

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

MCDR INSPECTION REPORT

Bhubaneswar regional office

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

Mine code : 30ORI13054

- (i) Name of the Inspecting : **RAM**) **RAMKISHAN R**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Chatrubhuja Sahoo, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 25/11/2019
- (v) Prev.inspection date : 21/09/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PATABEDA IRON (14 HA)**
- (b) **Registration NO.** : **IBM/247/2011**
- (c) **Category** : **A Other than Fully Mech.**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **ORISSA**
- District : **SUNDARGARH**
- Village : **Patabeda**
- Taluka : **Bans**
- Post office : **Wald**
- Pin Code : **72038**
- 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 correspondance** : **M/S M.G.MOHANTY, POST BOX NO. 17, BARBIL,
DIST. KEONJHAR- 758 035 (ORISSA)
ODISHA**
3. (a) **Lease Number** : **ORI0978**
- (b) **Lease area** : **14**
- (c) **Period of lease** : **20 yr.**
- (d) **Date of Expiry** : **~~20/12/2033~~ 7/3/2026.**
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/s M.G. Mohanty, R.L. Monhanty (Managing Partner)
 5A, Forest Park
 Bhubaneshwar Odisha-751009
 SUNDARGARH ORISSA
 Phone: 0674-2596400
 FAX : 0674-2596390

Geologist
 Name : Shri Dilip Kumar Pattnaik, Full Time
 Qualification : M.Sc
 Appointment/ : 01/07/2006
 Termination date

Manager
 Name : Shri Balram Behara
 Qualification : BE(mining)
 Appointment/ : 15/10/2011
 Termination date

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	No such specific proposal.	however 3 nos of boreholes were proposed during the year 2018-19.	
1b	Exploration over lease area for geological axis 1 or 2	3 nos of boreholes were proposed during the year 2018-19 for geological axis G1/G2.	during the year 2018-19 no boreholes were drilled. however 6 nos of boreholes were drilled already in the year 2016-17 as exploration programme.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year		In house team.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	during the last approved mining plan 6 nos of boreholes were proposed from the period year 2016-17 to 2020-21	6 nos of boreholes were drilled during the year 2016-17.	Nil
1e	Balance reserve as on 01/04/20	As per the last approved mining plan dated 18.03.2016 the iron ore reserves are 0.95 mil.t. and resources are 0.25 mil.t.	due to addition/depletion over the period of time the iron ore reserves as on 01.04.2019 are 0.89 mil.t. and resources are 0.17 mil.t.	Nil
1f	General remarks of inspecting officers on geology, exploration etc		Exploration has been carried out as proposed in the mining plan.	Nil

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	one quarry is proposed by opencast mining method during the year 2018-19.	development is carried out in one no. quarry	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no top soil generation is envisaged during the year 2018-19 and separate benches for OB and mineral are proposed.	seperate benches in OB and mineral are maintained.	Nil
2c	Stripping ratio or ore to OB ratio	1: 0.18 t/cu.m.	1:0.09 t/cu.m.	due to irregular nature of ore deposit.
2d	Quantity of topsoil generation in m3	Not applicable Nil		
2e	Quantity of overburden generation in m3	16919 cu.m.	5962 cu.m.	due to irregular nature of ore deposit and also less development work.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	development is carried out by opencast mining method with one quarry.		Nil

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one	one	
3b	Quantity of ROM mineral production proposed	90977 t. during the year 2018-19.	64400 t.	Nil
3c	Recovery of sailable/usable mineral from ROM production	79955 t of saleable ore and 11022 t of mineral reject	64400 t of saleable ore and Mineral rejects are Nil	Nil

3d	Quantity of mineral reject generation	11022 t	Nil	the generated mineral rejects were blended with saleable ore.
3e	Grade of mineral rejects generation and threshold value declared.	+45%-55% Fe	+45%-55% Fe	Nil
3f	Quantity of sub grade mineral generation.	addressed in mineral rejects	Not applicable	
3g	Grade of sub grade mineral generation	Not applicable	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised.	Mechanised.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	Not applicable	
3j	Provision of drilling and blasting in mineral benches	drilling and blasting is proposed.	drilling and blasting is carried out.	Nil
3k	Provision of mining machineries in mineral benches	shovel and dumper combination is proposed for excavation.	shovel and dumper combination is deployed.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m height bench is proposed.	maintained.	Nil
3m	Total area covered under excavation/pits	2.878 ha at the end of plan period i.e. 2020-21.	2.496 ha	Nil

3n	Ore to OB ratio for the pit/mine during the year.	1: 0.18 t/cu.m.	1:0.09 t/cu.m.	
3o	Total area put in use under different heads at the end of year	total area put to use under differnet heads at the end of plan period i.e. 2020-21 is 9.966 ha.	8.642 ha.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 94038 t 2015-16: 100473 t 2016-17: 90684 t 2017-18: 90947 t 2018-19: 90977 t	2014-15: 38500 t 2015-16: 77520 t 2016-17: 73300 t 2017-18: 81280 t 2018-19: 64400 t	Nil
3q	General remarks of inspecting officers on method of mining etc.		production is carried out from one quarry by opencast mining method.	Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	no top soil generation is envisaged during the year 2018-19 and seperate dumping for OB and mineral rejects are propsoed.	seperate dumping for OB is carried out. the mineral rejects are blended with saleable ore.	Nil
4b	Location of topsoil, OB and mineral reject dumps	dump-2 is propsoed for OB generated and MR stack is for mineral rejects.	waste generated is dumped in the dump-2 and mineral rejects are blended with saleable ore.	

4c	Number of dumps within lease area and outside of lease area	1 no waste dump is proposed with in lease area.	1 no waste dump with in lease area.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside UPL	outside UPL	Nil
4e	Number of active and alive dumps.	one dump	one dump	
4f	Number of dead dumps.	Not proposed.	Not applicable	
4g	Number of dumps established.	Not proposed.	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there.	already provided.	provided.	Nil
4i	Length of Retaining wall or garland drain all along dumps	already provided. so no fresh proposal.	provided.	Nil
4j	Number of settling ponds	already provided so no fresh proposal.	Nil	
4k	Specific comments of inspecting officer on waste dump management		waste dumping is carried out as per the proposal made in approved mining plan.	Nil

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.	Not applicable	Nil	
5b	Area under backfilling of mined out area	Not applicable	Nil	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable Nil		
5d	Total area fully reclaimed and rehabilitated	Not applicable Nil		
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Area not matured for backfilling.	Nil

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).	yearly report to be submitted.	submitted.	Nil
6b	Area available for rehabilitation (ha) .	Not applicable Nil		
6c	afforestation done (ha).	0.1 ha during the eyar 2018-19.	0.1 ha	Nil
6d	No. of saplings planted during the year	100	103	Nil
6e	Cumulative no .of plants		9379 nos	
6f	Any other method of rehabilitation	Not applicable Nil		Nil
6g	Cost incurred on watch and care during the year		RS 78000.	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not applicable Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	Not applicable Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not applicable Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not applicable Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not applicable Nil

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not applicable Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	periodical monitoring of environmental parameters are proposed.	carried out.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP measures are being implemenetd.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wise sorting within lease area is proposed.	grade-wise sorting of mineral is being carried out.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	+45%-55% Fe and +55% Fe	+45%-55% Fe and +55% Fe	Nil
7d	Any beneficiation process at mines	Not applicable Nil		
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Grade-wise sorting of mineral is being carried out.	Nil

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not applicable	Nil	
8b	Concurrent use or storage of topsoil	Not applicable	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps maintained for waste and mineral rejects are proposed.		Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	dump plantation is proposed.	carried out.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	100 nos	103 nos	
8g	Survival rate		90%	Nil
8h	Water sprinkling on roads to control airborne dust	water sprinkling is proposed for dust supression	carried out.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Aesthetic beauty in and around the mine is maintained.	Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and annual returns are to be submitted.	submitted.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate mining engineer 1 and geologist -2	Graduate mining engineer 1 and geologist -2	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	opencast workings: 2.496 ha, dump: 1.876 ha, plant, buidlings and others: 4.27 ha	found to be in order.	Nil
9d	Scrutiny of Annual return on afforestation	113 nos	113 nos	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock is 1870 t.	found to be in order.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	production cost Rs. 1085.36	production cost Rs. 1085.36	
9h	Scrutiny of Annual return on fixed assets			

9k	Scrutiny of Annual return on mining machineries	BACK HOE 2.100 found to be in order. CUM 1, BACK HOE 1.500 CUM 1, FRONT END LOADER 1.500 CUM 1 WHEEL LOADER 1.700 CUM 1, WHEEL LOADER 1.800 CUM 1, WATER TANKER 8000.000 LITRE 1 TIPPER 6.000 CUM 3	Nil
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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

no violation,

R. Duliy
(RAMKISHAN R)

Date : 4/12/19

Indian Bureau of Mines