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

## MCDR INSPECTION REPORT

# Bhubaneshwar regional office

Mine file No : ORI/MN/SNG/MCDR-3/BBS Mine code : 400RI13010

(i) Name of the Inspecting : DEY ) NARENDRA MOHAN DEY

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : SHRI SANJU MAHTO, MINES MANAGER & SHRI I K SINGH, SUR

Official with Designation

(iv) Date of Inspection : 16/08/2015
(v) Prev.inspection date : 22/06/2013

# PART-I : GENERAL INFORMATION

1. (a) Mine Name : KOLMONG

(b) Category : A Manual(c) Type of Working : Opencast

(d) Postal address

State : ORISSA

District : SUNDARGARH

Village : KOLMONG

Taluka : BONAI

Post office : MALDA

Pin Code :
FAX No. :
E-mail :
Phone :

(e) Police Station :

(f) First opening date : 01/09/1939

2. Address for : KOLMONG MANGANESE MINE correspondance VILL-KOLMONG, PO-KOIRA

DIST-SUNDERGARH

3. (a) Lease Number : ORI0197
(b) Lease area : 218.83
(c) Period of lease : 20

(d) Date of Expiry : 31/12/1999

4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : Rungta Mines Ltd

Rungta House P.O.Chaibasa SINGHBHUM (WEST) JHARKHAND

Phone: 06582-56461, 56561, 56661, 56761

FAX :91-6582-56442

Owner : M/S Rungta Mines Ltd

M/S Rungta Mines Ltd Rungta

House At P.O.Chaibasa SINGHBHUM (WEST) JHARKHAND Phone: 06582- 56461,56 FAX: 91-6582-5644

Agent : D.R.OJHA

C/O BICO LTD AT O.P.BARBIL

KEONJHAR ORISSA

Phone: 06596-62321,62221

FAX :

Mining Engineer

Name : D.K.SAHA, Full Time
Qualification : DEGREE IN MINING (AMIE)

Appointment/ : 20/12/2000

Termination date

Geologist

Name : H.MAZUMDER, Full Time

Qualification : MSC(GEO)
Appointment/ : 01/01/1986

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 DIRECT	No.of employment	Av. yearly working days
Managerial	3	39
Others	9	39
Workers	37	39
Supervisory	5	39

2. Community Development Plan (in and around the mines): Proposed action and expenditure towords socio-economic development.

Action during the year	Expenditure in Rs. Lakhs for				Remarks
	previous year current year		-		
	Proposed	Incurred	Proposed	Incurred	
<b>General</b> Housing		5.99			
Water supply		4.57			
Sub total Infrastructure		10.56			
Roads			0.01		
Electricity			1.72		
Sub total			10.56		
Environment management			3.57		
Others			0.11		
Sports activities			0.14		
Training			1.96		
Total			18.07		

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

# NO OUTSTANDING VIOLATION

- 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.
- NO SUSPENSION NOR PROHIBITION OF DEPLOYMENT WAS RECOMMENDED.

## 5. Scientific Mining

Items	Proposal	Actual work done	Remarks

## A. Exploration (Rule 13)

a.Type of prospecting: 26 NUMBER OF NIL, AS THE MINE WAS

and exploration i.e. BOREHOLE DISCONTINUED FROM

pitting, drilling 18.05.2014 TO 14.05.2015

b.Total area covered : OUT OF TOTAL LEASE AREA 113.375 HA THE LEASE

AREA EXPLORED AS PER UNFC NORMS IS AS

FOLLOWS:

UNDER G1 LEVEL: 49.05

HA

UNDER G2 LEVEL 17.02 HA
REST UNEXPLORED AREA
47.305 HA PRIVATE

TENANTED LAND FOR WHICH LESSEE IS IN PROCESS OF GETTING PERMISSION FOR

EXPLORATION.

## B. Working (Rule 13)

a.Number and size of: NEW PIT : 334 X 281 X 52 MINING

each pit (LxWxH) M OPERATION WAS

QUARRY 6&7 : 390 X 165 X DISCONTINUED 16 M FROM 18.05.2014 DHANDARIYA PIT : 231 X TO 14.05.2015.

153 X 28 M

MAGAZINE PIT : 138 X 102

X 12 M

b.Bench : HEIGHT 3 TO 4 M AND

size(LxWxH)length can WIDTH 6 TO 8 M.

be defined as
regular/irregular

c.Ore to waste ratio :1: 16.6 1: 22.03

pit wise if possible otherwise for mine

d.Total area covered : 43.677 HA 34.479 HA

under excavation/pits

C. Waste disposal (Rule 13)

a.Location of dumps : DUMP 1, DUMP 2 & DUMP 3
ON NON- MINERALISED LAND

e.Yearly generation : 664057 CUM 64373 CUM

of waste quantity.

b.Method of dumping : RETREATING

whether

advancing/retreat

c.Total area covered : 11 HA 6.66 HA

under waste dump.

d.No.and size of each: DUMP 1 : 300 X 250 X 35

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waste dump with No of steps/lift/bench

M WITH NO OF STEPS 2 DUMP 2: 250 X 100 X 12 M DUMP 3 : 150 X 50 X 12 M

#### D. Production

b.Year wise five year.

: 2014-15 : 40001 MT PRODUCTION DURING 2014- MINE WAS production of last 2015-16: 25376 MT

15 : 2921.514 MT PRODUCTION DURING 2015- FROM 18.05.2014 16 ( UP TO THE DATE OF TO 14.05.2015. INSPECTION) : 1538.37 MT

DISCONTINUED

## D. Reserve

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

RESERVE POSITION AS PER LATEST SCHEME OF MINING APPROVED ON 02.03.2015 FOR THE PERIOD 2015-16 TO 31.12.2019AND AT THE TIME OF INSPECTION IS AS FOLLOWS:

AS PER UNFC 111: 1543124 MT HAVING 10%

MN & ABOVE

AS PER UNFC 122 : 247125 MT HAVING 10% MN & ABOVE AS PER UNFC 221 : 24438 MT HAVING 10% MN & ABOVE AS PER UNFC 332 : 838086 MT HAVING 45% FE & ABOVE

# RESERVE POSITION AS ON 01/04/2015

MANGANESE	ORE	
Category	Quantity in Tonnes	Grade
Proved	1543124	+10%
Probable	247125	+10%
Possible	24438	+10%
Total	1814687	

	PRODUCTION FOR THE PREVIOUS	YEAR	2014 - 2015
Mineral	Production	Unit	
MANGANESE ORE	2921	TON	

## 6. Conservation of Mineral - both quantitative and qualitative

## Beneficiation (Rule 20 and 26)

Efforts for improving low grade and sub grade mineral. : LOW GRADE ORE STACKED SEPARATELY THE LESSEE IS GOING TO ESTABLISH A MOBILE SCREENING PLANT IN THE MINE TO SCREEN THE LOW GRADE ORE FINES.

Efforts for improving percentage of recovery of ore.

: BY MANUAL DRESSING, SIZING AND SORTING OF ORE.

## Minearl Rule 15

pitwise w.r.t. ROM and total

Percentage of recovery of ore: OVERALL RECOVERY OF ORE IS ABOUT 5% OF TOTAL

EXCAVATION OF ORE ZONE

material

Number of benches in ore and : NUMBER OF BENCHES IN ORE :13 waste.

NUMBER OF BENCHES IN WASTE: 4

## Sub/grd mineral/fines (Rule16)

total gty available during inspection with grade

Qty of yearly generation and : QUANTITY GENERATED DURING 2014-15 : 53 MT.

TOTAL QUANTITY AVAILABLE DURING INSPECTION 302 MT WITH

GRADE 10-25 % MN

Number and size of each stack: 100 X 100M

: S 550 & E 750 Location of stacking.

Separate stacking from waste : YES, SEPARATE STACKING FROM WASTE

Total area covered for : ONE HA

stacking

	Exploration data as on 31/03/	2015
No. of Boreholes	No. of Pits	No. of Trenches
180	39	

#### OVERBURDEN HANDLED DURING PREVIOUS YEAR 2014 - 2015 Overbuden/waste removed (in m3) : 64273

#### Utilisation of Sub Grade Mineral and Mineral Rejects Utilised Generated Stacked (In Ton.)

## 7. Environment Management - both quantitative and qualitativ

## A. Land environment

a. Landscape.

- : THE AREA CONSIST OF UNDULATED TOPOGRAPHY LAND WITH FEW HILLOCKS WITH HIGHEST CONTOUR AT 621 M AND LOWEST AT 558 M.
- b. Aesthetic environment
- : THE TOTAL LEASE AREA CONSIST OF BOTH FOREST AND NON-FOREST LAND.
- c. Soil and land use pattern
- : OUT OF TOTAL APPLIED RML AREA 113.375 HA, THE BROKEN UP AREA IS 52.9 HA.
- d. Agriculture
- : NO AGRICULTURAL LAND IN THE LEASE AREA.
- e. Forest(flora and fauna) : COMMON ANIMALS AND BIRDS ARE FOUND.
- f. Vegetation
- : MAINLY BUSHES AND SHRUBS ARE FOUND.
- and monuments (protected, historical), placec of worship and places of tourist
- h. Public building, places : NO MONUMENTS OR PLACE OF TOURIST ETC.

#### B Water environment.

- a. Surface water
- : NEAREST SURFACE WATER SOURCE IS KUNDRA NALA WHICH FLOWS ON THE EASTERN SIDE OF THE LEASE AND IS ABOUT 0.5 KM AWAY FROM OUTSIDE MINING LEASE.
- b. Ground water
- : SOURCE OF GROUND WATER IN THE AREA IS DUG WELL AND TUBE WELLS.
- c. Quality of water
- : THE GROUND WATER IS SUITABLE FOR DRINKING AND DOMESTIC USE.

# C. Air environment

a. Noise

: THE NOISE LEVEL IS UNDER PRESCRIBED LIMIT.

b. Air

- : THE AIR POLLUTION IS MINIMISED BY SPRINKLING OF WATER ON HAUL ROADS AND USING WET DRILLING TECHNIQUE.
- c. Climatic condition
- : MAXIMUM TEMP GOES UPTO 45 DEGREE IN THE MONTH OF MAY AND IT FALLS DOWN UPTO 5 DEGREE IN THE MONTH OF DECEMBER.

THE AVERAGE ANNUAL RAINFALL IS 14.5 mm.

## D. Socio economic environment

- a. Social and demographic profile.
- GONUA HAS 1245 POPULATION KASIRA HAS 835 POPULATION PATMUNDA HAS 818 POPULATION MOST OF THE VILLAGERS ARE DEPENDENT ON MINING SECTOR.
- b. Recommending health and : HEALTH CHECK-UP CAMPS ARE ORGANISED AND FREE safety.
  - MEDICINES ARE PROVIDED.
- c. Human settlement
- : DENSITY OF POPULATION IS LOW.

: THE NEARBY VILLAGES SUCH AS

- d. Recreational facility.
- : GAMES AND SPORTS FACILITIES ARE PROVIDED DISC ANTENA IS PROVIDED IN THE MINE CAMP AREA.

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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 Sta	Water Manage	<u>ement</u> Paramet	Value		
Beabon			Taramee	Actual Excess		
	Ai	r data for excess	parameters	Value		
Season	Station name	Туре	of area	Parameter Actual Excess		
PLANTATION DURING THE PREVIOUS YEAR 2014 - 2015						
				Area in Hect.		
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.

ANNUAL RETURN FOR THE YEAR 2014-15 HAS BEEN RECEIVED AND SCRUTINISED.

COST OF OPERATION : Rs.2904.63 /-

PRODUCTION: 2921.514 MT

PIT MOUTH VALUE: Rs.6411.11 /- (25% TO 35% MN)

Rs.9557.53 /- ( 35% TO 46 %MN)

FIXED ASSETS: Rs.7872750.00 /-

## 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.

THE SUPPLEMENTARY LEASE DEED HAS BEEN EXECUTED ON 02.05.2015 EXTENDING THE LEASE PERIOD UPTO 31.03.2020.

SCHEME OF MINING HAS BEEN APPROVED ON 02.03.2015 FOR THE PERIOD 2015-16 TO

DGPS MAP HAS BEEN PREPARED BY OSAC DATED 09.04.2014.

ON VERIFICATION IT IS OBSERVED THAT READINGS MENTIONED ON THE BOUNDARY PILLAR ARE ALMOST MATCHING WITH THE READINGS MENTIONED ON THE DGPS MAP.

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

NO OUTSTANDING VIOLATION. DURING CURRENT INSPECTION NO FRESH VIOLATION WAS ISSUED.

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 IS AS FOLLOWS: OUT OF TOTAL LEASE AREA 113.375 HA, THE LEASE AREA EXPLORED UNDER G1 LEVEL 49.05 HA

UNDER G2 LEVEL 17.02 HA

BALANCE UNEXPLORED AREA 47.305 FA

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 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.)

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

Date: (NARENDRA MOHAN DEY)

Indian Bureau of Mines