

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-83/BBS

Mine code : 30ORI08107

- (i) Name of the Inspecting : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : R C Jena , Mines Manager
Official with
Designation
- (iv) Date of Inspection : 02/05/2014
- (v) Prev.inspection date : 01/11/2013

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KULUM**
- (b) Category : A Other than Fully Mech.
- (c) Type of Working : Opencast
- (d) Postal address
State : ORISSA
District : KEONJHAR
Village : KULUM
Taluka : BARBIL
Post office : DEOJHAR
Pin Code : 758034
FAX No. :
E-mail :
Phone :
- (e) Police Station :
- (f) First opening date : 01/12/2011
2. Address for correspondence : KULUM
KEONJHAR
3. (a) Lease Number : ORI1035
(b) Lease area : 33.8
(c) Period of lease : 30
(d) Date of Expiry : 15/05/2041
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : M/S ADHUNIK METALIKS
 IDICOL HOUSE SAHIDNAGAR,
 BHUBANESWAR KEONJHAR
 ORISSA
 Phone:
 FAX :

Owner : ADHUNIK METALIKS
 KEONJHAR ORISSA
 Phone:
 FAX :

6. Date of approval of Mining : 06/12/2012
 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	4	306
Workers	15	306
Supervisory	1	306
Others	9	306
CONTRACT		
Others	1	306
Supervisory	1	306
Workers	82	306

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					
Sanitation		1.00		1.00	
Housing	5.00		3.40		
Water supply	2.00	2.00	2.00	2.00	all data as per
Sub total	7.00	3.00	5.40	3.00	
Infrastructure					
Roads	39.00	38.20	20.00	15.00	Public transport
Sub total	39.00	38.20	3.00	15.00	
Recreation	5.50	4.80	6.00	4.00	
Training	1.50	1.50	1.50	1.00	
Employment	40.00	66.40	65.00	66.50	
Environment management	1.50	2.50	1.50	1.00	
Others	10.00	8.50	10.00	7.00	(For one LMV and
Total	104.50	127.30	107.00	97.50	

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

On the basis of scrutiny of office record, violation of Rule 13(1) and 23E(2) were observed and communicated to lessee vide this office letter of even number dated 22.10.2013.

During current inspection violation of rule 13(1), 23E(2), 29 and 45(7) has been observed including outstanding violation and same has been communicated to party vide this office letter of even number dated 01.07.2014. Violation pointed out has been complied by party vide his letter dated 30.07.2014. Further in compliance of violation pointed out lessee submitted Modification of Mining Plan and same has been approved on dated 30.01.2015.

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 applicable.

5. Scientific Mining

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

a.Type of prospecting : 2012-13: 08 BH
and exploration i.e. 2013-14: 09 BH
pitting, drilling

b.Total area covered : Not specified.

2012-13: 08 BH
2013-14: 08 BH

Not specified.

B. Working (Rule 13)

a.Number and size of : Not specified.
each pit (LxWxH)

b.Bench : Regular.
size(LxWxH)length can
be defined as
regular/irregular

Length: 310 m
width: 50 m

As per surface
plan.

Regular.

c.Ore to waste ratio : 1:0.07
pit wise if possible
otherwise for mine

1:1.01

As per MCDR
data sheet.

d.Total area covered : 5.040 Hectare
under excavation/pits

5.040 Hectare

C. Waste disposal (Rule 13)

a.Location of dumps : South eastern
side.

South eastern side.

e.Yearly generation : 2012-13: 18600 CuM
of waste quantity. 2013-14: 38000 CuM

2012-13: 18757 CuM
2013-14: 3675 CuM

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

Retreating Method.

c.Total area covered : 6.510 Hectare.
under waste dump.

0.50 Hectare. (approx)

d.No.and size of each : Waste dump-1
waste dump with No of
steps/lift/bench

Waste dump-1
length: 100 m
Width: 50 m

as per surface
plan.

D. Production

b.Year wise : 2012-13: 140400 MT
production of last 2013-14: 241000 MT
five year.

2012-13: 113355 MT
2013-14: 30955 MT

D. Reserve

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

Reserve and resource as
per MMP dated
06.12.2012.

RESERVE POSITION AS ON 01/04/2014**IRON ORE**

Category	Quantity in Tonnes	Grade
Proved	3932976	+45 % Fe
Probable	3155472	+45 % Fe
Possible	2095408	+45 % Fe
Total	9183856	+45 % Fe

PRODUCTION FOR THE PREVIOUS YEAR 2013 - 2014

Mineral	Production	Unit
IRON ORE	30955	TON

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

Efforts for improving low grade and sub grade mineral : Beneficiation plan is proposed.

Efforts for improving percentage of recovery of ore : Beneficiation plan is proposed.

Mineral Rule 15

Number of benches in ore and waste : No information.

Percentage of recovery of ore pitwise w.r.t. ROM and total material : 20% in insitu Zone.
50% in Float Ore Zone.

Sub/grade mineral/fines (Rule 16)

Qty of yearly generation and total qty available during inspection with grade : 2013-14: 18534 MT

Number and size of each stack : No information.

Separate stacking from waste : Yes.

Total area covered for stacking : No information.

Exploration data as on 31/03/ 2014

No. of Boreholes	No. of Pits	No. of Trenches
16		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2013 - 2014

Overburden/waste removed (in m³) : 3675

Utilisation of Sub Grade Mineral and Mineral Rejects

Generated	Utilised	Stacked	(In Ton.)

7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : Hilly undulated.
- b. Aesthetic environment : Good.
- c. Soil and land use pattern : Forest area: 21.497 Ha
non-forest: 12.306 Ha
- d. Agriculture : Not observed.
- e. Forest(flora and fauna) : Local species of Flora and fauna.
- f. Vegetation : Small bushes and trees are observed.
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : Not observed.

B Water environment.

- a. Surface water : No major river or nala flowing in the lease area. However, some surface run off mark have been observed in NE part of lease area.
- b. Ground water : No information.
- c. Quality of water : No information.

C. Air environment

- a. Noise : Seems to be within prescribed limit as low level of Mining operation.
- b. Air : There is no industrial activity in vicinity, hence air pollution felt to be below prescribed limit.
- c. Climatic condition : Sub-tropical.

D. Socio economic environment

- a. Social and demographic profile. : No information.
- b. Recommending health and safety. : Not specified.
- c. Human settlement : Limited.
- d. Recreational facility. : Not observed.

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.

TOP SOIL MANAGEMENT
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 return 2013-14:

Cost of production: 1113.91 Rs./MT

Reserve: 5.70 Million Tonnes

Resorce: 5.31 Million Tonnes

Production: 30955.00 MT

Area in forest: 21.497 Hectare

Area in non-forest: 12.306 hectare

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 :

(DILIP JAIN)

Indian Bureau of Mines