

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/KJR/MCDR39/BBS

**Mine code :** 30ORI08035

- (i) Name of the Inspecting : **25** ) **SHRI IBRAHIM SARIF**  
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Mr. Ajay Kumar Thakur and Mr. Rajesh Mukherjee,  
Official with  
Designation
- (iv) Date of Inspection : 08/03/2016
- (v) Prev.inspection date : 22/05/2015

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **KATAMATI**
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : KATAMATI
- Taluka : BARBIL
- Post office : DEOJHAR
- Pin Code :
- FAX No. : 916596,33706
- E-mail : rsgarbi@noa.tatasteel.com,|
- Phone : 916596, 33734
- (e) Police Station :
- (f) First opening date : 01/05/1934
2. Address for : VILL. KATAMATI  
correspondance P.S JODA  
DIST.KEONJHAR.PIN: 758034
3. (a) Lease Number : ORI0107
- (b) Lease area : 403.32
- (c) Period of lease : 20
- (d) Date of Expiry : 16/01/2003
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : TISCO  
 Bombay House 24, Homy Mody  
 Street Mumbai MUMBAI  
 (SUBURBAN) MAHARASHTRA  
 Phone:  
 FAX :

Owner : TISCO  
 24,HOMI MODY STREET FORT  
 MUMBAI-1 GREATER BOMBAY  
 MAHARASHTRA  
 Phone:  
 FAX :

Agent : O.P.MISHRA  
 JODA EAST IRON MINES  
 VILL/PO-JODA DIST-KEONJHAR  
 KEONJHAR ORISSA  
 Phone: 0657-424401  
 FAX : 0657-425847

## Mining Engineer

Name : R.N.JENA,Full Time  
 Qualification : DIPLOMA MINING, IST CLASS COMPETANCY  
 Appointment/ : 06/09/2002  
 Termination date

## Geologist

Name : S.K.PANDEY,Part Time  
 Qualification : MSC GEOLOGY  
 Appointment/ : 01/04/2001  
 Termination date

## Geologist

Name : INDRANI SAHA,Full Time  
 Qualification : MSC TECH , PHD  
 Appointment/ : 10/07/2002  
 Termination date

## Manager

Name : R.S.GARBYAL  
 Qualification : M.TECH(COMPUTER),FIRST CLASS MANAGER CER  
 Appointment/ : 01/05/2001  
 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	13	313
Supervisory	3	313
Workers	55	313
Ministrial	13	313
CONTRACT		
Plant	24	313
Others	46	313

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	
<b>General</b>					
Water supply	20.00	16.50	20.00	25.04	1010 housae hol
Medical facility	12.00	11.00	15.00	14.60	13000 cases trea
<b>Sub total</b>	<b>32.00</b>	<b>27.50</b>	<b>35.00</b>	<b>39.64</b>	
<b>Infrastructure</b>					
<b>Sub total</b>			<b>27.50</b>		
<b>Others</b>	<b>62.50</b>	<b>64.00</b>	<b>50.80</b>	<b>33.30</b>	380 farmers
<b>Recreation</b>	<b>4.00</b>	<b>6.00</b>	<b>3.50</b>	<b>15.00</b>	
<b>Training</b>	<b>60.00</b>	<b>50.00</b>	<b>46.50</b>	<b>20.15</b>	893 Students ben
<b>Total</b>	<b>158.50</b>	<b>155.00</b>	<b>128.30</b>	<b>108.09</b>	

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

There was no outstanding violaions.

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 : 15 nos.  
and exploration i.e.  
pitting, drilling Nil

**B. Working (Rule 13)**

a.Number and size of : one no.  
each pit (LxWxH) one no. 980m x 820 m

b.Bench : Width:25m  
size(LxWxH)length can Height: 12m  
be defined as Regular  
regular/irregular Regular

c.Ore to waste ratio : 0.20  
pit wise if possible  
otherwise for mine 0.22

d.Total area covered : 73.04 Ha  
under excavation/pits 73.04 Ha

**C. Waste disposal (Rule 13)**

a.Location of dumps : Dump-2  
Dump-2

e.Yearly generation : 560000 Tonnes  
of waste quantity. 525600 Tonnes

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

c.Total area covered : 7.37 Ha  
under waste dump. 1.16 Ha

d.No.and size of each : one dump, 330 X  
waste dump with No of 170, in two steps  
steps/lift/bench one dump, 100 X 150, in  
two steps

**D. Production**

b.Year wise : 2014-15 : 2014-15 : 33000000  
production of last 7500000 Tonnes  
five year. 2015-16 : 2015-16 : 3310000  
8000000 Tonnes Tonnes

**D. Reserve**

a.Reserve position as :  
per latest MP/MS and  
at the time of  
inspection. Classification  
Quantity Grade  
Total Mineral  
Resources(A+B) 104.95 Fe  
>58%  
A. Mineral Reserve Fe  
>58%  
(1) Proved Mineral  
Reserve (111) 44.05  
(2) Probable Mineral  
Reserve (121 & 122)

44.01  
 B. Remaining Resources  
 Fe >58%  
 (1)Feasibility Mineral  
 Resource (211) 7.39  
 (2)Pre-feasibility  
 Mineral Resource (221 &  
 222) 3.43  
 (3)Measured Mineral  
 Resource (331) -  
 (4) Indicated Mineral  
 Resource(332) -  
 (5)Inferred Mineral  
 Resource (333) 6.07  
 (6)Reconnaissance  
 Mineral Resource (334) -

**RESERVE POSITION AS ON 01/04/2015**

<b>IRON ORE</b>		
Category	Quantity in Tonnes	Grade
Proved	44050000	+58% Fe
Probable	44010000	+58% Fe
Possible	16890000	+58% Fe
Total	104950000	+58% Fe

**PRODUCTION FOR THE PREVIOUS YEAR 2014 - 2015**

Mineral	Production	Unit
IRON ORE	3531982	TON

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

Efforts for improving low grade and sub grade mineral. : Hydrocyclone and Jigging plant is introduced in another adjacent area at Noamundi to improve recovery of Iron values from fines.

**Mineral Rule 15**

Number of benches in ore and waste. : Ore: 9 nos,  
Waste: 1 no.

**Sub/grd mineral/fines (Rule16)**

Qty of yearly generation and total qty available during inspection with grade : 343300 Tonnes was generated during 2015-16. available as on date: 6322677

Total area covered for stacking : 7.8 Ha

Separate stacking from waste : Yes Dump no. 3

Location of stacking. : 11650E to 12275E and 9850 N to 10300 N

**Exploration data as on 31/03/ 2015**

No. of Boreholes	No. of Pits	No. of Trenches
164		

**OVERBURDEN HANDLED DURING PREVIOUS YEAR 2014 - 2015**

Overburden/waste removed (in m3) : 5256000

**Utilisation of Sub Grade Mineral and Mineral Rejects**

Generated	Utilised	Stacked	(In Ton.)

## 7. Environment Management - both quantitative and qualitativ

### A. Land environment

- c. Soil and land use pattern : Parks & Gardens are developed in and around the lease area to improve the aesthetic of the area. Like Garden in front of Katamati Pit office, etc.
- d. Agriculture : No agricultural land within lease area
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : No

### B Water environment.

- b. Ground water : Mining operations have not intercepted ground water table.
- c. Quality of water : potable

### C. Air environment

- a. Noise : Regular monitoring is being carried out and parameters are within permissible limit
- b. Air : Wet drilling is practices, regular water sprinkling is done on haul roads , dry fog system is used in primary & at all transfer points in the plant to control dust generation. The air quality is monitored regularly and all the parameters are well within the limit.

### D. Socio economic environment

- a. Social and demographic profile. : The lessee is spending substantial amount through its Tata Steel Rural Development Society for peripheral developments such as education, health, sports, afforestation etc. Further, the expansion activities will also generate immense employment for local population. Hence the benefits to the community and its economy because of this project are quite appreciable.
- b. Recommending health and safety. : OHSAS-18001 system is in place and hence OHS aspect are taken care.
- c. Human settlement : Within the ML area there is a no human settlement.
- d. Recreational facility. : Recreational facilities being provided for the employees like parks, garden, club, fountain park etc. in the colony located at Noamundi.



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>2014 - 2015</u>			Area in Hect.
Within lease area			Outside lease area			
Area	Trees planted	Survival rate	Area	Trees planted	Survival rate	
.69	1720	80	.5	2068	60	

<u>TOP SOIL MANAGEMENT</u>	
Quantity as on 31/03/2015	

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

- a) Production:2014-15 33.01 Lakh tonnes
- b) Cost of operation Rs 795.89 per ton
- c) Pit's Mouth Value Rs 795.89 per ton
- d) Reserves 88.06 million tonnes (as on 1.04.2015)
- e) Stock at Mines head 2.88 Lakh tonnes
- f) Land Use

Lease area (surface area) Under Outside Total  
 utilisation as on 01.04.2015(hectares):forest forest

- |  |          |         |         |        |                 |
|--|----------|---------|---------|--------|-----------------|
| (i) Covered under current (O/C) Workings                                   | 17.6022  | 55.4426 | 73.0448 |        |                 |
| (ii) Used for waste,slime,   | 5.1434   | 38.1175 | 43.2609 |        |                 |
| (iii) Occupied by plant, buildings, residential, welfare buildings & roads |          |         |         | 8.4335 | 11.5049 19.9384 |
| (iv) Used for Storage of mineral)  | - 0.9740 | 0.9740  |         |        |                 |

**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 :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines