O/C

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SHREE CEMENT LTD.

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

SCL/BWR/ENV-9 /2019-20/ 9905

Date: 18/09/2019

To,

File No. C-105

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

Sub:- Environmental Statement of Cement Unit-1 of M/s Shree Cement Ltd, Village – Andheri Deori, Tehsil Masuda, District Ajmer (Raj) for the period of April 2018-March 2019.

Ref: - CTO No. - F(Tech)/AJMER(Beawar)/4(1)/2008-2009/6873-6875 dated – 31/10/2017

Dear Sir,
Kindly refer to above subject matter and referred letter. In this regard, we are submitting herewith the Environmental statement of Cement Unit 1.

This is for your kind information please.

Thanking you,
Yours faithfully,

For Shree Cement Ltd;

(Dr. Anil Kumar Trivedi)
Sr. G.M. Environment

Copy to:-

1. Chief Conservator of Forests (Central), Ministry of Environment & Forests, Central Regional Office, Kendriya Bhawan, 5th Floor Sector H, Aliganj, Lucknow – 226024 (U.P.)
2. The in charge (Regional office), Rajasthan state pollution control board, SPL-II, 5th phase, RIICO Ind area, Kishangarh.

ENVIRONMENTAL STATEMENT
M/s Shree Cement Limited Unit 1
Beawar, Rajasthan
Period from : April, 2016 to : March, 2017

FORM – V

PART – A

1.	Name and address of the Owner / Occupier of the Industry operation or process	M/S Shree Cement Ltd Bangur Nagar P.O. Box No. 33 Beawar- 305901 Distt. Ajmer (Rajasthan)
2.	Industry Category Primary (S.T.C. Code) Secondary (S.T.C. Code)	Red Category
3.	Production Capacity	4000 TPD Clinker 6000 TPD Cement
4.	Year of Establishment	1985
5.	Date of the last Environmental Statement submitted	25/09/2017

PART – B

WATER AND RAW MATERIAL CONSUMPTION

1. **WATER CONSUMPTION:**

Process	:	N.A. (As plant is based on dry Process technology)
Cooling and dust Suppression	:	80623 KL
Domestic	:	315733 KL (Common for Cement Plants & Power Plants)

Name of Product	Process Water Consumption per Unit of Clinker Output	
	During Previous Financial Year	During Current Financial Year
Clinker	0.075 KL/ MT of Clinker	0.083 KL/MT of Clinker
Cement	0.043 KL/ MT of Cement	0.114 KL/ MT of Cement

2. RAW MATERIAL CONSUMPTION: (CEMENT)

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	0.899	2.030
2. Laterite /Iron Ore/Mill scale		0.006	0.007
3. Slag		0.000	0.0
4. Sweetner/ High Grade Limestone/Flyash in raw mill/ sand		0.000	0.0
5. Gypsum		0.053	0.074
6. Fly Ash		0.023	0.063
7. Pet Coke		0.055	0.129
8. Bed Ash (in Cement)		0.000	0.0
9. Marble Slurry		0.000	0.107
10. AFR(Hazardous Waste)		0.000	0.0

3. POWER CONSUMPTION (KWH/T OF CEMENT):

During Previous Financial Year	During Current Financial Year
84.34	84.38

4. TOTAL CEMENT PRODUCTION (MT):

Product	During Previous Financial Year	During Current Financial Year
Clinker	430538	963596
Cement	753819	701763

PART – C
DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT

Pollutants	Quantity of Pollutants Discharged (Mass/Day)	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 cement plant. Domestic waste water generated from residential colony and office toilets is treated in STP and treated water and sludge generated is used in horticulture activities. Total quantity of treated domestic waste water during FY 2018-19 was 79,439 KL. Residential colony is common for Shree Cement Limited Unit 1& 2, Mines and Power Plants. Analysis report of STP treated water is attached as annexure.	
(b)	Air	Please refer **Annexure – 1 & 2**	

PART – D
HAZARDOUS WASTE
(As specified under Hazardous Wastes (Management, Handling & Trans boundary Movement Rule, 2016)

Hazardous Waste	Total Quantity (Ltrs.)	
	During Previous Financial Year (2017-2018)	During Current Financial Year (2018-2019)
a)From Process (Cement manufacturing is based on "Dry Process" No Hazardous waste is generated from the process except used oil which is drained from Machinery / Equipments)	We have Common authorization for Hazardous Waste Management & Handling for Unit 1& 2, D.G. Sets, Power Plants, Synthetic Gypsum and Mines. Total Quantity generated from April-2017 to March-2018 = 8400 Ltrs. Old Stock = 0 Ltrs. Total Used oil = 8400 Ltrs. Sold-out to registered recycler = 8400 Ltrs. Balance Quantity= 0 Ltrs	We have Common authorization for Hazardous Waste Management & Handling for Unit 1& 2, D.G. Sets, Power Plants, Synthetic Gypsum and Mines. Total Quantity generated from April-2018 to March-2019 = 800 Ltrs. Old Stock = 0 Ltrs. Total Used oil = 800 Ltrs. Sold-out to registered recycler = 0 Ltrs. Quantity Co- processed = 800 Ltrs. Balance Quantity= 0 Ltrs
(b) From Pollution Control Facilities	N.A.	N.A.

PART – E

SOLID WASTE

		Total Quantity	
		During Current Financial Year (2017-2018)	**During Current Financial Year (2018-2019)**
(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	100% reutilized within the unit.	100% reutilized within the unit.
	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 both the categories of wastes:

Battery Wastes:

As specified under Batteries (Management and Handling) Amendment Rules, 2010, we have purchased following new batteries of different categories is common for cement plant, power plant and mines -

1.	Number of new batteries of different categories purchased from the manufacturer / importer / dealer or any other agency	During 1st Apr 2018 to 31st Mar 2019	
	Common for Unit 1 & 2, Power plants, D.G. Sets, Synthetic Gypsum plant & Mines		
	Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
	(i) Automotive		
	a) Four wheeler	119	2.567
	b) Two wheeler	37	1.150
	(ii) Industrial		
	a) UPS	132	2.3803
	b) Motive Power	Nil	Nil
	c) Stand –by	Nil	Nil
	(iii) Others	Nil	Nil
	Total	288 **Nos**	6.0981 **MT**

	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 1st Apr. 2018 to 31st Mar. 2019	
	Common for Unit 1 & 2, Power plants, D.G. Sets, Synthetic Gypsum plant & Mines		
2.	Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
	(i) Automotive		
	a) Four wheeler	78	3.276
	b) Two wheeler	16	0.008
	(ii) Industrial	Nil	Nil
	a) UPS	65	0.156
	b) Motive Power	Nil	Nil
	c) Stand –by	Nil	Nil
	(iii) Others	Nil	Nil
	Total	**159 Nos.**	**3.440 MT**

Used battery scrap was sent to CPCB authorized recycler

Hazardous Wastes

Cement manufacturing is based on "Dry Process" technology. No Hazardous waste is generated from the process except used oil which is drained from Machineries / Equipment. The used oil & Lead acid batteries are sold to CPCB authorized recyclers.

Bio-Medical Wastes:

Bio-medical waste generated is common for cement plant, power plant and mines during current financial year April 2017 to March 2018 under the Bio-Medical Waste (Management & Handling) Rules 2016, are as follows.

	Bio-Medical Waste Quantity (Kg) as per Color Coding			
	Yellow	**Red**	**Blue**	**White**
April 2018 to March 2019	275	231	259	0

Above mentioned waste has been sent to Sales Promoter, CBWTF Bio Medical Treatment Facility, Jaipur Bye Pass Road, Ajmer (Raj.) for disposal.

E- Wastes:

	Total Quantity	
	During Previous Financial Year (2017-2018)	During Current Financial Year (2018-2019)
From Process	Nil	Nil
From Pollution Control Facility	Nil	Nil
Others	0.055	0.0

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 Ltd. 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 & Bag Houses. Bag - Filters installed at various material transfer points to clean the process and arrest the fugitive emissions.
The particulate matter (PM) collected in the pollution control equipment is recycled in process and neutralizing the cost of operation of pollution control equipment and hence no cost impact on the production cost.

To emphasis on conservation of the natural resources & to reduce the disposal problems of the waste, total 0.800 MT hazardous waste was co-processed and 6229.68 MT hazardous waste was utilized during April 18- March 19.
Unit has implemented the De- NOx technology for control of NOx emissions. The unique technology do not utilize ammonia and thus directly avoid the use of hazardous chemical and its handling. This also reduces our impact on GHG emissions which would otherwise had caused due to transporation.

PART – H

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

Green belt development and tree plantation is our ongoing process within our plant area and also outside the plant boundary. In the FY18-19, 721 new trees have been planted. Up- to March 2019 total green area is around 82.83 hectare with around 227356 nos. of trees which is ~35 % of the total land of plant and colony area (231.94 Ha.).

ANY OTHER PARTICULATES FOR IMPROVING THE QUALITY OF ENVIRONMENT.

1. We have full-fledged Environment Department with three separate cells, for monitoring, maintenance of pollution control equipment and Green Belt development.

2. Monitoring of stack emission and ambient air and water quality is being done regularly. The on-line continuous data is being transferred to CPCB and RPCB sites.

3. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.

4. Civil dept. taking care of Housekeeping and water supply department is taking care of operation of STP.

5. To further reduce fugitive emissions, we have a big size truck mounted and 04 nos of small 3D TPS sweeping machines for regular sweeping and cleaning of paved area. All the material transfer belts are covered and transfer points are equipped with pollution control equipment. Truck parking area and vehicle movement area are concreted to avoid any fugitive emissions.

6. Horticulture Department is taking care of tree plantation and green belt development. Every year we are doing tree plantation.

7. Conversion of ESP to Bag House has being done in Raw Mill and Kiln stack.

8. Installation of De- NOx system has helped to further reduce the NOx emissions.

9. We are committed and maintaining Zero Liquid Discharge (ZLD) from our premises.

10. We create environment awareness for all our stakeholders through meetings, training programs, world environment day celebrations etc.

We are enclosing herewith following documents:-

Annexure-1 : Stack Emission monitoring report.

Annexure-2 : Ambient Air Quality (PM10, PM2.5, SO_2 and NO_2), Ambient Noise Level monitoring report.

Annexure-3 : Treated Domestic Wastewater analysis report.

Annexure: 1

Shree Cement Ltd, Beawar
Unit-I
Stack Emission monitoring Report (PM All values in mg/Nm^3)
Year: 2018-19

S. No.	Month	Raw Mill & Kiln Stack	Coal Mill Stack	Cooler Stack	Cement Mill Stack
1	Apr-18	9	10	15	14
2	May-18	11	19	14	11
3	Jun-18	17	18	11	18
4	Jul-18	13	19	6	19
5	Aug-18	13	16	9	10
6	Sep-18	11	15	20	12
7	Oct-18	8	26	13	13
8	Nov-18	7.9	8.6	17.7	12.7
9	Dec-18	SD	SD	SD	20.5
10	Jan-19	20.3	19.3	10.0	21.5
11	Feb-19	21.8	5	10	10
12	Mar-19	10	8	13.2	19
Average		11.8	13.7	11.6	15.1

Annexure: 2

Shree Cement Ltd, Beawar

Ambient Air Quality (µg/M^3)& Noise Level Monitoring Report For The Period Of April 2018 To Mar 2019

Common for Cement plant & Power plant

Year:-2018-2019

Location →	Plant boundary towards village Sarakana						Residential Colony						Plant boundary towards Power Plant						Main Gate					
	AAQ in µg/M^3				Noise Level in dB(A)		AAQ in µg/M^3				Noise Level in dB(A)		AAQ in µg/M^3				Noise Level in dB(A)		AAQ in µg/M^3				Noise Level in dB(A)	
Parameter →	PM 2.5	PM-10	SO_2	NO_2	Day time	Night time	PM 2.5	PM 10	SO_2	NO_2	Day time	Night time	PM 2.5	PM 10	SO_2	NO_2	Day time	Night time	PM 2.5	PM 10	SO_2	NO_2	Day time	Night time
Apr	33	64	10	12	64.6	48.6	30	58	8	11	65.2	48.5	32	66	10	11	62.7	55.3	30	69	10	11	68.5	53.5
May	37	69	12	12	64.3	48.5	29	58	8	13	61.8	47.6	37	71	8	13	63.2	55.1	33	68	10	12	68.3	53.1
Jun	30	63	11	12	63.6	48.8	26	56	8	13	64.5	47.5	34	67	10	12	63.2	55.6	30	68	9	11	66.7	54.3
Jul	23	49	10	9	63.4	48.6	24	45	9	9	62.5	46.7	26	48	10	9	64.1	56.1	25	44	8	9	66.8	55.2
Aug	33	65	9	11	62.3	49.2	32	61	8	13	61.4	47.2	35	69	9	12	63.7	55.8	33	67	9	11	67.4	54.8
Sep	34	66	11	10	63.6	50.3	31	62	9	11	62.4	47.6	37	70	11	10	64	56.4	35	68	10	11	66.9	55.3
Oct	33	62	10	8	64.2	51.4	30	56	8	12	61.8	46.9	36	67	11	9	65.7	57.3	36	70	9	12	64.7	53.5
Nov	35	61	11	8	63.8	52.3	31	54	8	11	62.8	48.2	36	66	11	8	66.2	58.6	39	70	8	13	65.3	54.1
Dec	33	58	10	7	62	54	30	53	6	12	52	46	31	64	12	9	65	56	38	66	7	12	68	57
Jan	38	60	12	9	64	53	32	56	8	11	55	48	36	58	13	10	68	59	37	63	9	13	70	60
Feb	22	39	13	8	62	51	30	42	8	12	58	42	17	22	12	8	65	56	15	20	8	13	62	50
Mar	32	42	8	8	60	52	35	49	9	10	61	47	39	52	10	10	62	51	33	46	8	9	65	55
Average	**31.9**	**58.2**	**10.6**	**9.5**	**63.2**	**50.6**	**30.0**	**54.2**	**8.1**	**11.5**	**60.7**	**46.9**	**33**	**60**	**10.6**	**10.1**	**64.4**	**56.0**	**32**	**59.9**	**8.8**	**11.4**	**66.6**	**54.7**

Annexure: 3

S.N	Parameter	Apr-18	May-18	June-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Avg
1	pH	8.2	8.45	7.87	8.28	8.36	8.42	8.38	8.2	8.74	8.58	8.72	8.78	8.4
2	Suspended Solids	55	62	54	68	72	64	60	54	90	84	82	88	69.4
3	COD	48	80	90	120	128	110	120	142	220	210	210	226	142.0
4	BOD 3 days 27°C	18.4	16.2	18.6	22.4	22.8	20.8	19.2	20.8	26.8	25.6	24.6	25.6	21.8
5	Oil & Grease	0.31	0.52	0.58	1.2	1.28	1.1	0.8	1.1	1	1.4	1.2	1.62	1.0