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# SHREE CEMENT LTD.

Regd. Office & Works :

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



SCL/BWR/ENV/9/2011-12/

Date.15/9/2011

Regd. A.D

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

Sub:- Environmental Statement Report of Shree Cement Limited Unit-I, Beawar (Raj) for the period from April, 2010 to March, 2011.

Ref:- Consent to Operate Letter no. F (Tech) AJMER (BEAWAR)/4 (1)2008-2009/2538-2542 Dated 02/09/2009

Dear Sir,

We are submitting herewith the Environmental Statement Report of Shree Cement Limited Unit-I, Beawar (Raj) for the period from April, 2010 to March, 2011.

This is for your kind information please.

Thanking you,  
Yours faithfully,  
For Shree Cement Ltd., Beawar

(Rakesh Bhargava)  
Jt. Vice President (Environment)

Copy to: 1) The In-Charge (Regional Office), Rajasthan State Pollution Control Board, RIICO Industrial Area, Phase-III, Madangunj, Kishangarh (Raj.).

2) The Chief Conservator of Forest (C), Ministry of Environment & Forest, Regional Office (Central Region), Kendriya Bhavan, 5th Floor, Sector 'H' Aliganj, Lucknow (U.P.),

**ENVIRONMENTAL STATEMENT**  
**FORM - V**  
**M/s SHREE CEMENT LIMITED UNIT-I**  
**BEAWAR (RAJASTHAN)**  
**(APRIL 2010 TO MARCH 2011)**

**PART – A**

- |    |   |   |
|----|---|---|
| 1. | Name and address of the Owner / Occupier of the Industry operation or process | M/s Shree Cement Limited<br>Bangur Nagar<br>Post Box No. 33<br>BEAWAR – 305 901<br>Distt. Ajmer (Rajasthan) |
| 2. | Industry Category<br>Primary (S.T.C. Code)<br>Secondary (S.T.C. Code)         | Red Category  |
| 3. | Production Capacity SCL Unit-I  | 4000 TPD Clinker<br>6000 TPD Cement   |
| 4. | Year of Establishment   | 1985  |
| 5. | Date of the last Environmental Audit Report submitted                         | 15/9/2010   |

**PART – B**

**WATER AND RAW MATERIAL CONSUMPTION**

**(I) WATER CONSUMPTION:**

- Process : N.A. (As plant is based on dry process technology)
- Cooling and dust suppression : 121360 KL
- Domestic : 140067.5 KL

Name of Product	Process Water Consumption per Unit of Product Output	
	During Previous Financial Year	During Current Financial Year
OPC and PPC Cement	0.270 KL/MT of Cement	0.129 KL/MT of Cement

(II) **RAW MATERIAL CONSUMPTION (CEMENT PLANT):**

Name of Raw Material	Name of Product	Consumption of Raw Material Per Unit of Output (Cement)	
		During Previous Financial Year	During Current Financial Year
1. Limestone	Cement	1.19	1.089
2. Laterite/Iron Ore		0.001	0.002
3. Slag		0.021	0.012
4. Sweetener / High Grade Limestone/ Fly ash in raw mill/ Sand		0.00	0.00
5. Gypsum		0.048	0.055
6. Fly Ash		0.162	0.191
7. Coal / Pet coke		0.085	0.092
8. Bed Ash		-	0.001

(III) **POWER CONSUMPTION (KWH/T OF CEMENT):**

During Previous Financial Year	During Current Financial Year
86.98	88.67

(IV) **TOTAL CEMENT PRODUCTION (MT):**

During Previous Financial Year	During Current Financial Year
1007579	942846

**PART – C**

**DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT**

Pollutants	Quantity of Pollutants Discharged (Mass/Day)	Concentration of Pollutants in Discharge (Mass/Volume)	Percentage of variation from prescribed standard with reasons
(a)	Water	<p>As the plant is being operated on dry process technology, no liquid effluent is generated from the cement plant process.</p> <p>Domestic waste water generated from residential colony and office toilets is treated in STP and treated water is used in existing cement plant process. Total quantity of treated domestic wastewater during the year 2010-2011 was 42237 KL. Residential colony is common for Shree Cement Limited Unit I &amp; II, Mines, Power plants. Analysis Report of STP treated water is attached as Annexure-IV</p>	
(b)	Air	Please refer Annexure – I & II	

**PART – D**  
**HAZARDOUS WASTE**

(As specified under Hazardous Wastes (Management, Handling & Transboundary Movement) Rules amended up to 2010)

Hazardous Waste	Total Quantity (Ltrs.)	
	During Previous Financial Year April, 2009 to March,2010	During Current Financial Year April,2010 to March,2011
From Process	We are having a common Authorization for Hazardous waste management and handling for Unit-I & II, D.G. Sets, Power plants and Mines.	
	Total quantity generated from April-2009 to March-2010 = 41920 Ltrs. Old stock = 3050 Ltrs. Total used oil received =44970 ltrs  Self used=27035 Ltrs. Sell to recyclers=9240 Ltrs. Balance quantity=8695 ltrs	Total quantity generated from April-2010 to March-2011 = 19138 Ltrs. Old stock = 8695 Ltrs. Total used oil received =27833 ltrs  Sell to recyclers=19950 Ltrs. Balance quantity=7883 ltrs
(b) From Pollution Control Facilities	N.A.	N.A.

**PART – E**

**SOLID WASTE**

		Total Quantity	
		During Previous Financial Year	During Current Financial Year
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facility	Dust collected in the ESPs, Bag Houses and Bag Filters are recycled to the system.	
(c)	1) Quantity rejected or re-utilized within the unit	100%	100%
	2) Solid	Nil	Nil
	3) Disposed	Nil	Nil

## **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:

### **Hazardous Wastes**

Cement manufacturing is based on “Dry Process”. No Hazardous waste is generated from the process except used oil which is drained from Machineries / Equipments. It is used for lubrication in chains, Stacker and Reclaimer etc and partly sold to the registered recycler.

Solid Wastes: - N.A.

## **PART – G**

### **IMPACT OF THE POLLUTION CONTROL MEASURES ON CONSERVATION OF NATURAL RESOURCES AND CONSEQUENTLY ON THE COST OF PRODUCTION**

M/s Shree Cement Limited is being operated on dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy. The stack emissions from the plant are controlled by equipment like ESPs and Bag Houses. Bag Filters have been installed at various material transfer points to clean the process and arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled in process and neutralizing the cost of operation of pollution control equipments and hence no cost impact on the production cost.

## **PART – H**

### **ADDITIONAL MEASURES / INVESTMENTS PROPOSAL FOR ENVIRONMENT PROTECTION INCLUDING ABATEMENT OF POLLUTION**

Green belt development and tree plantation is our ongoing process. Every year we are growing new tree plantation. In the year 2010-11, 4725 new trees have been planted. Up to March 2011 total green area is 82.83 hectare with around 180534 trees which is around 35 % green area of total plant and colony area (231.94 hectare).

## PART – I

### ANY OTHER PARTICULATES FOR IMPROVING THE QUALITY OF ENVIRONMENT.

1. We have full-fledged Environment Department with three separate cells, one for monitoring and one for maintenance of pollution control equipment and one for Green Belt development.
2. Monitoring of stack emission, ambient air, noise and water quality is being done regularly.
3. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.
4. Civil dept is taking care of House keeping and water supply department is taking care of operation of STP.
5. Horticulture Department is taking care of tree plantation and green belt development. New tree plantation is continuous.

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

Annexure – I	:	Ambient Air Quality Report
Annexure – II	:	Stack Emission Level Report
Annexure – III	:	Noise Level report
Annexure – IV	:	Treated Domestic Wastewater Analysis Report.

**Annexure-I**

**AMBIENT AIR QUALITY ( $\mu\text{g}/\text{M}^3$ ) FOR PERIOD FROM APRIL 2010 TO SEP 2010**

Location Month	Plant boundary near village sarakana			Plant boundary near Coal yard			Railway siding			Satar guest house				Main gate		
	SPM	SO <sub>2</sub>	NO <sub>x</sub>	SPM	SO <sub>2</sub>	NO <sub>x</sub>	SPM	SO <sub>2</sub>	NO <sub>x</sub>	RSPM	SPM	SO <sub>2</sub>	NO <sub>x</sub>	SPM	SO <sub>2</sub>	NO <sub>x</sub>
Apr-10	178	9	10	367	9	11	163	9	12	53	144	8	11	313	10	12
May-10	188	9	11	383	10	11	175	9	11	58	151	9	10	319	10	11
Jun-10	168	8	10	366	10	11	166	8	11	55	153	8	10	328	9	11
Jul-10	166	8	11	368	10	11	168	8	11	54	151	9	11	330	9	11
Aug-10	162	8	11	361	9	10	160	8	10	51	150	8	10	315	9	10
Sep-10	171	8	11	365	9	11	165	9	11	54	152	8	10	322	10	11
<b>Average</b>	<b>172</b>	<b>8</b>	<b>11</b>	<b>368</b>	<b>10</b>	<b>11</b>	<b>166</b>	<b>9</b>	<b>11</b>	<b>54</b>	<b>150</b>	<b>8</b>	<b>10</b>	<b>321</b>	<b>10</b>	<b>11</b>

**AMBIENT AIR QUALITY ( $\mu\text{g}/\text{M}^3$ ) FOR PERIOD FROM OCT 2010 TO MARCH 2011**

Location Month	Plant boundary near village sarakana				Plant boundary near Coal yard				Railway siding				Satar guest house				Main gate			
	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>x</sub>	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>x</sub>	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>x</sub>	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>x</sub>	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>x</sub>
Oct-10	-	39	8	11	-	43	9	11	-	36	8	11	-	31	7	10	-	33	9	12
Nov-10	-	36	9	12	-	39	9	12	-	33	7	10	-	32	8	11	-	36	8	11
Dec-10	64	37	9	12	74	40	8	12	68	34	7	11	62	30	8	11	71	34	8	12
Jan-11	78	40	8	11	76	36	8	13	72	31	6	11	60	28	7	12	68	35	9	12
Feb-11	76	39	9	12	75	35	8	13	73	31	8	11	61	29	8	12	70	33	8	12
Mar-11	60	35	8	12	65	36	8	12	64	30	8	12	57	29	8	11	63	31	8	12
<b>Average</b>	<b>70</b>	<b>38</b>	<b>8</b>	<b>12</b>	<b>73</b>	<b>38</b>	<b>8</b>	<b>12</b>	<b>69</b>	<b>33</b>	<b>7</b>	<b>11</b>	<b>60</b>	<b>30</b>	<b>8</b>	<b>11</b>	<b>68</b>	<b>34</b>	<b>8</b>	<b>12</b>

**Annexure-II (STACK EMISSION LEVEL PM (Mg/Nm<sup>3</sup>) FOR YEAR, 2010-2011)**

MONTH	RAW MILL & KILN	COAL MILL	CLINKER COOLER	CEMENT MILL
Apr-10	47	39	43	33
May-10	48	41	41	34
Jun-10	50	47	49	32
Jul-10	46	40	43	30
Aug-10	Shutdown			31
Sep-10	Shutdown			33
Oct-10	36	37	28	38
Nov-10	44	33	34	29
Dec-10	35	41	29	32
Jan-11	30	27	33	24
Feb-11	37	45	34	28
Mar-11	33	35	39	38
<b>AVERAGE</b>	<b>41</b>	<b>38</b>	<b>37</b>	<b>32</b>

**Annexure-III (NOISE LEVEL (Leq-dB(A) FOR YEAR 2010-2011)**

Monitoring Location Month	Plant boundary near village Sarkana		Plant boundary near Coal yard		Railway Siding near Shree Power		Satkar guest house		Main Gate	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
Apr-10	59.2	54.1	60.3	52.7	61.3	54.3	53.2	43.7	68.9	62.5
May-10	59.7	54.4	60.5	52.5	61.8	54.8	53.6	43.5	68.9	62.3
Jun-10	58.9	54.6	60.1	52.6	61.6	54.7	53.4	43.6	68.7	62.4
Jul-10	58.8	54.5	60.3	51.8	61.1	54.5	53.2	43.3	64.1	62.1
Aug-10	58.6	54.4	60.4	52.5	61.5	54.3	53.3	43.4	66.8	62.5
Sep-10	58.7	54.5	60.3	52.6	61.3	54.5	53.3	43.6	66.7	62.3
Oct-10	57.6	53.6	61.2	53.2	60.5	54.9	53.4	43.7	67.2	62.6
Nov-10	61.5	55.6	64.2	58.2	63.5	57.1	53.2	43.5	68.9	63.1
Dec-10	67.8	56.8	68.5	59.2	61.8	56.8	53.0	43.2	69.2	63.4
Jan-11	68.9	55.9	70.6	58.9	62.5	57.3	54.1	43.2	70.2	63.2
Feb-11	67.8	54.6	70.2	58.9	63.2	58.1	53.8	43.4	68.9	63.5
Mar-11	68.5	56.8	69.8	57.6	62.9	56.1	53.4	43.7	67.8	62.8
<b>Average</b>	<b>62.2</b>	<b>55.0</b>	<b>63.9</b>	<b>55.1</b>	<b>61.9</b>	<b>55.6</b>	<b>53.4</b>	<b>43.5</b>	<b>68.0</b>	<b>62.7</b>

**Annexure-IV (STP Treated Water Quality, Year 2010-2011)**

S.No.	Month Parameter	April, 10	July, 10	Oct, 10	Jan, 11
1	pH	7.65	7.64	7.75	7.62
2	TSS (ppm)	47	51	63	46
3	COD (ppm)	61.2	58.3	54.9	57.2
4	BOD (ppm)	22.6	22.3	21.2	22.7
5	Oil & Grease (ppm)	1.8	1.8	2.4	2.2