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SHREE CEMENT LTD.

Regd.Office & Works :
BANGUR NAGAR, POST BOX NO.33, BEAWAR 305 901, RAJASTHAN, INDIA

Plant Correspondence Address
Village Akabarpur Oud, Tehsil Laksar, Distt. Haridwar (Uttarakhand) - 247663

SCL/RGU/ENV/ESR/2019-20/36 **Date : 10/09/2019**
Regd. AD

To,
The Member Secretary,
Uttarakhand Environment Protection & Pollution Control Board,
Gaura Devi Paryavaran Bhawan,
46-B, IT Park, Sahastradhara Road,
Dehradun, Uttarakhand-248001

Sub: Environmental Statement Report for the FY 2018-2019 (Apr-2018 to Mar-2019) for Clinker Grinding Unit of M/s Shree Cement Limited; situated at Village: Akabarpur Oud, Tehsil: Laksar, Distt Haridwar (Uttarakhand) -247663

Ref: Consent no. 39387/767 and HW Authorization Number 767 vide letter no. UEPPCB/HO/Con-S-191/2019/291 dated 16/05/2019

PCB ID – 11440	Inward ID – 242180
CCA (Renewal)	
Consent No. 39387/767	Date: 30.01.2019

Sir,

Kindly refer to above subject matter and reference letter. Submitting herewith the Environmental Statement Report for the FY 2018-2019 of our Clinker Grinding Unit.

This is for your kind information please.
Thanking you,
Yours faithfully,

For Shree Cement Ltd., Laksar
For Shree Cement Ltd., Laksar
Authorised Signatory

Kundan Singh
(Unit In-Charge)

Encl: - Environment Statement Report (Form-V)

Copy to: -

The Regional Officer, Uttarakhand Environment Protection and Pollution Control Board, Irrigation Design Building, Canal Road, Roorkee, (Haridwar).

M/S SHREE CEMENT LIMITED

Village: Akabarpur Oud, Tehsil: Laksar, Distt: Haridwar, Uttarakhand -247663

Environment Statement Report (ESR) FY: 2018-2019

FORM- V

PART- A

(i)	Name and address of the owner/ Occupier of the Industry, operation or process	:	Shree Cement Limited, (Clinker Grinding Unit) Village: Akabarpur Oud, Tehsil: Laksar, Distt: Haridwar, Uttarakhand -247663
(ii)	Industry Category	:	Red Category
(iii)	Production Capacity	:	181818 Metric Tons Per Month
(iv)	Year of Establishment	:	2010
(v)	Date of the Last Environment Statement Submitted	:	18/09/2018

PART- B

(WATER AND RAW MATERIAL CONSUMPTION)

(i) **Water consumption m^3/day**

Industrial	:	16178 KL
Domestic	:	21308 KL
Process	:	N.A. (Dry Process Technology)

Name of Product	Water consumption per unit of Product (KL/Metric Tons of Cement)	
	During the Previous FY	During the Current FY
Cement	0.0090	0.0115

***** Reason of increase: Water used for dust suppression by sprinklers, nos. sprinklers increased.

(i) **(a) Raw Material Consumption (MT):**

Name of raw material consume	Name of products	Consumption of Raw Material Per Unit of Output (Cement) (Metric Tons)	
		During the Previous FY	During the Current FY
Clinker in Cement	Cement	0.574	0.562
Gypsum in Cement		0.086	0.096
Fly-Ash in Cement		0.340	0.342

(b) Raw Material Consumption: (D.G. Set)

1000 KVA & 750 KVA D.G. Set installed at site but it is not operated on continuous basis. Operates D.G. Sets only for plant lighting purpose during failure of grid power supply. The total fuel consumption during the FY was 32128 Ltrs and power production was 105219 Kwh.

Name of Raw Material	Name of Product	Consumption of Raw Material per unit of Output (Ltrs/KWh)	
		During the Previous FY	During the Current FY
H.S. Diesel	Power	0.306	0.305

(ii) **Power Consumption (KWh/T of Cement):**

During the Previous FY	During the Current FY
31.00	30.82

***** Reason of increase**:** power slightly higher due to low cement production and less running hours

(iii) **Total Cement Production (MT):**

Cement Mill	
During the Previous FY	**During the Current FY**
1607137	1406634

(iv) **Total D.G. (1000 KVA + 750 KVA) Power Production (KWh):**

During the Previous FY	During the Current FY
210572	105219

PART- C
Pollution discharges to environment / unit of output.
(Parameter as specified in the consent issued)

Pollution	Quality of Pollutants Discharged Mass/day)	Concentration of Pollutants discharges (mass /volume)	Percentage of variation from prescribed standards
a) Water	As the plant is being operated on dry process technology, there is no industrial waste water generation from plant process. Water used for cooling purpose is recycled back into the system. Domestic waste water generated from office toilets & canteen is treated through STP (Capacity of 35 KLD) and treated water is used in plantation only		

b) Air

STACK EMISSION LEVEL			PM (mg/Nm3)
Sr. No.	**Month**	**Pollution Control Measures**	**(Limit: 30 (mg/Nm3)**
1	Apr-18	Bag House	18
2	May-18	Bag House	22
3	Jun-18	Bag House	21
4	Jul-18	Bag House	24
5	Aug-18	Bag House	22
6	Sep-18	Bag House	20
7	Oct-18	Bag House	23
8	Nov-18	Bag House	25
9	Dec-18	Bag House	20
10	Jan-19	Bag House	23
11	Feb-19	Bag House	21
12	Mar-19	Bag House	19

AMBIENT AIR QUALITY MONITORING: All Values in µg/m3

Sr. No	Month	Plant Boundary Near Main Gate Area				Plant Boundary Near CCR Building Area				Plant Boundary Near Diesel Pump Area			
Lmt: Annual		**60**	**40**	**50**	**40**	**60**	**40**	**50**	**40**	**60**	**40**	**50**	**40**
Parameters		**PM10**	**PM2.5**	**SO2**	**NOx**	**PM10**	**PM2.5**	**SO2**	**NOx**	**PM10**	**PM2.5**	**SO2**	**NOx**
1	Apr-18	41	26	8.8	9.2	44	28	8.9	9.4	46	31	9.2	9.9
2	May-18	43	29	9.4	10.8	46	30	9.0	10.2	51	32	9.5	11.2
3	Jun-18	45	33	10.1	12.4	43	29	9.8	10.7	53	37	11.0	13.8
4	Jul-18	52	30	10.3	11.9	46	27	9.8	10.5	57	33	11.8	13.7
5	Aug-18	46	28	10.9	13.7	41	26	10.0	11.7	53	32	12.2	16.1
6	Sep-18	47	31	11.5	12.1	43	29	10.3	10.9	49	32	14.0	15.5
7	Oct-18	50	31	11.7	12.6	47	28	10.5	11.3	54	33	13.7	16.3
8	Nov-18	51	32	11.4	12.0	49	31	10.4	10.9	53	34	13.2	14.8
9	Dec-18	49	30	12.2	12.7	48	27	10.9	11.5	52	32	14.2	17.3
10	Jan-19	48	29	11.6	11.9	44	28	10.3	11.0	51	33	13.0	15.3
11	Feb-19	50	33	12.0	12.8	46	31	9.8	10.2	53	35	14.3	16.5
12	Mar-19	51	32	11.8	13.2	47	30	10.5	11.0	54	33	13.2	15.5

NOISE LEVEL AT PLANT BOUNDARY: All Values In dB (A)								
Sr. No	Month	Plant Boundary Near Main Gate Area		Plant Boundary Near CCR Building Area		Plant Boundary Near Diesel Pump Area		DG Set
		Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	
1	Apr-18	63.4	57.2	58.6	52.6	61.7	56.3	68.6
2	May-18	64.5	59.2	60.2	53.4	65.3	57.6	67.3
3	Jun-18	63.4	58.2	61.8	52.7	66.3	56.6	69.6
4	Jul-18	64.2	57.4	60.6	51.2	65.3	55.6	67.4
5	Aug-18	65.7	58.1	61.3	53.4	64.8	57.3	68.6
6	Sep-18	66.1	59.2	62.4	54.6	63.7	56.8	69.1
7	Oct-18	64.5	58.3	61.4	55.1	62.8	56.4	70.3
8	Nov-18	65.3	59.6	61.6	54.2	63.4	56.7	68.2
9	Dec-18	65.8	58.6	60.4	53.7	64.3	57.2	67.4
10	Jan-19	63.6	57.8	60.4	52.4	61.9	54.6	69.7
11	Feb-19	64.3	56.4	59.7	51.8	62.6	55.1	68.5
12	Mar-19	64.1	55.7	60.2	52.3	63.6	53.8	66.3

PART- D

(HAZARDOUS WASTES)

(As specified under Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, amended up to 2016)

Total Quantity (Ltrs.)						
Haz. Waste		During Previous FY	Unit-Ltrs	During Current FY	Unit-Ltrs	Remark
(a)	From Process	Old Stock	0	Old Stock	0	Sold out to CPCB authorized recyclers only
		Total Qty. Generated	0	Total Qty. Generated	0	
		Total Sold Out	0	Total Sold Out	0	
		Balance Quantity	0	Balance Quantity	0	
(b)	From Pollution Control Facilities	NA		NA		

PART- E

(SOLID WASTES)

TOTAL QUANTITY (Kg)		
	During the Previous FY	During the Current FY
1) From Process	N.A	N.A
1) From Pollution Control Facilities	Dusts collected in Bag Filters & are recycled back into the system	

PART- F

Please specify the characterizations (in terms of composition of quantum) of Hazardous solid, Biomedical as well Battery water and indicate disposal practice adopted for both these 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 generated from machineries and sold out to the CPCB authorized recyclers.

Waste Utilization: N.A.

Solid Wastes: - N.A.

E-Waste:

Total Quantity		
	During the Previous FY	During the Current FY
From Process	Nil	Nil
From Pollution Control Facility	Nil	Nil

Bio-Medical Waste:

Biomedical waste generated and disposed off detail are as under: -

Biomedical Waste Generation & Disposal Data			
Sn.	**Month**	**During Previous FY; 2017-18**	**During Current FY; 2018-19**
		BMW Generation & Disposal (Kg)	**BMW Generation & Disposal (Kg)**
1	Apr-18	0.400	0.600
2	May-18	0.600	0.800
3	Jun-18	0.550	1.000
4	Jul-18	0.500	0.780
5	Aug-18	1.450	0.680
6	Sep-18	0.280	0.640
7	Oct-18	0.200	0.760
8	Nov-18	0.250	0.700
9	Dec-18	0.240	0.730
10	Jan-19	0.230	0.710
11	Feb-19	0.370	0.540
12	Mar-19	0.500	0.710
Total		**5.570**	**8.650**

Battery Waste:

Details of Lead Acid Batteries are as under:

Number of new batteries of different categories purchased from the manufacturer/importer/ dealer or any other agency during October – March and April – September	**During Previous FY; 2017-18 (Apr-2017 to Mar-2018)**		**During Current FY; 2018-19 (Apr-2018 to Mar-2019)**	
Category:	**(i) No. of Batteries**	**(ii)Approximate Weight (In MT)**	**(i) No. of Batteries**	**(ii)Approximate Weight (In MT)**
(i) Automotive				
a) Four wheeler	N.A.	N.A.		N.A.
b) Two wheeler	N.A.	N.A.		N.A.
(ii) Industrial				
a) UPS	0	0.000		0.000
b) Motive Power	0	0.000		0.000
c) Stand –by	0	0.000		0.000
(iii) Others	0	0.000		0.000
Total	**0**	**0.000**		**0.000**

Number of used batteries of categories mentioned in Sl. No 3 and Tonnage of scrap sent manufacturer/dealer/ importer/ registered recycler or any other agency to whom the used batteries scrap was sent.	**During Previous FY; 2017-18 (Apr-2017 to Mar-2018)**		**During Current FY; 2018-19 (Apr-2018 to Mar-2019)**	
Category:	**(i) No. of Batteries**	**(ii)Approximate Weight (In MT)**	**(i) No. of Batteries**	**(ii)Approximate Weight (In MT)**
(i) Automotive				
a) Four wheeler	N.A.	N.A.		N.A.
b) Two wheeler	N.A.	N.A.		N.A.
(ii) Industrial				
a) UPS	0	0.000		0.000
b) Motive Power	0	0.000		0.000
c) Stand –by	0	0.000		0.000
(iii) Others (Scrap)	0	0.000		0.000
Total	**0**	**0.000**		**0.000**

PART- G

Impact of the pollution abatement measures taken on conservation of natural resources and 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 back into the system and neutralizing the cost of operation of pollution control equipment's and hence no cost impact on the production cost.

PART- H

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

Green belt development and tree plantation is our ongoing process. Total plant area is 109600 meter^2 out of which 38.5% plantation has been done against 33% area which is 36168 meter^2. Total 325 nos. plants planted in FY 2018-19 out of which 285 have survived and total plantation are 8590 nos. upto the FY. We have planted different type of forest plant species like as Alestonis, Chakresia, Gulmohar, Pilkhan, Molssary, Silver Oak, Neem, Arjun, Cassia Fistula, Cassia Guluca, Cassia Samiya, Papri, Kanak Champa, Ficus Benjamin, Sheesham etc.

PART- I

Any other particulates in respect of environmental protection and abatement of pollution.

- We have full-fledged Environment Department for development of green belt, monitoring and maintenance of pollution control equipment.
- Monitoring of stack emission and ambient air and water quality is being done regularly and quarterly analyzed by third party M/s Eko Pro Engineers, Pvt. Ltd. Ghaziabad.
- Maintenance department is doing scheduled regular checking of all the pollution control devices.
- All belts are covered and bag dust collectors have been provided at all material transfer points.
- House-Keeping of plant area is being maintained in perfect order. We have deployed a small & large size vacuum cleaning machine for betterment of environment of plant area.
- Entire plant area and roads are concreted.
- Recharge capacity of RWH Structure is 81456 m^3/year & all drainages are connected with RWH.
- Piezometer is constructed for monthly water level monitoring.
- Covered shed and Silos have been constructed for raw material storage.
- Total 416 nos. of new bags changed of mill vent bag filter attached with cement mill stack.
- Water Sprinkler System installed in the Plant. (from main gate to unlading & total vehicle movement area).
- Total 17 nos. of water sprinklers have been installed for dust suppression in the plant area.
- STP (Sewage Treatment Plant) is installed with capacity of 35 KLD which is operates for daily treatment of domestic effluent discharged and treated water is used in plantation only.
- STP is being operated smoothly for daily treatment of domestic waste water.
- Repainting work related environment (slogans, Env display boards etc.) completed.
- Installation and apply of 4-inch size pipe in horizontal shape around a rechargeable well of RWH structure and holes around it. Bundle a jute and sack arounded the recharge well so that the good quality of water can be recharged inside the ground.
- Repairing and Filling of media as sand and gravels in all the RWH structures.
- Steps taken towards energy conservation and improving the efficiency.

Description	Name of area of implementation/ Equipment	Energy Saving (Kw/Hr)
Replacement of HPSV lights at packing plant with LED lights. 55No.s of HPSV Lights replaced with LED Lights.	Packing Plant	5.95 Kw/Hr.
Modification done in 508HE2 Line air heater by re-arrangement of heater coils in series-parallel for reducing running load of Heater.	Cement Mill	4.5 Kw/Hr.
Eliminating existing Tandem Elevator feeding & SKS 3250 Separator feeding air slides with blowers.	SKS 3250 Cement Mill	7.4 Kw/Hr.

Modification in Packer-1 Truck Loading Machine (605 TL-01), where Existing Drum Motor Driven arrangement of Inclined Belt Conveyor replaced with its feeding cross belt conveyor head pulley with Chain sprocket arrangement.	Packer No. 1, Packing Plant	3.0 Kw/Hr.
Elimination of Existing Complete Assembly of Clinker Cross Tunnel belts Bag Filter with Fan & Rotary Air Lock by done venting lines Modification	Clinker Handling Circuit, Clinker Elevator	24.2 Kw/Hr.
Optimization of both Packer's dedusting/ Venting flow by in House modification of suction ducts & made provision for air regulating damper into the line.	Packer No. 01 & 02, Packing Plant	0.5 Kw/Hr
Air Flow Optimization at SKS 3250 Circuit. In the process, Vent Fan RPM has reduced from 1150 to 850 by providing the new draught tapping point nearer to Process Fan outlet.	SKS 3250 Circuit, Cement Mill	10.0 Kw/Hr

Photographs are showing good initiatives and improvement in field of environment: -

Overview of Plant Area

Green Belt Development

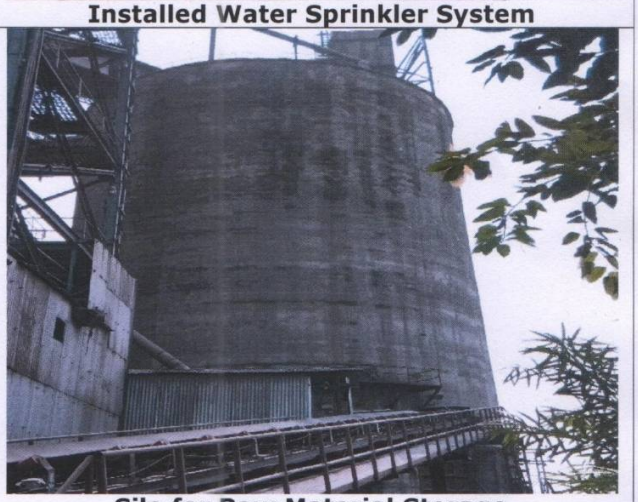
Cement Mill Area

Raw Material Storage Yard

Sewage Treatment Plant

Installed Water Sprinkler System

Piezometer Well



Silo for Raw Material Storage

World Environment Day Celebration

Green Belt Development

For Shree Cement Ltd., Laksar

Authorised Signatory

Prepared by:
Dated:10/09/2019

For M/s SHREE CEMENT LTD.
(Authorized Signatory)