

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON-MN/KJR/MCDR-81/BBS

**Mine code :** 30ORI08106

- (i) Name of the Inspecting : **RAM** ) **RAMKISHAN R**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri C.S.Jena, Mine Manager  
Official with  
Designation
- (iv) Date of Inspection : 10/12/2019
- (v) Prev.inspection date : 23/09/2018

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **NAIBAGA IRON & MANGANESE**
- (b) **Registration NO.** : **IBM/5410/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : NAIBAGA
- Taluka : JHUMPURA
- Post office : DUBUNA
- Pin Code :
- FAX No. : 06767272298
- E-mail : nimm.tpm@gmail.com
- Phone : 9437072218
- (f) Police Station : JODA
- (g) First opening date : 17/11/2009
- (h) Weekly day of rest : SUN
2. Address for : AT-JODA  
correspondance : PO-JODA  
DIST- KEONJHAR
3. (a) Lease Number : ORI0889
- (b) Lease area : 47.22
- (c) Period of lease : 50
- (d) Date of Expiry : 16/11/2059
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : SRI TARINI PRASAD MOHANTY  
 MINE OWNER , JODA  
 KEONJHAR ORISSA  
 Phone:  
 FAX :

Owner : T P MOHANTY  
 JODA KEONJHAR ORISSA  
 Phone: 06767273475  
 FAX : 06767273475

Agent : SHRI ARPIT MOHAR  
 JODA KEONJHAR ODISHA  
 KEONJHAR ORISSA  
 Phone: 06767273475  
 FAX : 06767273475

## Mining Engineer

Name : Himansu Maahant, Full Time  
 Qualification : BE(Mining)  
 Appointment/ : 02/02/2016  
 Termination date

## Manager

Name : Chandra Sekhar Jena  
 Qualification : BE(Mining)  
 Appointment/ : 01/11/2011  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Modif.of approved Mining Plan 14/05/2013  
 Mining Scheme rule 12 MCDR1988 02/06/2015

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No such specific proposal.	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	No proposal during the year 2018-19.	Nil	total 53 nos of boreholes were drilled by lessee under G1 level of exploration till date.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such specific proposal.	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed during the year 2018-19.	Nil	total 53 nos of boreholes were drilled by lessee under G1 level of exploration till date.
1e	Balance reserve as on 01/04/20	As per the approved documnet on 02.06.2015 the iron ore reserves are 10.14 mil.t. and reosurces are 4.156 mil.t. and manganese reserves are 0.216 mil.t. and resources are 0.015 mil.t.	due to addition/depletion over the period of time the reserves and resources as on 01.04.2019 are 8.45 mil.t. reserves of iron ore and resources of 4.156 mil.t. and manganese reserves are 0.216 mil.t. and resources are 0.015 mil.t.	
1f	General remarks of inspecting officers on geology, exploration etc		Total 53 nos of boreholes have been drilled as a part of exploration so far under G1 level in the lease area.	Nil

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	quarry-1, quarry-2 and quarry-3 are proposed for development during the year 2018-19.	development is carried out in quarry-1 and quarry-2 only.	due to local law and order problem the quarry-3 is not being developed.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	benches in mineral are only proposed.	benches in mineral are maintained.	No OB generation is envisaged.
2c	Stripping ratio or ore to OB ratio	1:0.02 t/cu.m.	Nil	No waste generated.
2d	Quantity of topsoil generation in m3	No generation of top soil is envisaged.	Nil	
2e	Quantity of overburden generation in m3	Not proposed.	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		mine development is carried out by opencast mining method in two nos of quarries.	

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**Exploitation:**

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3 nos.	2 nos.	Nil
3b	Quantity of ROM mineral production proposed	0.58 mil.t. iron ore, 14700 t of manganese ore during the year 2018-19.	0.50 mil.t. of iron ore and Nil production of Manganese ore	due to local law and order problem the quarry-3 is not being developed so manganese production could not be carried out.

3c	Recovery of saleable/usable mineral from ROM production	0.52 mil.t. saleable ore and 58458 mil.t. mineral reject.	0.50 mil.t. saleable ore and mineral reject is Nil.	
3d	Quantity of mineral reject generation	58458 t.	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	+45%-55% Fe	+45%-55% Fe	Nil
3f	Quantity of sub grade mineral generation.	Addrssed in mineral rejects.	Nil	
3g	Grade of sub grade mineral generation	Nil	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.	Nil	
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 machineris in mineral benches	shovel and dumper combination is proposed for excavation.	shovel and dumper combination is deployed for excavation.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m bench height is propsoed.	maintained.	

3m	Total area covered under excavation/pits	10.621 ha at the end of plan period i.e. 2019-20.	7.359 ha.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.02 t/cu.m.	Nil	Nil
3o	Total area put in use under different heads at the end of year	20.651 ha total area is put to use at the end of plan period i.e. 2019-20.	12.247 ha.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 538736 t 2015-16: 587160 t 2016-17: 589920 t 2017-18: 592680 t 2018-19: 584589 t. of iron ore	2014-15: 59950 t 2015-16: 440741 t 2016-17: 500100 t 2017-18: 241670 t 2018-19: 508080 t. of iron ore	Nil
3q	General remarks of inspecting officers on method of mining etc.		production is carried out by opencast mining method as proposed.	Nil

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#### 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. seperate dumping of intercalated waste and mineral rejects are proposed.	Nil	mineral rejects and intercalated waste not generated as the quarry-3 could not be operated during the year 2018-19.
4b	Location of topsoil, OB and mineral reject dumps	central part of the lease area.	Nil	No waste and mineral rejects generated during the year 2018-19.

4c	Number of dumps within lease area and outside of lease area	1 no.	Nil	No waste generated during the year 2018-19.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside UPL	Nil	Nil
4e	Number of active and alive dumps.	1 no.	Nil	No waste generated during the year 2018-19.
4f	Number of dead dumps.	Not proposed.	Nil	Nil
4g	Number of dumps established.	Not proposed.	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	proposed.	Nil	No active waste dump generated during the year 2018-19.
4i	Length of Retaining wall or garland drain all along dumps	100 m.	Nil	No active waste dump generated during the year 2018-19.
4j	Number of settling ponds	1 no	Nil	settling ponds not constructed as no active waste dump generated during the year 2018-19.
4k	Specific comments of inspecting officer on waste dump management		intercalated waste not generated during the year 2018-19 as the quarry-3 could not be operated.	

#### 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	not matured for reclamation and rehabilitation.

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

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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).	yeraly report needs to be submitted.	submitted.	Nil
6b	Area available for rehabilitation (ha) .	No proposal.	Nil	Nil
6c	afforestation done (ha).	0.41 ha	0.41 ha	Nil
6d	No. of saplings planted during the year	656 nos during the year 2018-19.	660 nos	
6e	Cumulative no .of plants	not specified.	14910 nos	
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year	Not specified.	Rs. 47495	

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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	proposed.	carried out.		Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.41 ha	0.41 ha		Nil

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	gap plantation	gap plantation	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	periodical monitoring of environmental parameters are proposed.	carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP measures implemented as proposed.	Nil

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wise sorting of mineral is propsoed.	grade-wise sorting is carried out.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanised for Iron ore and manual for Manganese ore.	mechanised for iron ore is being practiced.	Manganese ore could not be produced.
7c	Different grade of mineral sorted out at mines.	+45%-55% Fe and +55% Fe for iron ore, +10-25% Mn and +25% Mn for Manganese ore.	+45%-55% Fe and +55% Fe for iron ore	Nil
7d	Any beneficiation process at mines	Not proposed.	Nil	Nil

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	grade-wise sorting of mineral is being practiced.	Nil.
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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not applicable	Nil	Nil
8b	Concurrent use or storage of topsoil	Not applicable	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for intercalated waste and rejects or proposed.	Nil	No waste and mineral rejects generated during the year 2018-19.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable	Nil	Nil

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	656 nos.	660 nos	Nil
8g	Survival rate	Not specified.	75%	Nil
8h	Water sprinkling on roads to control airborne dust	water sprinkling on hual raods for dust supression proposed.	carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around the mines area is maintained.	Nil

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	annual and monthly returns are to be submitted.	submitted.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining Engineer 2, Diploma Mining Engineer 1, Geologist 1	Graduate Mining Engineer 2, Diploma Mining Engineer 1, Geologist 1	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings 1.160 ha.	incoreect information is furnished.	violation observed and communicated to lessee letter dated 07.01.2020.
9d	Scrutiny of Annual return on afforestation	660 nos	660 nos	Nil

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9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock is 295368 t of iron ore	found to be in order.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	prodcution cost Rs. 887.19	prodcution cost Rs. 887.19	
9h	Scrutiny of Annual return on fixed assets	Rs. 22055355	Rs. 22055355	Nil
9k	Scrutiny of Annual return on mining machineries	BACK HOE 0.900 CUM 4, BACK HOE 1.200 CUM 1, BACK HOE 0.600 CUM 1, DUMPER 25.000 TONNE 6, FRONT END LOADER 1.800 CUM 2, BLAST HOST DRILL 100.000 MM 1	found to be in order.	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
MCDR17 Rule 45(7)(a)	16/12/2019				
MCDR17 Rule 55(1)(1)	16/12/2019				

**Date :**

(RAMKISHAN R)

Indian Bureau of Mines