

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/MB/MCDR-1/BBS

Mine code : 300RI10014

- (i) Name of the Inspecting : **AR**) **SHRI PREM PRAKASH**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 25/07/2014
- (v) Prev.inspection date : 10/06/2012

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BADAMPAHAR**
- (b) Category : A Manual
- (c) Type of Working : Opencast
- (d) Postal address
State : ORISSA
District : MAYURBHANJ
Village : BADAMPAHAR
Taluka : RAIRANGPUR
Post office : BADAMPAHAR
Pin Code :
FAX No. :
E-mail :
Phone : 06794-278230
- (e) Police Station :
- (f) First opening date : 27/05/1970
2. Address for : BADAMPAHAR IRON ORE MINE, PO: BADAMPAHAR,
correspondance DIST: MAYURBHANJ, ORISSA.
3. (a) Lease Number : ORI0120
- (b) Lease area : 443.93
- (c) Period of lease : 30
- (d) Date of Expiry : 26/05/2000
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : M/s LAL TRADERS & AGENCY (P) LTD.
M/s LAL TRADERS & AGENCY 7,
WATER COOL STREET,
CALCUTTA, WEST BENGAL.
KOLKATA WEST BENGAL
Phone:033-2480602,2482623
FAX :033-2477739

Owner : M/S LAL TRADERS & AGENCY (P) LTD.
7, WATER COOL STREET,
CALCUTTA WEST BENGAL
KOLKATA WEST BENGAL
Phone:
FAX :

Mining Engineer

Name : K. BHATTACHARYA, Full Time
Qualification : B.E(MINING)
Appointment/ :
Termination date

Mining Engineer

Name : DULARAM MAHALI, Full Time
Qualification : B TECH MINING
Appointment/ :
Termination date

Geologist

Name : A.SEN, Full Time
Qualification : M.SC GEOLOGY
Appointment/ :
Termination date

Manager

Name : R.K. SWAIN
Qualification : NOT AVAILABLE
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	6	286
Supervisory	34	286
Others	105	286
Plant	16	286
Workers	542	286

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					
Housing	5.00	4.20	6.00	1.10	
Health	3.00	2.61	3.50	0.36	
Water supply	1.10	0.61	5.00	1.50	
Sanitation	3.50	3.02	4.00	0.98	
Sub total	12.60	10.44	18.50	3.94	
Infrastructure					
Roads	2.50	5.00	1.75	1.20	
Sub total	2.50	5.00	10.44	1.20	
Recreation	1.00	1.41	5.10	0.40	
Others	5.00	6.00	5.05	1.50	
Training	1.50	2.00	1.28	0.85	
Employment	38.00	40.00	35.90	12.40	
Total	60.60	72.91	59.52	20.29	

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

During inspection on date 09/10.06.2012, the violation of Rule 13(1), 21(1), 16(1), 27(4), 33(2)(5), 42(1), 45(5) & 45(7) were observed and communicated to the party vide this office violation letter dt. 18.07.2012; after that Show cause notice dtd. 25.10.2012 was issued for non-compliance of Rule 13(1), 33(2)(5) & 45(7) and subsequently recorded complied on 10.12.2012.

During last inspection on date 18.03.2013, no violation was pointed out.

During current inspection, violation of Rule 13(1), 27(3) & 45(7) were observed and being communicated to the party.

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 being recommended at present

5. Scientific Mining

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

b.Total area covered : 15 Ha.	20 ha.
a.Type of prospecting : Drilling of 15 and exploration i.e. nos. boreholes of pitting, drilling 320 mtr. length	20 nos. BHs of 400 mtr. total length.

B. Working (Rule 13)

b.Bench size(LxWxH)length can be defined as regular/irregular	: Bench ht.- 6m	Peak (200x20x6) Quarry No-4 (540x20x6) Norven (200x16x6) Bapet (570x16x6) Approx.	Apprx. sbench size
a.Number and size of each pit (LxWxH)	: 04 no. pits : Peak, Quarry No-4, Norven & Bapet	04 no. pits : Peak, Quarry No-4, Norven & Bapet	The value given in the proposal column are status of quarry at the end of 31.03.2015
c.Ore to waste ratio pit wise if possible otherwise for mine	: 1:0.13	1:0.143	The overall stripping ratio of the mine

C. Waste disposal (Rule 13)

a.Location of dumps	: at Non-mineralized barren zone	at Non-mineralized barren zone	till date cummulative
b.Method of dumping whether advancing/retreat	: Retreat	Advancing & retreating.	Due to hilly terrain, advancing method of dumping is applied.
c.Total area covered under waste dump.	: 7.417 ha.	5.97 ha.	The area given in the proposal column is up to 31.03.2015
d.No.and size of each waste dump with No of steps/lift/bench	: 05 nos. of dumps	Dump1-1 terrace Dump2- no terrace Dump3-3 terrace Dump4-1 terrace Dump5-4 terrace	
e.Yearly generation of waste quantity.	: 98020 m ³	100000 m ³	for the year 13-14

RESERVE POSITION AS ON 01/04/2014**PRODUCTION FOR THE PREVIOUS YEAR 2013 - 2014**

Mineral

Production Unit

IRON ORE	697840	Unit TON
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6. Conservation of Mineral - both quantitative and qualitative**Beneficiation (Rule 20 and 26)**

Efforts for improving low grade and sub grade mineral. : As reported, The user agency has established a beneficiation plant of 95,000 TPA at Tirildihi outside the ML area for improving low grade and sub grade mineral quality. As, Badampahar is a low grade Iron ore mines.

Efforts for improving percentage of recovery of ore. : Sorting & screening

Mineral Rule 15

Percentage of recovery of ore pitwise w.r.t. ROM and total material : Peak Norven Quarry No. 4 Bapet
Remarks
70% 70% 70% 70% Recovery
w.r.t total material,
Wrt. ROM-100% in 2013-14

Number of benches in ore and waste. : Quarry Name Bench in OB Bench in Ore Total
Peak 1 04
3
Norven 1 07
6
Quarry No. 4 1 08
7
Bapet 2
8 10

Sub/grd mineral/fines (Rule16)

Qty of yearly generation and total qty available during inspection with grade : 33554.450 MT of -50% Fe (2013-14)
Utilization :
Separately stacked for future use.
Quantity available during inspection 164000 MT approx.

Number and size of each stack : Stack No.1- 0.45 Ha., Stack No.2- 0.24 Ha., Stack near Peak - 0.87 Ha.

Location of stacking. : Near Quarry No. 3 & Peak Quarry

Separate stacking from waste : Separately stacked from waste

Total area covered for stacking : 1.5 Ha. approx.

Exploration data as on 31/03/ 2014

No. of Boreholes

No. of Pits

No. of Trenches

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2013 - 2014

Utilisation of Sub Grade Mineral and Mineral Rejects

Generated	Utilised	Stacked	(In Ton.)
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7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : The area is a hilly terrain with ups and downs. Iron ore mineralization occurred in these hilly areas both at the top as well as on the hill slopes.
- b. Aesthetic environment : Aesthetic beauty of the colony, mines office etc. is enhanced by plantation of different flower plants and medicinal plants. Plantation at avenue side and haul road, Gardening at nursery side and maintaining local road, village road from dust by sprinkling of water with water tanker on regular basis.
- c. Soil and land use pattern : top soil generation is negligible.
- d. Agriculture : Mining work is undertaken at the hill top. There is no agriculture land nearby.
- e. Forest(flora and fauna) : local common species namely Sal, Mahula, Neem, Patas, Kendu, Asan, Chhatian, Simul and etc.
- f. Vegetation : The area is covered by dense vegetation. Large number of trees has been planted within and outside the lease.
- h. Public building, places and monuments (protected, historical), place of worship and places of tourist : Nil

B Water environment.

- a. Surface water : Surface run-off water being channelized through checkdams & settling pond for arresting the siltation before discharging to seasonal nalla.
- b. Ground water : Ground water samples are checked periodically as per norms.

C. Air environment

- a. Noise : Noise level measurement being undertaken . Earplugs are provided to the employees working in the noisy area.
- b. Air : periodical monitoring being carried out, parameters/results were within the permissible limit.
- c. Climatic condition : Sub-tropical, Temperature 9° C - 44° C
Annual rainfall 1100mm - 1450mm

D. Socio economic environment

- a. Social and demographic profile. : The socio economic environment is improved due to mining activities due to generation of employment, making of approach road to surrounding villages and infrastructure development.
- b. Recommending health and : Periodical Medical Examination (PME) has been carried

safety. out as per norms.

c. Human settlement : Some human settlement are there but away from working area. mostly the workers are coming from the nearby villages.

d. Recreational facility. : Annual sports like football, local dance, cricket tournament, badminton tournament programs reportedly being organized.

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>2013 - 2014</u>	Area in Hect.
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<u>TOP SOIL MANAGEMENT</u>	
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.

Scrutiny of annual returns on cost of operation, reserves, production, pit mouth value, stock, land use pattern and fixed assets for the year 2013-14.

(1) Cost of operation : Rs. 1521.00
 (2) Reserve : 18853160.000 MT (111)
 (3) Production : 697840.000 MT (ROM)
 (4) Pit's Mouth Value :

Nature Grade Pit's Mouth Value (in Rs.)

Lumps 55% to below 58% Fe 1846.00

58% to below 60% Fe 3559.00

60% to below 62% Fe 4681.00

Fines Below 55% Fe 373.00

55% to below 58% Fe 631.00

(5) Stock :

Nature Grade Stock as on 31/03/2014

Lumps Below 55% Fe 60585.278 MT

55% to below 58% Fe 161300.026 MT

58% to below 60% Fe 167955.806 MT

60% to below 62% Fe 12436.635 MT

Fines Below 55% Fe 119355.184 MT

55% to below 58% Fe 140015.252 MT

58% to below 60% Fe 31836.550 MT

60% to below 62% Fe 4162.319 MT

(6) Land use pattern

Sl.	No.	Lease	Area
Under Forest	Outside Fores	Total	
1	Already exploited& abandoned by opencast (O/C) mining	0 0 0	
2	Covered under current (O/c) working	37.7	0 37.7
3	Reclaimed/rehabilitated	3.125	0 3.125
4	Used for waste disposal		
5.97	0	5.97	
5	Occupied by plant, building, residential, welfare building & roads		8.402
	0.78	9.182	
6	Used for any other purpose	3.87 0 3.87	
7	Work done under progressive mine closure plan during the year		
	0 0 0		

(7) Fixed assets : Rs.96721334.00

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.)

Nil

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

Nil

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

Nil

Date :

(SHRI PREM PRAKASH)

Indian Bureau of Mines