CIN No. L26943RJ1979PLC001935 : 01462 228101-6 Phone Toll Free : 1800 180 6003 / 6004 Fax 01462 228117 / 228119 E-Mail shreebwr@shreecement.com Website : www.shreecement.com

### 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-9/2021-22/ 7121

Date: 27/09/2021

To,

**File No. C-146** 

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

Sub:- Submission of Environmental Statement Report of Synthetic Gypsum Manufacturing Plant of M/s Shree Cement Ltd, Village - Andheri Deori, Tehsil Masuda, District Ajmer (Raj) for the FY-2020-2021 (April-2020 to March-2021) under environment protection Act, 1986.

Ref: - CTO No. - F (CPM)/ Ajmer (Masuda)/2(1)/2018-2019/3508-3510 dated -31/12/2019.

#### Dear Sir.

With reference to the above subject and referred CTO letter, we are submitting herewith the Environmental Statement (in Form-V) as per Rule 14 of EP Rules, 1986 for Synthetic Gypsum Manufacturing Plant of M/s Shree Cement Limited situated Near Village - Andheri Deori, Tehsil Masuda, District Ajmer (Raj) for the period from 1<sup>st</sup> April 2020 to 31<sup>st</sup> March 2021.

Submitted for your kind information and record please.

Thanking you, Yours faithfully,

For Shree Cement Ltd;

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

Copy to:-1. 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 NEW DELHI OFFICE : 122-123, Hans Bhawan, 1, Bahadurshah Zafar Marg, New Delhi 110002

Phone : 011 23370828, 23379218, 23370776 CORP. OFFICE : 21, Strand Road, Kolkata 700001 Phone : 033 22309601-4 Fax : 033 22434226



#### <u>ENVIRONMENTAL STATEMENT</u> <u>Synthetic Gypsum Manufacturing Plant</u> <u>M/s Shree Cement Limited</u> <u>Beawar, Rajasthan</u> <u>Period from : April, 2020 to March, 2021</u>

#### $\underline{FORM - V}$

#### <u>PART – A</u>

	Name and address of the Owner /	M/s Shree Cement Ltd.
	Occupier of the Industry	Bangur Nagar,
1.	operation or process	P.O. Box No. 33,
	HUME A DEPOSIT AND A	Beawar- 305901
		Distt. Ajmer (Rajasthan)
	Industry Category	
2.	Primary (S.T.C. Code)	Red Category
	Secondary (S.T.C. Code)	
3.	Production Capacity	1350 TPD
4.	Year of Establishment	2009
5	Date of the last Environmental	22.00.2020
э.	Statement submitted	22.09.2020

#### <u> PART – B</u>

#### WATER AND RAW MATERIAL CONSUMPTION

#### 1. WATER CONSUMPTION:

Process & Cooling

Domestic

60189 KL

224047 KL (Common for Cement Plants, Synthetic Gypsum Plant, Power Plants & Mines)

ist in realition	Process Water Consumption per U	nit of Output (Synthetic Gypsum)
Name of Product	During Current Financial Year (2019 - 20)	During Current Financial Year (2020 - 21)
Synthetic Gypsum	0.390 KL/MT	0.183 KL/MT

#### **RAW MATERIAL CONSUMPTION:**

2.

Nome of Dow Motorial	Name of	Consumption of Raw Material Per Unit of Output (Gypsum) KL/MT		
Name of Kaw Material	Product	During Previous Financial Year	During Current Financial Year	
	-2000 T	(2019 - 20)	(2020 - 21)	
1. Water		0.390 KL/MT	0.183 KL/MT	
2. Sulphuric Acid	Synthetic	0.416 KL/MT	0.327 KL/MT	
3. Spent Sulphuric Acid	Gypsum	0.121 KL/MT	0.124 KL/MT	
4. Lime Stone		0.699 MT/MT	0.283 MT/MT	

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

During Previous Financial Year	During Current Financial Year		
(2019 - 20)	(2020 - 21)		
8.363 KWh/MT	6.16 KWh/MT		

### 4. TOTAL SYNTHETIC GYPSUM PRODUCTION (MT):

Product	During Previous Financial Year (2019 - 20)	During Current Financial Year (2020- 21)
SYNTHETIC	182723	328422
GYPSUM		

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

Pollutants	Quantity of Pollutants Discharged	Concentration of Pollutants in Discharge	Percentage of variation from prescribed standard with reasons
	(Mass/Day)	(Mass/Value)	
Water	NO effluent discharged	There is no effluent generation from the syn gypsum plant. Domestic waste water generated from resid colony, canteen, guest house and office toilets units cement and power plant is being treated ir and treated water and sludge generated is us horticulture activities. Total quantity of the domestic waste water during FY 2020-21 was 6 KL. Residential colony and guest house is commend Shree Cement Limited Unit 1& 2, Mines and H Plants. Analysis report of STP treated water is att as annexure.	
Air	BDL	Please refer Annexure – 1	
Noise & Ambient Air		Please refer Annexure-2	

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

#### HAZARDOUS WASTE

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

Hazardous	Total Quantity (Ltrs.)			
Waste	During Current	During Current		
	Financial Year	Financial Year		
· · · · · · · · · · · · · · · · · · ·	(2019-2020)	(2020-2021)		
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.			
generated from				
the process	and the second second second second second	Total Quantity generated from		
except used oil	Total Quantity generated from	April-2020 to March-2021		
which is	April-2019 to March-2020	= 12600 Ltrs.		
drained from	= 1200  Ltrs.	Old Stock $= 0$ Ltrs.		
Machinery /	Old Stock $= 0$ Ltrs.	Total Used oil = 12600 Ltrs.		
Equipments)	Total Used oil = $1200$ Ltrs.	Sold-out to registered recycler		
	Sold-out to registered recycler	= 12600 Ltrs.		
	= 0 Ltrs.	Quantity Co- processed = 0 Ltrs.		
	Quantity Co- processed = 1200	Balance Quantity= 0 Ltrs		
	Ltrs.			
n si ya kiyan k	Balance Quantity= 0 Ltrs			
(b) From				
Pollution	NA	DI A		
Control	IN.A.	N.A.		
Facilities				

 $\underline{PART - E}$ 

#### SOLID WASTE

5		To	tal Quantity	
		During Previous Financial Year (2019-2020)	During Current Financial Year (2020-2021)	
(a)	From Process	Nil	Nil	
(b)	From Pollution Control Facility	Dust collected Bag Houses recycled to the system.		

(c)	1. Quantity rejected or re- utilized within the unit	100% reutilized within the unit.	100% reutilized within the unit.
	2. Sold	Nil	Nil
	3. Disposed	N11	N1l

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

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:

List enclosed as Annexure-3.

#### **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 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. 2020 to 31 <sup>st</sup> Mar. 2021

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

Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)		
(i) Automotive				
a) Four wheeler	85	3.570		
b) Two wheeler	15	0.030		
(ii) Industrial	Nil	Nil		
a) UPS	133	2.660		
b) Motive Power	Nil	Nil		
c) Stand –by	Nil	Nil		
(iii) Others	Nil	Nil		
Total	233 Nos.	6.26 MT		
	Category: (i) Automotive a) Four wheeler b) Two wheeler (ii) Industrial a) UPS b) Motive Power c) Stand –by (iii) Others Total	Category:(i) No. of Batteries(i) Automotive(i) No. of Batteriesa) Four wheeler85b) Two wheeler15(ii) IndustrialNila) UPS133b) Motive PowerNilc) Stand -byNil(iii) OthersNilTotal233 Nos.		

Used battery scrap was sent to CPCB authorized recycler

#### Hazardous Wastes

No Hazardous waste is generated from the process except used oil which is sold to CPCB authorized recyclers/co-processed in cement kiln.

#### **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 During Current Financial Year							
(April 2019 to March 2020)			(April 2020 to March 2021)				
Yellow Red Blue White			Yellow	Red	Blue	White	
282	219	247	0.0	234	205	211	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 <b>Previous</b>	During Current Financial		
	Financial Year (2019-2020)	Year (2020-2021)		
From Process	Nil	Nil		
From Pollution Control Facility	Nil	Nil		
Others	0.0	11.86		

#### Solid Wastes: · N.A.

#### <u>PART – G</u>

# IMPACTOFTHEPOLLUTIONCONTROLMEASURESONCONSERVATIONOFNATURALRESOURCESANDCONSEQUENTLYONTHECOSTOFPRODUCTIONCONSEQUENTLY

The stack emission from the plant is controlled by three stage scrubber system i.e. Injector & Ventury Scrubber. Wet Cyclone separator and scrubbing towers for control of air pollution. Water used in three stage scrubber system is re utilized in process, thus it can be said that the utilization of raw material is being done at their cost. Since the system is operated on total recycle, there is no effect on the cost of production.

#### <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 FY 20-21, 131 new trees have been planted. Up- to March 2021 total green area is around 82.83 hectare with around 228411 nos. of trees which is ~35 % of the total land of plant and colony area (231.94 Ha.). Environment expenditure incurred in the year of 2020-21 (April -2020 to March-2021) was 325.45 (cost in lac). The expenditure in same heads is proposed for next year.

#### PART – I

#### 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.
- 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. Waste water generated is reused in synthetic gypsum plant.
- 10. We are committed and maintaining Zero Liquid Discharge (ZLD) from our premises.
- 11. 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.
- 12. 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 & Ambient Noise Level monitoring report.

#### Annexure: 1

<b>Stack Emission</b>	monitoring	Report (	PM	All	values	in	mg/Nm3)
	Ye	ear: 2020	-21				

S. No.	Month	PM Level
1	Apr-20	BDL
2	May-20	BDL
3	Jun-20	BDL
4	Jul-20	BDL
5	Aug-20	BDL
6	Sep-20	BDL
7	Oct-20	BDL
8	Nov-20	BDL
9	Dec-20	BDL
10	Jan-21	BDL
11	Feb-21	BDL
12	Mar-21	BDL

\*BDL = Below Detection limit

Annexure: 2

C



			Waste Characteriz	ation	
SN	Name of waste	Nature of	Source of industry	Category	Source
1	Furnace or reactor residue and debris	Solid	Petrochemical Processes and Pyrolytical operations	1.1	Petrochemical Processes and Pyrolytic operations
2	Tarry residue and still bottoms from distillation	Solid		1.2	Petrochemical Processes and Pyrolytic operations
3	Oily sludge emulsion	Semi Solid		1.3	Petrochemical Processes and Pyrolytic operations
4	Organic residues	Liquid/ Solid		1.4	Petrochemical Processes and Pyrolytic operations
5	Residues from alkali wash of fuels	Solid		1.5	Petrochemical Processes and Pyrolytic operations
6	Spent catalyst and molecular sieves	Solid		1.6	Petrochemical Processes and Pyrolytic operations
7	Oil from waste water treatment	Liquid		1.7	Petrochemical Processes and Pyrolytic operations
8	Cargo Residue, washing water and sludge containing oil	Liquid/ Solid	Cleaning, emtying and maintenance of Petroleum Oil storage tanks including ships	3.1	Cleaning Empying and maintenance of Petroleum Oil storage tanks including ships
9	Cargo Residueand sludge containing chemicals	Liquid/ Solid		3.2	Cleaning Empying and maintenance of Petroleum Oil storage tanks including ships
10	Sludge and filters contaminated with oil	Solid		3.3	Cleaning Empying and maintenance of Petroleum Oil storage tanks including ships
11	Ballast water containing oil from ships	Semi Solid		3.4	Cleaning Empying and maintenance of Petroleum Oil storage tanks including ships
2	Slope Oil	Liquid	Petroleum refining or re- processing of used oil or recycling of waste oil	4.3	oil Refining
3	Waste cutting oil	Liquid	Bearing manufacturing industries/other industry	5.3	Any industry
4	Plating metal sludge	Solid	Metal surface treatment, such as etching, staining, polishing, galvanizing, cleaning, degreasing, plating etc.	12.8 Metal surface treatment, s itching, staining, polishing galvanizing, cleaning,deg plating etc.	
5	Sludge from Acid rect	Liquid	Production of Iron and steel including other ferrous alloys (electric furnace, steel rolling and finishing mills, Coke oven and byproduct plants)	13.2	Iron & Steel Industry
6	Spent catalyst	Solid	Oil refinery/other industry	18.1	Production of Nitrogen and complex fertilizers
7	Carbon Residue	Solid	Beverage industry/other industry	18.2	Production of Nitrogen and complex fertilizers
8	Contaminated Aromatic, Aliphatic or Napthenic Solvents may or may not fit for reuse	Liquid	Production and/or industrial use of solvents	20.1	Production and/Or industrial use of Solvents
9	Spent Solvents	Liquid		20.2	Production and/Or industrial use of
0	Distillation Residue	Liquid		20.3	Production and/Or industrial use of Solvents
1	Process Studge	Solid		20.4	Production and/Or industrial use of Solvents

22	Spent Solvents	Liquid	Production and/or industrial use of paints, pigments, lacquers, varnishes and inks	21.2	Production and/Or industrial use of Paints, pigments, lacquers, varnishes and inks	
23	Spent Catalyst	Solid	Production of plastics	22.1	Production of plastics	
24	Process Residue	Solid		22.2	Production of plastics	
25	Spent Solvents	Liquid	Production and/or industrial use of glues, organic cements, adhesive and resins	23.2	Production and/Or industrial use of glues, Organic cement, adhesive and resins	
26	Spent catalyst	Solid	Oil refinery/other industry	26.5	Dyes & Dye Intermediate Industrty	
27	Process Waste or resid	Solid	// contain	29.1	Production and formulation of pesticides	
28	Sludge Containing Re	Solid	-	29.2	Production and formulation of pesticides	
29	Spent Solvents	Liquid	Production and/or industrial use of paints, pigments, lacquers, varnishes and inks	29.4	Production and formulation of pesticides	
30	Spent catalyst	Solid	•	29.5	Production and formulation of pesticides	
31	Exhaust air or gas cleaning residue	Solid	Purification and treatment of exhaust air/ gases, water and waste water from the	35.1	Purification and Treatment of Exhoust air/gases, water and	
32	Oil and Grease Skimming	Semi Solid	processes in this schedule and common industrial efluent treatment plants	35.4	Purification and Treatment of Exhaust air/gases, water and waste water from processes	
33	Waste exhibits any of the Hazardous characteristics listed in Class-C due to the presence of any hazardous constituents in the substances or wastes	Solid	Tyre industry, Rubber Industry, processes where carbon powder is added/ generated	Schedule II- Class-E1	Any industry	
34	Waste Clothes/ Cotton waste/ Fibre etc.	Solid		Schedule III- B3030	Textile industry	
35	Tyre Fibre	Solid	Tyre industry/other industry	Schedule III- B3040	Tyre Industry	
36	Carbide Lime Sludge	Solid		Schedule III- OW	Paper Industry/ any other Industry	
37	ETP Bio solid from soft drink/ Beverage Industry	Solid		Schedule III- OW	Soft drink/ Beverage industry	
38	Spent carbon from Soft drink/ beverage industry	Solid		Schedule III- OW	Soft drink/ Beverage industry	
39	WTP sludge from soft drink/ beverage industry	Solid		Schedule III- OW	Soft drink/ Beverage industry	
40	FF Slag/ ISF Slag	Solid		Schedule III- OW	Iron & Steel Industry	
41	FMCG waste	Solid	and the second	Schedule III- OW	FMCG Industry	
42	Red mud	Solid		Schedule III- OW	Aluminium Industry	
43	Toxic Effluent containing chemical (Toxic effluent/ aqueous waste)	Solid		Schedule III- OW	Bulk Pharma/Any Industry	
44	Plastic waste	Solid	Wind mills/ other industries	Non hazardous	Rubber/ Tyre/ Any other Industry using carbon	
45	Trade Rejects	Solid	FMCG, Pharma industry	Non hazardou	FMCG Industry/ Pharma industry	

46	Oil emulsion sludge	Semi Solid	Petroleum refining or re- processing of used oil or recycling of waste oil	4.1	Oil Refining	
47	Spent Catalyst	Solid	Production and/or industrial use of glues, organic cements, adhesive and resins	4.2	Oil Refining	
48	Waste/ Residues Not made with Animal/ Vegetable material	Solid	Production or industrial use of synthetic dyes, dye intermediates and pigments	23.1	Production and/Or industrial use of glues, Organic cement, adhesives and resins	
49	Spent Solvents	Liquid	*	26.4	Dyes & Dye Intermediate Industrty	
50	Process Residues and wastes	Solid	-	28.1	Bulk Pharma Industry	
51	Spent catalyst	Solid	Production/formulation of drugs/ Pharmaceutical and heathcare product	28.2	Bulk Pharma Industry	
52	Spent carbon	Solid	-	28.3	Bulk Pharma Industry	
53	Off specification products	Solid		28.4	Bulk Pharma Industry	
54	Date Expired Products (Pharma Industries)	Solid		28.5	Bulk Pharma Industry	
55	Spent Solvent (Pharma Industries)	Liquid	-	28.6	Bulk Pharma Industry	
56	Contaminated cotton rags or other cleaning materials	Solid	Handling of hazardous chemicals and wastes	33.2	Any industry	
57	Spent Ion Exchange Resin Containing Toxic Metals	Solid	-	35.2	Purification and Treatment of Exhaust air/ gases, water and waste water from processes	
58	Any process or distillation residue	Liquid	Purification process for organic compounds/ solvents	36.1	Purification Process of Organic compounds	
59	Dust from air filtration system	Solid	Production or industrial use of Synthetic Dyes, Dye intermediates and pigments.	26.2	Dyes & Dye Intermediate Industrty	
60	Empty' barrels/containers contaminated with hazardous chemical/wastes	Solid	Handling of hazardous chemicals and wastes	33.1	Handling of hazardous chemicals and wastes	
61	Spent carbon or filter medium	Solid	Petroleum refining or re-processing of used oil or recycling of waste oil/ Purification process for organic compounds/ solvents	36.2	Purification Process of Organic compounds	
62	Used Oil	Liquid	Cement Plant, Mines	5.1	Own Cement Process & Mines	

### - 1. <u>2</u>E

And Antonio Constantine States