

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-25/BBS

Mine code : 30ORI08030

- (i) Name of the Inspecting : **S024**) **DR. M K SOMANI**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : **S N PATNAIK, VP, S R BEHRA, MINES MANAGER, C V TAMHAN**
Official with
Designation
- (iv) Date of Inspection : 17/07/2014
- (v) Prev.inspection date : 03/05/2013

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JORURI (335 AC)**
- (b) Category : A Manual
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : JORURI
- Taluka : BARBIL
- Post office : JAJANG
- Pin Code : 758052
- FAX No. :
- E-mail :
- Phone : 279206
- (e) Police Station :
- (f) First opening date : 15/06/1957
2. Address for : JORURI IRON MINE M/S KMC
correspondance P.O.JAJANG, DIST:KEONJHAR
ORISSA-758052
3. (a) Lease Number : ORI0064
- (b) Lease area : 135.57
- (c) Period of lease : 20
- (d) Date of Expiry : 10/04/1997
4. Mineral worked : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : KALINGA MINING CORPORATION
 P.O.JAJANG KEONJHAR
 ORISSA
 Phone:79206
 FAX :

Owner : M/S.Kalinga Mining Corporation
 po.Jajang KEONJHAR ORISSA
 Phone: 06767- 79206
 FAX :

Agent : Sri.T.Pal
 C/O KALINGA MINING CORP
 P.O.JAJANG KEONJHAR ORISSA
 Phone: 79206
 FAX :

Mining Engineer
 Name : T.C.MAHANTA,Full Time
 Qualification : DIPLOMA MINING,I ST CLASS MANAGER CERTIF
 Appointment/ : 16/12/2002
 Termination date

Mining Engineer
 Name : B.N.PATI,Full Time
 Qualification : DIPLOMA IN MINING WITH 2ND CLASS CERT. F
 Appointment/ :
 Termination date

Geologist
 Name : Dr. MITHILESH SINGH,Full Time
 Qualification : M.Sc (geology)
 Appointment/ : 01/01/2002
 Termination date

Manager Name : P.K.NANDA Qualification : B.E.(MINING) Appointment/ : Termination date

Manager Name : D.C.KALIA Qualification : Diploma in Mining Appointment/ : 09/02/2004 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
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DIRECT

Supervisory	11	309
Workers	136	309
Others	5	309
Managerial	4	309

CONTRACT

Others	102	309
Supervisory	15	309
Workers	87	309
Managerial	11	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						
Housing	2.00	2.50	2.00	0.00	350 beneficiarie	
Water supply	3.00	22.45	3.00	8.20		
Health	2.50	5.30	3.00	1.25	215	
Sub total	7.50	30.25	8.00	9.45		
Infrastructure						
Public transport	2.50	3.00	1.20	0.30	56	
Sub total	2.50	3.00	30.25	0.30		
Employment	2.50	2.50	3.60	0.80	22	
Training	1.50	2.00	2.26	0.57	80	
Recreation	1.50	2.00	1.57	0.00	58	
Others			1.24		112	
Total	15.50	17.50	40.12	11.12		

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

The following provision of MCDR' 1988 were found violated in the above mine during inspection on 17.07.2014:

1. Rule 27: The copies of plans and sections as required under Rule 28 have not been updated properly.

2. Rule 29: The copies of plans and sections as required under Rule 28 have not been submitted for the year 2013-14 so far to the RCOM, IBM, Bhubaneswar.

3. Rule 45: The following discrepancies have been observed in the Annual Return 2012-13.

i) Name of the mine is not given correctly.

ii) Quality of grades produced not given.

iii) Quantity and quality of grades of mineral rejects produced.

iv) Details of beneficiation not given.

v) Depreciation figures not given corresponding columns.

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 : 8 B H and exploration i.e. pitting, drilling		6B H	Already 2 Bore proposed Bore hole have been done in previous year 2012-13.
b.Total area covered : 8HA		33.963 HA	6HA

B. Working (Rule 13)

a.Number and size of each pit (LxWxH)	Name of the PIT L W H	Name of the PIT L W H
	1.Top pit 265 265	1.Top pit 265 265 60
	2. Tata Pit 60 130	2. Tata Pit 130 130 19
	130 19	
b.Bench size(LxWxH)length can be defined as regular/irregular	: Average Height : 6 M Average Width : 6 M	Average Height : 7 Average Width : 10
c.Ore to waste ratio : pit wise if possible otherwise for mine	1:0.07	1:0.07
d.Total area covered : under excavation/pits	31.103 Ha	31.103 Ha

C. Waste disposal (Rule 13)

a.Location of dumps	: No proposal of extra dump, the waste materials was proposed for reclamation of village pit area	No proposal of extra dump, the waste materials was proposed for reclamation of village pit area
e.Yearly generation of waste quantity.	: 294958 .000	221000.00
b.Method of dumping whether advancing/retreat	: Advancing	Advancing . Back filling in process
c.Total area covered under waste dump.	: 0.335 Ha	0.880 Ha
d.No.and size of each waste dump with No of steps/lift/bench	: No : 1 Location : Village pit Size : 83.08 x 40.32 m	No : 1 Location : Village pit Size : 110 x 80 m

D. Production

b.Year wise	:	793691.470
production of last	Approved mining	542165.440
five year.	plan/ scheme	257780.610
	2009-10	437298.000
	1232669.000	1473795.000
	2010-11	
	2149311.000	
	2011-12	
	2109245.000	
	2012-13 872302.000	
	2013-14	
	2267951.000	

D. Reserve

a.Reserve position as :	A. Mineral Reserve
per latest MP/MS and	1. Proved Mineral
at the time of	Reserve 111 8373145.000
inspection.	+45% Fe
	2. Probable Mineral
	Reserve 121 and 122
	2794284.000 +45% Fe
	B. Remaining Resources
	1. Feasibility Mineral
	Resource 211
	1679262.000 +45% Fe
	2.Prefeasibility Mineral
	Resource 221 and 222
	2426884.000 +45% Fe

RESERVE POSITION AS ON 01/04/2014

IRON ORE		
Category	Quantity in Tonnes	Grade
Proved	8373145	+45% Fe
Probable	4758655.77	+45% Fe
Possible		
Total	13131800.77	+45% Fe

PRODUCTION FOR THE PREVIOUS YEAR 2013 - 2014

Mineral	Production	Unit
IRON ORE	1473795	TON

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

Efforts for improving low grade and sub grade mineral. : Beneficiation installation is in process for up gradation of sub grade Ore.

Efforts for improving percentage of recovery of ore. : Beneficiation installation is in process for up gradation of sub grade Ore.

Mineral Rule 15

Percentage of recovery of ore : 80%
pitwise w.r.t. ROM and total material

Number of benches in ore and waste. : Top pit : Bench in ore - 6 no & OB bench - 2 No
Tata Pit : Bench in ore - 4 & No OB bench

Sub/grd mineral/fines (Rule16)

Qty of yearly generation and total qty available during inspection with grade : 2013-2014 312075.000
Cumulative as on 31.03.2014 2415280.000

Number and size of each stack : SG 1 - 5.883 Ha
SG 2 - 1.150 Ha
SG 3 - 0.124 Ha
SG 4 - 0.077 Ha.

Location of stacking. : Near ML Pillar C1 TO C2 - S-G Stack No-1
Near ML Pillar No J - S-G Stack No-2
Near ML Pillar No I3 Western side - S-G Stack No-3
Near ML Pillar No I3 North-Eastern side-- S-G Stack No-4

Separate stacking from waste : YES

Total area covered for stacking : 7.234 Ha.

Exploration data as on 31/03/ 2014

No. of Boreholes	No. of Pits	No. of Trenches
82		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2013 - 2014

Overburden/waste removed (in m3) : 110500

Utilisation of Sub Grade Mineral and Mineral Rejects

Generated	Utilised	Stacked	(In Ton.)

<u>Information on reclamation and rehabilitation as on 31/03/ 2014</u> (Area in Hect.)				
Area broken	Area matured	Area reclaimed	Nature of rehabilitation	Area rehabilitated
2.27	1.07	1.07	By backfilling	1.07

7. Environment Management - both quantitative and qualitativ

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.
Within lease area			Outside lease area			
Area	Trees planted	Survival rate	Area	Trees planted	Survival rate	
2.9	9860	52	15	7200	42	

<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.

- 1) Cost of operation 1351.51 per metric ton
- 2) Reserve as on 1st April 13 12694122.500
+45% Fe
- 3) Production 2013-14 1473795.000 Tons
- 4) Pit's Mouth Value Lumps 62% to 65% : 4440.00
Fines : Below 55% : 859.00
Fines: 62 to 65 % : 1358.00
- 5) Stock Lumps : 133381.618
Fines : 296311.442
- 6) Land use pattern Attached
- 7) Fixed assets 183775276.00

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.)

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