

MCDR Reoprt

1) Name of Inspecting officer:	Mr. Prem Prakash
2) Designation	Sr. Asst Controller of Mines.
3) Accompanying mine official with designation	Mr.T.C.Sei, G.M.(Mines), Mr.Ashutosh Mohapatra(Geologist)
4) Date of Inspection	26/07/2015
5) Date of Previous Inspection	20.09.2014

PART -I GENERAL INFORMATION

1. Name of mine	Nuagaon Iron & Manganese Mine
a. Category of mine (A-Fully mechanized, A-Other than fully mechanized, B-Manual)	B-other than fully mechanized (OTFM)
b. Mode of working (OC/UG/Both o/c & u/g)	OC-Opencast
c. Postal address	At-Nuagaon Iron & Manganese Mine Po-Koira
d. State	Odisha
e. District	Sundergarh
f. Tehsil/ Taluka	Koira
g. Police station	Koira
h. Village	Nuagaon
i. Post	Koira
j. Pin Code	770048
k. FAX	06767-275362
l. E-mail	smbbl@gmail.com
m. Phone	06767-275362
n. Date of first opening	11.05.1999
o. Weekly day of rest	Saturday

2. a) Lease No.	:	ML No. 1048
b) Lease area in hect.	:	29.257 hecets.
c) Period of lease	:	20 years.
f) Date of expiry.	:	10.05.2019.

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 : Sri Prabodh Mohanty
Fax-06767-275362
E mail- smbbl@gmail.com
- b) Nominated owner : NA
- c) Agent with date of appointment : Sri T.C.Sei
Fax-06767-275362
E mail- smbbl@gmail.com
19.03.2005
- d) Mining Engineer and geologists appointed under rule 42 of MCDR, 1988 with date of appointment and whether full/ part time with qualification. : B.B. Samal (B.E. Mining),
Date of appointment -02.02.2012
Ashutosh Mohapatra
M.Sc. Applied Geology
Dt. of appointment – 01.03.2011

e) Mine Manager with qualification and date of appointment : A.N.Prasad
(2nd class competency)
06.10.2008- full time

5. Details about Mining Plan/ Mining Scheme

a) Letter No. and date of approval of mining plan : CAL/SG/Fe-Mn/MP-536, 30.04.1998

b) Letter No. and date of approval of mining scheme : MS/OTFM/23-ORI/BHU/2013-14/937
22/5/2014

c) Period of mining plan/ mining scheme in force : : From (financial year) 2014-15 to 2018-19 (05 years) and up to 10.05.2019

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.

Classification	Average daily employment			Average No. of days worked in a year	Remarks
	Direct	Contract	Total		
OPENCAST					
a) Managerial person	04 Nos.	-	04 Nos.	305 days in year	
b) Supervisory persons	20 Nos.	-	20 Nos.		
c) Workers	56	-	56		
d) Ministerial persons	-	-	-	-	
e) Employment in plant	-	-	-	-	
f) Others	02 Nos.	-	02 Nos.		
UNDERGROUND					
a) Managerial person*	Not Applicable				
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 incurred in Rs. Lakhs (Previous financial year) (2014-15)	Expenditure proposed in Rs. Lakhs for current year 2015-16	Expenditure incurred so far in Rs. Lakhs, in current year 2015-16, Till the date of inspection	Remarks
I	General development in the area					Expenditures as reported by the mine management.
	a) Housing	-	-	-	-	
	b) Water supply	1.50	1.20	1.50	0.90	
	c) Sanitation	0.50	0.45	0.50	0.10	
	d) Health, safety and medical facilities.	1.50	1.65	1.50	0.45	

2	Training	1.50	1.30	1.50	0.60	Not verified by the undersigned.
3	Employment to local inhabitants					
4	Infrastructure-public transport, roads, communication and electricity	2.50	1.95	2.50	0.65	
5	Recreation and other sports activities	0.20	0.20	0.20	0.15	
6	Expenditure for environment management	3.00	2.98	3.00	1.26	
7	Others	1.75	1.69	2.00	0.73	
	Total					
	% expenditure out of total annual budget					
	Total					

3. Status of compliance of MCDR, 88 including therewith the rectification of outstanding violation of the rules.

After last inspection on 20.09.2014, Violation Rule 45(7) was pointed out, which was complied with. During current inspection, compliance of MCDR,88 observed to be satisfactory.

4. (a) 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 recommended.

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.	08 nos. Core drilling	08 nos. Core drilling	
b) Total area covered	7.50 hecets.	7.50 hecets. approx..	
ii) Workings (Rule 13)			
a) Opencast/ underground	Opencast	Opencast	
b) Manual/ mechanized	Semi mechanized.	Semi mechanized.	
c) No. and size of each pit (L x W x H)	Not specified for a year	Iron-310X160X15 Mn.-320X120X11 approx.	cumulative
d) Bench size (l x w x h) length can be defined as regular or irregular	Wxh: Iron-9X5 m Mn.- 5x3 m	Wxh: Iron-9X5 m Mn.-5x3m approx..	Regular almost
e) Ore to waste ratio pit wise if possible otherwise for mine.	Iron-1:0.77 Mn.-1:3.26	Iron-1:0.79 Mn.-1:3.72	
f) Total area covered under excavation/pits	Not specified for a year	8.25 hecets. approx..	cumulative
iii) Waste disposal (Rule 13)			
a) Location of dumps	West part of Lease	West part of Lease	
b) Method of dumping whether advancing/ retreat	Retreating	Retreating	

c) Total area covered under waste dump	Not specified for a year	4.12 hect. approx..	
d) No. & size of each waste dump with number of steps lift/ bench.	One No.-1	One No.-1	
e) Yearly generation of waste quantity.	39600M ³	10129M ³	i.e. 35453 te
f) Year-wise quantity of top soil removed, utilized & stacked.	negligible	negligible	

6. Conservation of mineral- both quantitative and qualitative.

i) Mineral (Rule 15)

- (a) No. of benches in ore and waste: Iron-(Ore-02, Waste-02)
Mn. - (Ore-02, Waste-03)
- (b) Percentage of recovery of ore pit-wise w.r.t. ROM and total material
: Iron:100% w.r.t. ROM

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

- (a) Separate stacking from waste: Separately it is stacked.
- (b) Location of stacking: Northern side of the lease area
- (c) Total area covered for stacking: 0.328hect.

(d) No. and size of each stack:

IRON

MANGANESE

- 1) L- 12.6, B – 7.6, H – 1.5.
2) L- 12.2, B – 11.1, H – 2.
3) L- 23.4, B – 20.2, H – 2.

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2) L- 12.2, B – 11.1, H – 2.
3) L- 23.4, B – 20.2, H – 2.

- (e) Quantity of yearly generation, utilisation and total quantity available during inspection with grade. : Iron- 60,200 MT (+45.55% fines)
Mn. – 350MT (-25%Mn.)
Closing stocks

iii) Beneficiation (Rule 20)

- (a) Efforts for improving low grade and sub-grade mineral. :
1. For Iron Screening plant is installed
2. For Manganese manual sorting of ore

- iv) Efforts for improving percentage of recovery of ore. By Screening

7. Environment Management both quantitative and qualitative

i) Land Environment

- (a) Landscape: Hilly.
- (b) Aesthetic environment: Improved by Safety zone plantation all around the mines, haul road maintaince by water sprinkling, construction of Retaining wall, Garland drain, Settling pond, dump slope maintaince by cremating Avenue Plantation also done along the Village road
- (c) Soil and land use pattern: Top soil generation is negligible.
- (d) Agriculture: Not Applicable.
- (e) Forest (flora & fauna) : No forest land within lease.
- (f) Vegetation: Formation of Green belt within safety zone & dump slope.

(g) Public building, places and monuments (protected monument and historical monument), places of worship and places of tourist interest. : Not Exist.

ii) Water Environment

(a) Surface water : Quarterly monitoring being carried out & parameters are within the permissible limit.

(b) Ground water: Not Intersected yet by mining.

(c) Quality of water: Quarterly monitoring being carried out & parameters are within the permissible limit.

iii) Air Environment

(a) Noise: Quarterly monitoring being carried out & parameters are within the permissible limit.

(b) Air: Quarterly monitoring being carried out & parameters are within the permissible limit.

(c) Climatic condition: Sub-Tropical.

iv) Socio-economic environment:

(a) Social and demographic profile: Employment given to local people.

(b) Recommending health and safety: Supply of PPE and periodical medical examination by the specialized Doctors.

(c) Human settlement: No persons have been displaced due to mining activities.

(d) Recreational facility: Sports material reported being supplied to the village youths for promoting their games & sports.

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.1488/MT – Iron, Rs. 3786/MT- Mn. Ore

(2) Reserve – Iron-1771392 MT, Mn.- 327331 MT (total resource)

(3) Production – Iron.- 54320.334 MT, Mn.- 300.000 MT

(4) Pit's Mouth Value- Iron-1275.00 Mn.-4100.00

(5) Stock- Iron – 119064.833 MT, Mn. – 1135.833MT

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
INDIAN BUREAU OF MINES