

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/KJR/MCDR-16/BBS

**Mine code :** 30ORI08015

- (i) Name of the Inspecting : 25 ) SHRI IBRAHIM SARIF  
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : S.S.Barik, Regional Manager,  
Official with  
Designation
- (iv) Date of Inspection : 17/03/2016
- (v) Prev.inspection date : 24/07/2015

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : DAITARI
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : TALAPADA
- Taluka : GHATGAON
- Post office : TALAPADA
- Pin Code : 758026
- FAX No. : 06726-48723
- E-mail :
- Phone : 06726-48722
- (e) Police Station :
- (f) First opening date : 18/02/1967
2. Address for : DAITARI IRON ORE MINE, OMC,  
correspondance
3. (a) Lease Number : ORI0085
- (b) Lease area : 1812.99
- (c) Period of lease : 30
- (d) Date of Expiry : 26/01/1996
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : O.M.C.LTD.  
 SRI.G.K.DHAL,MD OMC House  
 ,P.B.No.34 BHUBANESWAR  
 KHURDA ORISSA  
 Phone:  
 FAX :0674-401629(BBSR),06767-30257

Owner : M/S OMC LTD.  
 M/S OMC LTD. OMC HOUSE,  
 POST BOX NO. 34  
 BHUBANESWAR-751010 KEONJHAR  
 ORISSA  
 Phone:  
 FAX :

Agent : N.C.SAHOO, SR. MANAGER  
 C/O.DAITARI MINE, OMC  
 JAJPUR DISTRICT,ORISSA  
 JAJPUR ORISSA  
 Phone:  
 FAX : 06726-48723

## Mining Engineer

Name : B.B.NAYAK,Full Time  
 Qualification : DIGREE IN MINING  
 Appointment/ :  
 Termination date

## Mining Engineer

Name : R.C.SAHU,Full Time  
 Qualification : DIPLOMA IN MINING  
 Appointment/ :  
 Termination date

## Mining Engineer

Name : N.C.SAHOO,Full Time  
 Qualification : DME(MINING), AMIE.  
 Appointment/ : 24/07/2000  
 Termination date

## Geologist

Name : K.RAY,Full Time  
 Qualification : M.SC(GEOLOGY)  
 Appointment/ : 28/09/2001  
 Termination date

## Manager

Name : N.C.SAHOO  
 Qualification : DME(MINING), AMIE.  
 Appointment/ : 24/07/2000  
 Termination date

6. Date of approval of Mining : 08/01/2015  
 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	40	309
Plant	28	309
Ministrial	33	309
Others	109	309
Supervisory	22	309
Managerial	44	309
CONTRACT		
Plant	301	309
Workers	150	309
Others	86	309
Supervisory	3	309
Ministrial	3	309
Managerial	2	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	
<b>General</b>					
Water supply		23.18			
Health	166.00	78.85	72.00		
<b>Sub total</b>	<b>166.00</b>	<b>102.03</b>	<b>72.00</b>		
<b>Infrastructure</b>					
Roads			23.00	200.00	
<b>Sub total</b>			<b>102.03</b>	<b>200.00</b>	
<b>Others</b>			<b>10.35</b>	<b>44.00</b>	
<b>Sports activities</b>	<b>14.00</b>	<b>13.00</b>	<b>3.10</b>	<b>13.00</b>	
<b>Environment management</b>	<b>35.00</b>	<b>22.00</b>	<b>152.50</b>		
<b>Total</b>	<b>215.00</b>	<b>107.00</b>	<b>290.98</b>	<b>257.00</b>	

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

There was no outstanding violation of MCDR 1988

During current inspection violation of rule 13(1), 27(4) and 45(7) of MCDR 1988 was observed and pointed out to the party vide this office letter dated. .03.2016

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.

**5. Scientific Mining**

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

a.Type of prospecting : 6000 meterage of and exploration i.e. drilling pitting, drilling Nil

b.Total area covered : 400 ha.

**B. Working (Rule 13)**

a.Number and size of : each pit (LxWxH)

b.Bench : 05 Nos. of Bench 05 Nos. of Bench of size(LxWxH)length can of size 500 x 20 size 500 x 20 x 10 be defined as x 10 regular/irregular

d.Total area covered : 61.63ha. 61.63ha. under excavation/pits

**D. Production**

b.Year wise : 2014-15 : 1801704.000 MT production of last 2015-16 (up to Feb'2016) five year. : 2726716.000 MT

**D. Reserve**

a.Reserve position as : Category Quantity per latest MP/MS and (in Mill Tonnes) Grade at the time of inspection. Proved 72.444

+58% Fe Probable 80.71

+58% Fe Possible 32.25

+45% Fe Total 185.404

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

<b>IRON ORE</b>		
Category	Quantity in Tonnes	Grade
Proved	72444000	+58% Fe
Probable	80710000	+58% Fe
Possible	32250000	+45% Fe
Total	185404000	

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

Mineral	Production	Unit
IRON ORE	1801700	TON

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

Efforts for improving percentage of recovery of ore. : blending of different grade to make it salable grade ore.  
 practically the deposit of this mine contains High grade ore.

**Mineral Rule 15**

Number of benches in ore and waste. : 5 No. of benches in Ore No waste benches .

Percentage of recovery of ore : 99%  
 pitwise w.r.t. ROM and total material

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

No. of Boreholes	No. of Pits	No. of Trenches
136	103	

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

Overburden/waste removed (in m3) :	0
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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. : Daitari ML area is an undulated hilly terrain consisting of high ridges & valleys forming a part of the Tomka-Daitari hill range extending from Tomka up to Harichandanpur. Daitari Iron Ore Mines of OMC Ltd is located around the Daitari Hill , featured in the survey of India topsheet no. 73G/16 (F45 N16).
- b. Aesthetic environment : The area of Daitari consists of forest land, quarries and rivulets.
- c. Soil and land use pattern : Practically no top soil is encountered in the working area.  
Total ML area:- 1018.3085 Ha.  
Area broken for mining -95.60Ha. (Quarry-61.63 Ha. External dump-5.50Ha. Ore stacking and processing - 14.0Ha. Camp office, workshop etc-5.50 Ha. Construction of road-8.97 Ha. ) Safety Zone-13.277 Ha.Undisturbed area-909.4315 Ha.
- d. Agriculture : No Agricultural activity observed within lease area.
- e. Forest(flora and fauna) : The forests in this area (core zone) are classified as northern tropical dry deciduous forests. The tree heights vary from 1.2 to 15m. Sal, Asan, and Kangara are most dominant species. Average density of trees found to be 1515 per ha. with species diversity of 2.976
- f. Vegetation : The natural Vegetation in this area is classified as Northern Tropical Dry Deciduous Forests. In this part of forest area the average tree density is about 0.4. Most of the trees are mature with height ranging from 1.5 to 15m. Sal & Kangara are most dominant species with height Kendu, Dhaura, Asan and Jamu, Mango etc. In the near by villages, common vegetation found are mango, guava, Drumstick, Jackfruit, Bel, Jamun, Ber, Bamboo & Papaya etc.
- h. Public building, places and monuments (protected, historical), place of worship and places of tourist : No

### B Water environment.

- a. Surface water : The area displays a dendritic pattern of drainage. Daitari hill range acts as a water divider. Surface run off of south side contributes to Damsala nala. Surface run off of north side contributes to Kukrangi nala & Kusei river.  
Boulder packed check dams & RCC type check dams are built on northern side to control water current and suspended solid particles. Surface water samples on Northern side were collected and tested and parameters found to be within the criteria specified in Is: 10500.

- b. Ground water : Ground water samples are being collected and tested. All the water parameters meet the prescribed norms. Rain water harvesting pond & roof top water collection pits are made for water storage that also helps to recharge ground water table.
- c. Quality of water : Potable

#### C. Air environment

- a. Noise : Regular noise monitoring is being carried out. The noise level is within permissible limits.
- b. Air : Monitoring of Ambient air quality (PM10, PM2.5 SO2, NOx & CO) is being done regularly. Monitored results found to be within the norms specified in NAAQS by CPCB. Dust suppression measures like water sprinkling through mobile water tanker & installation of nozzle spray system at hopper are done to control dust to arrest dust air pollution. Main haul road is black topped on which water sprinkling is done regularly to suppress dust.
- c. Climatic condition : Daitari area enjoys a humid temperate subtropical climate, summer months are the hottest periods of the year with the mercury rising up to 40°C. The minimum temperature during winter is about 7°C. Annual rainfall is of the order of 1000 mm-1300mm.

#### D. Socio economic environment

- a. Social and demographic profile. : Population density of Daitari leasehold area is about 116 Persons per sq. KM out of which there are about 943 females per 1000 males Literates-41.61%, working polupation-41.54% of total population. Economic condition: Marginal-52%, small farmer's category-13%, Medium & large farmer's category-35%. OMCL takes up possible measures for the socio-economic upliftment of nearby villages. In mining and mineral handling activity the local people are given preference.
- b. Recommending health and safety. : All safety measures like use of safety appliances are provided to workers along with training of its usage. Periodical medical examination of workers is done. Lessee conducting free periodic health camps in nearby villages. And established 16 bedded hospital for its employees as well as for local people.
- c. Human settlement : No Human settlement within lease area
- d. Recreational facility. : There are 05 clubs in different sectors of Daitari Iron Ore Project. Central Cultural Committee provides sports materials and other facilities for improvement of games in every respect.

#### 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.



Season	Station type	Station name	Parameter	Value	
				Actual	Excess

**Air data for excess parameters**

Season	Station name	Type of area	Parameter	Value	
				Actual	Excess

**PLANTATION DURING THE PREVIOUS YEAR      2014 - 2015**

Area in Hect.					
Within lease area			Outside lease area		
Area	Trees planted	Survival rate	Area	Trees planted	Survival rate
0	0	0	2	5500	87

**TOP SOIL MANAGEMENT**

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.**

For the year 2014-15

- (1) Cost of operation Rs 1258.57/MT
- (2) Reserve 185.404 million tone as on 1.03.2016
- (3) Production 18,01,700 MT
- (4) Pit's Mouth Value Rs 3785.72 for CLO & Rs. 2512.12 for Fines (last year)
- (5) Stock as on 10.3.2015 Total-.25,830.493M.T of CLO & FINES (at Mines) & 21,46,469.677MT of CLO & FINES (at Baliparbat) & 58,852.745 MT of CLO & Fines (at DRS)
- (6) Land use pattern Total ML area -1018.3085 Ha.
- (7) Fixed assets Rs. 103985268.00

**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.)**

As per the Mines Act, Mine includes Transportation up to railway siding, in this regard Adjacent area over which conveyor is passing through may have been included in mining lease area of Daitari lease for better administration.

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

As per the Mines Act, Mine includes Transportation up to railway siding, in this regard Adjacent area over which conveyor is passing through may have been included in mining lease area of Daitari lease for better administration.

**Date :**

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines