

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/DOL/SNG/MCDR-5/BBS-12/5/01

Mine code : 38ORI13014

- (i) Name of the Inspecting : **SQ24**) **DR. M K SOMANI**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sri S.K Rout .Agent/ AED(Mines)
Official with
Designation
- (iv) Date of Inspection : 05/06/2013
- (v) Prev.inspection date : 02/08/2011

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **LANJIBERNA (893.55 HA)**
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) Postal address
State : ORISSA
District : SUNDARGARH
Village : LANJIBERNA
Taluka : RAJGANGPUR
Post office : LANJIBERNA
Pin Code : 770023
FAX No. : 06624-220733/933
E-mail : GKVERMA@OCL.IN
Phone : 0661-2451419,2451417
- (e) Police Station : RAJGANGPUR
- (f) First opening date : 12/05/1951
2. Address for : VILL/PO-LANJIBERNA
correspondance DIST-SUNDERGARH
3. (a) Lease Number : ORI0016
(b) Lease area : 1002.01
(c) Period of lease : 20
(d) Date of Expiry : 20/08/1998
4. Mineral worked : DOLOMITE Associated
LIMESTONE Main

5. Name and Address of the

Lessee : ORISSA CEMENT LIMITED
 AT/PO RAJGANGPUR
 SUNDARGARH ORISSA
 Phone:20133,20733
 FAX :20933, 20133

Owner : V P SOOD
 AT PO RAJGANGPUR
 SUNDARGARH ORISSA
 Phone: 06624220121
 FAX : 06624220133/933

Agent : P.C.MISHRA
 C/O ORISSA CEMENT L.TD
 AT/PO LANJIBERNA
 SUNDARGARH ORISSA
 Phone: 220121
 FAX : 220133

Mining Engineer

Name : A.K. MISHRA, Part Time
 Qualification : M. TECH
 Appointment/ : 15/07/2005
 Termination date

Geologist

Name : Dr A MUKHERJEE, Full Time
 Qualification : M TECH GEOLOGY
 Appointment/ : 01/12/2005
 Termination date

Manager

Name : G.K.VERMA
 Qualification : AMIE
 Appointment/ : 01/08/1996
 Termination date

6. Date of approval of Mining : 08/02/2012
 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	5	309
Supervisory	21	309
Workers	84	309
Others	9	309
Ministrial	5	309
Plant	15	309
CONTRACT		
Workers	128	309

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					
Water supply	25.00	10.28	5.97		
Health	35.00	41.82	11.07		
Sub total	60.00	52.10	17.04		
Infrastructure					
Sub total			52.10		
Others	10.00		30.89		EDUCATION
Others	23.00		45.31		COMMUNITY DEVELO
Training	15.00	0.83	4.77		
Sports activities	2.00		2.55		
Environment management			0.88		PLANTATION
Total	110.00	17.87	136.50		

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

VIOLATION OF RULE 13(1), 23(E)(2), 45(1)(B) AND 46 IS BEING ISSUED. NO PREVIOUS VIOLATIONS ARE PENDING.

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 : 56 bore holes of and exploration i.e. 4471 meterage pitting, drilling		20 boreholes of 2075	Within surface right area to prove the deposit beyond RL 166m
b.Total area covered : Grid interval of 100x100		100x100	

B. Working (Rule 13)

c.Ore to waste ratio : 1:1.17 pit wise if possible otherwise for mine		1:0.75	
b.Bench size(LxWxH)length can be defined as regular/irregular	: REGULAR	REGULAR	
a.Number and size of each pit (LxWxH)	2_6 960x500x58 1_3 1860x300x41 4_5 930x330x47	2_6 960x500x58 1_3 1860x300x41 4_5 930x330x47	
d.Total area covered : 124.35 ha under excavation/pits		124.35 ha	

C. Waste disposal (Rule 13)

a.Location of dumps	: All inactive dumps along the southern side lease boundary. The other dumps located on the western side and on the northern side of the boundary are non active.	All inactive dumps along the southern side lease boundary. The other dumps located on the western side and on the northern side of the boundary are non active .	
b.Method of dumping whether advancing/retreat	: Advancing	Advancing	
c.Total area covered : 51.81 ha under waste dump.		51.81 ha	
d.No.and size of each waste dump with No of steps/lift/bench		AREA OF THE IS IN Ha 1 External dump no. 8N- 2.77 2 External dump no. 7N - 3.3 3 External dump No 6N -	

4.39
 4 External dump No 5N -
 9.42
 5 External dump no. 3N
 & 4N- 5.95
 6 External dump no. 1W &
 1S - 13.48
 7 External dump No 2S -
 0.2
 8 External dump No 3S -
 0.72
 9 External dump No 4S-
 0.53
 10 External dump no.
 5S- 0.09
 11 Unnamed Old Dump 1-
 6.95
 12 Unnamed Old Dump 2-
 4.01

D. Production

b.Year wise : 4200000MT 2829234.50 MT
 production of last
 five year.

D. Reserve

a.Reserve position as : 103.23 Million 103.23 Million Tones as
 per latest MP/MS and Tones as on on 01.04.2013
 at the time of 01.04.2013
 inspection.

RESERVE POSITION AS ON 01/04/2013

LIMESTONE		
Category	Quantity in Tonnes	Grade
Proved	103230000	CEMENT GRADE
Probable		
Possible	16750000	CEMENT GRADE
Total	119980000	CEMENT GRADE

PRODUCTION FOR THE PREVIOUS YEAR 2012 - 2013

Mineral	Production	Unit
LIMESTONE	2829234.5	TON

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

Efforts for improving low grade and sub grade mineral. : NOT APPLICABLE

Efforts for improving percentage of recovery of ore. : NOT APPLICABLE

Mineral Rule 15

Percentage of recovery of ore pitwise w.r.t. ROM and total material : 100%

Number of benches in ore and waste.	:	Qry.No.	Quarry Size (in m)	Top RL	Bottom RL	No.
		of benches	Bench size (in m)			
		L	B D	IN ORE	W H	
		Qry-2&6	960 500 58 261	203 8 22	8.0	
		Qry-1&3	1860 300 41 271	230 6 20	6.60	
		Qry-4&5	930 330 47 265	218 7 20	7.00	

Sub/grd mineral/fines (Rule16)

Qty of yearly generation and total qty available during inspection with grade : NOT APPLICABLE

Number and size of each stack : NOT APPLICABLE

Location of stacking. : NOT APPLICABLE

Separate stacking from waste : NOT APPLICABLE

Total area covered for stacking : NOT APPLICABLE

Exploration data as on 31/03/ 2013

No. of Boreholes	No. of Pits	No. of Trenches
740		
20		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2012 - 2013

Overburden/waste removed (in m3) : 2118797.68

Utilisation of Sub Grade Mineral and Mineral Rejects

Generated	Utilised	Stacked	(In Ton.)

Information on reclamation and rehabilitation as on 31/03/ 2013

(Area in Hect.)

Area broken	Area matured	Area reclaimed	Nature of rehabilitation	Area rehabilitated
124.35	8.29	8.29	By backfilling	8.29

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

- a. Landscape. : GOOD
- b. Aesthetic environment : GOOD
- c. Soil and land use pattern : The top soil quantity is negligible and occurring as small isolated pockets which gets mixed up with stone chips on blasting and not possible to separate it out. The soil recovered mixed with morrum or small quantity stone chips are utilized for plantation on dumps.
- d. Agriculture : NONE
- e. Forest (flora and fauna) : 56.84 Ha
- f. Vegetation : NONE
- h. Public building, places and monuments (protected, historical), place of worship and places of tourist : NONE

B Water environment.

- a. Surface water : NONE
- b. Ground water : NONE
- c. Quality of water : SW-1 Quarry 2&6, SW-2 Quarry 1&3 AND SW-3 Quarry 4&5 Discharge Water:

The samples after analysis for discharge of water on land for irrigation is found to be well within the prescribed limits in both the seasons monitored.

C. Air environment

- a. Noise : The following measures have been taken.
 " Provisions of acoustic enclosures of noise generating equipment.
 " Shock absorbing pads at the foundation for vibration generation equipment.
 " Blasting during day time only and use of NONEL system.
 " Earmuffs for persons working in high noise areas.
 " Regular monitoring of noise levels at various points.
 " Green belts development.
- b. Air : The following measures have been taken
 " Deployment of Eco friendly hydraulic drill machines,
 " Covering of Stacker Reclaimer,
 " Regular water sprinkling on hopper, belt conveyor of crushing plant,
 " Internal roads from quarry face to crusher hopper,

workshops are metallic. Some parts of the roads are planned for concreting,
 " Permanent water sprinkling system has been installed along the haul roads,
 " Closed circuit dust collection system through pulse jet type bag filter at crushing.

c. Climatic condition : TROPICAL

D. Socio economic environment

d. Recreational facility. : AVAILABLE AT THE COLONY

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>2012 - 2013</u>		
Within lease area			Outside lease area		
Area	Trees planted	Survival rate	Area	Trees planted	Survival rate
2.1	8050	70		0	

Area in Hect.

<u>TOP SOIL MANAGEMENT</u>	
Quantity as on 31/03/2013	

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

(1) Cost of operation	Rs 345.71	
(2) Reserve	103.23 Million Tones as on 01.04.2013	
(3) Production	2829234.50 MT	
(4) Pit's Mouth Value	Rs 345.71	
(5) Stock		10723.66 MT

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 :

(DR. M K SOMANI)

Indian Bureau of Mines