

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/MN/SNG/MCDR-2/BBS

Mine code : 40ORI13008

- (i) Name of the Inspecting : **DEY**) **NARENDRA MOHAN DEY**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : S/SHRI A SEN, CGM, S SAMAL, MINES MANAGER CUM MINING
Official with
Designation
- (iv) Date of Inspection : 07/11/2015
- (v) Prev.inspection date : 21/09/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KANTHER-KOIRA**
- (b) Category : B Manual
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : KANTHER-KOIRA
- Taluka : BONAI
- Post office : KOIRA
- Pin Code :
- FAX No. :
- E-mail :
- Phone :
- (e) Police Station :
- (f) First opening date : 15/12/1945
2. Address for : PO:KOIRA, DIST: SUNDERGARH
correspondance : ORISSA
PIN-770048
3. (a) Lease Number : ORI0206
- (b) Lease area : 73.65
- (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

6. Date of approval of Mining : 25/02/2015
 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	4	
Supervisory	2	
CONTRACT		
Workers	25	

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					
Sanitation		1.68		1.68	
Water supply		3.27		3.41	
Sub total		4.95		5.09	
Infrastructure					
Public transport			4.95	4.95	
Sub total			4.95	4.95	
Total			9.90	10.04	

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

NO OUT STANDING 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.

NOT RECOMMENDED

5. Scientific Mining

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

A. Exploration (Rule 13)

a.Type of prospecting : 2014-15 : 18 and exploration i.e. 2015-16 : 18 pitting, drilling	2014-15 : NIL 2015-16 : 04	2014-15 : NIL 2015-16 : 04	MINING OPERATION WAS TEMPORARILY DISCONTINUED FROM 18.05.2014 TO 14.05.2015.
--	-------------------------------	-------------------------------	---

b.Total area covered : 2014-15 : 3.5 HA	2014-15 : NIL CUMULATIVE TOTAL AREA COVERED : 19.922 HA AS ON DATE OF INSPECTION.		
---	--	--	--

B. Working (Rule 13)

a.Number and size of : each pit (LxWxH)	ONE SIZE OF PIT : 400 M X 200 M X 61 M		
b.Bench : size(LxWxH)length can be defined as regular/irregular	HEIGHT 6 M AND WIDTH 12 M		
c.Ore to waste ratio : 1 : 17.53 (MT : pit wise if possible CUM) otherwise for mine	1 : 35 (MT : CUM)		
d.Total area covered : under excavation/pits	12.818 HA		MINING OPERATION WAS DISCONTINUED FROM 18.05.2014 TO 14.05.2015.

C. Waste disposal (Rule 13)

a.Location of dumps : S100 -E 800	S 100 -E 800		
e.Yearly generation : 701336 CUM of waste quantity.	20583 CUM		MINING OPERATION WAS DISCONTINUED FROM 18.05.2014 TO 14.05.2015.
b.Method of dumping : ADVANCING whether advancing/retreat	ADVANCING		
c.Total area covered : 10.01 HA AT THE under waste dump. END OF SCHEME PERIOD	4.01 HA		
d.No.and size of each : 250 M X 200 M X 28 waste dump with No of M steps/lift/bench	250 M X 200 M X 22 M		

D. Production

b.Year wise : 2014-15 : 40010 MT production of last 2015-16 : 20025 MT	PRODUCTION 2014-15 : 584.538 MT		MINE WAS DISCONTINUED
---	------------------------------------	--	--------------------------

five year.

PRODUCTION UPTO DATE OF FROM 18.05.2014
INSPECTION : 3281.987 MT TO 14.05.2015.

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 25.02.2015
AND AT THE TIME OF
INSPECTION IS AS
FOLLOWS:
AS PER UNFC 121 : 425423
MT HAVING 10% MN & ABOVE
AS PER UNFC 122 :
4998 MT HAVING 10% MN &
ABOVE

RESERVE POSITION AS ON 01/04/2015

MANGANESE ORE		
Category	Quantity in Tonnes	Grade
Proved	0	
Probable	430421	10% MN & ABOVE (121: 425423 MT + 122: 4998 MT)
Possible	0	
Total	430421	10% MN & ABOVE

PRODUCTION FOR THE PREVIOUS YEAR 2014 - 2015

Mineral	Production	Unit
MANGANESE ORE	585	TON

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

Efforts for improving low grade and sub grade mineral. : NOT DONE AS THE LOW GRADE ORE IS HIGHLY CONTAMINATED WHICH IS NOT PHYSICALLY SEPARABLE.

Efforts for improving percentage of recovery of ore. : BY MANUAL DRESSING, SIZING AND SORTING OF ORE .

Mineral Rule 15

Percentage of recovery of ore pitwise w.r.t. ROM and total material : MANGANESE ORE 5% ROM OF TOTAL EXCAVATION.

Number of benches in ore and waste. : NUMBER OF BENCHES IN ORE 14 AND IN WASTE 1

Sub/grade mineral/fines (Rule 16)

Qty of yearly generation and total qty available during inspection with grade : DURING 2014-15 QUANTITY GENERATED : 327.588 MT DURING 2015-16 AS ON DATE OF INSPECTION : 164 MT CUMULATIVE AS ON DATE OF INSPECTION : 491.588 MT HAVING GRADE 10 TO 20 % MN

Number and size of each stack : 40 M X 20 M X 2 M

Location of stacking. : WITHIN THE MINE SITE

Separate stacking from waste : THE SUB GRADE ORE IS SORTED BY MANUAL METHOD AND STACKED SEPARATELY IN THE MINE SITE.

Total area covered for stacking : 0.79 HA

Exploration data as on 31/03/ 2015

No. of Boreholes	No. of Pits	No. of Trenches
251		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2014 - 2015

Overburden/waste removed (in m3) :	20583
------------------------------------	-------

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. : THE AREA IS HIGHLY UNDULATED WITH HILLOCK AND VALLEYS.HIGHEST CONTOUR IS AT 676 M AND LOWEST CONTOUR IS 581 M.
- b. Aesthetic environment : OUT OF TOTAL LEASE AREA 73.653 HA, 35.839 HA LAND IS UNDER FOREST.
- d. Agriculture : NO AGRICULTURAL LAND
- e. Forest(flora and fauna) : COMMON PLANTS AND ANIMALS & BIRDS ARE FOUND.
- f. Vegetation : COMMON PLANTS LIKE SAL, MANGO ETC ARE FOUND.
- h. Public building, places and monuments (protected, historical), place of worship and places of tourist : NO MONUMENTS ETC.

B Water environment.

- a. Surface water : NEAREST SURFACE WATER SOURCE IS TEHERAI NALA WHICH IS OUT SIDE LEASE BOUNDARY.
- c. Quality of water : THE QUALITY OF GROUND WATER IS SUITABLE FOR DRINKING AND DOMESTIC USE.
- b. Ground water : SOURCE OF GROUND WATER IN THE AREA IS DUG WELL AND TUBE WELL.

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 ROAD AND ALSO USING WET DRILLING TECHNIQUE.

D. Socio economic environment

- b. Recommending health and safety. : HEALTH CHECK-UP CAMPS ARE ORGANISED AND FREE MEDICINES ARE PROVIDED.
- a. Social and demographic profile. : MOST OF THE PEOPLE IN THE AREA DEPEND ON AGRICULTURAL.
- d. Recreational facility. : SPORTS AND GAMES ITEMS ARE PROVIDED. DIS ANTENNA IS PROVIDED IN THE MINE CAMP 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>					Value	
Season	Station type	Station name	Parameter	Actual	Excess	

<u>Air data for excess parameters</u>					Value	
Season	Station name	Type of area	Parameter	Actual	Excess	

<u>PLANTATION DURING THE PREVIOUS YEAR</u>		<u>2014 - 2015</u>	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 PERIOD 2014-15 HAS BEEN RECEIVED AND SCRUTINISED.

COST OF OPERATION : Rs.12857.05 /- PER TONNE

RESERVE : 430421 MT (PROVED & PROBABLE)

PRODUCTION : 584.538 MT (MINE WAS DISCONTINUED FROM 18.05.2014 TO 14.05.2015)

PIT MOUTH VALUE : Rs.12599.42 /-

LAND USE PATTERN: OUT OF 73.653 HA, 20.199 HA LAND IS ALREADY COVERED UNDER MINING ACTIVITIES.

FIXED ASSETS : Rs 3789110.00 /-

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.

SCHEME OF MINING APPROVED ON 25.02.2015 FOR THE PERIOD 2015-16 TO 31.12.2019.
DGPS MAP PREPARED BY ORSAC DATED 29.08.2012.
BOUNDARY PILLARS HAVE BEEN COSTRUCTED AND MAINTAINED .
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.

DURING CURRENT INSPECTION NO VIOLATION WAS OBSERVED.

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.

OUT OF TOTAL LEASE AREA 73.653 HA, THE LEASE AREA EXPLORED AS PER UNFC IS AS FOLLOWS:
UNDER G1 LEVEL : 19.606 HA
UNDER G2 LEVEL : 0.316 HA
OTHER UNEXPLORED AREA 53.731 HA PROPOSAL HAS BEEN GIVEN TO PUT 54 BOREHOLES DURING THE YEAR 2015-16 TO 2017-18.

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 SO THE CLOSING OPERARION 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