

**FORM – V**  
**(See rule 14)**

**Environmental statement for the financial year ending the 31<sup>st</sup> March 2012**

**PART – A**

1.	Name and address of the Owner/Occupier of the Industry, operation of the process.	:	<b>BINANI CEMENT LIMITED,</b> VILLAGE: SIROHI-BHAGEGA TEHSIL: NEEM KA THANA, DIST. SIKAR, RAJASTHAN
2.	Industry category	:	RED, LARGE
3.	Production Capacity	:	1.4 Million TPA (CLINKER GRINDING UNIT)
4.	Year of establishment	:	2008
5.	Date of the last environmental statement submitted	:	28.07.2011

**PART – B**

**Water and Raw Material Consumption**

**(I) Water Consumption (M<sup>3</sup>/Day)**

Process	:	Nil
Cooling	:	04.34 (Total run days = 246)
Plantation	:	21.09 (Total run days = 365)
Domestic	:	09.98 (Total run days = 365)

Name of products	Process Water consumption per unit of product output	
	During the previous financial year	During the current financial year
	(1)	(2)
Portland Cement (PPC)	0.00087 KL/MT	0.00088 KL/MT

**(II) Raw Material Consumption**

S. No.	Name of raw material	Name of products	Consumption of raw material per unit output (Per Ton)	
			During the previous financial year	During the current financial year
1.	Clinker	PPC	0.6980 MT/MT of Cement	0.6889 MT/MT of Cement
2.	Fly Ash	PPC	0.2359 MT/MT of Cement	0.2491 MT/MT of Cement
3.	Gypsum	PPC	0.0661 MT/MT of Cement	0.0620 MT/MT of Cement

### PART – C

**Pollution discharged to environment/unit of output generated (Parameter as specified in the consent issued)**

S. No	Pollutants	Concentration of Pollutants in discharge			Percentage of variation from prescribed standards with reason.
		Parameter	Prescribed Std. (mg/NM <sup>3</sup> )	Observed Value (mg/NM <sup>3</sup> )	
a.	Water (Industrial)	Not applicable since no waste water is generated from the process			N. A.
	Water (Domestic)	Very low quantity of domestic effluent (<6 KLD) generated, which is disposed by adequately designed Septic Tank & Soak Pit			N.A.
b.	Air (Stack Emission) Particulate Matter Cement mill	Parameter	Prescribed Std. (mg/NM <sup>3</sup> )	Observed Value (mg/NM <sup>3</sup> )	Stack Emission value is well within the prescribed limits stipulated by concerned regulatory authorities.
		SPM	50	24.3 (Annual Average)	

### PART - D

#### Hazardous Wastes

(As specified under Hazardous Waste (Management, Handling & Trans boundary Movement) Rules, 2008 amended till date.

S. No.	Hazardous Waste	Total quantity (Kg.)	
		During the previous financial year	During the current financial year
a.	From Process		
(i)	Used Oil & Grease (Kg) (Cat. 5.1)	1930	4420
b.	From pollution control facility	Storage Shed with spillage Tank	Storage Shed with spillage Tank

### PART – E

#### Solid Waste

Sl. No.	Solid Waste	Total quantity (Kg.)	
		During the previous financial year	During the current financial year
a.	From Process	Nil	Nil
b.	From pollution control facility	Nil	Nil
c.	Quantity recycled or reutilized	Nil	Nil

**PART – F**

Please specify the characterization (in terms of composition & quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Description of Haz. waste	Qty. of waste generated during the year (Ltr.)	Discharged from	Accumulated quantity (as on 01.04.2012)	Disposal Method
<b>Used/ Spent Oil &amp; Grease (Cat. 5.1)</b>	4420 Kgs.	4420 Kgs.	Nil (Kgs.)	Sold to the authorized recycler

**(i) Other Solid Waste (generated from the entire premises):**

Description of waste	Qty. of waste generated during the year (MT)	Disposed (MT)	Accumulated quantity (as on 01.04.12)	Disposal Method	Equipment / Facility Used
<b>Fly Ash (purchased)</b>	4415 MT (31.03.2011) 298996 MT	300935 MT	2476 MT	Used in PPC production	Fly Ash feeding in Cement Mill
<b>Paper Waste</b>	990 Kgs.	780 Kgs.	210 Kgs.	Sold to Vendors	-
<b>Metal Scrap</b>	178.356 MT	163.356 MT	15 MT	Sold to Vendors	-
<b>Torn PP Bags &amp; other misc. Plastic Waste</b>	15970 Nos. & 36.9 MT	13970 Nos.& 35.75 MT	1303 Nos.	Sold to Vendors	-
<b>E-waste (Old computers, printers, circuit boards etc.)</b>	Nil	Nil	Nil	Nil	-
<b>Spent Batteries</b>	4 Nos.	Nil	06 Nos.	Buy Back System	Dealer
<b>Filter bags scrap</b>	620 Nos.	Nil	1120 Nos.	Sale to Vendors	-
<b>Cotton waste/cotton rags</b>	782 Kgs.	782	Nil	Sold to Vendors	-
<b>Wooden Scrap</b>	7170 Kg	6910 Kg	260 Kgs.	Sold to Vendors	-

## PART – G

### **Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.**

The plant is equipped with state-of-the-art Air Pollution Control devices such ESP, Jet Pulse Filters etc designed to control the Source Emission (PM) level below 50 mg/NM<sup>3</sup> from any of the stacks installed at our plant.

In addition, we are successfully managing the ambient SPM & RSPM level below the prescribed levels by way of putting up Jet Pulse Filters at each of the transfer points, fully mechanized system (Truck tippler) for Fly Ash handling, covered belt conveyors, water sprinklers for raw materials and mostly paved surfaces for vehicular movement inside the plant premises.

All these systems have proved to be very effective in arresting and putting back the recovered material into the production line thus preventing the precious raw material, intermediate & finished products from getting lost in the atmosphere.

Thus, the pollution abatement practices adopted by us save precious raw material / product and greatly help in conserving valuable natural resources.

## PART – H

### **Additional measures/ investment proposal for environmental protection including abatement of pollution / prevention of pollution.**

- (a) About 3500 Nos. of plants saplings were planted in 2011-2012 with which the total surviving trees in the plant & colony is 13056 till date.
- (b) One Bore Well is being used as piezometric well for measurement of groundwater level in the plant.
- (c) Optimize the System interlocking through PLC to avoid the ideal running of the equipments.
- (d) P & V cooling system for Compressor house.

## PART – I

### **Any other particulars for improving the quality of the environment.**

#### Details of steps taken for improvement of environment during 2012-2013

##### **Environment Management System improvement**

1. Planning to conduct a study for Energy losses to exert greater emphasis on conservation of natural resources in particular water and non renewable energy sources.
2. Periodical review of EMS including compliance of environmental laws through periodic Management Review & Quality forums
3. Quarterly EHS inspection of all the sections throughout the plant premises.
4. Awareness promotion through various environmental competitions, workshops, presentations etc. on World Environment Day, Earth Day, Ozone Layer Conservation Day etc.
5. We have planned To reduce the energy consumption in Fly ash Bag House motor by introducing the VFD (Variable Frequency Drive).
6. We have so far replaced the Sodium Vapor Lamps (HPSV) with Compact Florescent Lamp (CFL) in our offices for energy conservation.

#### **(i) AIR**

##### **(a) Improvement in Ambient Air Quality through effective control on Fugitive Emission**

- (a) Water sprinkling on the unpaved surface for dust suppression.
- (b) Tractor driven Road Sweeper for arresting the road dust to minimize the dust
- (c) Concrete paving in 2,500 M<sup>2</sup> plant area resulting in effective control on air born fugitive dust due to vehicular movement.
- (d) RCC of Truck Parking area 2,000 M<sup>2</sup> resulting in effective control on air born fugitive dust due to Truck movement.
- (e) Replacement of 58 Nos. of filter bags in bag filters (JPF) to effectively control the dust emission during material transport to improve the air quality inside the plant premises.

##### **(b) Reduction in point source emission**

- (a) Installation of state-of-the-art Dry Fly Ash feeding system to facilitate direct unloading of open fly ash trucks (Truck Tippler) thus remarkably minimizing fugitive emission caused during fly ash handling.
- (b) Installation of state-of-the-art direct unloading of open Clinker Wagon (Wagon Tippler) thus remarkably minimizing fugitive emission caused during Clinker handling.

#### **(ii) WATER**

##### **(a) Augmenting the groundwater resources**

Constructed 4 water harvesting structures during the year 2008-2009 thus increasing the water harvesting potential to 40376.818 M<sup>3</sup> @ an annual average rainfall of 450 mm.

### **(iii) Green Belt development**

- (e) During 2011, about 3514 Nos. of plants saplings were planted with which the total surviving trees in the plant & colony has now become 13,056. A garden has been developed in 3600 M<sup>2</sup> area in front of Admin building & colony. 350 trees were planted in surrounding villages in association with villagers in monsoon season of 2011. The tree species planted are Shisham, Neem, Ashok, Babool, Ber, Pipal, Sirus, Kher, Gulmor, Imali, Amla, Sahtoot, Jamun, Karaj, Papaya, Bel, and Boganvillia, Rose, Mehandi, etc.

### **(iv) Reduction in Noise Level**

Some of the major initiatives taken to reduce the noise level are as under:

1. Proper lubrication and housekeeping to avoid excessive noise generation.
2. Periodical monitoring and reduction in vibration.
3. More than 13056 Plants survive & Covered Area about 18 hectares in the year 2007-2011 in and around the periphery of plant boundary to attenuate noise.

### **(v) Increase in industrial waste utilization**

#### **▪ Blending material**

1208081 MT PPC was produced by utilizing 300935 MT of Fly Ash generated from the Thermal Power Plants. This has resulted in significant reduction in clinker consumption with consequent reduction in GHG emission.

Thanking You,

Your's faithfully,  
For Binani Cement Limited, NKT

**(VS Panwar)**

Unit Head