Ambuja Cement

REGD. A/D

ACL/EMD/F-16/2014/

25.05.2014

The Director (s),
Ministry of Environment & Forest (MoEF),
Regional Office, Western Region,
"Kendriya Paryavaran Bhavan"
Link Road No.3, Ravi Shankar Nagar,
Bhopal – 462016, (M.P.)

Sub.: Six Monthly Compliance Status Report of Environmental Clearance.

Ref.: Environmental Clearance No. J-11015/273/2007- IA.II (M) dated 12.05.2010

Sir,

We are pleased to submit herewith half yearly compliance status report (i.e. for the period of October'13 to March'14) of Environmental Clearance No. J-11015/273/2007-IA.II (M) dated 12.05.2010 granted by MoEF to *Singsar Limestone Mines* of Ambuja Cements Ltd., located at village — Singsar, Thordi & Barevala of Taluka - Sutrapada, District — Junagadh (Gujarat). We are also enclosing here with CD containing soft copy of the same.

In case of further clarification/information require, we shall be please to provide the same.

Thanking you,

Yours Faithfully,

For Ambuja Cements Ltd.

Dr. Anand K. Rai HOD (Environment)

Encl.: As above.

Copy to:

 Central Pollution Control Board Western Zonal Office, Synergy House-II, Subhanpura - Gorwa Road, Vadodara-390023 (Gujarat)

2) Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, **ระบบ**หวัยว**Cคุณลาโลก**ได้ยา**i582**010 (Unit : Ambujanagar)

Regd. Office: P.O. Ambujanagar - 362715, Tal: Kodinar, Dist.: Junagadh, Gujarat. Phone: (02795) 221137, 232009, Fax: (02795) 220328, 232032

MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS Ministry of Environment & Forests

Western Regional Office (W), Bhopal.

Monitoring Report Part-I DATA SHEET

Date: 25.05.2014

01 Project type : Open Cast (Limestone) Mining

02 Name of the project : Singsar Limestone Mining Project

03 Clearance letter(s) / OM no. and : J-11015/273/2007-IA.II (M),

date Dated 12.5.2010

04 Location :

a) District(s) : Junagadh

b) State(s) : Gujarat

c) Latitude : 20⁰47'38" to 20⁰50'01" N

d) Longitude : 70°35'53" to 70°38'20" E

05 Address for correspondence :

a) Address of concerned Project: Shri, Dinkar DashoraChief Engineer (with pincode: Agent of Mines

& telephone / telex / fax . Ambuja Cements Ltd.

numbers). PO: Ambujanagar, Taluka - Kodinar

District : Junagadh (Gujarat)

Pin : 362715 Tel: -02795-237205

Fax: 02795 - 220328/232032

b) Address of Executive Project : Shri, Kumar Rajan
Engineer / Manager (with manager (Mines)
pincode / fax numbers.

Ambuja Cements Ltd

PO : Ambujanagar - 362715

Taluka : Kodinar,

District: Junagadh (Gujarat).

Tel: 02795 - 232064

Fax: 02795 - 220328/232032

- 06 Salient features
 - a) of the project
 - :
 - b) of the environmental management plans
- : Singsar Limestone Mining Lease is located at a crow fly distance of about 5.8 Kms from the Cement Plants at Ambujanagar.
- : Mining operations would not involve drilling & blasting. Limestone excavation will be carried out by environment friendly Surface Miner supported by ripper dozer.
 - Regular monitoring of environmental parameters will be undertaken as per the norms of MoEF and IBM.
 - ❖ Preventive maintenance of deployed HEMM will be undertaken regularly.
 - Dust suppression by water sprinkling on haul roads will be done regularly in working area.
 - Afforestation / Green belt development will be done along haul road and lease periphery.
 - Mined-out areas will be converted to pasture land & also converted into water reservoir.
 - Rural Development and Socio-economic activities will be undertaken in the project buffer zone area.
- 07 Break up of the project area.
 - a) Submergence area (forest & non-forest)

: Nil

b) Others

: 728.1156 ha (Government waste land, Gauchar land & Private land)

- O8 Break up of the project affected population with enumeration of those losing houses / dwelling units only agricultural land only, both dwelling units & agricultural land & landless labourers / artisan.
 - a) SC, ST / Adivasis

b) Others

(Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures if a survey is carried out give details & year of survey)

- O9 Financial details Project cost as originally planned and subsequent revised estimates and the year of price reference.
 - a) Allocation made for environmental management plans with item wise and year wise break-up.

: Not applicable: Not applicable

: Project Cost : Rs.103 Crore

(year of price reference 2008) Limestone raised from the mining lease area will partially supplement the requirements of existing cement units. As it is a captive mine for the Cement Plant, no separate project costing was prepared.

Capital Investment

Capital investment for

environment 57.08 Lakhs

protection measures

Recurring Expenditure per year

Plantation - 3.00 Lakhs Environmental - 2.00 Lakhs

Monitoring

Pollution Control - 5.00 Lakhs

Rural

Development - 5.0 Lakhs

Total/Year Rs.15.00 Lakhs (Recurring)

b) Benefit cost ratio / Internal rate of return and the year of

assessment.

- c) Whether (c) includes the cost of environmental management as shown in the above.
- : No separate assessment made, as it is an integral part of the raw material source for the cement plants at Ambujanagar.

: Yes

d) Actual expenditure incurred on the project so far.

: 16.21 Crore

e) Actual expenditure incurred on the environmental management plans so far.

: 0.80 Crore (Pl. refer **Annexure 8**)

10 Forest land requirement.

> a) The status of approval for diversion of forest land for non-forestry use

The project area does not comprise of any forest land.

: Not applicable. b) The status of clearing felling

c) The status of compensatory afforestation, if any

: Not applicable.

d) Comments on the viability & sustainability of compensatory afforestation programme in the light of actual field experience so far.

: Not applicable.

11 The status of clear felling in nonforest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.

: Not applicable

12 Status of construction

a) Date of commencement (Actual and / or **planned**)

: February 2012

b) Date of completion (Actual and / or **planned**).

: Not applicable. As it is ongoing captive mining Project for cement plant.

13 Reasons for the delay if the project is yet to start.

: Not applicable.

14 Dates of site visits

was monitored by the

a) The dates on which the project : 12.10.10 to 13.10.10 by Dr. A. Mehrotra

Regional Office, Bhopal

Regional Office on previous occasions, if any.

b) Date of site visit for this : 12.10.10 to 13.10.10

monitoring report

Details of correspondence with project authorities for obtaining action plans / information on status of compliance to safeguards other than the routine letters for logistic support for site visits).

: Half yearly compliance status report is being regularly submitted and last submission was on 23.11.2013 vide letter no.ACL/EMD/F-16/2013.

..00..

	·	earance issued to Singsar Limestone Mines /2007-IA.II (M) dated 12th May, 2010
Sr. No.	Condition	Compliance Status
(i)	The project proponent shall obtain consent to establish and consent to operate from the Gujarat State Pollution Control	Consent to establish & Conent to operate has been granted by Gujarat Pollution Control Board vide CTE No. 39140 dated 29.10.2010, vide letter no. GPCB/ID29262/CTE/CCA-NG/288/62147 & CCA No. AWH-44580 dated 02.12.2011, vide letter no. GPCB/CC-JNG-288/ID-29262/99297 respectively. All the stipulated conditions is being effectively complied.
(ii)		Point noted and being complied. The revenue land on which mining is done is being converted in to non-agricultural use from State Land use dept. Government of Gujarat.
(iii)	'' '	Industries and Mines Dept. Govt. of Gujarat have granted lease grant order vide order no. MCR-112000-CHH-1 dated 18.10.2011.
(iv)	The project proponent shall develop alternate grazing land/fodder plots in the non-mineralized area for use of grazing land.	Pasture land will be developed out side mine lease area, on getting clearance from various authorities.
(v)		Mining is being done above premonsoon ground water table. No pumping of ground water during mining.
(vi)	No pumping of groundwater shall be done for any purpose in the mine lease area.	
(vii)	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations.	At no stage of mining natural water course will be obstructed by mining activity.
(viii)	The project proponent shall effectively implement the	Compliance Status is as under.
,		1. Mining is being done using eco-friendly, blast free Surface Miner
		Parameter of air, water and land is being maintained within prescribed norms.
		 Green belt will be developed in periphery of lease area with respect to approved mine plan.
		Appropriate parapet bund will be created around mining pits. Mines will be quitably reglaimed.
(ix)	only and it should not be kept unutilized for long. The topsoil	6. Mines will be suitably reclaimed. Top soil being stacked separately in the ear marked site with appropriate measures. Top Soil is stored systamatically. Road side bunds are made from poor grade material and Top soil is used for greenbelt development and pastureland development.
(x)	be constructed for the working pit to arrest flow of silt and	sedimentation pits will be constructed after progressive mining.

	•	earance issued to Singsar Limestone Mines /2007-IA.II (M) dated 12th May, 2010
Sr. No.	Condition	Compliance Status
(xii)	The entire excavated area of 650.94ha left unfilled shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to	Excavated area will be converted in to water bodies as per approved mining plan from IBM. Higher benches will be made gentler for easy accessibility by local people to use the water body. Peripheral fencing will be carried out along the excavated area after progressive mining.
(xiii)	7.5m wide green belt in the safety zone around the mining lease, around the water body, reclaimed area, mine	DFO/Agriculture department will be consulted for planting native species.
(xiv)	sprinkling shall be carried out in critical areas prone to air	Ambient air quality parameters is being maintained within norms prescribed by GPCB.
(xv)	conservation measures to augment ground water resources	Rainwater harvesting measures to augment ground water resources in the area is being done by our Ambuja Cement Foundation (ACF). A glimpse about ACF & community development work done by ACF in surrounding areas is enclosed as Annexure I .
(xvi)	carried out within the mine lease and in the surrounding area (upto 5 km of the mine lease) by establishing a network of groundwater monitoring stations (existing wells and installing new piezometers) during the mining operation in consultation with Central Groundwater Authority / Ground Water Board and groundwater table shall be monitored and records maintained. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water	study on ground water in Singsar limestone mine & its buffer zone has been conducted by Ground Water and Mineral Investigation Consultancy Centre (P) Ltd., Jaipur. Copy of report has been already submitted to MoEF vide our submission dated 25.12.2010 vide letter no.ACL/EMD/F-16/2010.
(xvii)	permission of the competent authorities for drawl of requisite	There will be no withdrawal of ground water. Water requirement at initial stage is being met from harvested rain water in existing solaj mines pits, as mines will develop water requirement will be met from harvested rain water in mined out pits.
(xviii)	harvesting measures on long term basis and work out a	Rainwater harvesting measures to augment ground water resources in the area is being done by our Ambuja Cement Foundation (ACF). Details of work done by ACF in near by areas is enclosed as Annexure -I.

	·	earance issued to Singsar Limestone Mines /2007-IA.II (M) dated 12th May, 2010
Sr. No.	Condition	Compliance Status
(xix)	pollution of the Somat River, the Singoda River and the Saraswati River in consultation with the State Pollution Control Board.	
(xx)	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	, ,
(xxi)	Drilling and blasting operation shall not be carried out.	Blast free fully mechanized Surface Miner machine is being used for mining.
(xxii)		
(xxiii)	Land oustees and land losers/affected people should be rehabilitated as per the National Policy on Resettlement and Rehabilitation of project Affected Families (NPRR).	Resettlement and Rehabilitation is not applicable in this mine.
(xxiv)	number of high efficiency dust extraction system. Loading	There is no mineral handling plant at Mines site. Mineral extracted is being transported to cement plant by tippers/truck tipplers, which is being covered with suitable covering mechanisim for prevention of fugitive emission.
(xxv)		Existing township is being used , no any additional colony has been developed at project site. ETP for workshop waste water is provided.
(xxvi)		Pre-project community heath status report has been already submitted to MoEF vide our submission dated 25.12.2010 vide letter no.ACL/EMD/F-16/2010
(xxvii)	examination of the workers engaged in the project shall be	Pre-placement medical examination and periodical medical examination of the worker engaged is being regularly carried out at our all existing plant and mines by team of doctors of our occupation health centre.
(xxviii)		
(xxix)	with size less than 10Km i.e., PM10), NOX in the ambient air within the impact zone, shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The	

	•	earance issued to Singsar Limestone Mines /2007-IA.II (M) dated 12th May, 2010
		, , ,
Sr. No.		of Singsar Limestone Mine Lease study area is prepared by "Gujarat Institute of Desert Ecology", Bhuj. The same has been submitted to MoEF vide our submission dated 25.12.2010 vide letter no.ACL/EMD/F-16/2010
(xxxi)	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	·
B. Gen	eral Conditions:	
(i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	
(ii)	No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.	Point Noted
(iii)		
(iv)		
(v)	controlled regularly. Water spraying arrangement on haul	Environment friendly Surface Miner machine is being used for mining. Surface miner is provided with inbuilt facility of water sprinkling to suppress dust generated during mining. On all haul roads regular water sprinkling is being done by water tankers.
(vi)	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.	excavating the limestone. The noise levels are kept well within the
(vii)	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	

	·	earance issued to Singsar Limestone Mines /2007-IA.II (M) dated 12th May, 2010
Sr. No.	Condition	Compliance Status
(viii)	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.	Dust Masks, Safety Shoes, Safety Goggles & Helmet are provided to each & every personnels working in the mine area. Periodic Health check up is being done for personnel working in mines area.
	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	undertaken periodically by our Occupational Health Centre.
(ix)	qualified personnel should be set-up under the control of a	A well established Environmental Management Division (EMD) with suitable qualified personnel is exist. Head of environmental management cell directly report to the Unit Head (Jt. president) of the organisation. EMD organisation chart is enclosed as Annexure 7 .
(x)	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Bhopal.	
(xi)		Regular six monthy environmental clearance compliance report is being submitted to MoEF. Last submission was on 23.11.2013 vide letter no. ACL/EMD/F-16/2013/.
(xii)	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	·
(xiii)		
(xiv)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	
(xv)	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collectors office/ Tehsildars Office for 30 days.	GPCB is the concern authority for the same

	·	earance issued to Singsar Limestone Mines /2007-IA.II (M) dated 12th May, 2010
Sr. No.	Condition	Compliance Status
(xvi)	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Bhopal by e-mail.	
(xvii)		

Ambuja Cement Foundation - Ambujanagar Details for programme wise expenditure for the year 2013-14

(Rs. In lakhs)

		Funds from	*Funds received through	from other Donors / Donor	***People's	****Direct Funding to	
Sr.No	Programme	ACF Resources	Government	Agencies	Contribution	_	Total Exp.
	GUJARAT - Kodinar						-
1	Water Resource Mangement & Drinking Water Projects						-
	a.Water Resource Devlopment	40.16	17.57				57.73
	B .Drinking Water Programme	37.83	-	13.55	46.29	-	97.67
	c. Salinity Prevention (KVY III)	81.61		52.60	90.93	90.01	315.15
2	Agriculture Development(Farm Forestry &Afforesation)	38.36		16.88	145.03	186.33	386.60
3	Better Cotton Initiative (BCI)	0.54		38.21	1.85	2.30	42.90
4	Krishi Vigyan Kendra (KVK)	16.84	105.59		-		122.43
5	Animal Husbandry Programme	0.44	-		-		0.44
6	Health & Sanitation Programme	12.78			15.31	-	28.09
7	Skill and Enterprunership Development Programme	26.79		15.97	23.78		66.54
8	Village Knowledge Centre & Anganwadi exp	1.93			-		1.93
9	Capacity Building &Training Programmes	0.21	-		-		0.21
10	Women / Youth Development	6.82					6.82
11	Integrated Community Development Programme	80.89					80.89
12	Co-ordination & Administration Expenses	63.65					63.65
13	Capital Expenditure	2.08					2.08
	TOTAL	410.93	123.16	137.21	323.19	278.64	1,273.13

Aug-'2013 Ground Water Quality Report of Singsar Limestone Mines .Aug -2013

Aug- 2013			Ground Water Quality Report of Singsar Elinestone Milles .Adg -2013										
Ref.No.		0:1991 (F.R) Permissible			Well Weter					Diese	motoro		
	Desirable	Permissible			Well Water						meters		
Source			W1	W3	W4	W6	W7	W8	W10	PIEZO NO-1	PIEZO NO-2		
Village			SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR		
Taluka	1		SUTRAPADA	SUTRAPADA	SUTRAPADA	KODINAR	SUTRAPADA	SUTRAPADA	SUTRAPADA	SUTRAPADA	SUTRAPADA		
District		'	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH		
Color Hazen Units	5	25	C.L.	C.L.	C.L.	C.L.	C.L.	C.L.	C.L.	C.L.	C.L.		
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable		
Turbidity NTU	1	5	0	0	0	0	1	0	0	0	0		
Dissolved Solids mg/l	500	2000	2386	458	3334	232	3628	2454	2248	1158	826		
pH	6.5 to 8.5	No Relaxation	7.53	7.83	8.49	8.44	7.54	7.97	7.59	7.88	8.17		
Total Hardness (as CaCO3) mg/l	300	600	900	180	1128	120	1048	852	776	288	172		
Calcium (as Ca) mg/l	75	200	173	37	243	21	197	179	147	61	35		
Magnessium (as Mg) mg/l	30	100	114	21	126	16	130	98	99	33	20		
Chlorides (as CI) mg/l	250	1000	840	140	1280	40	1540	920	848	480	320		
Sulphates (as SO4) mg/l	200	400	180	36	226	24	210	170	155	58	34		
Nitrates (as NO3) mg/l	45	No Relaxation	23.29	10.63	37.7	5.93	38.69	30.38	23.33	70.48	117.58		
Fluorides (as F) mg/l	1	1.5	0.7	0.3	0.16	0.27	0.4	0.21	0.56	0.43	0.65		
Alkalinity (as CaCO3) mg/l	200	600	80	72	48	100	168	88	160	160	320		
Water level in mtr. from ground													
level													

January -'2014 Ground Water Quality Report of Singsar Limestone Mines .January -2014

January - 2014			Ground Wat	er waanty ite	port or ornigs	ai Lilliestone	Willies .Janua	1 y -2017			
Ref.No.		0:1991 (F.R) Permissible			Well Water					Piozo	meters
_	Desirable	r ei iiiissibie									
Source	_		W1	W3	W4	W6	W7	W8	W10	PIEZO NO-1	PIEZO NO-2
Village			SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR	SINGSAR
Taluka			SUTRAPADA	SUTRAPADA	SUTRAPADA	KODINAR	SUTRAPADA	SUTRAPADA	SUTRAPADA	SUTRAPADA	SUTRAPADA
District		'	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH	JUNAGADH
Color Hazen Units	5	25	C.L.	C.L.	C.L.	C.L.	C.L.	C.L.	C.L.	C.L.	C.L.
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity NTU	1	5	0	0	0	0	0	0	0	0	0
Dissolved Solids mg/l	500	2000	5342	3532	5158	606	6286	3992	6542	2482	1064
pH	6.5 to 8.5	No Relaxation	7.58	7.6	7.62	8.37	7.6	7.63	7.51	7.92	8.4
Total Hardness (as CaCO3) mg/l	300	600	2124	1360	1892	412	1872	984	1972	548	472
Calcium (as Ca) mg/l	75	200	427	280	380	84	379	200	395	112	97
Magnessium (as Mg) mg/l	30	100	256	160	228	48	224	117	239	65	55
Chlorides (as CI) mg/l	250	1000	2076	1388	1932	64	2700	1860	2792	1200	316
Sulphates (as SO4) mg/l	200	400	44	33	307	70	303	158	317	88	76
Nitrates (as NO3) mg/l	45	No Relaxation	39.4	36.2	40	7.8	40.6	39.9	44.3	24.3	20
Fluorides (as F) mg/l	1	1.5	0.36	0.35	0.31	0.36	0.39	0.29	0.58	1.4	0.46
Alkalinity (as CaCO3) mg/l	200	600	136	140	96	160	152	124	128	268	148
Water level in mtr. from ground											
level											

Ambient Air Quality Monitoring Results (Oct 2013 - March 2014)

									Ambient	Air Quality	Monitorin	g Results								
Month		Si	ngsar Mine	es			Т	hordi Villag	je			Ba	revala Villa	ige			Sol	aj Mines Of	ffice	
	PM2.5	PM10	S02	NOx	co	PM2.5	PM10	SO2	NOx	co	PM2.5	PM10	SO2	NOx	co	PM2.5	PM10	SO2	NOx	co
Unit >	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)
Oct. 2013	29.00	42.00	11.30	16.50	0.50	25.00	46.00	12.50	17.10	0.30	28.00	45.00	12.90	16.90	0.50	26.00	43.00	11.60	17.80	0.40
	31.00	43.00	12.20	16.60	0.30	28.00	47.00	11.70	17.70	0.40	24.00	44.00	12.90	18.10	0.40	29.00	49.00	11.70	18.80	0.30
Nov.2013	35.00	47.00	13.60	17.20	0.40	32.00	49.00	12.30	18.60	0.50	27.00	42.00	13.50	19.40	0.30	31.00	46.00	12.70	17.80	0.50
	25.00	40.00	12.20	17.40	0.40	27.00	41.00	13.50	16.60	0.50	26.00	42.00	11.70	17.20	0.30	23.00	46.00	12.60	16.70	0.20
Dec.2013	21.00	43.00	11.40	16.60	0.20	24.00	45.00	12.50	15.50	0.30	22.00	47.00	12.80	16.40	0.40	26.00	49.00	11.30	15.80	0.30
	31.00	43.00	12.20	16.30	0.50	28.00	46.00	13.70	17.70	0.30	29.00	44.00	12.60	18.80	0.50	33.00	41.00	14.50	16.50	0.40
Jan. 2014	24.00	41.00	12.30	17.50	0.30	26.00	43.00	12.70	16.30	0.40	27.00	44.00	13.30	16.90	0.50	28.00	45.00	12.60	15.20	0.50
	35.00	45.00	13.20	16.60	0.30	32.00	48.00	13.90	17.20	0.40	33.00	49.00	12.10	17.60	0.30	36.00	46.00	13.50	17.40	0.50
Feb. 2014	28.00	45.00	11.20	16.50	0.50	29.00	48.00	12.20	17.70	0.30	24.00	41.00	12.80	16.20	0.40	24.00	40.00	11.50	15.70	0.30
	31.00	41.00	12.10	17.70	0.50	36.00	43.00	12.70	16.50	0.30	37.00	45.00	13.50	16.80	0.40	34.00	42.00	12.40	16.10	0.30
March 2014	25.00	41.00	12.40	17.10	0.30	26.00	43.00	11.60	16.30	0.40	28.00	45.00	12.10	17.40	0.50	27.00	43.00	12.50	16.70	0.50
	28.00	42.00	11.20	16.20	0.30	32.00	45.00	12.60	16.90	0.40	34.00	47.00	12.80	17.20	0.50	31.00	46.00	11.60	17.60	0.40
Minimum	21.00	40.00	11.20	16.20	0.20	24.00	41.00	11.60	15.50	0.30	22.00	41.00	11.70	16.20	0.30	23.00	40.00	11.30	15.20	0.20
Maximum	35.00	47.00	13.60	17.70	0.50	36.00	49.00	13.90	18.60	0.50	37.00	49.00	13.50	19.40	0.50	36.00	49.00	14.50	18.80	0.50
Average	28.58	42.75	12.11	16.85	0.38	28.75	45.33	12.66	17.01	0.38	28.25	44.58	12.75	17.41	0.42	29.00	44.67	12.38	16.84	0.38

Annexure 4
Air Borne Dust Survey - Singsar Mines Mines (Oct-2013 to March-2014)

	Machine : S	Surface Mil	ner		Machine :D		Machine Loader				
Date	Period	Location	RSPM (mg/m3)	Date	Period	Location	RSPM (mg/m3)	Date	Period	Location	RSPM (mg/m3)
14-Oct-13	0600 - 1400		0.25	15-Oct-13	0600 - 1400		0.29	16-Oct-13	0600 - 1400		0.26
18/11/13	0600 - 1400	bin	0.22	19-Nov-13	0600 - 1400	bin	0.3	20-Nov-13	0600 - 1400	bin	0.24
2-Dec-13	0600 - 1400	Ca	0.25	3-Dec-13	0600 - 1400	Ca	0.29	4-Dec-13	0600 - 1400	Ca	0.23
6-Jan-14	0600 - 1400	ide	0.26	7-Jan-14	0600 - 1400	ide	0.29	8-Jan-14	0600 - 1400	ide	0.23
24-Feb-14	0600 - 1400	lns	0.22	25-Feb-14	0600 - 1400	Ins	0.25	26-Feb-14	0600 - 1400	Insi	0.29
20-Mar-14	0600 - 1400		0.30	21-Mar-14	0600 - 1400		0.25	22-Mar-14	0600 - 1400		0.22

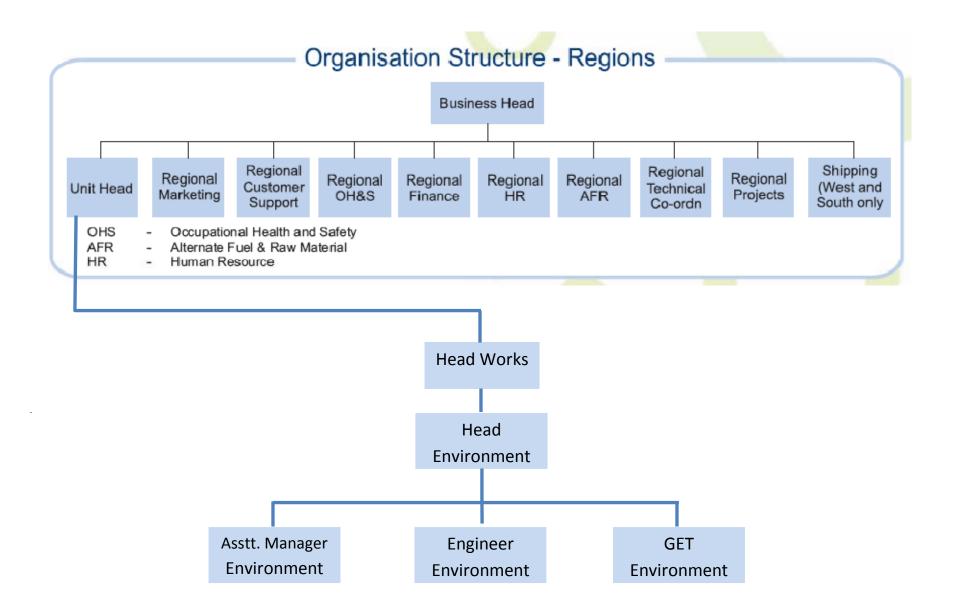
Annexure 5

Ambient Noise Level Monitoring - Singsar Mines (October-2013 to March-2014)

		Noise Levels in dB(A)													
Month	Near Surfa	ace Miner	Hual	road	Mines offices										
	Min	Max	Min	Max	Min	Max									
Oct-13	79	80	50	53	39	41									
Nov-13	75	76	40	46	39	44									
Dec-13	70	73	43	49	40	46									
Jan-14	74	79	46	50	39	44									
Feb-14	70	74	40	46	40	43									
Mar-14	74	76	45	48	40	43									

Annexure 6

				No	ise Lev	el of HEMM - Singsa	r Mines (Oct-20	13 March-	2014)						
Machine	achine Surface Miner				Loader					Dozer					
Month	Conditions	Noise Levels (dB)				Conditions	Noise Levels (dB)				Conditions	Noise Levels (dB)			
		At 5m.	distance	At 10m.	distance	Conditions	At 5m. dista	stance At 10m. distance		Conditions	At 5m. o	distance	At 10m. distance		
		Min	Max	Min	Max		Min	Max	Min	Max		Min	Max	Min	Max
Oct-13	While dozing the material	73	74	56	59	While loading to tipper	64	66	53	58	While mining	58	60	55	59
Nov-13	While dozing the material	72	76	50	53	While loading to tipper	55	59	39	42	While mining	48	50	40	44
Dec-13	While dozing the material	65	70	45	50	While loading to tipper	56	59	53	58	While mining	50	53	40	44
Jan-14	While dozing the material	60	65	43	45	While loading to tipper	64	68	40	42	While mining	40	45	43	46
Feb-14	While dozing the material	56	60	40	45	While loading to tipper	55	62	39	42	While mining	39	40	46	50
Mar-14	While dozing the material	62	66	40	42	While loading to tipper	60	63	38	40	While mining	40	46	40	44



EXPENDITURE INCURRED ON THE ENVIRONMENTAL MANAGEMENT PLANS

(A) Capital Investment for Environmental Monitoring:

(1) Monitoring Equipments : 37.08 Lakh

(2) Environmental Laboratory : 10.00 Lakh

(3) Others (Monitoring Van & DG sets) : 10.00 Lakh

Total: Rs. 57.08 Lakh

(B) Recurring expenditure for the period of October'13 to March'14:

(1) Green belt development & dust suppression : 4.83 Lakh

(2) Manpower Cost* : 10.70 Lakh

(3) House Keeping : 0.74 Lakh

(4) Other Env. Protection (Environmental Monitoring) : 0.67 Lakh

(5) Environmental Awareness* : 0.16 Lakh

Total: Rs. 17.10 Lakh

^{*}Expenditures common for all the plant & mines.

EXPENDITURE INCURRED ON THE ENVIRONMENTAL MANAGEMENT PLANS

(A) Community Development expenditure by Ambuja: Rs. 12.73 Crore Cement Foundation**

** Community development expenditure is common for all plant & mines at Ambujanagar. Programme wise Expenditure Details is as below:

		ja Cement Found					
	Details for prog	gramme wise exp	enditure for th	e year 2013-14	1		
							(Rs. In lakhs)
Sr.No	Programme	Funds from ACF Resources	*Funds received through Government	from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp.
	GUJARAT - Kodinar						-
1	Water Resource Mangement & Drinking Water Projects						-
	a.Water Resource Devlopment	40.16	17.57			7	57.73
	B .Drinking Water Programme	37.83	-	13.55	46.29	-	97.67
	c. Salinity Prevention (KVY III)	81.61		52.60	90.93	90.01	315.15
2	Agriculture Development(Farm Forestry &Afforesation)	38.36		16.88	145.03	186.33	386.60
3	Better Cotton Initiative (BCI)	0.54		38.21	1.85	2.30	42.90
4	Krishi Vigyan Kendra (KVK)	16.84	105.59		-		122.43
5	Animal Husbandry Programme	0.44	-		-		0.44
6	Health & Sanitation Programme	12.78			15.31	-	28.09
7	Skill and Enterprunership Development Programme	26.79		15.97	23.78		66.54
8	Village Knowledge Centre & Anganwadi exp	1.93			2		1.93
9	Capacity Building &Training Programmes	0.21	-		12		0.21
10	Women / Youth Development	6.82					6.82
11	Integrated Community Development Programme	80.89					80.89
12	Co-ordination & Administration Expenses	63.65					63.65
	Capital Expenditure	2.08					2.08
	TOTAL	410.93	123.16	137.21	323.19	278.64	1,273.13