

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/LST-DOL/SNG/MCDR-2/BBS

Mine code : 38ORI13003

- (i) Name of the Inspecting : 25) SHRI IBRAHIM SARIF
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri A K Barik, Mines manager and Shri V Dungkung, Ge
Official with
Designation
- (iv) Date of Inspection : 11/03/2016
- (v) Prev.inspection date : 04/03/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : BIRMITRAPUR
- (b) Category : A Other than Fully Mech.
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : BIRMITRAPUR
- Taluka : BIRMITRAPUR
- Post office : BIRMITRAPUR
- Pin Code : 770033
- FAX No. : 0661-2610270
- E-mail :
- Phone : 0661-2610270
- (e) Police Station :
- (f) First opening date : 01/01/1922
2. Address for : BIRAMITRAPUR LIMESTONE & DOLOMITE MINE
correspondance VILL-RAIPUR, BANUMUNDA
PO-BIRAMITRAPUR
3. (a) Lease Number : ORI0011
- (b) Lease area : 793.97
- (c) Period of lease : 10
- (d) Date of Expiry : 29/02/2000
4. Mineral worked : DOLOMITE Associated
LIMESTONE Main

5. Name and Address of the

Lessee : BISRA STONE LIME CO. LTD
 BIRAMITRAPUR SUNDERGARH
 DISTRICT ORISSA SUNDARGARH
 ORISSA
 Phone:
 FAX :

Owner : Bisra Stone & lime company ltd
 Birmitrapur SUNDARGARH
 ORISSA
 Phone: 0661-610202.
 FAX :

Agent : T.C.SEI
 M/S BISRA STONE LIME CO LTD
 BIRAMITRAPUR SUNDARGARH
 ORISSA
 Phone:
 FAX :

Mining Engineer

Name : A.K.BARIK, Full Time
 Qualification : AMIE(MINING)
 Appointment/ : 14/09/1992
 Termination date

Mining Engineer

Name : S.S. MISHRA, Full Time
 Qualification : A.M.I.E
 Appointment/ :
 Termination date

Geologist

Name : V DUNG DUNG, Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 30/12/1992
 Termination date

6. Date of approval of Mining : 27/08/2014
 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	4	164
Supervisory	28	164
Others	125	
Workers	161	
CONTRACT		
Workers	72	

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.

There was no outstanding violations.

During current inspection violations of rule 13(1), 23(5) and 45(7) of MCDR 1988 were observed.

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 recommended

5. Scientific Mining

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

a.Type of prospecting :
and exploration i.e.
pitting, drilling

Dolomite
79 no. of Bore holes in
Dolomite over 3048
meters
Limestone
55 no. of bore holes in
Limestone over 3136
meters

b.Total area covered :

Limestone:
G1 level Quarry
Block :190.848 Ha
G2 Level Non Quarry
Block 65.6 Ha

Dolomite :
G1 level Quarry
Block :156.552 Ha
G2 Level Non Quarry
Block 38.24 Ha

B. Working (Rule 13)

b.Bench : Height 8 meters Height 8 meters
size(LxWxH)length can Width more than Width more than
be defined as height height
regular/irregular

d.Total area covered : 179.12 Ha 159.61 Ha
under excavation/pits

C. Waste disposal (Rule 13)

a.Location of dumps : 17 no. of dumps are
exist in the lease area.
Only Dump no. 4 is
active one.

e.Yearly generation : Limestone : 10,800 Limestone : Nil
of waste quantity. T Dolomite : Nil
Dolomite : Nil

b.Method of dumping : Retreating Retreating
whether
advancing/retreat

c.Total area covered : 41.112 Ha 34.402 Ha
under waste dump.

D. Production

b.Year wise : Limestone : Limestone : 2229.000 T
production of last 2715200 T Dolomite : 102498.500
five year. Dolomite : T
2407638 T

D. Reserve

a. Reserve position as :
per latest MP/MS and
at the time of
inspection.

Limestone: in Million
Reserves :111- 119.65; Tonnes
122- 35.28
Resources :211 - 37.24;
221-35.07; 222- 33.73.
Dolomite:
Reserves : 111- 83.62;
122 - 33.78
Resources: 211 - 12.11;
221 - 10.45; 222 -
26.23.

RESERVE POSITION AS ON 01/04/2015

LIMESTONE		
Category	Quantity in Tonnes	Grade
Proved	119650000	+42% CaO
Probable	35280000	+42% CaO
Possible	106040000	+42% CaO
Total	260970000	

DOLOMITE		
Category	Quantity in Tonnes	Grade
Proved	83620000	+19% MgO
Probable	33780000	+19% MgO
Possible	48790000	+19% MgO
Total	166190000	+19% MgO

PRODUCTION FOR THE PREVIOUS YEAR 2014 - 2015

Mineral	Production	Unit
LIMESTONE	2229	TON
DOLOMITE	102498.5	TON

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

- Efforts for improving low grade and sub grade mineral. : There exist 17 no. of dumps. As these dumps are old in nature analysis of these as per revised threshold value of Limestone [35% CaO (Min), MgO-4% (Max) & SiO₂ -18%(max)] and Dolomite [Mgo 15% (min) & SiO₂ -6% (max)] for possible recovery of limestone and dolomite.
Further the rest dump material is in the process of sell as mineral reject/ road material.
- Efforts for improving percentage of recovery of ore. : Where grade is not uniform, manual labours are engaged for sorting and sizing of reject from Blasted material.

Mineral Rule 15

- Percentage of recovery of ore pitwise w.r.t. ROM and total material : For both Limestone & Dolomite
Recovery of Ore is 80%
Recovery of Sub grade Ore is 10%

Exploration data as on 31/03/ 2015

No. of Boreholes	No. of Pits	No. of Trenches
55		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2014 - 2015

Overburden/waste removed (in m ³) :	0
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Utilisation of Sub Grade Mineral and Mineral Rejects

<u>Generated</u>	<u>Utilised</u>	<u>Stacked</u>	(In Ton.)

7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : The general topography of the area represents gently undulating terrain covered with soil and alluvium to a great extent and gently sloping from SSE to NNE direction. The highest elevation of the lease area is 343.6 m and lowest elevation is 237.2 m.
- c. Soil and land use pattern : Mining : 159.61 Ha
Overburden : 34.202 Ha
Infrastructure : 14.12 ha
Road : 10.08 Ha
Railway line/ Magazine : 6.64 Ha
Township area : 17.60 Ha
Mineral seperation plant : 5.50 ha
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : No such Public building, places and monuments (protected, historical), placec of worship and places of tourist exist in the lease area.

B Water environment.

- a. Surface water : The drainage pattern in the lease area is controlled by the hill slopes. No river / nala is found in the lease area. The river Lurgi flowing at western side of the lease area and daitari nala flowing at eastern side of lease area.
- b. Ground water : Ground water has not been affected by mining operations. Tube wells have been dug in the village of Birmitrapur and used for drinking purpose.

D. Socio economic environment

- c. Human settlement : 17.60 Ha area of lease has been occupied by Township. The mining operation in the M L area will have positive impact on the economy of the local people. About 1000 peoples are directly employed in the mine.

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

<u>PLANTATION DURING THE PREVIOUS YEAR</u>		<u>2014 - 2015</u>	Area in Hect.
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Within lease area			Outside lease area		
Area	Trees planted	Survival rate	Area	Trees planted	Survival rate
1	2500	85			

TOP SOIL MANAGEMENT
Quantity as on 31/03/2015

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

2014-15

(1) Production	Limestone	Dolomite
	2229.000 MT	102498.500 MT
(2) Pit mouth value	Rs.408	Rs. 592
(3) Closing Stock	427030.63 MT	336271.82 MT
(4) Cost of production :	Rs.1192.84	

(5) Reserves:

Limestone:

Reserves :111- 119.65; 122- 35.28

Resources :211 - 37.24; 221-35.07; 222- 33.73.

Dolomite:

Reserves : 111- 83.518; 122 - 33.78

Resources: 211 - 12.11; 221 - 10.45; 222 - 26.23.

(6) Lease area (surface area) utilisation as at the end of year (hectares)

(i) Covered under current (O/C) workings : 160.11

(ii) Used for waste disposal 34.2

(iii) Occupied by plant, buildings, residential, welfare buildings & roads: 53.94

(7) Value of Fixed Assets* (Rs.'000): 23688.06

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.)

Lease was executed over reduced area of 793.043 Ha in Single block from original lease area of 1099.303 Ha in Six blocks without compliance of rule 23(5) of MCDR, 1988 approval of Final mine closure plan for 306.26 Ha.

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

None

Date :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines