

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/SNG/MCDR-2/BBS

Mine code : 30ORI13006

- (i) Name of the Inspecting : **SQ24**) **DR. M K SOMANI**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri S.D.Pahari, General Manager, M.N.Baraik, MINES M
Official with
Designation
- (iv) Date of Inspection : 09/06/2013
- (v) Prev.inspection date : 01/10/2012

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KALTA**
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) Postal address
State : ORISSA
District : SUNDARGARH
Village : KALTA
Taluka : BONAI
Post office : KALTA
Pin Code : 770052
FAX No. : 06625-234023
E-mail : NIL
Phone : 06625-234036
- (e) Police Station :
- (f) First opening date : 06/01/1960
2. Address for : KALTA IRON ORE MINE
correspondance AT/PO-KALTA
DIST-SUNDERGARH
3. (a) Lease Number : ORI0158
(b) Lease area : 3.34
(c) Period of lease : 20
(d) Date of Expiry : 17/01/2004
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : SAIL
 Barsuan, Tensa SUNDARGARH
 ORISSA
 Phone:
 FAX :

Owner : SAIL
 SUNDARGARH ORISSA
 Phone:
 FAX :

Agent : S.P.GUPTA
 PL & DQ, PURNA PANI
 SUNDARGARH ORISSA
 Phone: 0661-728121
 FAX :

Mining Engineer

Name : D.PANDIT, Full Time
 Qualification : BTECH (HONS)
 Appointment/ : 30/06/2002
 Termination date

Mining Engineer

Name : R.K.BRAHMA, Full Time
 Qualification : B TECH (MINING) IST CLASS MANAGERS CERTI
 Appointment/ : 11/02/2003
 Termination date

Mining Engineer

Name : P.C.NAIK, Full Time
 Qualification : B TECH IN MINING
 Appointment/ :
 Termination date

Geologist

Name : S.R.PATTANAIK, Full Time
 Qualification : MSC (GEO)
 Appointment/ : 17/03/2003
 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		
Workers	41	307
Plant	3	307
Ministrial	6	307
Others	2	307

Supervisory	10	307
Managerial	10	307
CONTRACT		
Workers	437	307
Ministrial	15	307
Supervisory	80	307
Plant	10	307
Managerial	2	307

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	7.23	4.53	0.00		
Water supply	5.28	7.62	32.00		
Health	0.70	0.70	8.00		
Sanitation	0.00	0.00	0.00		
Sub total	13.21	12.85	40.00		
Infrastructure					
Public transport	7.50	89.00	7.83		
Sub total	7.50	89.00	12.85		
Training	11.02	12.00	10.68		
Employment	0.00	19.83	0.00		
Others	0.00	2.50	0.00		
Recreation	3.00	12.50	1.00		
Environment management	17.74	10.00	17.72		
Total	52.47	185.83	50.08		

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

VIOLATION FOR RULE 13(1), 27(4), 29 AND 42 IS BEING ISSUED.

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, 19888, 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 : Nil and exploration i.e. pitting, drilling		Nil	
b.Total area covered : Nil		Nil	

B. Working (Rule 13)

a.Number and size of : each pit (LxWxH)		Challan Gate (West) 410mX140mX13.8m Challan Gate (East) 454mX200mX27.9m New Area 320mX250mX38.4m Local Area 380mX320mX28.4m Mayurnachan Area 330mX120mX15m Kalapahar-I 210mX150mX15.1 Kalapahar-II 280mX135mX15.4m	
b.Bench : Regular size(LxWxH) length can be defined as regular/irregular		Regular	
c.Ore to waste ratio : 1: 0.60 pit wise if possible otherwise for mine		1: 0.32	
d.Total area covered : 131.14 Ha under excavation/pits		131.14 Ha	

C. Waste disposal (Rule 13)

a.Location of dumps : Challan-gate (West) OB/Waste Challan-gate (West) OB/Waste Block-B (near Site Office) SGM Block-B (near site office) OB/Waste M.N.Area (stabilize dump) OB/Waste		Challan-gate (West) OB/Waste Challan-gate (West) OB/Waste Block-B (near Site Office) SGM Block-B (near site office) OB/Waste M.N.Area (stabilized dump) OB/Waste	
e.Yearly generation : 630000 T of waste quantity.		270851 T	
b.Method of dumping : Advancing whether advancing/retreat		Advancing	

c.Total area covered : 10.235 Ha under waste dump. 10.235 Ha

d.No.and size of each waste dump with No of steps/lift/bench : Challan-gate(West) OB/Waste Non-mineralised 60 40 Challan-gate(West) OB/Waste Non-mineralised 60 40 Challan-gate(West) OB/Waste - do - 50 30 Block-B(near Site Office) SGM - do - 50 30 Block-B(near Site Office) SGM - do - 1200 14 Block-B(near site office) OB/Waste - do - 450 60 M.N.Area(stabilized dump) OB/Waste - do - 300 100

D. Production

b.Year wise production of last five year. : 1050000 Te Lump: 570068.00 Te Fines: 284521.00 Te

D. Reserve

a.Reserve position as : per latest MP/MS and at the time of inspection. 64.281 million Te (57% Fe Cut off) 12.16 million Te(+45% & below 57% Fe)

RESERVE POSITION AS ON 01/04/2013

IRON ORE		
Category	Quantity in Tonnes	Grade
Proved	64281000	+57% Fe
Probable		
Possible		
Total	64281000	+57% Fe

PRODUCTION FOR THE PREVIOUS YEAR 2012 - 2013

Mineral	Production	Unit
IRON ORE	854589	TON

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

Efforts for improving low grade and sub grade mineral. : Mobile crushing & screening facility available.
Production through crushing & screening in the year 2012-13 : 49,520.00 Te

Efforts for improving percentage of recovery of ore. : SORTING

Mineral Rule 15

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

Number of benches in ore and waste. : ORE 2 TO 6
O.B. 1 TO 2

Sub/grd mineral/fines (Rule16)

Qty of yearly generation and total qty available during inspection with grade : Total Quantity up to 31.03.2012: 263815 Te ,
Grade : Fe%: 58.1, SiO2%:4.25, Al2O3%: 5.12%
Actual Quantity in 2012-13 : ' Nil'
Actual Quantity in 2013-14 : ' Nil'
(till date of inspection)

Number and size of each stack : One, 1200m x14m X 7.86m

Location of stacking. : In Block 'B'

Separate stacking from waste : YES

Total area covered for stacking : 1.68Ha

Exploration data as on 31/03/ 2013

No. of Boreholes	No. of Pits	No. of Trenches
0		
168		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2012 - 2013

Overburden/waste removed (in m3) :	135426
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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. : GOOD
- b. Aesthetic environment : GOOD
- c. Soil and land use pattern : Degraded land by pit in forest 131.14
Degraded land by dump in forest 10.235
Degraded land by road in forest 7.000
Degraded land by plant building Town in forest 13.000
- d. Agriculture : NONE
- e. Forest (flora and fauna) :
- f. Vegetation :
- h. Public building, places and monuments (protected, historical), place of worship and places of tourist : NONE

B Water environment.

- a. Surface water : MONITORING IS BEING DONE EVERY MONTH
- b. Ground water : MONITORING IS BEING DONE EVERY MONTH
- c. Quality of water : MONITORING IS BEING DONE EVERY MONTH

C. Air environment

- a. Noise : MONITORING IS BEING DONE EVERY MONTH
- b. Air : MONITORING IS BEING DONE EVERY MONTH
- c. Climatic condition : MONITORING IS BEING DONE EVERY MONTH

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>					Value	
Season	Station type	Station name	Parameter		Actual	Excess

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

<u>PLANTATION DURING THE PREVIOUS YEAR</u>			<u>2012 - 2013</u>			Area in Hect.
Within lease area			Outside lease area			
Area	Trees planted	Survival rate	Area	Trees planted	Survival rate	
14	47000	62	0	0	0	

TOP SOIL MANAGEMENT
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.

THE RECOVERY OF IRON ORE FROM THE OLD DUMPS IS NOT REFLECTED IN APPROPRIATE COLUMN.

(1) Cost of Production	: Lump: Rs.1452.35 / Te	Fines :
Rs.1111.77 / Te		
(2) Reserve	: 64.281 million Te (57% Fe Cut off)	:12.16 million
Te(+45% & below 57% Fe)		
(3) Production	Lump: 570068.00 Te	Fines:
284521.00 Te		
(4) Pit's Mouth Value	: Same as cost of production	
(5) Stock	: Lump: 76742.537 Te	Fines:
57081.43 Te		
(Closing Stock of 2012-13 at Mines Head as per Monthly Return Form_F1 of March, 2013)		
(6) Land use pattern	: Mining & Infrastructure	
(7) Fixed assets	: 72.48 lakh	

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