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SHREE CEMENT LTD.

(SURATGARH CEMENT GRINDING UNIT)

NEAR N.H. NO. 15, VILLAGE-UDASAR, P.O. SURATGARH-335804

TEHSIL-SURATGARH, DISTT. SRIGANGANAGAR (RAJ.) INDIA

UIN NO.- L26943RJ1979PLC001935



SCL/SGU/ ENV/2016-17/ 8276-78

Date: 28/09/2017

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

File No-C-109

Sub: - Environmental Statement of M/s Shree Cement Limited situated at village- Udepur, Tehsil- Suratgarh, District- Shri Ganganagar (Rajasthan) for the period of 2016-17.

Ref: - CTO no: F (Tech)/GANGANAGAR (SURATGARH)/1(1)/2008-2009/2157-2159 Dated 01/09/2015.

Sir,

Kindly refer to above subject matter and reference letter. In this regards, we are submitting herewith the Environmental Statement of M/s Shree Cement Limited situated at village- Udepur, Tehsil- Suratgarh, District- Shri Ganganagar (Rajasthan) for the period of April 2016 to March 2017.

This is for your kind information.

Thanking you,

Yours faithfully,

For SHREE CEMENT LIMITED, SURATGARH

Re

(Arun Agarwal)
General Manager (Unit In-charge)

Copy to: 1) The Regional Officer, Regional Office, Rajasthan State Pollution Control Board, 33, Phase-II, Bichwal Industrial Area, Bikaner.

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.),

BEAWAR OFFICE : Bangur Nagar, Post Box No. 33, Beawar 305 901 (Raj.)

Phone : 01462 228101-6, Fax : 01462 228117 / 119

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JAIPUR OFFICE : A-6, Yudhishter Marg, Opp. Yojana Bhawan, C-Scheme, Jaipur 302 005

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CORP. OFFICE : 21, Strand Road, Kolkata 700 001 Phone : 033 22309601-5 Fax : 033 22434226

Environmental Statement for Clinker Grinding Unit of M/s Shree Cement Limited, situated at village - Udepur, Tehsil- Suratgarh, District -Shri Ganganagar, Rajasthan
From: April, 2016 to March, 2017

PART – A

| | | |
|----|---|--|
| 1. | Name and address of the Owner / Occupier of the Industry operation or process | M/s Shree Cement Ltd, (Grinding Unit) Village - Udepur, Tehsil- Suratgarh, District -Shri Ganganagar, Rajasthan |
| 2. | Industry Category Primary (S.T.C. Code) Secondary (S.T.C. Code) | Red Category |
| 3. | Production Capacity | 2 MTPA Cement |
| 4. | Year of Establishment | 2010 |
| 5. | Date of the last Environmental Audit Report submitted | 20/09/2016 |

PART – B

WATER AND RAW MATERIAL CONSUMPTION

(I) **WATER CONSUMPTION:**

| | | |
|--------------|---|--|
| Process | : | N.A. (As plant is based on dry Process technology) |
| Cooling | : | 7102 KL |
| Construction | : | Nil |
| Domestic | : | 20805 KL |

| Name of Product | Water Consumption per Unit of Product Output(Cement) | |
|-----------------|--|-------------------------------|
| | During Previous Financial Year | During Current Financial Year |
| Cement | 0.0088 KL/ MT of Cement | 0.0043 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. Clinker | Cement | 0.6072 | 0.6177 |
| 2. Gypsum | | 0.0773 | 0.0787 |
| 3. Fly Ash | | 0.3155 | 0.3036 |

RAW MATERIAL CONSUMPTION: (D.G. SET)

| Name of Raw Material | Name of Product | Consumption of Raw Material per unit of Output (Ltrs / KWH | |
|----------------------|-----------------|--|-------------------------------|
| | | During Previous Financial year | During Current Financial year |
| Fuel/ Diesel | Power | D.G. not operated so far | |

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

| During Previous Financial Year | During Current Financial Year |
|--------------------------------|-------------------------------|
| Cement Mill | Cement Mill |
| 32.94 | 32.58 |

(IV) TOTAL CEMENT PRODUCTION (MT):

| During Previous Financial Year | During Current Financial Year |
|--------------------------------|-------------------------------|
| Cement Mill (MT) | Cement Mill (MT) |
| 1528302 | 1643016 |

(V) TOTAL D.G. POWER PRODUCTION (KWH):

| During Previous Financial Year | During Current Financial Year |
|--------------------------------|-------------------------------|
| N.A | N.A |

PART – C
DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT

| Pollutants | Quantity of Pollutants Discharged | Concentration of Pollutants in Discharge (Mass/Value) | Percentage of variation from prescribed standard with reasons |
|------------|-----------------------------------|--|---|
| (a) | Water | As the plant is being operated on dry process technology, no liquid effluent is generated from the Clinker Grinding Unit. The waste water generated from the office toilet and mess is treated by STP and used for plantation purpose | |
| (b) | Air | Please refer Annexure – 1, 2 & 3 | |

PART – D
HAZARDOUS WASTE

(As specified under Hazardous & Other Wastes (Management & Trans boundary Movement) Rules amended up to 2016)

| Hazardous Waste | Total Quantity (KL) | |
|--|--|---|
| | During Previous Financial Year | During Current Financial Year |
| a) From Process (Cement manufacturing (Grinding) is based on "Dry Process" No Hazardous waste is generated from the process except used oil which is drained from Machinery / Equipments) | Total quantity generated = 7.86 KL Old stock = Nil Total disposal= 5.46 KL Balance quantity= 2.4 KL | Total quantity generated = 4.12 KL Old stock = Nil Total disposal= 3.78 KL Balance quantity= Nil |
| (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 | N.A | Nil |
| (b) | From Pollution Control Facility | Dust collected in the Bag Houses and Bag Filters are recycled to the system. | |
| (c) | 1) Quantity rejected or re-utilized within the unit | 100% | 100% |
| | 2) Sold | 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 the categories of wastes:

(I) E-Waste:-

E-Waste was not generated during year 2016-17.

(II) Used Oil:-

Used Oil from Machineries / Equipment's. It is store in closed drums at Used Oil storage area and is sold out to the CPCB authorized recyclers time to time.

(III) Bio-Medical waste:-

Bio-medical waste was generated in small quantity at dispensary and was sold to authorize recycler for incineration/ future treatment (Annexure-IV).

(IV) Battery waste:-

2.05 MT waste batteries sold to authorize recycler during 2016-17 and present stock is nil.

(V) Hazardous Waste Utilization:-

Cement manufacturing is based on "Dry Process". No Hazardous waste is generated from the process except used oil.

(VI) Solid Wastes utilization: - 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 (Grinding Unit) 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 Bag Houses and Bag Filters 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

- 1) Green belt development and tree plantation is our ongoing process. Every year we are doing new tree plantation to increase the bio-diversity of the area. Till date we have developed plantation around 5540 trees & shrubs, this is around 40.1 % green area of the total plant area (14.5 Hect.).
- 2) Opacity meter installed for continuous stack emission monitoring and data transmitted online to server of CPCB & RPCB.
- 3) Replacement of HPSV & CFL lamps of plant area with LED lights and saved approx. 20.9 KW/Day.
- 4) Installation of 03 nos. VFD at bag filters and saved approx. 8.4 KW/Day
- 5) Replacement of bag filters of cement mill bag house with PTFE bag filters which is long lasting and efficient for emission level below 20 mg/Nm³.
- 6) Bio composting of kitchen waste received from mess at plant area.

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, one for maintenance of pollution control equipment and one for Green Belt development.
2. Monitoring of stack emission and ambient air 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 and Personal & Administration departments taking care for of Housekeeping.
5. Horticulture Section is taking care of tree plantation and green belt development. Every year we are growing new tree plantation.

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

- Annexure-I : Ambient Air Quality Report (SPM, SO₂ and NO_x)
Annexure-II : Stack Emission Report
Annexure-III : Noise level monitoring data
Annexure-IV : Bio-Medical waste generated quantity

ANNEXURE-I

AMBIENT AIR QUALITY ($\mu\text{g}/\text{m}^3$) FOR YEAR 2016-17

| Location Month | Plant boundary toward truck parking area | | | | Plant boundary behind CCR building. | | | | Plant boundary towards Udepur village. | | | |
|----------------|--|-----------|-----------|-----------|-------------------------------------|-----------|-----------|-----------|--|-----------|-----------|-----------|
| | PM10 | PM2.5 | SO2 | NOx | PM10 | PM2.5 | SO2 | NOx | PM10 | PM2.5 | SO2 | NOx |
| Apr-16 | 49 | 37 | 14 | 19 | 42 | 31 | 9 | 12 | 46 | 33 | 12 | 16 |
| May-16 | 47 | 36 | 15 | 17 | 42 | 31 | 8 | 11 | 44 | 34 | 11 | 16 |
| Jun-16 | 48 | 37 | 16 | 18 | 42 | 32 | 9 | 13 | 46 | 32 | 13 | 15 |
| Jul-16 | 46 | 37 | 17 | 18 | 43 | 32 | 9 | 12 | 47 | 32 | 13 | 16 |
| Aug-16 | 44 | 34 | 15 | 17 | 40 | 32 | 8 | 13 | 45 | 31 | 12 | 15 |
| Sep-16 | 44 | 37 | 16 | 20 | 42 | 31 | 11 | 16 | 47 | 38 | 14 | 15 |
| Oct-16 | 48 | 35 | 14 | 18 | 44 | 34 | 12 | 16 | 52 | 39 | 13 | 18 |
| Nov-16 | 50 | 39 | 15 | 18 | 46 | 35 | 14 | 17 | 51 | 41 | 16 | 19 |
| Dec-16 | 53 | 38 | 13 | 17 | 49 | 36 | 13 | 16 | 57 | 38 | 14 | 17 |
| Jan-17 | 49 | 36 | 15 | 16 | 47 | 35 | 12 | 15 | 48 | 34 | 12 | 14 |
| Feb-17 | 50 | 38 | 14 | 17 | 45 | 36 | 13 | 16 | 48 | 34 | 13 | 16 |
| Mar-17 | 47 | 35 | 11 | 15 | 42 | 30 | 11 | 14 | 44 | 32 | 11 | 16 |
| Average | 48 | 37 | 15 | 18 | 44 | 33 | 11 | 14 | 48 | 35 | 13 | 16 |

ANNEXURE-II

STACK EMISSION LEVEL (mg/Nm^3) FOR YEAR 2016-17

| Sr. No. | Month | Pollution Control Measures | PM (mg/Nm^3) |
|----------------|--------------|----------------------------|--------------------------------|
| 1 | April-16 | Bag House | 20 |
| 2 | May-16 | Bag House | 24 |
| 3 | June-16 | Bag House | 23 |
| 4 | July-16 | Bag House | 27 |
| 5 | August-16 | Bag House | 22 |
| 6 | September-16 | Bag House | 26 |
| 7 | October-16 | Bag House | 26 |
| 8 | November-16 | Bag House | 24 |
| 9 | December-16 | Bag House | 28 |
| 10 | January-17 | Bag House | 24 |
| 11 | February-17 | Bag House | 25 |
| 12 | March-17 | Bag House | 24 |
| Average | | | 24 |

ANNEXURE-III

NOISE LEVEL (Leq-dB (A)) FOR YEAR 2016-17

| S. No. | Monitoring Location Month | Plant boundary toward truck parking area | | Plant boundary behind CCR building | | Plant boundary towards Udepur village. | |
|--------|---------------------------|--|--------------|------------------------------------|--------------|--|--------------|
| | | Day Time | Night Time | Day Time | Night Time | Day Time | Night Time |
| 01. | Apr-16 | 68.9 | 65.1 | 65.3 | 59.3 | 65.4 | 62.4 |
| 02. | May-16 | 67.5 | 64.8 | 65.2 | 59.6 | 66.3 | 63.1 |
| 03. | Jun-16 | 68.1 | 65.2 | 65.4 | 58.3 | 65.9 | 64.2 |
| 04. | Jul-16 | 67.6 | 64.3 | 60.8 | 54.3 | 64.9 | 61.5 |
| 05. | Aug-16 | 67.5 | 64.8 | 64.8 | 59.3 | 64.3 | 62.4 |
| 06. | Sep-16 | 68.9 | 64.6 | 61.3 | 57.6 | 65.3 | 62.8 |
| 07. | Oct-16 | 68.3 | 63.2 | 65.8 | 61.6 | 67.3 | 61.4 |
| 08. | Nov-16 | 67.1 | 62.4 | 64.3 | 60.8 | 68.3 | 62.4 |
| 09. | Dec-16 | 64.2 | 60.3 | 62.1 | 58.6 | 67.2 | 61.3 |
| 10. | Jan-17 | 66.5 | 60.2 | 64.8 | 59.3 | 66.2 | 60.8 |
| 11. | Feb-17 | 68.2 | 63.2 | 64.8 | 60.6 | 62.9 | 57.8 |
| 12. | Mar-17 | 66.2 | 62.5 | 63.8 | 61.2 | 64.1 | 59.3 |
| | Average | 67.42 | 63.38 | 64.03 | 59.21 | 65.68 | 61.62 |

ANNEXURE-IV

Bio-Medical waste quantity generated during 2016-17

| S. No. | Month | BIOMEDICAL WASTE GENERATION & DISPOSAL (Kg) |
|---------------|--------------|---|
| 1 | April,16 | 0.713 |
| 2 | May,16 | 0.812 |
| 3 | June,16 | 0.743 |
| 4 | July, 16 | 0.869 |
| 5 | August,16 | 0.762 |
| 6 | September,16 | 0.625 |
| 7 | October,16 | 0.712 |
| 8 | November,16 | 0.696 |
| 9 | December,16 | 0.584 |
| 10 | January,17 | 0.732 |
| 11 | February,17 | 0.715 |
| 12 | March,17 | 0.692 |
| | TOTAL | 8.655 |