

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: 15/06/10 to 30/06/10

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 : 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 16th to 30th June 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	90.00	88.50	108.25	94.25	97.50
	RSPM	31.75	30.00	32.25	33.00	32.00

	Nox	15.31	15.06	15.73	16.03	15.98
	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation				Date & PPV(mm/s)
(ii)	Location : 1	C South Face, Minimate kept at a distance of 200 mtr from the blast site.				19th June -10 :- PPV - 3.73 mm/s
	Location : 2	C West face, Minimate kept at a distance of 200 mtr from the blast.				30th June -10 :- PPV - 2.49 mm/s
	Quality of Discharge Water	Mines Work Shop Outlet (Date of sampling) 23.06.2010				Mining area run-off (Date of sampling)
(iii)	pH	8.9				-
	TSS (mg/l)	92.0				-
	TDS (mg/l)	196.0				-
	DO (mg/l)	4.9				-
	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 (2009)	2.0		5000.0	200.0	2500.0
	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)	6/30/2010	6/18/2010	6/18/2010	
		Location :(Core Zone / Buffer Zone)	core Zone	Buffer Zone	Buffer Zone	
		SPM	310	132	188.4	
		RSPM	36.8	30.5	22.4	
		NOx	9	11	10	
	(ii)	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			23/06/10 & 1.78
		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
	(iii)	Quality of Discharge Water				
			Mines Work Shop Outlet (16/06/10)	Mining area run-off (Date of sampling)		
		pH	7.6	-		
		TSS(mg/l)	74	-		
	(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	

MINE III

I.	Static Information
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(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)	28/06/2010	24/6/2010	24/6/2010	
	Location :(Core Zone / Buffer Zone)	Core Zone	Buffer Zone	Buffer Zone	
	SPM	226.76	79.94	60.93	
	RSPM	62.16	37.12	28.74	
	NOx	18.34	8.56	7.14	
(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)		16/06/2010 & 3.40	
	Location : 2	NORTH BLOCK(125 MTR)		20/06/2010 & 1.37	
(iii)	Quality of Discharge Water				
		Mines Work Shop Outlet (18/06/2010)	Mining area run-off (18/06/2010)		
	pH	7.64	7.71		
	TSS(mg/l)	31	17		
	TDS(mg/l)	429	237		
	DO(mg/l)	3.6	5.4		
(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	4.38	10157	53442	2500-3000
	Cumulative	30.14	103890	524175	2500-3000

MINE IV

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 $\mu\text{g}/\text{M}^3$ (Three Locations-1 in core & 2 in buffer zone with date of sampling)	At L/S Mines Dormitory	Rathoh Village	Chandi Village	Mangoo Village
		Location : (Core Zone / Buffer Zone)	Core Zone	Buffer Zone	Buffer Zone	Buffer Zone
		SPM	178.01	170.72	154.76	162.84
		RSPM	85.42	79.50	75.71	78.38
		SO ₂	5.0	6.0	5.0	7.0
		NO _x	7.0	7.0	5.0	6.0
		(ii)	Vibration Report			
	(1 or 2 locations)	Location with distance from blast site and habitation	Date & PPV (mm/s)			
		Location : 1	Rathoh village site (130m)	16/06/2010 - 1.86		
Location : 2		Haul road side 1330 MLR (130m)	29/06/2010 - 1.4			
(iii)	Quality of Discharge Water					
		Mines Work Shop Outlet (22/06/2010) Oil & Grease Trap	Mining area run-off (Date of sampling Gyana Khad 24/06/2010 (V Notch))			
	pH	7.2	7.2			
	TSS(mg/l)	53.8	15.0			

	TDS(mg/l)	-	385.0		
	DO(mg/l)	-	4.95		
(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	---	62	---	---
	Cumulative	40.11	131357	23644	3864

MINE V

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	
			22.06.2010	22.06.2010	22.06.2010	22.06.2010	
			SPM	127.5	143.4	131.9	136.3
			RSPM	37.7	48.7	39.7	47.7
			NOx	15.8	13	12.8	15
(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

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)

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
		17.06.2010	17.06.2010	17.06.2010	17.06.2010
	SPM	139.3	172.1	136.5	146.9
	RSPM	50.1	56.5	46.4	42.1
	NOx	8.5	10.3	9.6	12.1
(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV(mm/s)	

		Not applicable Surface Miner is being used for mining.			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			
(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

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			
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
		16.06.2010	16.06.2010	16.06.2010	16.06.2010
	SPM	142.6	130.1	143.1	146.9
	RSPM	53.3	40.9	43.3	42.1
	NOx	13.2	11.5	8.2	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			
(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

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.			
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
		19.06.2010	19.06.2010	19.06.2010	19.06.2010
	SPM	129.6	133.8	144.6	147.3
	RSPM	37.3	44.5	45.1	45.7
	NOx	12.5	14.6	10.3	15.8
(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			
	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 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	
			29.06.2010	29.06.2010	29.06.2010	29.06.2010	
			SPM	135	136.9	141.3	147.3
			RSPM	38.1	45	46	45.7
			NOx	10	13.6	12.6	15.8
	(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			
	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	0.5	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	
			24.06.2010	24.06.2010	24.06.2010	24.06.2010	
			SPM	150.8	142.7	139.4	143.7
			RSPM	49.6	54.5	50.4	59.2
			NOx	10.3	14.8	12.1	15.8
	(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			
	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	1.18	1557	0	1319
	Cumulative	4.86	5450	0	1121