

MCDR Report

1) Name of Inspecting officer:	Shri Prem Prakash
2) Designation	Sr.Assistant Controller of Mines.
3) Accompanying mine official with designation	Shri.A.Sen(C.G.M-Geology), Shri B.K.Srivastava(Mines Manager).
4) Date of Inspection	26.11.2015
5) Date of Previous Inspection	09.03.2015

PART -I GENERAL INFORMATION

1. Name of mine	Teherai Iron & Mn Mines.
a. Category of mine (A-Fully mechanized, A-Other than fully mechanized, B-Manual)	A-Fully mechanized.
b. Mode of working (OC/UG/Both o/c & u/g)	OC
c. Postal address	Koira
d. State	Odisha
e. District	Sundergarh
f. Tehsil/ Taluka	Koira
g. Police station	Koira
h. Village	Teherai
i. Post	Koira
j. Pin Code	770058
k. FAX	06767-275221
l. E-mail	rungta_bbl@yahoo.co.in
m. Phone	06767-277161

2. a) Lease No.	:	
b) Lease area in hect.	:	Total lease area-137.460 Ha
c) Period of lease	:	RML from 01.01.1982 to 31.12.2001. Supplementary lease deed executed on dt. 02.5.2015 up to 31.3.2020.
d) Date of expiry.	:	31.3.2020

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

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

a) Lessee/ owner	M/s Bonai Industrial Co. Ltd.
b) Nominated owner	Sri M.D. Rustagi; dt. 12.01.2008
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 Deepak Kumar (Mining Engineer), Full time, date of appointment- 22.06.2011 Degree in Mining Engineering, 2 nd Class Manager Certificate. Year of passing 1995. Sri S.K.De (Geologist), Full time, Date of appointment. 30.01.2013. M. Sc in Geology.year of passing 2002.
e) Mine Manager with qualification and date of appointment	: Sri B.K. Srivastava. A.M.I.E(India),1 st Class Manager Certificate of Competency, dt.01.07.2009.

5. Details about Mining Plan/ Mining Scheme

- a) Letter No. and date of approval of mining scheme : Modification of approved Scheme of Mining is approved vide letter No. MSM/FM/04-ORI/BHU/2015-16/1037 Dt: 21.7.2015 for the period of 2015-16 to 2016-17.
- b) Period of mining plan/ mining scheme in force : Modification of Scheme of Mining From 2015-16 to 2016-17(financial year)

PART II-TECHNICAL DETAILS

1. Details about employment.

Maximum number of persons employed on any day during the year(i) below ground (ii) above ground and (iii) in all in the mines....02.04.2014 ...Total=119, Male...117, Female...2.

Classification	Average daily employment			Average No. of days worked in a year	Remarks
	Direct	Contract	Total		
OPENCAST					
a) Managerial person	4	Nil	4	305	
b) Supervisory persons	2	1	3	305	
c) Workers	4	4	8	305	
d) Ministerial persons	Nil	Nil	Nil	Nil	
e) Employment in plant	Nil	Nil	Nil	Nil	
f) Others	3	3	6	305	
UNDERGROUND	N.A	N.A	N.A		
a) Managerial person*					
b) Supervisory persons					
c) Workers					
d) Ministerial persons					
e) 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), Up to month of Oct'15	Remarks
1	General development in the area					Expenditures mentioned are as reported by the mines manager.
	a) Housing					
	b) Water supply	18.55165	22.79343	18.55165		
	c) Sanitation	4.14052	29.1701	4.14052		

	d) Health, safety and medical facilities.	0.72(X-ray Technician salary at Koira CHC)	13.22(Health care)	0.72(X-ray Technician salary at Koira CHC)		Not verified.
2	Training	0.1235		0.1235		
3	Employment to local inhabitants					
4	Infrastructure-public transport, roads, communication and electricity	77.0496(Cultural pandal, const. of drain, Dev. Of play ground)	144.52257(Electricity, Building, Boundary wall, Roads)	77.0496	45.06896 (Roads, electricity & etc.)	
5	Recreation and other sports activities	0.43033(Sports material distribution)		0.43033		
6	Expenditure for environment management	1.68708	21.65774(Pond renovation, check dam)	1.68708		
7	Others	0.96		0.96		
	Livelihoods promotion:		7.1636(Kithen Garden promotion, Paddy seeds, fertilizers, fruit bearing saplings)		7.1636	
	Education		3.05(Teacher's salary, Computer, school furniture & etc)			
	Total	103.66268	241.57774	103.66268	52.23256	

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
09.03.2015	Nil	Nil

After last inspection on 09.03.2015, 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.	15 Nos. of Core-Drill.	Nil	Mines working reported suspended from 17.05.2014 to 12.05.2015 vide letter no.1631 dt.17.05.2014 by D.D.M.Koira.
b) Total area covered	10 Ha.	Nil	
ii) Workings (Rule 13)			
a) Opencast/ underground	Opencast	Opencast	
b) Manual/ mechanized	A (FM)	A (FM)	
c) No. and size of each pit	(Iron) – 1 no. [Chattan pit]	(Iron) – 1 no. [Chattan pit]	TRL-665.00m BRL-590.00m, Approx. 11 nos of benches are formed.
	(Mn) – 1 no. [Pit – 1]	(Mn) – 1 no. [Pit – 1]	
d) Bench size (1 x w x h) length can be defined as regular or irregular	Chattan pit (Iron) –6-8m height, 10-12m width. Regular	Chattan pit - 6-8m height, 10-12m width. Regular	
e) Ore to waste ratio pit wise if possible otherwise for mine.	1:0.52(T/m ³)	1:1.71 (upto May'2014) (T/m ³)	ROM= 110470 MT, OB = 1,89,255 m ³
f) Total area covered under excavation/pits	Not specified for a year.	About 57.25 ha.	
iii) Waste disposal (Rule 13)			
a) Location of dumps	Dump-C	Dump-C	
b) Method of dumping whether advancing/ retreat	Retreating	Retreating	
c) Total area covered under waste dump	Not specified for a year.	Dump-C about 2 ha.	Active dump
d) No. & size of each waste dump with number of steps lift/ bench.	Dump- C– 2 nos. of terraces of 12m height.	Dump- C– 2 nos. of terraces of about 12m height	Mines working reported suspended from 17.05.2014 to 12.05.2015 vide letter no.1631 dt.17.05. 2014 by DDM. Koira.
e) Yearly generation of waste quantity.	7,32,551.70m ³	1,89,255.35m ³ .	

Year-wise quantity of top soil removed, utilized & stacked.	Nil	Nil	
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(b) Recommending health and safety	Medical facilities are available at Koira, Tensa, & Kalta. The remote villages are covered by mobile unit of the health department .
(c) Human settlement	Density of population is low.
(d) Recreational facility	Games & Sports facilities are provided. Disc Antenna is provided in the mine camp area.

6. Conservation of mineral- both quantitative and qualitative.

i) Mineral (Rule 15)

- (a) No. of benches in ore and waste:- Approx. 11 nos. of benches are formed.
- (b) Percentage of recovery of ore pit-wise w.r.t. ROM and total material: W.r.t. ROM Iron ore recovery is about 100% from ore zone excavation.

ii) Sub-grade mineral/ fines (Rule 16)

- (a) Separate stacking from waste : Yes.
- (b) Location of stacking : N965 to N1000 & E400 to 450
- (c) Total area covered for stacking : 1700m²
- (d) No. and size of each stack : One no.(50x34x1.2)
- (e) Quantity of yearly generation : Generation during 2014-15:- Nil (grade below 55% of Fe) .

iii) Beneficiation (Rule 20)

- (a) Efforts for improving low grade and sub-grade mineral. : By Crushing and Screening method.

- iv) Efforts for improving percentage of recovery of ore. Sorting & screening.

7. Environment Management both quantitative and qualitative:

i)	Land Environment	
(a)	Landscape	The lease area has undulating terrain with occasional mounds.
(b)	Aesthetic environment	Aesthetic environment surrounding the area is satisfactory
(c)	Soil and land use pattern	Generation of top soil is negligible
(d)	Agriculture	No agricultural land within the lease area.
(e)	Forest (flora & fauna)	Common local species of plants, birds and animals.
(f)	Vegetation	Mainly bushes and shrubs are found.
(g)	Public building, places and monuments (protected monument and historical monument), places of worship and places of tourist interest.	Nil
ii)	Water Environment	
(a)	Surface water	Toe wall, garland drain etc. are provided around dump to prevent the contamination of surface water.
(b)	Ground water	Source of ground water in the area is dug well & tube wells.
(c)	Quality of water	The ground water is suitable for use.
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 sprinkling of water on haul roads & using wet drilling technique. Regular air monitoring is also reported being carried out.
(c)	Climatic condition	Temperature The maximum temperature goes upto 45 ⁰ C in the


		month of May and it falls down upto 5° C in the month of December.
	Relative Humidity	During summer, the humidity ranges between 51% to 56%, in monsoon the humidity ranges between 70% to 83% and in winter, the humidity ranges between 62% to 64%.
	Rainfall	The average annual rainfall is 14.5 mm. The maximum precipitation occurs in July and August.
iv)	Socio-economic environment	
(a)	Social and demographic profile	Most of the people in the area depend on mining & agriculture. Agricultural activity is not the main source of earning, most of the people are dependent on mining sector.
(b)	Recommending health and safety	Medical facilities are available at camp. As reported, the remote villages are covered by mobile unit of the health department .
(c)	Human settlement	Density of population is low.
(d)	Recreational facility	Games & Sports facilities are provided. Disc Antenna is provided in the mine camp area.

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

- (1) Cost of operation : Rs.684. 37 per te
- (2) Reserve : Iron = 6.367 Mill. Mt (111 cat.)
- (3) Production : ROM Iron =110470 te
- (4) Pit's Mouth Value: Iron ore: Rs.3346.00 (For 60-62% lumps)
Rs.4324.00 (For 62-65% lumps)
Rs.659.87 (For 60-62% fines)
Rs.1645.66 (For 62-65% fines)
- (5) Stock: Iron ore: 4821.150MT (ROM).
Processed ore
Lumps:- 60%-62% Fe :- 13951.370 tonnes.
62%-65% Fe:- 62859.817 tonnes.
Fines:- 55%-58%Fe :- 4646.000tonnes.
60% -62%Fe:- 126949.010tonnes.
62%-65%Fe:- 168952.379tonnes

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


 10.6.16
 P. Prakash
 Dy. Controller of Mines