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## SHREE CEMENT LTD.

An ISO 9001, 14001, 45001 & 50001 Certified Company Regd. Office: BANGUR NAGAR, POST BOX NO.33, BEAWAR 305901, RAJASTHAN, INDIA

## SCL/BWR/ENV-9/2020-21/ 6109

Date: 22/09/2020 File No. C-105

To,

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

Sub:- Environmental Statement Report of Cement Unit II of M/s Shree Cement Ltd, Village – Andheri Deori, Tehsil Masuda, District Ajmer (Raj) for the period of April 2019-March 2020.

Ref: - CTO No. F (CPM)/ Ajmer (Masuda)/1(1)/2010-2011/6975-6977, dated 03/11/2017.

Dear Sir,

Kindly refer to above subject matter and referred letter. In this regard, we are submitting herewith the Environmental Statement Report of Cement Unit II of M/s Shree Cement Ltd, Village – Andheri Deori, Tehsil Masuda, District Ajmer (Raj) for the period of April 2019-March 2020.

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:-

- Chief Conservator of Forests (Central), Ministry of Environment, Forests & Climate Change, Central Regional Office, Kendriya Bhawan, 5<sup>th</sup> Floor, Sector H, Aliganj, Lucknow – 226024(U.P.)
- 2. The in charge (Regional office), Rajasthan State Pollution Control Board, SPL-II, 5th phase, RIICO Industrial Area, Kishangarh, Ajmer (Raj).

JAIPUR OFFICE : SB-187, Bapu Nagar, Opp. Rajasthan University, JLN Marg, Jaipur 302015 Phone : 0141 4241200, 4241204

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CORP. OFFICE : 21, Strand Road, Kolkata 700001 Phone : 033 22309601-4 Fax : 033 22434226



## ENVIRONMENTAL STATEMENT M/s Shree Cement Limited Unit II

## Period from : April, 2019 to : March, 2020

## FORM – V

#### $\underline{PART - A}$

	Name and address of the Owner /	M/S Shree Cement Ltd.		
1.	Occupier of the Industry	Bangur Nagar,		
	operation or process	P.O. Box No. 33,		
		Beawar- 305901		
		Distt. Ajmer (Rajasthan)		
	Industry Category			
2.	Primary (S.T.C. Code)	Red Category		
	Secondary (S.T.C. Code)			
3	Production Conscity	5500 TPD Clinker		
5.	Froduction Capacity	7200 TPD Cement		
4.	Year of Establishment	1997		
5.	Date of the last Environmental	18/00/2010		
	Statement submitted	18/09/2019		

#### $\underline{PART - B}$

#### WATER AND RAW MATERIAL CONSUMPTION

:

:

:

#### 1. WATER CONSUMPTION:

Process

N.A. (As plant is based on dry Process technology)

Cooling and dust Suppression 63978 KL

Domestic

265923 KL (Common for Cement Plants & Power Plants)

	Process Water Consumption p	per Unit of Clinker Output
Name of Product	During Previous Financial Year (2018-19)	During Current Financial Year (2019-20)
Clinker	0.084 KL/MT of Clinker	0.094 KL/MT of Clinker
Cement	0.092 KL/MT of Cement	0.098 KL/MT of Cement

## 2. RAW MATERIAL CONSUMPTION: (CEMENT )

	Name of	<b>Consumption of Raw Material Per</b> <b>Unit of Output (Cement)</b>		
Name of Raw Material	Product	During Previous Financial Year (2018-19)	During Current Financial Year (2019-2020)	
1. Limestone		1.634	1.66	
2. Laterite /Iron Ore/Mill scale		0.008	0.0	
3. Slag		0.00	0.0	
4. Sweetner/ High Grade Limestone/Flyash in raw mill/ sand	Cement	. 0.000	0.0	
5. Gypsum		0.099	0.09	
6. Fly Ash		0.299	0.26	
7. Coal & Pet Coke		0.104	0.10	
8. Bed Ash (in Cement)		0.00	0.0	
9. Marble Slurry		0.085	0.08	
10. AFR( Hazardous Waste)	1.1月4四	0.0000007	0.02	

## 3. <u>POWER CONSUMPTION (KWH/T OF CEMENT):</u>

During Previous Financial Year	During Current Financial Year		
(2018-19)	(2019-2020)		
67.77	71.64		

## 4. TOTAL CEMENT PRODUCTION (MT):

Product During Previous Financial Year (2018-19)		During Current Financial Year (2019-2020)		
Clinker	1128609	675593		
Cement	1034039	646338		

Pollutants	Quantity of Pollutants Discharged (Mass/Day)	Concentration of PollutantsPercentage of variat from prescribed standard with rease (Mass/Value)	
(a)	Water	Concentration of Pollutants in Discharge (Mass/Value)Percentage of variation from prescribed standard with reasonsAs the plant is being operated on dry process technology, no liquid effluent is generated from the cement plant.operated from residential is being treated in the standard with reasonsDomestic waste water generated from residential colony, canteen and office toilets is being treated in STP and treated water & sludge generated is used in plantation & horticulture activities. Total quantity of treated domestic waste water during FY 2019-20 was 88,670 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

## <u>PART – C</u> <u>DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT</u>

## <u>PART – D</u>

(As specified under Hazardous & Other Wastes (Management & Trans boundary Movement Rule, 2016) & Amendment rule, 2019.

Hazardous	Total Qua	untity (Ltrs.)
Waste	During Previous	During Current
ALL ALL A CANADA	Financial Year	<b>Financial Year</b>
ters i sharra at	(2018-2019)	(2019-2020)

a)From Process	We have Common	We have Common authorization		
(Cement	authorization for Hazardous	for Hazardous Waste Management		
manufacturing	Waste Management &	& Handling for Cement Plant (Unit		
is based on	Handling for Cement Plant	1 & 2), D.G. Sets, Power Plants,		
"Dry Process"	(Unit 1 & 2), D.G. Sets, Power	Synthetic Gypsum Plant and		
No Hazardous	Plants, Synthetic Gypsum Plant	Mines.		
waste is	and Mines.	and a first start		
generated from	Total Quantity generated from	here and the second		
the process	April-2018 to March-2019	Total Quantity generated from		
except used oil	= 800 Ltrs.	April-2019 to March-2020		
which is	Old Stock $= 0$ Ltrs.	= 1200 Ltrs.		
drained from	Total Used oil = 800 Ltrs.	Old Stock $= 0$ Ltrs.		
Machinery /	Sold-out to registered recycler	Total Used oil = 1200 Ltrs.		
Equipments)	= 0 Ltrs.	Sold-out to registered recycler		
	Quantity Co- processed = 800	= 0 Ltrs.		
A VERMAN	Ltrs.	Quantity Co- processed = 1200		
and the second second	Balance Quantity= 0 Ltrs	Ltrs.		
and the second second		Balance Quantity= 0 Ltrs		
(b) From				
Pollution	NT A	NI A		
Control	N.A.	IN.A.		
Facilities				

## <u>PART – E</u>

## SOLID WASTE

	Second Street Street	Total Quantity			
		During Previous Financial Year (2018-2019)	During Current Financial Year (2019-2020)		
(a)	From Process	Nil Nil			
(b)	From Pollution	Dust collected in the ESPs, Bag Houses and Bag			
	Control Facility	Filters are recycled to the sys	tem.		
(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		

#### $\underline{PART} - \underline{F}$

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 (Unit 1 & 2), D.G. Sets, Power Plants, Synthetic Gypsum Plant and Mines-

	Number of new batteries of different categories purchased from the manufacturer / importer / dealer or any other agency	During 1 <sup>st</sup> Apr 2019	9 to 31 <sup>st</sup> Mar 2020
	Common for Cement Plant (Unit 1 & 2), D.G Plant and Mines	. Sets, Power Plants,	Synthetic Gypsum
	Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
1.	(i) Automotive		
	a) Four wheeler	84	0.915
	b) Two wheeler	10	0.296
	(ii) Industrial		
	a) UPS	120	1.0
	b) Motive Power	Nil	Nil
	c) Stand –by	Nil	Nil
	(iii) Others	Nil	Nil
	Total	214 Nos	2.211 <b>MT</b>
1.	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 1 <sup>st</sup> Apr. 201	9 to 31 <sup>st</sup> Mar. 2020
2.	Common for Cement Plant (Unit 1 & 2), D.G. Plant and Mines.	Sets, Power Plants, S	Synthetic Gypsum
	Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
	(i) Automotive		
	a) Four wheeler	105	5.82
	b) Two wheeler	30	0.345
	(ii) Industrial	Nil	Nil

	a) UPS	212	2.575
	b) Motive Power	Nil	Nil
	c) Stand –by	Nil	Nil
- 19	(iii) Others	Nil	Nil
	Total	347Nos.	8.74 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 1200 Liter & Lead acid batteries 347 nos. 8.74 MT are sold to CPCB authorized recyclers.

### **Bio-Medical Wastes:**

Bio-medical waste generated is common for Cement Plant (Unit 1 & 2), D.G. Sets, Power Plants, Synthetic Gypsum Plant and Mines during previous and current financial year under the Bio-Medical Waste (Management & Handling) Rules 2016 & amended on 2019, are as follows:

Bio-Medical Waste Quantity (Kg) as per Color Coding							
During Previous Financial Year (April 2018 to March 2019)			During Current Financial Year (April 2019 to March 2020)				
Yellow	Red	Blue	White	Yellow	Red	Blue	White
275	231	259	0.0	282	219	247	0.0

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 (2018-2019)	During Current Financial Year (2019-2020)						
From Process	Nil	Nil						
From Pollution Control Facility	Nil	Nil						
Others	0.0	0.0						

## Solid Wastes: · N.A.

### <u> PART – G</u>

# IMPACTOFTHEPOLLUTIONCONTROLMEASURESONCONSERVATIONOFNATURALRESOURCESANDCONSEQUENTLYON 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 pollution control equipment's 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 back 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 14292.9 MT hazardous waste was co-processed and 21764.78 MT hazardous waste was utilized during April 19- March 20.

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 transportation.

#### <u>PART – H</u>

## ADDITIONALMEASURES / INVESTMENTSPROPOSALFORENVIRONMENTPROTECTIONINCLUDINGABATEMENTOFPOLLUTION

Green belt development and tree plantation is our ongoing process within our plant area and also outside the plant boundary. Every year we are doing new tree plantation to increase the density and bio-diversity of the area. In the FY19-20, 924 new trees have been planted. Up- to March 2020 total green area is around 82.83 hectare with around 228280 nos. of trees which is  $\sim$ 35 % of the total land of plant and colony area (231.94 Ha.).

## <u>PART – I</u>

## 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 basis. 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.
- 6. All the material transfer belts are covered and transfer points are equipped with pollution control equipment.
- 7. Truck parking area and vehicle movement areas are paved and concreted to avoid any fugitive emissions.
- 8. Horticulture Department in coordination with environment department is taking care of tree plantation and green belt development. Every year during monsoon season, we are doing new tree plantation.
- 9. Covered shed and Silos have been constructed for raw material storage.
- 10. Conversion of ESP to Bag House has being done in Raw Mill and Kiln stack.
- 11. Installation of De- NOx system has helped to further reduce the NOx emissions.
- 12. We are committed and maintaining Zero Liquid Discharge (ZLD) from our premises.
- 13.Domestic waste water generated from Colony, guesthouse, office toilets and canteen is being treated at Sewage Treatment Plant (STP) and treated water is being utilized in plantation & gardening
- 14. 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<sub>2</sub> and NO<sub>2</sub>), Ambient Noise Level monitoring report.

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Annexure-3: Treated Domestic Wastewater analysis report.

Annexure: 1

## <u>Shree Cement Ltd, Beawar</u> <u>Unit-II</u> <u>Stack Emission monitoring Report ( PM All values in mg/Nm<sup>3</sup>)</u> <u>Year: 2019-20</u>

S. No.	Month	Raw Mill & Kiln Stack	Coal Mill Stack	Cooler Stack	Cement Mill Stack				
1	Apr-19	5	9	9	11				
2	May-19	10	9	9	11				
3	Jun-19	10	9	10	7				
4	Jul-19	Jul-19	Jul-19	Jul-19	Jul-19	11	7	5	14
5	Aug-19	25	14	6	24				
6	Sep-19	24	10	12	7				
7	Oct-19	SD	SD	SD	SD				
8	Nov-19	23	9	10	8				
9	Dec-19	21	10	9.3	15				
10	Jan-20	22	8	12.1	14.2				
11	Feb-20	20	9	13.2	15.2				
12	Mar-20	17.2	10.2	14.2	18.1				
Average	e	17.1	9.5	10.0	13.1				

offering and particularly interaction and an effet and a

Average	Mar	Feb	Jan	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Parameter →	Ļ	Location						Annexur
54.4	50.0	51.0	51.0	55.0	57.0	55.0	55.0	55.0	60.0	59.0	50.0	55.0	PM 10			Pl					: 2
33.2	23.0	25.0	20.0	23.0	26.0	46.0	28.0	46.0	40.0	45.0	40.0	36.0	PM- 2.5	AQ in	vills	int bo					
8.5	9.0	9.0	9.0	8.0	7.0	8.0	8.0	8.0	9.0	8.0	9.0	10.0	SO2	µg/m <sup>3</sup>	ige S	ound			Am		
8.3	10.0	9.0	9.0	8.0	7.0	9.0	6.0	9.0	8.0	9.0	8.0	7.0	NO <sub>2</sub>		arak	lary			bient		
65.0	66.0	68.0	72.0	65.0	67.0	70.0	66.0	65.0	60.0	62.0	60.0	59.0	Day time	Noise in dl	kana	towa			Air Q		
46.3	49.0	55.0	42.0	41.0	42.0	48.0	44.0	43.0	45.0	46.0	51.0	50.0	Night time	Level B(A)		rds			uality		
54.5	44.0	53.0	54.0	58.0	59.0	54.0	53.0	54.0	59.0	51.0	59.0	56.0	PM 10						(µg/r		
32.9	27.0	26.0	24.0	25.0	27.0	38.0	30.0	38.0	41.0	45.0	41.0	33.0	PM- 2.5	AAQ in	Kesic	;			n <sup>3</sup> )& N		
8.1	8.0	10.0	9.0	8.0	7.0	7.0	7.0	7.0	7.0	11.0	7.0	9.0	SO2	mg/m	lenti	•		Con	Voise		
8.8	9.0	10.0	8.0	7.0	7.0	8.0	7.0	8.0	12.0	8.0	12.0	10.0	NO2			2		imon	Level	Shi	
61.2	62.0	72.0	65.0	58.0	59.0	60.0	59.0	54.0	58.0	59.0	64.0	64.0	Day time	No Lev dB	olony	-	Yea	for Co	Mon	ee Co	
44.5	49.0	60.0	45.0	42.0	35.0	39.0	41.0	40.0	42.0	43.0	49.0	49.0	Night time	oise el in (A)			nr:-20	ement	itorin	ement	
53.3	49.0	52.0	48.0	50.0	51.0	56.0	53.0	56.0	55.0	64.0	55.0	50.0	PM 10			Pla	19-202	plant d	g Rep	Ltd, I	
35.0	30.0	27.0	22.0	25.0	26.0	44.0	26.0	44.0	42.0	52.0	42.0	40.0	РМ 2.5	AAQ		nt bo	8	& Pow	ort Fo	Beawa	
8.6	10.0	9.0	10.0	9.0	8.0	7.0	8.0	7.0	8.0	10.0	8.0	9.0	SO2	in µg/m	Р	undar		er plant	r The l		
9.2	11.0	9.0	10.0	9.0	8.0	8.0	8.0	8.0	9.0	8.0	9.0	13.0	NO <sub>2</sub>	3	lant	v tow			Period		
62.7	65	70	62	89	65	62	59	57	62	60	59	63	Day time	Noise d		ards P			Of Apr		
44.4	55.0	44.0	39.0	42.0	36.0	40.0	43.0	42.0	45.0	48.0	50.0	49.0	Night time	Level in B(A)	(	ower			il 2019		
54.9	48.0	53.0	54.0	56.0	58.0	60.0	56.0	60.0	54.0	54.0	54.0	52.0	PM 2.5	Å					To Mai		
31.3	26.0	25.0	23.0	24.0	25.0	37.0	29.0	37.0	33.0	49.0	33.0	34.0	PM 10	<b>LAQ</b> ir					r 202[		
8.5	13 J	3.8	8.E	75	51	100	6	C01	81	19	8.1	<u>19</u>	\$0F	n hiðun i	Mair						
9.2	12.0	11.0	10.0	9.0	8.0	8.0	9.0	8.0	11.0	9.0	11.0	4.0	NO2		Gat						
65.3	69.0	66.0	65.0	70.0	69.0	65.0	58.0	62.0	62.0	64.0	67.0	67.0	Day time	dE N	e						
50.4	53.0	52.0	45.0	55.0	48.0	50.0	47.0	50.0	49.0	50.0	53.0	53.0	Night time	oise ⁄el in \$(A)			1				



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	Mar-20 Avg	79 05	0.0	31 538	0.00 10	68.6 180.6	0.001 D.00	15 906	0.02 DT	15 15	D.1
	Feb-20	62	1.1	36	20	71.2		16		1.2	
	Jan-20	869	0.04	59	00	919		18.5	0.01	1.3	2.4
	Dec-19	a	0.0	75	2	215		21.2		1.8	
Contraction of the second second	Nov-19	7 88	000.1	06	00	218	01-	15.2	1.01	1.62	
	Oct-19	8.38	0.00	32		228 99.8		22.8	0.11	1.2	
	Sep-19	8.56		52		220		24.2		1.28	
	Aug-19	8.48		44		196		22.6		1.32	
	Jul-19	8.38		56		216		24.6		1.3	
	June-19	8.78		48		198		21.8		1.8	
-	May-19	3.7		55		510		22.E		en H	
	Apr-19	8.58		68		220		22.4		1.8	
	Parameter	Hd		Suspended Solids	400	COD	2010 1 0 C C C	BUD 3 days 27°C	2 0 10	Uil & Grease	「「「「「「「「」」」」」」」」」」」」」」」」」」」」」」」」」」」」」
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