

o/c

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SHREE CEMENT LTD.

Regd. Office:

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



SCL/Nimbeti Mines/Env. Statement /2019-20/0971

Date: 10/09/2019

Mines Cell

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

Sub:- Environmental Statement for the period from April 2018 to March 2019 for Nimbeti Limestone Mines of M/s Shree Cement Limited situated near Village- Nimbeti Ras, Tehsil- Jaitaran, Dist- Pali (Raj)

Ref: - CTO No.- F(Mines)/Pali(Jaitaran)/100(1)/2017-2018/8221-8225 dated 28/12/2017

Sir,

We are submitting herewith the Environmental Statement for the period from April 2018 to March 2019 for Nimbeti Limestone Mines (A Captive Mine of M/s Shree Cement Ltd.) situated near Village- Nimbeti Ras, Tehsil- Jaitaran, Dist- Pali (Raj).

This is for your kind information please.

Thanking you,
Yours faithfully,

For Shree Cement Limited;

(Dr. Anil Kumar Trivedi)
Sr. GM (Environment)

Encl: a/a

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 Regional Officer (Regional Office), Rajasthan Board for the Prevention & Control of Pollution, S / A-6, Mandia Road, Industrial Area, Near Pali Urban Co-Operative Bank, PALI- MARWAR- 306401 (Raj.)

o/c Environment dept Raj

JAIPUR OFFICE : SB-187, Bapu Nagar, Opp. Rajasthan University, JLN Marg, Jaipur-302 015

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ENVIRONMENTAL STATEMENT - FORM - V

Nimbeti Limestone Mine
M/s Shree Cement Limited
Period from: April 2018 to March 2019

PART – A

1.	Name and address of the Owner / Occupier of the Industry operation or process	Nimbeti Limestone Mine M/s Shree Cement Ltd; Village: Nimbeti/Ras, Tehsil: Jaitaran, Dist: Pali -306107 (Rajasthan)
2.	Industry Category Primary (S.T.C. Code) Secondary (S.T.C. Code)	Red Category
3.	Production Capacity	25.3 Million TPA Limestone
4.	Year of Establishment	1997
5.	Date of the last Environmental Statement Submitted	22/09/2018

PART – B

WATER AND RAW MATERIAL CONSUMPTION

Water consumption	
Process (Dust suppression, Crusher)	101912 KL
Domestic	70430 KL (Common for Cement Plant, Power Plant, Mines and Colony)

1. Water Consumption

Name of Products	Process Water Consumption Per Unit of Output (KL / MT of Limestone)	
	During Previous Financial Year (2017-18)	During Current Financial Year (2018-19)
Mining of Limestone	0.00548	0.00584

2. Raw Material Consumption:

Name of Raw Materials	Name of Products	Consumption of raw material per unit of output	
		During Previous Financial Year (2017-18)	During Current Financial Year (2018-19)
Not Applicable			

3. Power Consumption (KWH/T of Limestone):

During Previous Financial Year (2017-18)	During Current Financial Year (2018-19)
1.14	1.18

4. Total Limestone Production (in Lac Tones):

During Previous Financial Year (2017-18)	During Current Financial Year (2018-19)
192.756	174.6356

PART – C
DISCHARGED TO ENVIRONMENT / UNIT OF OUTPUT

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Prevent age of variation from prescribed standards with reasons
(a) Water	Waste water generated from office toilets is treated in STP and treated effluent and sludge generated is used in horticulture activities. Analysis Report of STP treated water is attached as Annexure-4. Waste water generated from mines work shop is being used for dust suppression after removing the oil & grease traces.		
(b) Air	Please refer Annexure – 1 & 2		

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:

Hazardous Wastes

Cement manufacturing is based on “Dry Process”. No Hazardous waste is generated from the process except used oil which is drained from Machineries / Equipments. 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 2018 to March 2019 under the Bio-Medical Waste (Management & Handling) Rules 2016, are as follows.

Period	Bio-Medical Waste Quantity (Kg) as per Color Coding			
	Red	Blue	Yellow	White
April 2017 to March 2018	39.105	38.05	37.92	38.91
April 2018 to March 2019	39.21	28.448	41.065	32.01

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 (2017-18)	During Current Financial Year (2018-19)
From Process	1740 Kg.	Nil
From Pollution Control Facility	Nil	Nil

Solid Wastes: - N.A.

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 –

	Number of new batteries of different categories purchased from the manufacturer / importer / dealer or any other agency	Previous Year 1 st Apr 2017 to 31 st Mar 2018		Current Year 1 st Apr 2018 to 31 st Mar 2019	
		(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
1.	Category:				
	(i) Automotive				
	a) Four wheeler	207	8.652	219	9.568
	b) Two wheeler	Nil	Nil	Nil	Nil
	(ii) Industrial				
	a) UPS	455	4.640	66	0.563
	b) Motive Power	Nil	Nil	Nil	Nil
	c) Stand –by	Nil	Nil	Nil	Nil
	(iii) Others	Nil	Nil	Nil	Nil
	Total	662 Nos	13.292 MT	285 Nos	10.131 MT
2.	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	Previous Year 1 st Apr 2017 to 31 st Mar 2018		Current Year 1 st Apr 2018 to 31 st Mar 2019	
	Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
	(i) Automotive				
	a) Four wheeler	164	5.438	301	7.854
	b) Two wheeler	Nil	Nil	Nil	Nil
	(ii) Industrial				
	a) UPS	449	3.592	112	0.896
	b) Motive Power	Nil	Nil	Nil	Nil
	c) Stand –by	Nil	Nil	Nil	Nil
	(iii) Others	Nil	Nil	Nil	Nil
Total	613 Nos	9.030 MT	413 Nos	8.750 MT	

Used battery scrap was sent to CPCB authorized recycler

PART - G

In respect of the pollution abatement measures taken up on conservation of natural resources and on the cost of production: -

1. Low grade limestone is used with high grade lime stone for conservation of lime stone.
2. Automatic water sprinkler system has been installed for water spraying on haulage road.
3. Controlled blasting is being done for further reduction of fugitive emissions.

PART – H

Additional measures / investment proposal for environment protection including abatement & prevention of pollution: -

1. Blasting is being done by using of shock tube detonators (Down line detonators in combination of Noise less trunk line detonators) which is latest technology available, resulting in reduction of noise level and ground vibration to a great extent.
2. We are using Rock breakers for breaking of oversize boulders instead of secondary blasting which eliminated vibration, noise, fly rocks & reducing greenhouse gases which have caused due to secondary blasting.
3. Massive plantation has been carried out within and outside mine lease area. Up to March 2019 total 92460 nos. of trees has been planted in mine lease area.
4. Operator independent truck dispatch system (OITDS) has been installed for reducing down time heavy earth equipment's thereby reducing emissions.
5. Closed unloading hopper with water sprinkling arrangement is provided for unloading of limestone.

PART - I

Any other particular for improving the quality of the environment: -

6. Wet drilling system/dust cyclone precipitator with drilling machine is used while drilling so that dust is suppressed immediately and the same drill cutting is being used as stemming material for blast hole.
7. The haul road is maintained using motor grader and soil compactor. Water is sprayed on haul road by sprinkler attached with tipper (water tanker).
8. Dust generated during unloading of limestone in hopper is suppressed by Water spraying in the form shower with pressure from nozzle fitted to main water pipe line (Atomized water sprinkler system) in both of crusher, so that

dust generated while crushing is suppressed. Water is sprinkled at material transfer chute to prevent generation of dust.

9. Control Blasting is being done which has low velocity of detonation therefore air pollution, is very meager. Non electric blasting system is used to reduce ground vibration.
10. All personal protective equipments (PPE's) provided to all Mine Employee i.e. Dust-Masks (Respirator), Ear Plug, Eye Goggle, Ear Mark etc concern to them as additional measures of air & noise control.
4. Construction of grease and oil catchers at washing ramp to avoid pollution. Separated oil and grease from above catchers is sent to plant with used oil.
5. We have an organizational structure for Environment Management to carry out implementation of environment measures envisaged in the EMP (Please refer Annexure-3)
6. Full flashed environment laboratory monitors ambient air quality for PM10, PM 2.5, SO₂, NO₂ and Noise level.

Annexure-1

Ambient Air Quality Monitoring Report (PM10, PM2.5, SO₂ and NO₂)

Shree Cement Ltd, Ras														
Year:-2018-2019														
Ambient Air Quality at Nimbeti Mine (µg/M3)														
Location Month	Mines office				Near Nimbeti village				Near Mines crusher			Near Mines phase		
	PM 2.5	PM 10	SO ₂	Nox	PM 2.5	PM 10	SO ₂	Nox	SPM	SO ₂	Nox	SPM	SO ₂	Nox
18-Apr	27.0	46.0	8.4	11.4	24.0	43.0	8.4	11.8	333.0	8.8	11.7	311.0	8.6	11.5
18-May	29.5	45.0	8.1	11.0	30.5	43.5	8.0	11.5	309.5	8.4	12.3	330.5	8.2	11.4
18-Jun	34.0	51.5	7.7	11.0	33.0	50.5	7.7	12.1	320.0	7.9	12.0	300.0	7.9	10.8
18-Jul	28.5	44.5	7.4	10.6	28.5	44.0	7.1	11.4	299.0	7.7	11.4	333.5	7.1	10.3
18-Aug	26.5	41.5	7.7	10.9	26.0	42.5	7.4	11.4	268.0	7.3	11.7	275.0	7.6	11.1
18-Sep	27.5	43.5	7.5	11.0	30.0	40.0	7.0	11.8	270.5	7.5	11.7	261.0	7.8	11.1
18-Oct	31.5	50.0	8.1	11.6	28.5	39.5	7.5	11.5	299.0	7.4	11.5	287.0	8.4	11.7
18-Nov	29.0	47.0	8.4	12.0	29.5	40.0	7.8	11.6	325.0	7.8	11.8	297.5	8.8	12.1
18-Dec	32.0	50.0	8.6	12.2	30.0	43.0	7.3	11.9	349.0	7.2	11.6	322.0	8.3	11.8
19-Jan	33.5	54.0	8.9	13.2	25.5	46.0	8.2	12.8	382.5	7.7	13.1	335.5	8.6	13.6
19-Feb	34.5	54.0	8.9	13.3	25.5	46.0	8.2	12.6	382.5	7.7	13.1	335.5	8.6	12.3
19-Mar	29.5	46.5	8.6	12.7	27.5	50.0	8.4	12.4	341.0	7.9	12.4	323.0	8.1	12.6
Average	30.6	48.2	8.2	11.8	28.4	44.1	7.7	11.9	323.6	7.6	12.0	307.2	8.1	11.7

*** Suspended Particulate Matter (µg/M3)**

NOTE:- Frequency of mines monitoring changed from Quarterly to Twice in a month by MoEF by the Circular dated 14/5/2009 & 27/5/2009.

Annexure-2

Ambient Noise Level monitoring report

Shree Cement Ltd, Ras								
Year:-2018-2019								
Ambient Noise Level (Leq-dB(A) Mines								
Location Month	Near Mines Office		Near Nimbeti Village		Near Mines Crusher		Near Mines Phase	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
Apr-18	71.2	62.7	68.1	56.9	71.0	61.8	63.4	56.6
May-18	72.6	61.7	68.7	55.1	70.7	62.0	64.3	57.1
Jun-18	72.5	62.3	67.7	54.2	70.3	61.7	63.3	55.7
Jul-18	72.1	61.4	68.8	56.9	69.8	60.0	61.8	56.1
Aug-18	64.2	57.1	66.4	57.6	67.5	58.9	56.2	46.2
Sep-18	67.2	60.8	68.8	59.2	69.8	58.9	64.3	49.8
Oct-18	64.1	58.7	67.8	59.4	66.5	59.5	63.8	50.8
Nov-18	65.9	60.0	67.1	61.2	63.8	59.0	63.3	51.1
Dec-18	68.1	61.4	63.7	57.1	63.4	56.3	64.6	52.1
Jan-19	70.1	60.0	62.9	56.8	72.9	58.7	68.2	57.6
Feb-19	71.2	60.7	65.0	56.8	71.3	58.7	67.1	58.7
Mar-19	72.2	62.0	66.0	59.5	71.1	55.8	66.9	56.6
Average	68.8	60.5	66.5	57.8	68.7	58.8	63.9	53.5

Annexure- 3

Organizational Structure for Environment Management**NIMBETI LIMESTONE MINES****Organizational Structure for Environment Management**

We have an Environment Management Cell to carry out implementation of Environment Measures envisaged in the EMP., as follows: -

S. No.	Name	Designation
1	Dr. Anil Kumar Trivedi	Sr. General Manager (Environment)
2	Sh. Pankaj Agarwal	Assistant Vice President (Mines)
3	Sh. Manish Bohra	Addi. General Manager (Mines)
4	Sh. A. K. Jain	GM (Environment)
5	Sh. G. L. Yadav	Senior Officer (Environment)
6	Sh. S. N. Shukla	Senior Officer (Environment)
7	Sh. Piyush Singh Brijvasi	Officer (Environment)
8	Sh. Mohit Kumar	Assistant Officer (Environment)
9	Sh. Rajesh Yadav	Manager (Horticulture)

Annexure: 4

(STP Treated Water Quality, Year 2018-2019)

S. No.	Parameter ↓	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Avg.
1	pH	7.29	7.3	7.33	7.26	7.66	7.36	7.26	7.31	7.22	7.39	7.5	7.44	7.36
2	Total Suspended Solids	42.3	46.3	48.2	42.1	46.6	48.2	56	43.2	40.3	43.6	40	42	44.90
3	Oil and Grease	3.1	3.4	3.1	3.9	2.95	1.56	2.04	1.8	1.8	2	<4.0	2.53	3.1
4	BOD 3days 27°C	18.4	17.5	15.7	13.2	15	16.7	15.3	17.9	11.2	13.3	11.9	24	15.84
5	COD	89.3	92.3	90.1	98.5	95.1	86.5	95.3	89.2	98.1	135	146	62.9	98.19