

MCDR- Report

1) Name of Inspecting officer:	Sri P. Prakash
2) Designation	Sr. Asst. Controller of Mines
3) Accompanying mine official with designation	Sri A. Sen, C.G.M. (Geology), Sri A.C.Biswal, C.G.M. (Mining)
4) Date of Inspection	22.09.2015
5) Date of Previous Inspection	08.03.2015

PART -I GENERAL INFORMATION

1. Name of mine	Jajang Iron & Mn Mine
a. Category of mine (A-Fully mechanized, A-Other than fully mechanized, B-Manual)	Jajang Iron & Mn Mine A - Mech
b. Mode of working (OC/UG/Both o/c & u/g)	O.C.
c. Postal address	At/PO-Jajang
d. State	Odisha
e. District	Keonjhar
f. Tehsil/ Taluka	Barbil
g. Police station	Bamebari
h. Village	Jajang
i. Post	Jajang
j. Pin Code	758052
k. FAX	06767 276161
l. E-mail	rungtas@runtamines.com
m. Phone	06767-277481,277441,275221

2. a) Lease area in hect.	:	666.15 Hect.
b) Period of lease	:	13.02.1997 to 12.02.2017 (2 nd RML)
c) Date of expiry	:	12.02.2017

3.a) Mineral(s) included in the lease deed	:	Iron & Manganese Ore.
b) Mineral(s) worked	:	Iron Ore

4. Name and address of (including FAX/ E-mail, if any)

- a) Lessee/ owner : Rungta Mines Ltd.
- b) Nominated owner : Sri. M.D.Rustagi
- c) Agent with date of appointment : Sri. D.R. Ojha, Dt.01.04.1999
- d) Mining Engineer and geologists appointed under rule 42 of MCDR, 1988 with date of appointment and whether full/ part time with qualification. : Sri. R.R.Yadav, Dt-25.07.2008, Full time, AMIE(Mining)
Sri.D. K.Mahanta, Dt-22.10.2003 Full time, M. Sc. (Geology),
- e) Mine Manager with qualification and date of appointment : A. C. Biswal, AMIE(Mining), 1st Class Manager's Certificate of Competency from D.G.M.S., Dt. 01.09.2001

5. a) Details about Mining Plan/ Mining Scheme : Approved Mining Scheme:-314(3)/2011- MCCM (CZ)/MS/49, Dt. 27.03.2012, Modification of mining scheme:- MSM/FM/05-ORI/BHU/2015-16 Dt.24.07.2015

b) Period of mining plan/ mining scheme in force : : From 2015-16 to dt12.02.2017
(financial year)

PART II-TECHNICAL DETAILS

1. Details about employment.

2014-15

Maximum number of persons employed on any day during the year(i) below ground (ii) above ground and (iii) in all in the mines. dt19.05.2014, 791

Classification	Average daily employment			Average No. of days worked in a year	Remarks
	Direct	Contract	Total		
OPENCAST					
a) Managerial person	38	0	38	356	
b) Supervisory persons	47	0	47	356	
c) Workers	11	334	345	356	
d) Ministerial persons	48	18	66	356	
c) Employment in plant	23	181	204	356	
f) Others	69	0	69	356	
UNDERGROUND	Not Applicable				
a) Managerial person*					
b) Supervisory persons					
c) Workers					
d) Ministerial persons					
c) Employment in plant					
f) Others					* If common, please state

2. Community Development Plan (in and around the mines)

S. N	Proposed action towards socio-economic development during the current year	Expenditure proposed in Rs. Lakhs (Previous financial year) (2014-15)	Expenditure proposed in Rs. Lakhs for current year (2015-16)	Expenditure incurred in Rs. Lakhs (Previous financial year) (2014-15)	Expenditure incurred so far in Rs. Lakhs, in current year (2015-16), Till the date of inspection	Remarks
1	General development in the area					Expenditures mentioned are as reported by the mines manager. Not verified.
	a) Housing	-				
	b) Water supply	177.94	218.23	157.20	12.40	
	c) Sanitation	23.81	46.91	3.57	2.72	
	d) Health, safety and medical facilities.	98.17	58.7	66.31	20.40	
2	Training	5.64	10.61	6.68	1.20	
3	Employment to local inhabitants	101.87	320.00	318.19	140.43	
4	Infrastructure-public transport, roads, communication and electricity	694.64	631.80	620.36	172.73	
5	Recreation and other sports activities	9.28	447.88	111.02	1.43	
6	Expenditure for environment management	53.18	111.48	34.97	50.00	

7	Others (Agriculture, Animal Husbandry, Education, Electricity, Welfare)	398.62	199.85	170.24	7.50	
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3. Status of compliance of MCDR, 88 including therewith the rectification of outstanding violation of the rules.

Date of last inspection	Violation pointed out	Compliance reported
08.03.2015	Nil	Not Applicable

After last inspection on 08.03.2015, No Violation was pointed out.
During current inspection, Violation of MCDR,88 was also not observed.

4. A note on justification in case of suspension of mining operations under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 1988 if recommended. Not Applicable.

Not recommend

5. Scientific Mining (As per latest approved mining Plan/Scheme)

Item	Proposal (2014-15)	Actual work done (2014-15) or Cumulative as applicable	Remarks
i) Exploration (Rule 13)			
a) Type of prospecting and exploration i.e. pitting, drilling etc.	Drilling (19 no.)	Drilling (23 no)	18 nos holes are reported carried out within the already explored /working area to get the information on ultimate depth of the ore zone & 5 nos holes are to prove the barrenness.
b) Total area covered	No specific area proposed	about 1480 m drilled	
ii) Workings (Rule 13)			
a) Opencast/ underground	Opencast	Opencast	
b) Manual/ mechanized	Mechanized	Mechanized	
c) No. and size of each pit	Two nos of pits. B-Block Quarry C-Block Quarry	Two nos of pits. B-Block Quarry C-Block Quarry	
d) Bench size (l x w x h) length can be defined as regular or irregular	Height -6-9m Width- 12-20 m Regular	Height -6-9m Width-12-20m (Approx) Regular	A small part of the C- Block quarry has been developed manually having height 1.5to 3.0m & width 8-10m as per proposed.
e) Ore to waste ratio pit wise if possible otherwise for mine.	1:0.15 (Tonne:M ³)	1:0.18 (Tonne:M ³)	For entire mine
f) Total area covered under excavation/pits	Not specified for a year	---	
iii) Waste disposal (Rule 13)			
a) Location of dumps	Dump-4 (Active)	Dump-4 (Active)	
b) Method of dumping whether advancing/ retreat	Advancing	Advancing	
c) Total area covered under waste dump	44.495 hect	About 44.5 hect	cumulative
d) No. & size of each waste dump with number of steps	Dump-4, 6 benches (Active)	Dump-4, 6 benches (Active)	Dump-1 dead & rehabilitated, Dump-2 dead

lift/ bench.			& rehabilitated, Dump-3 dead & rehabilitated, 2584844 Te
e) Yearly generation of waste quantity.	14.87 Lac m ³	10.34 Lac m ³	
f) Year-wise quantity of top soil removed, utilized & stacked.	Nil	Nil	

6. Conservation of mineral- both quantitative and qualitative.

i)	Mineral (Rule 15)	
(a)	No benches in ore and waste	9 benches of ore and 2 benches of OB in B-block and 11 benches of ore and 3 benches of OB in C-block
(b)	Percentage of recovery of ore pit-wise w.r.t. ROM and total material	About 100% ore recovery from ROM (Mineralized Zone) during year 2014-15.
ii)	Sub-grade mineral/ fines (Rule 16)	
(a)	Separate stacking from waste	yes
(b)	Location of stacking	Four nos of stocks in B-Block i.e. SG-2,SG-3,SG-4& SG-5 and six nos in C-Block i.e. SG-6 to SG-11
(c)	Total area covered for stacking	About 19 Ha.
(d)	No. and size of each stack	10 nos.
(e)	Quantity of yearly generation (2014-15)	Lump below 55% Fe=103428 te Fines below 55% Fe= 59403 te
iii)	Beneficiation (Rule 20)	
(a)	Efforts for improving low grade and sub-grade mineral.	Screening / crushing of low-grade ore stocks/dumps. Control blasting is being carried out to recover more lumpy ore & Rock breakers are also being used in certain area for optimum recovery.
iv)	Efforts for improving percentage of recovery of ore.	By crushing, screening and manual dressing, sizing and sorting of ore.

7. Environment Management both quantitative and qualitative

- i) Land Environment
- (a) Landscape
- The area is having hilly terrain with rugged topography with highest contour at 660 m & lowest at 495m approximately.
Good
Top soil generation negligible
Not observed near to mine workings area.
Common local species of Flora and also Fauna of common migratory type are reported.
Bushes and dry deciduous species like Sal, Kurum, Kangara, Dharua, Assan, Kendu, Jamu, Mango etc. at unexcavated and rehabilitated area
- (b) Aesthetic environment
- (c) Soil and land use pattern
- (d) Agriculture
- (e) Forest (flora & fauna)
- (f) Vegetation
- (g) Public building, places and monuments (protected monument and historical monument), places of worship and places of tourist interest.
- There is no Public building, places and monuments (protected monument and historical monument), places of worship and places of tourist interest are reported within lease area. However one Sri Hanuman temple and one Sri Radha Krishna Temple has been constructed within the mine camp.
- ii) Water Environment
- (a) Surface water
- Two nos. Rain water harvesting cum siltation pond has been developed. water collected during the rainy season is used for dust suppression measures. A check dam adjacent to railway siding has been constructed to arrest silt flow during rainy season.
- (b) Ground water
- Since the working is continuing above the water table, as a result there is

Rehabilitated, Dump-3
Rehabilitated.

- (c) Quality of water
no possibility of contamination of ground water table due to mining operation.
The drinking and domestic water required for daily need is met up through existing bore wells and dug wells. A water treatment plant has been installed to purify water.
- iii) Air Environment
- (a) Noise
The noise level monitoring in the core zone and residential areas are being carried out.
- (b) Air
The air pollution is minimized by providing stationery water sprinkling as well as mobile tanker on haul roads, plant area (Dry fog system) etc , & using wet drilling technique. Regular air monitoring is also reported being carried out.
- (c) Climatic condition
The temperature of the area varies from 11.6⁰C to 46.4⁰ C.
- iv) Socio-economic environment
- (a) Social and demographic profile
Most of the people in the area depend on mining & agriculture. Mining activities has given employment to local people directly and indirectly.
- (b) Recommending health and safety
Health check-up camps are reported to be organized and medicines being provided regularly along with 24 hr Ambulance service.
- (c) Human settlement
One employee's colony is there within the lease area.
- (d) Recreational facility
Club, Games & Sports facilities are provided in the mine camp area

8. Scrutiny of annual return on cost of operation, reserves, production, pit mouth value, stock etc. for the year 2014-15

- 1) Cost of operation : Rs 791.02/Tonne
- 2) Reserve (As on 1.4.2015) : 82.437 ml. te (111-cat.)
- 3) Production : 5492231.230 MT
- 4) Pit's Mouth Value :

Grade Fe%	Ex Mines price Rs/ MT (as per IBM)	
	Lumps	Fines
55-58	1526.41	1072.81
58-60	2330.57	-
60-62	4101.75	1964.41
62-65	5060.55	2595.67
65 & above	5690.78	-

5) Stock : 12603.750 MT (ROM Ore), 1010743.989 MT (Processed Ore)

9. PROPOSAL FOR FURTHER ACTION:

a)	Indian Bureau of Mines(any issue related to CGPB ,SGPB ,assistance consultancy ,annual programme and studies etc.	Nil
b)	The State Government (illegal mining ,mining dispute ,infrastructure, mineral based industry ,mineral policy etc.)	Nil
c)	The Central Government (infrastructure development ,mineral policy and legislation , mineral based industry etc.)	Nil

P. Prakash
Dy. Controller of Mines