

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/MN/SNG/MCDTR-6/BBS

Mine code : 40ORI13015

- (i) Name of the Inspecting : 25) SHRI IBRAHIM SARIF
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri S N Jha, Agent and Shri Tarun Chakravarthy, Geol
Official with
Designation
- (iv) Date of Inspection : 09/08/2015
- (v) Prev.inspection date : 16/09/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : MALDA
- (b) Category : A Other than Fully Mech.
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : MALDA(BONAI)
- Taluka : KOIRA
- Post office : MALDA-VIA-JODA
- Pin Code :
- FAX No. : 06767-272971
- E-mail : ashishkumar@tatasteel.com
- Phone : 06767-272971/ 9437577041
- (e) Police Station : MALDA
- (f) First opening date : 01/04/1935
2. Address for : VILL-MALDA
correspondance PO-CHORMALDA
DIST-SUNDERGARH
3. (a) Lease Number : ORI0207
- (b) Lease area : 822
- (c) Period of lease : 20
- (d) Date of Expiry : 12/08/1990
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

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

Owner : A.N.SINGH
C/O TISCO LTD SINGHBHUM
(EAST) JHARKHAND
Phone: 0657-431227
FAX :

Agent : SHRI SATYABADI SAHU, HEAD (MN GROUP OF MINES)
AT/PO: BICHAKUNDI M/S TATA
STEEL LTD. DIST: KEONJHAR,
ORISSA KEONJHAR ORISSA
Phone:
FAX : 06767-272971

Geologist

Name : shri rookam bhagabati, Full Time
Qualification : M.Sc. APPLIED GEOLOGY
Appointment/ :
Termination date

Manager

Name : S.K.SINGH
Qualification : DME (MINING)
Appointment/ : 14/10/2008
Termination date

Manager

Name : SHRI ASHISH KUMAR
Qualification : AMIE (MINING), FIRST CLASS MANAGER HOLDE
Appointment/ :
Termination date

6. Date of approval of Mining : 06/04/2015
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 | | |
| Managerial | 2 | 309 |
| Supervisory | 4 | 309 |
| Others | 11 | 309 |
| Ministrial | 1 | 309 |
| CONTRACT | | |
| Others | 102 | 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 | | | | | |
| Infrastructure | | | | | |
| Sub total | | | | | |
| Sub total | | | | | |
| Total | | | | | |

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

THERE WAS NO OUTSTANDING VIOLATION. DURING CURRENT INSPECTION VIOLATION OF RULE 13(1) WAS POINTED OUT TO THE PARTY VIDE THIS OFFICE LETTER DATED 16/11/2015.

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, 1988, if recommended.

NOT RECOMMENDED AT PRESENT

5. Scientific Mining

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

A. Exploration (Rule 13)

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

Nil

B. Working (Rule 13)

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

BLOCK I : 600 M X 400 M
X 62 M (RB QUARRY)
BLOCK II: 200 M X 200 M
X 38 M
BLOCK III : 366 M X 250
M X 54 M
BLOCK IV : 308 M X 303 M
X 56 M
KUSUM PIT : 144 M X96 M
X 16 M
KENAVETA PIT : 200M X 85
M X 36 M
G-PIT : 100 M X39 M X10M

MINING
OPERATION HAS
BEEN STOPPED
SINCE
25.02.2011 BY
DFO, BONAI FOR
WANT OF FOREST
CLEARANCE.

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

IRREGULAR LENGTH WITH 6-
8 M MINIMUM WIDTH AND 6-
8 M MAXIMUM HEIGHT.

d.Total area covered :
under excavation/pits

42.25 HA OF FOUR PITS
DEVELOPED.

C. Waste disposal (Rule 13)

a.Location of dumps :

FOUR NUMBER OF DUMPS IN
EACH BLOCK

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

DUMP BLOCK I: 340 M X
263M X 50 M (3 LIFTS
OF 20 M APPROX)
DUMP BLOCK II: 166M X
100 M X 29 M (2 LIFTS)
DUMP BLOCK III: 353 M X
200 M X 28 M (2 LIFTS
OF 25 M APPROX)
DUMP BLOCK IV : 241 M X
165 M X 38 M

c.Total area covered :
under waste dump.

21.316 HA

D. Production

b.Year wise :
production of last
five year.

2014-15 : nIL

ON THE DATE OF
INSPECTION MINE
WAS CLOSED
SINCE
25.02.2011.

D. Reserve

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

RESERVE POSITION AS ON
01.04.2014 AS PER
MINING PLAN APPROVED ON
11.11.2010 VALID UPTO
2014-15 IS AS FOLLOWS:
PROVED (111) : 1124008
MT
PROBABLE (121 + 122) :
1210820 MT
INDICATED (332) : 170000
MT
INFERRED (333) : 3470000
MT

RESERVE POSITION AS ON 01/04/2015

| MANGANESE ORE | | |
|----------------------|--------------------|--|
| Category | Quantity in Tonnes | Grade |
| Proved | 1124008 | AS PER UNFC |
| Probable | 1210820 | AS PER UNFC |
| Possible | 170000 | AS PER UNFC 332 BESIDES ABOVE ANOTHER 3470000 TC |
| Total | 2504828 | |

PRODUCTION FOR THE PREVIOUS YEAR 2014 - 2015

| 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. : THE LOW GRADE ORE WERE CONSIDERED AS PRODUCTION AND WERE SOLD. THE SUB-GRADE ORE IN THE COURSE OF MINING WERE STORED SEPARATELY FOR FUTURE USE.

Mineral Rule 15

| | | | |
|-------------------------------------|---------------------|-----|-------|
| Number of benches in ore and waste. | : NUMBER OF BENCHES | ORE | WASTE |
| | | 3 | 7 |

Sub/grd mineral/fines (Rule16)

Number and size of each stack : 2 STACKS, ONE ABOUT 1.5 HA AND THE OTHER 1.0 HA

Qty of yearly generation and total qty available during inspection with grade : MINING OPERATION HAS BEEN STOPPED SINCE 25.02.2011. HOWEVER CUMULATIVE QUANTITY IS 48805 CUM HAVING MN CONTENT LESS THAN 15% IS AVAILABLE DURING INSPECTION.

Location of stacking. : AT THE ENTRY OF THE ML

Separate stacking from waste : YES

Total area covered for stacking : 2.5 HA APPROX

Exploration data as on 31/03/ 2015

| No. of Boreholes | No. of Pits | No. of Trenches |
|------------------|-------------|-----------------|
| 641 | | |

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2014 - 2015

| | |
|------------------------------------|---|
| 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 MINING LEASE AREA IS UNDULATING TERRAIN.
- b. Aesthetic environment : AESTHETIC BEAUTY HAS BEEN TAKEN CARE OF BY WELL PLANNED PLANTATION INSIDE AND OUT SIDE THE LEASE.
- c. Soil and land use pattern : TOP SOIL WHENEVER GENERATED WERE BEING UTILISED FOR VARIOUS CIVIL WORKS, PLANTATION ETC.
70% OF TOTAL ML AREA IS FOREST LAND .
53% OF THE TOTAL LEASE AREA IS MINERALISED
AND 88% OF THE MINERALISED AREA FOR MN ORE IS IN FOREST LAND
AREA UTILES FOR PIT : 42.25 HA
WASTE DISPOSAL : 21.316 HA
MINERAL STACK YARD ; 2.5 HA APPROX
- d. Agriculture : FEW SCATTERED UNORGANISED CULTIVATION / AGRICULTURAL LAND WAS THERE IN THE BUFFER ZONE OVER AN AREA 74.174 HA AROUND 9.02 % OF THE TOTAL LEASE. THE MINING OPERATION DOES NOT AFFECT ANY AGRICULTURAL LAND.
- e. Forest(flora and fauna) : THE FOREST AREA COVERED OVER 578.859 HA WITH THIN VEGETATION. FAUNA LIKE JACKAL, WOLF, BAT SQUIRREL ARE FOUND IN THE AREA.
- f. Vegetation : THE AREA IS MODERATELY VEGETATED.
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : NO SUCH BUILDING EXIST IN THE LEASE AREA EXCEPT ONE TEMPLE IS LOCATED NEAR THE COLONY AT A DISTANCE OF NEARLY 4 KM FROM THE ACTIVE MINING AREA.

B Water environment.

- a. Surface water : KUNDRA NALLA FLOWS IN THE NORTH EAST PART OF THE ML. THE SURFACE WATER FLOWS NATURAL DRAINAGE, NOT AFFECTED MUCH BY MINING.
- c. Quality of water : THERE IS NO ADVERSE EFFECT OF WATER QUALITY DUE TO ON-GOING MINING ACTIVITY.
- b. Ground water : NONE OF THE MINING PITS DUG TILL DATE HAS SHOWN INTERSECTION WITH WATER TABLE.

C. Air environment

- a. Noise : WITHIN PERMISSIBLE LIMIT
- c. Climatic condition : MAXIMUM TEMPAERATURE REACHES UPTO 43.8 DEGREE DURING MAY-JUNE AND MINIMUM 4.1 DEGREE DURING DECEMBER-JANUARY.
DRY HOT TROPICAL TYPE CLIMATE.

D. Socio economic environment

- a. Social and demographic profile. : THERE ARE 13 VILLAGES WITHIN THE LEASE HOLD AREA. NUMBER OF HOUSE NEARLY 1100, POPULATION NEARLY 5000. CONSIST OF ST 64%, GENERAL & OBC 25% AND SC 12%

APPROX.

POPULATION DEPENDS DIRECTLY OR INDIRECTLY ON MINING ACTIVITIES.

- c. Human settlement : THERE ARE 13 VILLAGES IN THE CORE ZONE AND ALMOST 200 SMALL HAMLETS IN THE BUFFER ZONE.
- b. Recommending health and safety. : TATA STEEL RURAL DEVELOPMENT SOCIETY PUT THE CONTINUOUS EFFORT TOWARDS AWARENESS OF PEOPLE AND RENDERING THE MEDICAL SUPPORT INSIDE THE CORE AND BUFFER ZONE.
- d. Recreational facility. : STANDARD RECREATIONAL FACILITIES AVAILABLE IN THE COLONY WHICH ARE ALSO ACCESSABLE BY LOCAL VILLAGERS.

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. |

| <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.

ANNUAL RETURN FOR THE YEAR 2013-14 HAS BEEN RECEIVED. SINCE THE MINING OPERATION HAS BEEN STOPPED SINCE 25.02.2011, NO PRODUCTION DURING 2014-15. COST OF OPERATION : NIL
PIT MOUTH VALUE : NIL FIXED ASSETS: Rs.39686000 /-

LAND USE:

AREA EXCAVATED:81.320 HA
WASTE DISPOSAL:66.740 HA.
MINERAL STORAGE:32.240 HA.
INFRASTRUCTURE :12.660 HA.
ROADS:20.140 HA.
GREEN BELT:69.730 HA.
TOWN SHIP AREA:123.320 HA.
STORAGE OF TOP SOIL:10 HA.

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