

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/MN/SNG/MCDR-13/BBS

Mine code : 40ORI13042

- (i) Name of the Inspecting : **DEY**) **NARENDRA MOHAN DEY**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 19/09/2013
- (v) Prev.inspection date : 13/05/2009

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PATMUNDA**
- (b) Category : B Manual
- (c) Type of Working : Opencast
- (d) Postal address
State : ORISSA
District : SUNDARGARH
Village : PATMUNDA
Taluka : BONAI
Post office : PATMUNDA
Pin Code :
FAX No. : 06767 275770
E-mail :
Phone : 06767 275318
- (e) Police Station :
- (f) First opening date : 11/11/1996
2. Address for : VILL& PO: PATMUNDA
correspondance DIST: SUNDARGARH,ORISSA, PIN-770048
POLICE STATION: KOIRA
3. (a) Lease Number : ORI0645
(b) Lease area : 81.2
(c) Period of lease : 10
(d) Date of Expiry : 11/02/2006
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S SUN ALLOYS AND MINERALS
 P.B.NO.50 P.O.BARBIL
 KEONJHAR ORISSA
 Phone:0674 530 249, 530 663, 06767-75318
 FAX :0674 532016, 06767-75318

Owner : M/S SUN ALLOYS AND MINERALS
 P.B.NO.54, AT P.O.BARBIL
 KEONJHAR ORISSA
 Phone: 0674-530249, 53
 FAX : 0674-532016, 06

Mining Engineer

Name : B.MALLICK,Full Time
 Qualification : DIPLOMA IN MINING ENGINEERING
 Appointment/ : 02/04/1997
 Termination date

Geologist

Name : P.MUKHERJEE,Full Time
 Qualification : M.Sc (GEOLOGY) Ph.D
 Appointment/ : 05/12/1996
 Termination date

Manager

Name : B.MALLICK
 Qualification : FOREMAN CERTIFICATE OF COMPETENCY
 Appointment/ : 01/02/0002
 Termination date

6. Date of approval of Mining : 30/03/2012
 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	1	
Workers	4	
Supervisory	1	

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					COMMUNITY DEVELC
Sub total					
Infrastructure					
Sub total					
Total					

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

NO OUTSTANDING VIOLATION. SCHEME OF MINING HAS BEEN APPROVED ON 15.06.2012 FOR THE PERIOD 2011-12 TO 2015-16.

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.

5. Scientific Mining

Items	Proposal	Actual work done	Remarks
-------	----------	------------------	---------

A. Exploration (Rule 13)

b.Total area covered : MINING OPERATION CLOSED BY DFO, BONAI SINCE 22.12.2009 FOR WANT OF E C.

B. Working (Rule 13)

a.Number and size of : THERE ARE 4 NUMBER OS MINE IS CLOSED
each pit (LxWxH) EXISTING PITS. SINCE
PIT 1: 100 M X 75 M X 20M 22.12.2009 BY
PIT 2: 136 M X 75 M X 16 DFO, BONAI FOR
M WANT OF E C.
PIT 3: 55 M X 45 M X 5.2
M
PIT 4: 30 M X 20 M X 4.5
M

b.Bench : AVERAGE 3.00 M WIDTH
size(LxWxH)length can AND 2.5 M HEIGHT AVERAGE
be defined as IN ALL THE PITS
regular/irregular

d.Total area covered : 2.972 HA
under excavation/pits

C. Waste disposal (Rule 13)

a.Location of dumps : SOUTH EAST DUMP,
NOTHTHERN SIDE DUMP AND
WESTERN SIDE DUMP, ALL
ARE OVER NON-MINERALISED
LAND.

c.Total area covered : SOUTH EAST DUMP : 1500
under waste dump. SQ M
NORTHERN SIDE DUMP :
1200 SQ M AND WESTERN
SIDE DUMP : 13500 SQ M.

b.Method of dumping : RETREATING
whether
advancing/retreat

D. Production

b.Year wise : 2011-12; NO MINING OPERATION HAS
production of last PROPOSAL, 2012-13: BEEN CLOSED BY DFO,
five year. 4944 TONNES, 2013- BONAI SINCE 22.12.2009
14: 5016 TONNES, FOR WANT OF E C. NOTICE
2014-15: 5016 OF DISCONTINUANCE HAS
TONNES, 2015-16: BEEN SUBMITTED BY THE
5065 TONNES LESSEE.

D. Reserve

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

RESERVE POSITION AT THE MINING
TIME OF INSPECTION AS OPERATION HAS
PER LATEST SCHEME OF BEEN CLOSED BY
MINING APPROVED ON DFO, BONAI
15.06.2012 IS AS SINCE
FOLLOWS: 22.12.2009 FOR
PROVED (III): 172155 WANT OF E C.
TONNES 25 TO 39 % MN
PROBABLE (122) 56278
TONNES 25 TO 39 % MN
POSSIBLE (333) : 83646
TONNES 10 TO 25 % MN
TOTAL : 312079 TONNES

RESERVE POSITION AS ON 01/04/2013

MANGANESE ORE		
Category	Quantity in Tonnes	Grade
Proved	172155	25.4 TO 39.5% MN AS PER UNFC 111
Probable	56278	25.4 TO 39.5 MN AS PER UNFC 122
Possible	83646	10TO 25% MN AS PER UNFC 333
Total	312079	

PRODUCTION FOR THE PREVIOUS YEAR 2012 - 2013

Mineral	Production	Unit
MANGANESE ORE	0	TON

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

Efforts for improving low grade and sub grade mineral. : IT WAS REPORTED THAT THR SUB GRADE ORE GENERATED DUE TO MINING IS BLENDED WITH HIGH GRADE ORE BEFORE DESPATCH TO VARIOUS TO VARIOUS CONSUMING INDUSTRIES.

Mineral Rule 15

Number of benches in ore and waste. : PIT 1: BENCHES IN ORE 3 AND WASTE 3
PIT 2: BENCHES IN ORE 3 AND WASTE 3
PIT 3 : BENCHES IN ORE 2 AND NO BENCH IN WASTE
PIT 4: BENCHES IN ORE 3 AND NO BENCH IN WASTE

Sub/grd mineral/fines (Rule16)

Number and size of each stack : SOUTH EAST DUMP: 60 M X 25 M AND HEIGHT 10 M
NORTHERN SIDE DUMP : 60 M X 20 M AND HEIGHT 8 M
WESTERN SIDE DUMP: 150 M X 90 M AND HEIGHT 20 M WITH 2 STEPS.

Separate stacking from waste : NO SUB GRADE STACK WAS FOUND DURING INSPECTION.
IT WAS REPORTED THAT THE SUB GRADE ORE GENERATED DUE TO MINING WAS BLENDED WITH HIGH GRADE ORE BEFORE DESPATCH TO VARIOUS CONSUMING INDUSTRIES.

Exploration data as on 31/03/ 2013

No. of Boreholes	No. of Pits	No. of Trenches
41		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2012 - 2013

Overburden/waste removed (in m3) :	0
------------------------------------	---

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. : THE LEASE AREA IS UNDULATING TOPOGRAPHY.
 d. Agriculture : THERE IS NO AGRICULTURE LAND INSIDE LEASE AREA
 e. Forest(flora and fauna) : NO FOREST LAND INSIDE LEASE AREA, NO FOREST GROWTH .
 f. Vegetation : NO PROMINENT VEGETATION OBSERVED INSIDE LEASE AREA.

B Water environment.

- a. Surface water : GOOD,

C. Air environment

- c. Climatic condition : VERY HOT DURING SUMMER AND VERY COLD DURING WINTER.

D. Socio economic environment

- a. Social and demographic profile. : THE LABOURERS WORKING IN THE MINE WERE MOSTLY TRIBAL AND BACKWARD.
 c. Human settlement : THHERE IS NO HUMAN SETTLEMENT INSIDE LEASE AREA.

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>2012 - 2013</u>
	Area in Hect.

<u>TOP SOIL MANAGEMENT</u>
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.

ANNUAL RETURN FOR THE YEAR 2012-13 HAS BEEN RECEIVED.

NO PRODUCTION.

AS THE MINING OPERATION HAS BEEN CLOSED SINCE 22.12.2009 BY DFO, BONAI FOR WANT OF EC. THOUGH CONDITIONAL EC HAS BEEN OBTAINED ON 27.12.2012, THE CONDITION HAS NOT BEEN FULFILLED BY THE LESSEE. SO THE MINE IS CLOSED SINCE THEN.

COST OF OPERATION ZERO AS MENTIONED IN THE A R.

FIXED ASSETS: Rs.1588000 /-

PART - III : PERFORMANCE OF MINE OWNER

(In case of lease expiring within 2 years - as per guidelines)

a. Compliance of terms and conditions of lease deed.

BOUNDARY PILLARS HAVE NOT BEEN CONSTRUCTED AND MAINTAINED AS PER CCOM CIRCULAR NO 2/2010 AND ITS SUBSEQUENT ADDENDUM DATED 21.09.2011.
 FOREST CLEARANCE OBTAINED ON 25.04.1995 FOR ORIGINAL LEASE PERIOD.
 NO FOREST LAND IN THE RML PERIOD AREA.
 FOR WANT OF E C MINE WAS CLOSED BY DFO, BONAI ON 22.12.2009
 CONDITIONAL E C OBTAINED ON 27.12.2012.
 CONDITION HAS NOT BEEN FULFILLED YET. SO MINE IS PRESENTLY CLOSED SINCE THEN i.e 22.12.2009.
 CONSENT TO OPERATE OBTAINED FROM SPCB ON 13.07.2006.

b. Compliance of the provisions of MCDR, 88 and advise given.

DURING CURRENT INSPECTION NO PROVISION OF MCDR, 88 WAS OBSERVED VIOLATED AND ADVISE WAS GIVEN TO CONSTRUCT & MAINTAIN BOUNDARY PILLARS AS PER CCOM CIRCULAR.

d. Whether the mine owner has carried out exploration and exploitation on the basis on surface mapping, pitting, trenching and core drilling taking in to consideration the mode of occurrences of mineral deposit.

THE MINE OWNER HAS CARRIED OUT EXPLORATION AS PER UNFC NORMS AS FOLLOWS:

G1 LEVEL : 5.778 HA

G2 LEVEL: 2.947 HA

G3 LEVEL : 3.800 HA

UNEXPLORED AREA : 31.007 HA,

BALANCE AREA TO BE EXPLORED AFTER OBTAINING NECESSARY STATUTORY CLEARANCES.

INITIALLY RML APPLIED ON 04.02.2005 OVER AN AREA 43.568 HA DELETING 37.629 HA.

FMCP OVER AN AREA 37.629 HA HAS BEEN APPROVED ON 30.06.2008.

SUBSEQUENTLY REVISED RML APPLIED ON 06.08.2010 OVER AN AREA 43.532 HA.

FMCP OVER AN AREA 0.036 HA (DLC FOREST AREA WITH IN THE AREA FIRST APPLIED FOR RENEWAL OVER 43.568 HA) HAS BEEN APPROVED ON 28.10.2011

h. In case leases where the mineralisation tends to exhaust within the present period, the status of closing operation in phases and the special issues including human issues to be addressed at the time of closing of mine.

THE MINERALISATION WILL NOT EXHAUST WITHIN THE PRESENT PERIOD, SO THE CLOSING OPERATION IN PHASES DOES NOT ARISE.

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

Indian Bureau of Mines (any issue related to CGPB, SGPB, Assistance, Consultancy, Annual Programme and studies, etc.)

State Government (Illegal mining, mining dispute, infrastructure, Mineral based industry, Mineral policy, etc.)

STATE GOVT. IS REQUESTED TO ENSURE FIXING OF BOUNDARY PILLARS.

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

Date :

(NARENDRA MOHAN DEY)

Indian Bureau of Mines