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# SHREE CEMENT LTD.

Regd. Office & Works :

BANGUR NAGAR, POST BOX NO.33, BEAWAR 305 901, RAJASTHAN, INDIA



SCL/Nimbeti Mines/Env. Statement /2011-12/

Date: 20/9/2011

Regd. A.D

To,  
The Member Secretary  
Rajasthan Pollution Control Board  
4, Institutional Area, Jhalana Doongri Road  
JAIPUR-302004 (Rajasthan)

Sub:- Environmental Statement for the period from April, 2010 to March, 2011 for Nimbeti Limestone Mines of M/s Shree Cement Limited; situated near Village: Nimbeti/Ras, Tehsil: Jaitaran, Dist: Pali (Raj)

Ref: - RPCB Consent Letter No.-

1. F.5 (PA-148)RPCB/Gr.II/Mine/484 dated: 22/10/2007
2. F(Mines)/Pali(Jaitaran)/40(1)/2010-2011/1233 dated: 04/06/2010

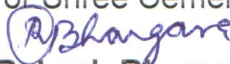
Sir,

We are submitting herewith the Environmental Statement Report for the period from April, 2010 to March, 2011 for Nimbeti Limestone Mines (A Captive Mine of M/s Shree Cement Ltd.) situated near Village: Nimbeti/Ras, Tehsil: Jaitaran, Dist: Pali (Raj).

This is for your kind information please.

Thanking you,  
Yours faithfully,

For Shree Cement Limited;

  
(Rakesh Bhargava)  
Jt. Vice President (Environment)

Encl: a/a

Copy to:-

1. Chief Conservator of Forests (Central), Ministry of Environment & Forests, Central Regional Office, Kendriya Bhawan, 5<sup>th</sup> Floor Sector H, Aliganj, Lucknow – 22602 (U.P.)
2. The Regional Officer (Regional Office), Rajasthan Board for the Prevention & Control of Pollution, S / A-6, Mandia Road, Industrial Area, Near Pali Urban Co-Operative Bank, PALI- MARWAR- 306401 (Raj.)

**ENVIRONMENTAL STATEMENT**  
**Nimbeti Limestone Mine**  
**M/s Shree Cement Limited**  
**Period from : April, 2010 to : March, 2011**

**FORM - V**

**PART – A**

1.	Name and address of the Owner / Occupier of the Industry operation or process	<u>Nimbeti Limestone Mine</u> <u>M/s Shree Cement Ltd;</u> Village: Nimbeti/Ras, Tehsil: Jaitaran, Dist: Pali -306107 (Rajasthan)
2.	Industry Category Primary (S.T.C. Code) Secondary (S.T.C. Code)	Red Category
3.	Production Capacity	14.4 MTPA Limestone
4.	Year of Establishment	2007
5.	Date of the last Environmental Audit Report submitted	20/9/2010

**PART – B**

**WATER AND RAW MATERIAL CONSUMPTION**

<b>Water consumption</b>	
<b>Process (Dust suppression, Crusher)</b>	58940 KL
<b>Domestic</b>	73881 KL (Common for Cement Plant, Power Plant and Mines)

**1. Water Consumption**

<b>Name of Products</b>	<b>Process Water Consumption Per Unit of Output (KL / MT of Limestone)</b>	
	<b>During Previous Financial Year (2009-10)</b>	<b>During Current Financial Year (2010-11)</b>
Mining of Limestone	0.0051	0.00761

## 2. Raw Material Consumption:

Name of Raw Materials	Name of Products	Consumption of raw material per unit of output	
		During Previous Financial Year (2009-10)	During Current Financial Year (2010-11)
Not Applicable			

## 3. Power Consumption (KWH/T of Limestone) :

During Previous Financial Year (2009-10)	During Current Financial Year (2010-11)
1.35	1.50

## 4. Total Limestone Production (in Lac Tones):

During Previous Financial Year (2009-10)	During Current Financial Year (2010-11)
104.74	77.43

## PART – C

### DISCHARGED TO ENVIRONMENT / UNIT OF OUTPUT

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Prevent age of variation from prescribed standards with reasons
(a) Water	Waste water generated from office toilets is disposed off in soak pit via septic tank. Waste water generated from mines work shop is being used for dust suppression after removing the oil & grease traces.		
(b) Air	Please refer Annexure – 1		

**PART – D**

**HAZARDOUS WASTES**

(As specified under Hazardous Wastes (Management, Handling & Trans boundary Movement Rules, 2010)

<b>Hazardous Waste</b>	<b>Total Quantity (Kg.)</b>	
	<b>During previous financial year (2009-10)</b>	<b>During current financial year (2010-11)</b>
(a)From Process	<p>We are having common authorization for Hazardous Waste Management &amp; Handling for Cement Plant, Power Plant, D.G.Set and Nimbeti Limestone Mines</p> <p>Section wise used oil generation from April, 2009 to March, 2010 is given as below:-</p> <p>Cement Plant : 11092 Ltrs. Power Plant : 184 Ltrs. D.G. Set : Nil Mines : 25715 Ltrs. Old Stock : 8475 Ltrs.</p> <hr/> <p>Total : 45466 Ltrs.</p> <p>Out of 45466 Ltrs. 23100 Ltrs. sell-out to authorized recyclers and rest 12387 Ltrs. self reused for lubrication in chains, Stacker &amp; Reclaimer and balance was 9979 Ltrs.</p>	<p>We are having common authorization for Hazardous Waste Management &amp; Handling for Cement Plant, Power Plant, D.G.Set and Nimbeti Limestone Mines.</p> <p>Total quantity generated from April, 2010 to March, 2011 = 34440 Ltrs. Old Stock = 9979 Ltrs. Total = 44419 Ltrs.</p> <p>Sold-out to authorized recyclers = 34020 Ltrs. Balance quantity = 10399 Ltrs.</p>
(b)From Pollution Control Facilities	N.A	N.A

**PART – E**  
**SOLID WASTE**

		Total Quantity	
		During previous financial year (2009-10)	During current financial year (2010-11)
(a)	From process	Not Applicable	
(b)	From pollution control facility	Not Applicable	
(c)	1. Quantity recycled or re-utilized within the unit	Not Applicable	
	2. Sold	Not Applicable	
	3. Disposed: During mining of limestone disposed of overburden. (in Lac tones) *	40.21	47.97

- Overburden is being dumped in overburden dump yard.

**PART – F**

**PLEASE SPECIFY THE CHARACTERIZATION (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THE CATEGORIES OF WASTES: -**

**Solid Waste**

Solid waste from the mines is Overburden (waste rock) is being handled by shovel & dumper combination from mine working face and dumped systematically at ear marked overburden dump yard. The total overburden generated from the April 2010 to March 2011 was 47.97 Lac Tones.

**Hazardous Waste**

Cement manufacturing is based on “Dry Process”. No Hazardous waste is generated from the process except used oil which is drained from Machineries / Equipments. The used oil is sold to CPCB authorized recyclers.

## **PART - G**

**In respect of the pollution abatement measures taken up on conservation of natural resources and on the cost of production: -**

-----Not Applicable----

## **PART – H**

**Additional measures / investment proposal for environment protection including abatement & prevention of pollution: -**

1. We have constructed bitumen road from mines site to State Highway through village Jawangarh.
2. We have constructed double bitumen road from Beawar to Ras.
3. We have made cement road in village Jawangarh.
4. Green belt development and tree plantation is our ongoing process. Every year we are growing new trees plantation. During period April 2010 to March 2011, total 3931 nos. of trees has been planted. Year-wise plantation details are as follows:-

<b>Year</b>	<b>No. of Trees Planted</b>
2000-2001	885
2001-2002	1352
2002-2003	332
2003-2004	400
2004-2005	2615
2005-2006	2002
2006-2007	5950
2007-2008	5810
2008-2009	5774
2009-2010	11605
2010-2011	3931

5. Waste is dumped in non-mineralized zone/area. Waste dump yard is regularly dozed to keep it stabilized. At the edge of the waste dumps, a strong parapet wall is maintained for the safety of the dumpers. We are maintaining the drainage system at waste dump as well as have constructed some check dams to arrest silt. The plantation is being carried out in the stabilized area every year to make the dump yard green.
6. Company provides saplings free of cost to nearby villagers and supporting them for post plantation care so that greenery of the surrounding villages which helped in improving the environment of the area.

## **PART - I**

### **Any other particular for improving the quality of the environment: -**

1. We are using wet drilling system/dust cyclone precipitator with drilling machine ROC F9, ROC L-8 & IBH-10 while drilling so that dust is suppressed immediately and the same drill cutting is being used as stemming material for blast hole.
2. Regular water spraying is being done on haul road and near loading places & crusher hopper including belt transfer point for effective dust suppression. Also we are using Bio-degraded Chemical DUST-BAN-8801 with water spraying on haul road for conservation of water. The haul road is maintained using motor grader and soil compactor. Water is sprayed on haul road by sprinkler attached with tipper (water tanker).
3. Dust generated during unloading of limestone in hopper is suppressed by Water spraying in the form shower with pressure from nozzle fitted to main water pipe line (Atomized water sprinkler system) in both of crusher, so that dust generated while crushing is suppressed. Water is sprinkled at material transfer chute to prevent generation of dust.
4. Blasting is being done 3-4 times in a week by using slurry explosive and ANFO, which has low velocity of detonation therefore air pollution is very meager. Non electric blasting system is used to reduce ground vibration.
5. Blasting is being done by using of shock tube detonators (Down line detonators in combination of Noise less trunk line detonators) which is latest technology available, resulting in reduction of noise level and ground vibration to a great extent.
6. We are using Rock breakers for breaking of oversize boulders instead of secondary blasting which eliminated vibration, noise, fly rocks & reducing green house gases which have caused due to secondary blasting.
7. We are providing all personal protective equipments (PPE's) to all Mine Employee i.e. Dust-Masks (Respirator), Ear Plug, Eye Goggle, Ear Mark etc concern to them as additional measures of air & noise control.
8. Construction of grease and oil catchers at washing ramp to avoid pollution. Separated oil and grease from above catchers is sent to plant with used oil.

9. We have an organizational structure for Environment Management to carry out implementation of environment measures envisaged in the EMP (Please refer Annexure-2)
10. We are having full fledged environment laboratory for monitoring ambient air quality for SPM, SO<sub>2</sub>, NO<sub>2</sub> and Noise level.

On support of above, we are enclosing herewith following:-

- Annexure-1 : Ambient Air Quality (SPM, PM10, PM2.5, SO<sub>2</sub> and NO<sub>2</sub>) &  
Ambient Noise Level monitoring report
- Annexure- 2 : Organizational Structure for Environment Management
-

## Annexure:1

Shree Cement Ltd, Ras																				
Ambient Air Quality & Noise Level Monitoring Report																				
Common for Cement plant & Power plant																				
Year:-2010-2011																				
Location →	Near Mines Office					Near Nimbeti Village					Near Mines Crusher					Near Mines Phase				
Parameters →	AAQ in µg/M <sup>3</sup>			Noise Level in dB(A)		AAQ in µg/M <sup>3</sup>			Noise Level in dB(A)		AAQ in µg/M <sup>3</sup>			Noise Level in dB(A)		AAQ in µg/M <sup>3</sup>			Noise Level in dB(A)	
↓	SPM	SO <sub>2</sub>	NO <sub>2</sub>	Day time	Night time	SPM	SO <sub>2</sub>	NO <sub>2</sub>	Day time	Night time	SPM	SO <sub>2</sub>	NO <sub>2</sub>	Day time	Night time	SPM	SO <sub>2</sub>	NO <sub>2</sub>	Day time	Night time
Apr-10	291	7.9	9.3	65.3	52.4	203	7.7	8.4	46.3	37.4	410	9.2	9.9	63.5	64.0	381	8.4	9.0	69.5	61.5
				67.4	64.2				47.1	36.8				73.3	63.7				70.2	62.4
May-10	8.2	9.6	8.1	66.4	53.1	258	7.4	8.1	51.2	41.2	436	8.9	10.2	73.7	63.0	412	8.0	9.2	68.2	62.2
				68.1	55.3				48.3	38.3				73.1	64.1				66.9	61.8
Jun-10	312	7.5	9.5	67.1	55.2	248	7.2	8.0	53.2	39.8	416	9.1	10.6	73.7	63.3	396	7.1	8.5	69.4	61.8
				69.2	56.3				51.3	48.3				73.2	63.8				65.9	62.3
Jul-10	320	8.0	8.6	65.1	54.5	255	6.3	7.2	54.6	40.5	445	8.7	9.9	74.5	63.5	389	7.4	9.2	70.6	63.5
				71.6	57.7				52.5	49.6				75.6	66.7				66.5	66.6
Aug-10	218	7.7	8.3	66.6	55.6	197	6.1	7.9	55.6	43.8	314	7.9	8.8	75.8	64.8	227	7.1	8.4	71.5	62.8
				69.5	57.6				53.8	50.6				76.5	67.5				65.5	62.6
Sep-10	341	8.1	8.9	65.8	55.2	278	7.4	9.2	45.6	34.2	381	8.6	9.5	71.6	62.4	269	8.2	9.1	70.8	57.4
				63.2	51.6				44.5	32.4				72.8	62.2				71.2	56.5
Oct-10	237	7.7	8.6	64.2	51.8	145	6.3	7.2	43.5	32.6	310	8.7	9.9	71.8	61.4	302	7.4	9.2	68.6	56.2
				66.5	52.3				45.1	35.8				72.4	62.9				67.5	57.8
Nov-10	231	7.5	8.5	65.4	52.5	138	6.5	6.9	42.8	35.2	317	8.5	9.9	73.2	63.5	307	7.2	9.3	70.5	58.6
				65.4	52.3				45.1	35.4				72.4	62.9				67.5	57.8
Dec-10	240	7.9	8.9	66	53.4	156	6.8	7.1	43.4	36.8	361	8.8	10.0	73.8	62.9	330	7.3	9.7	71.1	62.1
				67.1	54.5				46.1	36.2				73.2	63.4				68.3	56.4
<b>Average</b>	<b>231</b>	<b>7.7</b>	<b>8.5</b>	<b>66.7</b>	<b>54.8</b>	<b>250</b>	<b>7.4</b>	<b>8.3</b>	<b>48.3</b>	<b>39.2</b>	<b>367</b>	<b>8.4</b>	<b>9.7</b>	<b>73.0</b>	<b>63.7</b>	<b>335</b>	<b>7.6</b>	<b>9.1</b>	<b>68.9</b>	<b>60.6</b>

### Ambient Air Quality & Noise Level Monitoring Report

Location →	Near Mines Office						Near Nimbeti Village						Near Mines Crusher						Near Mines Phase					
Parameter →	PM-2.5	PM-10	SO <sub>2</sub>	NO <sub>2</sub>	Day time	Night time	PM-2.5	PM-10	SO <sub>2</sub>	NO <sub>2</sub>	Day time	Night time	PM-2.5	PM-10	SO <sub>2</sub>	NO <sub>2</sub>	Day time	Night time	PM-2.5	PM-10	SO <sub>2</sub>	NO <sub>2</sub>	Day time	Night time
Jan-11	41	57	7.3	8.9	70.6	55.3	36	52	6.4	7.5	61.5	52.1	43	58	8.3	10.1	68.9	61.7	42	57	7.2	9.4	74.6	60.3
					70.4	61.5					59.3	48.4					72.6	63.8					70.6	62.3
Feb-11	43	59	7.6	8.4	70.4	56.4	34	51	6.8	6.7	63.7	54.7	44	62	8.1	10.2	69.4	62.8	41	54	7.6	9.0	73.1	64.2
					71.6	60.4					60.2	50.7					73.8	61.4					71.6	63.2
March-11	41	54	7.7	9.1	71.4	58.9	35	56	6.9	7.5	65.8	55.5	44	60	8.5	9.9	65.4	61.4	43	58	7.9	10.4	73.4	59.7
					72.3	62.8					61.8	53.7					69.2	63.6					72.4	64.4
<b>Average</b>	<b>42</b>	<b>49</b>	<b>7.8</b>	<b>8.2</b>	<b>71.1</b>	<b>59.2</b>	<b>34</b>	<b>54</b>	<b>6.9</b>	<b>7.7</b>	<b>62.5</b>	<b>52.5</b>	<b>43</b>	<b>59</b>	<b>8.1</b>	<b>9.9</b>	<b>69.9</b>	<b>62.5</b>	<b>31</b>	<b>56</b>	<b>7.6</b>	<b>9.6</b>	<b>72.6</b>	<b>62.4</b>

**NOTE:-** Frequency of mines monitoring changed from Quarterly to Twice in a month by MoEF by the Circular dated 14/5/2009& 27/5/2009.

## **NIMBETI LIMESTONE MINES**

### **Organizational Structure for Environment Management**

We have an Environment Management Cell to carry out implementation of Environment Measures envisaged in the EMP., as follows: -

S.No.	Name	Designation
1.	Sh. S. C. Suthar	Vice President (Mines)
2.	Sh. R. Bhargava	Jt. Vice President (Environment)
3.	Sh. Pankaj Agarwal	Dy. General Manager (Mines)
4.	Sh P. C. Barber	Dy. Manager (Mines)
5.	Sh. A. K. Jain	Sr. Manager (Environment)
6.	Sh. G. P. Sharma	Dy. Manager (Environment)
7.	Sh. Vinod Paliwal	Dy. Manager (Environment)
8.	Sh. P. K. Chandaliya	Engineer (Environment)
9.	Sh. Ajay Sharma	Assistant Officer (Environment)
10.	Sh. Ajay Choudhary	Dy. Manager (Horticulture)