

**INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION**

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/LST/SNG/MCDR-12/BBS

Mine code : 38ORI13028

- (i) Name of the Inspecting : **25**) **SHRI IBRAHIM SARIF**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Mr M Jha
Official with
Designation
- (iv) Date of Inspection : 04/03/2015
- (v) Prev.inspection date : 27/06/2013

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KHATKURBAHAL (72.44 HA)**
- (b) Category : B Manual
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : KHATKURBAHAL
- Taluka : RAJGANGPUR
- Post office : KHATKURBAHAL
- Pin Code : 770018
- FAX No. : 0661-4400172
- E-mail : rkl_sivacem@sancharnet.in
- Phone : 0661-4400828,168,080, 42450
- (e) Police Station :
- (f) First opening date : 01/04/1998
2. Address for : KHATKURBAHAL LIMESTONE MINE,M/S SHIVA CEMENT LTD
correspondance P.O.KHATKURBAHAL, DIST:SUNDERGRAH
ORISSA-770018
3. (a) Lease Number : ORI0733
- (b) Lease area : 72.44
- (c) Period of lease : 20
- (d) Date of Expiry : 14/01/2012
4. Mineral worked : DOLOMITE Associated
LIMESTONE Main

5. Name and Address of the

Lessee : SHIVA CEMENT LTD.
 CIVIL TOWNSHIP ROURKELA
 SUNDARGARH ORISSA
 Phone: 0661-4400828,168,080
 FAX : 0661-4400172

Owner : SHIVA CEMENT LTD
 CIVIL TOWNSHIP ROURKELA
 SUNDARGARH ORISSA
 Phone: 0661-4400828,16
 FAX : 0661-4400172

Manager Name : JYOTINDRA BEHERA Qualification : DIPLOMA IN MINING Appointment/ : Termination date

6. Date of approval of Mining :
Plan/Scheme of Mining**PART - II : TECHNICAL DETAILS/COMMENTS**

1. Details about Average employment :

Maximum number of persons employed on any day during the year

Employment category	No.of employment	Av. yearly working days
DIRECT		
Managerial	2	306
Workers	8	306
CONTRACT		
Workers	36	306

2. Community Development Plan (in and around the mines) : Proposed action and expenditure towards socio-economic development.

Action during the year	Expenditure in Rs. Lakhs for				Remarks
	previous year		current year		
	Proposed	Incurred	Proposed	Incurred	
General					
Infrastructure					
Sub total					
Sub total					
Total					

3. Status of compliance of MCDR, 1988, including therewith the rectification of the outstanding violation of rules.

violation of rule 13(1) of MCDR 1988 in respect of construction of retaining wall along bottom periphery of waste dump was pointed out earlier on 28.08.2013.

During current inspection earlier violation was observed complied.

Further violation of rule 13(1) of MCDR 1988 was pointed to the party vide this office letter dated. 06.04.2015

4. A note on the justification in case of suspension of mining operation under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 1988, if recommended.

Not at present

5. Scientific Mining

Items	Proposal	Actual work done	Remarks
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A. Exploration (Rule 13)

a.Type of prospecting : 4 no. of bore and exploration i.e. holes pitting, drilling	Nil	violation was pointed out
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B. Working (Rule 13)

a.Number and size of each pit (LxWxH)	Main Quarry : 300 x 200 x 30	Main Quarry : 280 x 180 x 30	
b.Bench size(LxWxH)length can be defined as regular/irregular	: 5m height, 5m width, regular	9 meters height, 6 m width with regular length	deviation was pointed out
c.Ore to waste ratio pit wise if possible otherwise for mine	: 1: 0.057	1 : 0.15	
d.Total area covered under excavation/pits	: 7.516 Ha	6.40 Ha	

C. Waste disposal (Rule 13)

a.Location of dumps	: North Eastern corner of lease area	North Eastern corner of lease area at earmarked place
e.Yearly generation of waste quantity.	: 15300 cum	8000 tonnes
b.Method of dumping whether advancing/retreat	: Retreating method	Retreating method
d.No.and size of each waste dump with No of steps/lift/bench	: one with 5 no. of terrace	one with 1 (one) no. of terrace

D. Production

b.Year wise production of last five year.	: 2013-14 : 264384 MT	2013-14 : 53090 MT
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D. Reserve

a.Reserve position as per latest MP/MS and at the time of inspection.	Proved Geological Reserves : 46266228 MT Probable Geological Reserves : 5740875 MT
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RESERVE POSITION AS ON 01/04/2014

LIMESTONE		
Category	Quantity in Tonnes	Grade
Proved	46266228	>40% CaO
Probable	5740875	>40% CaO
Possible		
Total	52007103	

<u>PRODUCTION FOR THE PREVIOUS YEAR 2013 - 2014</u>		
Mineral	Production	Unit
LIMESTONE	53090	TON

6. Conservation of Mineral - both quantitative and qualitative**Beneficiation (Rule 20 and 26)**

Efforts for improving low grade and sub grade mineral. : Blending of low grade with high grade ore

Mineral Rule 15

Number of benches in ore and waste. : One bench in Waste
Three no. of Benches in Ore

Exploration data as on 31/03/ 2014

No. of Boreholes	No. of Pits	No. of Trenches
24		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2013 - 2014

Overburden/waste removed (in m3) :	8000
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Utilisation of Sub Grade Mineral and Mineral Rejects

Generated	Utilised	Stacked	(In Ton.)

7. Environment Management - both quantitative and qualitativ**A. Land environment**

- a. Landscape. : The lease area represents almost flat terrain with gentle undulation
- d. Agriculture : Agriculture field exist within lease area
- e. Forest(flora and fauna) : The Lease area is of Non-Forest land, common flora like Neem, Mango etc. area observed
- f. Vegetation : The lease area is surrounded with scanty vegetation
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : School building exist near by mines, muffle blasting being practiced

B Water environment.

- b. Ground water : Water table in the lease area is 8 meters from surface level, ground water table has been intersected by mining operations.
No pollution of ground water due to mining activities
- c. Quality of water : Potable

C. Air environment

- a. Noise : Within permissible limit
- b. Air : Within permissible limit
- c. Climatic condition : Sub tropical

D. Socio economic environment

- a. Social and demographic profile. : Peoples in the locality of lease area is mainly depend on Agriculture. About 57 no. of persons belonging to adjacent village of lease area has been employed in the mines.
- b. Recommending health and safety. : Initial and Periodical medical examination of workers employed in the lease area is being done on regular basis. Infrastructure facility for the government medical practioner is being provided by the lessee for medical camp.
- c. Human settlement : No Human settlement within the lease area. The human settlement exist nearvillages are mostly dominated by Tribes.

7.1 Comments on the steps taken by the lessee towards maintaining environment and monitoring of environmental parameters to ensure the qualitative improvement in the environment and ecology.

<u>Water Management</u>				
Season	Station type	Station name	Parameter	Value
				Actual Excess

<u>Air data for excess parameters</u>				
Season	Station name	Type of area	Parameter	Value
				Actual Excess

PLANTATION DURING THE PREVIOUS YEAR 2013 - 2014

Area in Hect.

TOP SOIL MANAGEMENT

Quantity as on 31/03/2014

8. Scrutiny of annual returns on cost of production, reserve, production, pit mouth value, stock, land use pattern and fixed assets.

Cost of Production: Rs. 248.56

Reserves :

Proved Mineral Reserve 111	18221014.000	>40%CaO
Probable Mineral Reserve 121 and 122	797040.000	>40%CaO
Feasibility Mineral Resource 211	27890811.000	>40%CaO
Prefeasibility Mineral Resource 221 and 222	4943835.000	>40%CaO

Production : 53090 MT

Closing Stock : 2871 MT

Pit Mouth Value : Rs. 248.46

Land use Pattern (in Ha) :

(i) Covered under current (O/C) workings	6.6
(ii) Used for waste disposal	1.17
(iii) Occupied by plant, buildings, residential, welfare buildings & roads	3.23

Fixed Assets (Rs '000) : 57103

PART - III : PERFORMANCE OF MINE OWNER

(In case of lease expiring within 2 years - as per guidelines)

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

Indian Bureau of Mines (any issue related to CGPB, SGPB, Assistance, Consultancy, Annual Programme and studies, etc.)

None

State Government (Illegal mining, mining dispute, infrastructure, Mineral based industry, Mineral policy, etc.)

None

The Central Government (Infrastructure, Development, Mineral policy and Legislation, Mineral based industry, etc.)

None

Date :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines