

MCDR Report

Name of Inspecting officer:	PREM PRAKASH
2) Designation	Sr. Asst. Controller of Mines
3) Accompanying mine official with designation	Kailash Kumar Pradhan (Mines Manager), & N.Patel (DGM Mines)
4) Date of Inspection	04.03.2016
5) Date of Previous Inspection	05.06.2015

PART -I GENERAL INFORMATION

1. Name of mine	Raikela Iron Ore Mine
a. Category of mine (A-Fully mechanized, B-Other than fully mechanized)	A (FM)
b. Mode of working (OC/UG/Both o/c & u/g)	OC
c. Postal address	At- Raikela
d. State	Odisha
e. District	Sundargarh
f. Tehsil/ Taluka	Koira
g. Police station	Koira
h. Village	Raikela
i. Post	Dengula
j. Pin Code	770048
k. FAX	06767275631
l. E-mail	neraikelamines@yahoo.com, gapl_sponge@yahoo.co.in
m. Phone	9437569186
n. Date of first opening	01.11.1985
o. Weekly day of rest	Sunday

2. a) Lease No.	: 4948/MG dated – 16.04.1982
b) Lease area in hect. with forest area, if any	: 45.932 ha.
c) Period of lease	: 20 years
d) In case of forest area if the permission has been taken, its details like area permitted to be worked & letter No. etc.	: Stage II clearance Letter No. No. 8-128/1997-EC dated-10.11.2005- 37.317ha.
e) if the area is worked on any interim Govt. order or court order, its details.	: N.A.
f) Date of expiry.	: 20.12.2003 (RML applied on 16.12.2002)

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

4. Name and address of (including FAX/ E-mail, if any)
- a) Lessee/ owner : National Enterprises , Post Box No. - 44,
At/Po-Barbil, Dist-Keonjhar,Odisha
e.mail - gapl_sponge@yahoo.co.in
- b) Nominated owner : N.A.
- c) Agent with date of appointment : N.A.
- d) Mining Engineer and geologists appointed under rule 42 of MCDR, 1988 with date of appointment and whether full/ part time with qualification. : Lalit Kumar Beuria (Degree in Mining Engineer)
Date-30.11.2012, Full time
Bichitranda Mohanty (Msc. Geology)
Date-26.09.2012, Full time

e) Mine Manager with qualification and date of appointment : Kailash Kumar Pradhan, 1st class Mines Manager certificate of competency, dated-01.09.2014, Full time

5. Details about Mining Plan/ Mining Scheme

: the modification of Scheme of Mining, approved dated 02.06.2015
 Period of mining plan/ mining scheme in force : From 2015-16 to 2017-18 (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.

Classification	Average daily employment			Average No. of days worked in a year	Remarks
	Direct	Contract	Total		
OPENCAST					
a) Managerial person	5	Nil	5	303	-
b) Supervisory persons	4	8	11	303	-
c) Workers	Nil	28	28	303	-
d) Ministerial persons	-	-	-	-	-
e) Employment in plant	-	-	-	-	-
f) Others	9	13	22	303	-
UNDERGROUND					
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 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
1	General development in the area	-	-	-	-	Expenditures given is as reported by the mines manager. Not verified by the undersigned.
	a) Housing	-	-	-	-	
	b) Water supply	-	1.0	0.5	1.0	
	c) Sanitation	2.5	2.7	2.5	2.0	
	d) Health, safety and medical facilities.	-	2.0	2.0	1.0	
2	Education & Training	-	0.36	-	0.33	
3	Employment to local inhabitants	-	-	2.5	2.0	
4	Infrastructure-public transport, roads, communication and electricity	2.7	3.0	2.8	2.74	

Recreation and other sports activities	-	0.5	0.5	0.50
Expenditure for environment management	-	3.5	6.0	5.0
7 Others	4.0	3.0	4.0	3.0
Total	9.2	16.06	20.8	17.57
% expenditure out of total annual budget	-	-	-	-
Total	9.2	16.06	20.8	17.57

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
05.06.2015	Nil	NA

During current inspection, Violations of rule 13(1), 45 (7) and 27(3) are observed and being communicated to the party.

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 being recommended at present

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.	20 Nos.	07 Nos.	--
b) Total area covered	20 Ha.	About 7 Ha.	--
ii) Workings (Rule 13)			
a) Opencast/ underground	OC	OC	
b) Manual/ mechanized	Mechanised	Mechanised	
c) No. and size of each pit (L x W x H)	01 pit	01 pit	--
d) Bench size (l x w x h) length can be defined as regular or irregular	regular	irregular	
e) Ore to waste ratio pit wise if possible otherwise for mine.	1:0.234(t/m ³)	1:0.291(t/m ³)	
f) Total area covered under excavation/pits	19.67 ha. at the end of Scheme period	About 17.21 ha.	
iii) Waste disposal (Rule 13)			
a) Location of dumps	N.E side	N.E side	
b) Method of dumping whether advancing/ retreat	Retreat	Retreat	
c) Total area covered under waste dump	1.960 ha.	1.960 ha.	
d) No. & size of each waste dump with number of steps lift/ bench.	1 Nos., 3 steps	1 Nos., 3 steps	
e) Yearly generation of waste quantity.	145660 MT	68386 MT	59958 MT dumped over external dump
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 benches in ore and waste : 14 Nos
- (b) Percentage of recovery of ore pit-wise w.r.t. ROM and total material : w.r.t. ROM = 100%,
w.r.t. Total material = 89%
- ii) Sub-grade mineral/ fines (Rule 16)
- (a) Separate stacking from waste : Yes
- (b) Location of stacking : South-East
- (c) Total area covered for stacking : 0.14 hector
- (d) No. and size of each stack : One (40x35m)
- (e) Quantity of yearly generation, utilisation and total quantity available during inspection with grade. : 28708 MT (45-55% Fe)
(up to February 2016)
- iii) Beneficiation (Rule 20)
- (a) Efforts for improving low grade and sub-grade mineral. : By blending
- (b) The process flow sheet and material balance need to be given here. : ROM is screened & lump are crushed
- iv) Efforts for improving percentage of recovery of ore. : By using control blasting system.

7. Environment Management both quantitative and qualitative

i) Land Environment

- (a) Landscape : Hilly terrain
- (b) Aesthetic environment : Not satisfactory
- (c) Soil and land use pattern : Top soil generation negligible
- (d) Agriculture : No Agricultural Land in ML area.
- (e) Forest (flora & fauna) : Common local species
- (f) Vegetation : Scanty
- (g) Public building, places and monuments (protected monument and historical monument), places of worship and places of tourist interest. : N.A.

ii) Water Environment

(a) Surface water

(b) Ground water

(c) Quality of water

iii) Air Environment

(a) Noise

(b) Air

Seasonal monitoring of environmental parameters w.r.t. surface water, ground water, air & noise reported being carried out and parameters are reportedly within the permissible limit. However, protective measures are not found constructed satisfactorily around Fines Stacks/waste dump, thus resulting in escape of wash-off material therefrom in harmful quantities. Ground water not intersected yet by mining.

- (c) Climatic condition : Tropical
- iv) Socio-economic environment
- (a) Social and demographic profile : The inhabitants of the nearby area are mostly tribal people which are benefitted by the regular incomes from mines.
- (b) Recommending health and safety : As reported; Pre-employment medical examination.
Periodic medical examination (once in a year).
Medical examination at cessation of employment.
Provided ambulance to the nearest villagers.
Weekly doctor visit the mines to check-up the health of employees & local villagers.
- (c) Human settlement : One Small office & employees residential complex is there within the ML area.
- (d) Recreational facility : Provided in residential complex.

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.2902/- per MT
 (2) Reserve/resource - 2273654 M.T
 (3) Production – 499700MT
 (4) Pit's Mouth Value- 3500
 (5) Stock- 830127.779

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.)	A copy of violation letter being endorsed to Director of mines, Odisha.
c)	The Central Government (infrastructure development, mineral policy and legislation, mineral based industry & etc.)	Nil


01.4.16

P. Prakash
Dy. Controller of Mines