

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/SNG/MCDR-22/BBS

**Mine code :** 30ORI13054

- (i) Name of the Inspecting : **CHHA** ) **SHRI L H CHHANGTE**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri A.K. Misra GM (Mines)  
Official with  
Designation
- (iv) Date of Inspection : 30/07/2016
- (v) Prev.inspection date : 16/10/2015

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **PATABEDA IRON (14 HA)**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address  
State : ORISSA  
District : SUNDARGARH  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. : 06742596370  
E-mail : mgmbbsr@gmail.com  
Phone : 06742596400
- (f) Police Station : KOIRA
- (g) First opening date : 09/04/2006
- (h) Weekly day of rest : SUN
2. Address for : M/S M.G.MOHANTY, POST BOX NO. 17, BARBIL,  
correspondance DIST. KEONJHAR- 758 035 (ORISSA)  
ODISHA
3. (a) Lease Number : ORI0978  
(b) Lease area : 14  
(c) Period of lease : 20  
(d) Date of Expiry : 07/03/2026
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : M/S.M.G.MOHANTY  
 R.L.MOHANTY, MANAGING PAR  
 AT/PO.BARBIL,KEONJHAR,  
 ORISSA.-758035 KEONJHAR  
 ORISSA  
 Phone:06767-75318  
 FAX :06767-75770

Owner : M.G.MOHANTY  
 PB-17,PO.BARBIL,KEONJHAR  
 ORISSA. KEONJHAR ORISSA  
 Phone: 06767-30318  
 FAX : 06767-30770

6. Date of approval of Mining	:	Modif.of approved Mining Plan	07/08/2007
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	13/11/2009
	:	Mining Scheme rule 12 MCDR1988	01/04/2011
	:	Modif.approved Mining Scheme	28/05/2014
	:	Mining Scheme rule 12 MCDR1988	18/03/2016

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NONE	NIL	No exploration proposed during 2015-16
1b	Exploration over lease area for geological axis 1 or 2	None	The whole of Ml area has been covered under G 1 & 2 of UNFC	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Departmental	Details not given	Details of expenditures incurred for exdploration not given at the time of inspection
1d	Balance area to be explored to bring Geological axis in 1 or 2	None	No area left for further exploration to upgrade to G 1 & 2 of UNFC	
1e	Balance reserve as on 01/04/20	Balance as on 01/04/2016 put as 1. 10.08 MMT (+65% Fe) - G1 and 2. 0.85 MMT (+65% Fe) - G2	Balance as on date was found to be same as porposed / estimated in their approved MP	No deviation
1f	General remarks of inspecting officers on geology, exploration etc			The whole area of ML i.e 28.397 has been fully explored under G1 & 2 of UNFC

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	One large quarry proposed at the northern side of the ML	One large quarry ( 15 ha approx) developed as proposed	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed	Seperate benches have been developed in OB and Ore	

2c	Stripping ratio or ore to OB ratio	1:0.1	Actual was 1: 0.09	No significant deviation
2d	Quantity of topsoil generation in m3	Nil	None	
2e	Quantity of overburden generation in m3	6000 m3 for 2015-16	52385 m3 for the year	Slightly under developed
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Details of development given in approved MP	The same has been followed satisfactorily	

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 large pit in the northern side of the ML	Developed main pit as proposed	No deviation
3b	Quantity of ROM mineral production proposed	50,000 MT for 2015-16	Produced 44,3276 MT during the year	
3c	Recovery of sailable/usable mineral from ROM production	90%	Most of the ROM has been recovered and sold	No deviation in this aspect
3d	Quantity of mineral reject generation	10% only	Generation of Mineral Rejects has been maintained as proposed	No deviation
3e	Grade of mineral rejects generation and threshold value declared.	- 45% Fe as the Threshold value is 45% Fe	Grade and Threshold value maintained	
3f	Quantity of sub grade mineral generation.	5000 MT for the year 2015-16	Sub grade ( 45-55% Fe) generated was 4487 MT only	
3g	Grade of sub grade mineral generation	45-55% Fe	Standard sub grade maintained	

3h	Manual / Mechanised method adopted for segregating from ROM	Semi Mechanised Category A	Semi Mechanised method of mining in vogue	No deviation
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None	Nil	Data not available during inspection
3j	Provision of drilling and blasting in mineral benches	None	Nil	Additional drilling and blasting has not been required in this mine
3k	Provision of mining machineries in mineral benches	Yes	Deployed	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proper and scientific bench geometry and dimensions proposed in their MP	Developed as proposed	
3m	Total area covered under excavation/pits	15 ha ( 150m x 100 m)	13.5 ha ( 135 m x 100m )	No significant deviation
3n	Ore to OB ratio for the pit/mine during the year.	1: 1	Actual turned out to be 1 : 0.9	
3o	Total area put in use under different heads at the end of year	Proposed land use pattern : Out of total area of ML i.e 28.397 ha 1. 15 ha under mine workings, 2. Dumps = 1.85 ha , 3. Forest area= 1.311 ha 4. Others = 10.236 ha	Land use pattern has been made as proposed in their approved MP	

3p	Production of ROM mineral during the last five year period as applicable	50,000 MT for 2015-16	Actual during the year was 47,260 MT	Slightly under produced due to various operational constraints and demand of market
3q	General remarks of inspecting officers on method of mining etc.	Details of exploitation / development programme given in MP	Mining activities have been carried out as proposed in the approved MP	No major deviation

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Mostly OB dump ans Mineral rejects or sub grade dumps have been made seperately	
4b	Location of topsoil, OB and mineral reject dumps	One in the Northern side , Sout West and Eastern side	Developed a proposed	
4c	Number of dumps within lease area and outside of lease area	3 dumps within ML and None outside ML	Dumps developed as roposed	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Actual development is also outside UPL	No deviation here
4e	Number of active and alive dumps.	3 Active dump, No dead dump	Actual as proposed	
4f	Number of dead dumps.	Nil	None	
4g	Number of dumps established.	Nil	None as on date of inspection	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes erected as proposed	No deviation

4i	Length of Retaining wall or garland drain all along dumps	100 m, 80m and 120m	Retaining walls erected as proposed around the 3 dumps	
4j	Number of settling ponds	NIL	None	
4k	Specific comments of inspecting officer on waste dump management	Details given in MP	Solid waste management has been carried out as proposed	No adverse effect in this regard as on date of inspection

#### Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Nil	There is no area where there is full extration of mineral in the ML	
5b	Area under backfilling of mined out area	No	No backfilling started in this mine	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No	The top soil generated has been negligent but whatever generated has been used for civil works	
5d	Total area fully reclaimed and rehabilitated	No	NIL	NO matured area for back filling or reclamation / rehabilitation
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No specific proposal for the same	No work as above	

#### Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Yes, Annual Return and Monthly Return has been submitted to IBm on a routine basis	
6b	Area available for rehabilitation (ha) .	Nil	None	
6c	afforestation done (ha).	Regular plantations proposed	Plantations as proposed	No deviation , infact over achieved
6d	No. of saplings planted during the year	Proposal during the year was 2000	Actual plantation was 2385	Over achievement in last year plantations
6e	Cumulative no .of plants	25,000 saplings till 2015-16	Actual cummulative plantations was 20908	Satisfactory compliance
6f	Any other method of rehabilitation	NIL	None	
6g	Cost incurred on watch and care during the year	Not given	Data not available	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	None	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	None	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Nil	None	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	None	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	None	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Details not given	Partly done	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	None	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	none	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Routine monitoring proposed	Carried out as proposed	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Much details not given in their MP	Bare minimum works of rehabilitation carried out	No matured land available as on date

---

**Mineral Conservation:**


---

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

---

7a	ROM Mineral dispatch or grade-wise sorting within lease area	Lumps : 2500 MT (60-62% Fe) , 35,000 MT ( +65% Fe) Fines : 10000 MT ( - 55% Fe), 7500 MT ( 65% Fe above )	Lumps : 2500 MT (60-62% Fe) , 30,000 MT ( +65% Fe) Fines : 7500 MT ( - 55% Fe), 7000 MT ( 65% Fe above )	Under production due to certain administrative constraints and low market demand
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Both manual and mechanised	Practised as proposed	
7c	Different grade of mineral sorted out at mines.	Lumps : 60-62% Fe and +65% Fe Fines : - 55% Fe and 65% Fe above	Actual despatch same as proposed	
7d	Any beneficiation process at mines .	Semi mechanised mobile screens iwthin the ML	As proposed	

---

**Environment:**


---

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

---

**Compliance of Rule 45:**


---

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

---

**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

**Date :**

(SHRI L H CHHANGTE)

Indian Bureau of Mines