

FORM – V
(See rule 14)

Environmental statement for the financial year ending the 31st March 2014

PART – A

| | | | |
|----|---|---|--|
| 1. | Name and address of the Owner/Occupier of the Industry, operation of the process. | : | BINANI CEMENT LIMITED, 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 | : | 04.06.2013 |

PART – B

Water and Raw Material Consumption

(I) Water Consumption (M³/Day)

| | | |
|------------|---|------------------------------|
| Process | : | Nil |
| Cooling | : | 04.01 (Total run days = 209) |
| Plantation | : | 15.06 (Total run days = 365) |
| Domestic | : | 09.44 (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) | 0.00085 KL/MT | 0.00082 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 | 0.6826 MT/MT of Cement | 0.6754 MT/MT of Cement |
| 2. | Fly Ash | PPC | 0.2562 MT/MT of Cement | 0.2634 MT/MT of Cement |
| 3. | Gypsum | PPC | 0.0612 MT/MT of Cement | 0.0612 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. |
|-------|---|--|---------------------------------------|--------------------------------------|---|
| 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 ³) | Observed Value (mg/NM ³) | Stack Emission value is well within the prescribed limits stipulated by concerned regulatory authorities. |
| | | PM | 50 | 18.9 (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) | 3610 | 980 |
| 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 01.04.2013) | Disposal Method |
|-------------------------------------|--|-----------------|--|----------------------------------|
| Used/ Spent Oil & Grease (Cat. 5.1) | 1480 Kgs. | 980 Kgs. | 500 (Kgs.) | Sold to the authorized recyclers |

(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 01.04.14) | Disposal Method | Equipment / Facility Used |
|--|---|------------------------|--|------------------------|--------------------------------|
| Fly Ash (purchased) | 236 MT (31.03.2013) 272394 MT | 270179 MT | 2215 MT | Used in PPC production | Fly Ash feeding in Cement Mill |
| Paper Waste | 50 Kgs.(31.03.2013) 1200 Kgs. | Nil | 1250 Kgs. | Sold to Vendors | - |
| Metal Scrap | 20 MT (31.03.2013) 67.17 Ton | 59.17 Ton | 28 Ton | Sold to Vendors | - |
| Torn PP Bags & other misc. Plastic Waste | 102 Nos. & 0.30 MT (31.03.2013) 32465 No. 11.20 Ton | 31550 No. 11.30 Ton | 1017 Nos. 0.20 Ton | Sold to Vendors | - |
| E-waste (Old computers, printers, circuit boards etc.) | Nil | Nil | Nil | Nil | - |
| Spent Batteries | 22 Nos. (31.03.2013) 38 Nos. | 60 Nos. | Nil | Buy Back System | Dealer |
| Filter bags scrap | 520 Nos. (31.03.2013) 125 Nos. | Nil | 645 Nos. | Sale to Vendors | - |
| Cotton waste/cotton rags | 1014 Kgs. | 1014 Kgs. | Nil | Sold to Vendors | - |
| Wooden Scrap | 30 Kgs. (31.03.2013) 1100 Kgs. | 800 Kgs. | 330 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/NM³ from any of the stacks installed at our plant.

In addition, we are successfully managing the Ambient Air Quality PM2.5 & PM10 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) Total 2317 Nos. of plants saplings were planted in 2013-2014 with which the total surviving trees in the plant & colony is 15954 as on 31.03.2014.
- (b) One Bore Well is being used as piezometric well for measurement of groundwater level inside 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 2013-2014

Environment Management System improvement

1. Third party certified Energy Management System (EnMS) conforming to the requirements of ISO 50001:2011.
2. Proposed appoint a consultant for legal compliance GAP analysis (Alert System).
3. Periodical review of EMS including compliance of environmental laws through periodic Management Review & Quality forums.
4. Quarterly EHS inspection of all the sections throughout the plant premises.
5. Awareness promotion through various environmental competitions, workshops, presentations etc. on World Environment Day, Energy Day, Ozone Layer Conservation Day etc.
6. We are introducing the VFD (Variable Frequency Drive) or change the pulley size to in various motors by reduce the energy consumption.
7. We have so far replaced the Sodium Vapor Lamps (HPSV) with Compact Florescent Lamp (CFL) (30 Nos.) our Street light for energy conservation.
8. We had introduced / separate the Lighting Transformer for Plant Lighting Load to save the energy.

(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 level.
- (c) Concrete paving almost complete in plant area resulting in effective control on air born fugitive dust due to vehicular movement.
- (d) Replacement of 470 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 6 Nos. water harvesting structures during the year 2008-2014. The total increasing the water harvesting potential to 60006 M³ with the rainfall of 644 mm during the year 2013-2014.

(iii) Green Belt development

- (a) During 2013-2014, total 2317 Nos. of plants saplings were planted with which the total surviving trees in the plant & colony has now become 15954. A garden has been developed in 3900 M² area in Plant & colony. The tree species planted are Shisham, Neem, Ashok, Babool, Ber, Pipal, Sirus, Kher, Gulmor, Imali, Amla, Sahtoot, Jamun, Karaj, Bakayan, Papaya, Bel, and Boganvillia, Rose, Mehandi, etc. The 80 plants were planted in surrounding villages in association with villagers in monsoon season of 2013 & total 705 plants were planted in surrounding villages till date.

(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. The total 15,954 Plants survive & Covered Area about 14.4 hectares (As per in the year 2007-2014 in and around the periphery of plant boundary to attenuate noise.

(v) Increase in industrial waste utilization

▪ Blending material

1,025,698 MT PPC was produced by utilizing 2,701,79 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

(PK Dad)
Unit Head