

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON-MN/SNG/MCDR-12/BBS

**Mine code :** 30ORI13012

- (i) Name of the Inspecting : **RAM** ) **RAMKISHAN R**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri A.S.Mohapatra, Agent  
Official with  
Designation
- (iv) Date of Inspection : 24/12/2019
- (v) Prev.inspection date : 11/01/2019

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **NADIDIH**
- (b) **Registration NO.** : **IBM/4583?2011(WB)**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : NADIDIH
- Taluka : BONAI
- Post office : GUALI
- Pin Code :
- FAX No. : 06596-262101
- E-mail : bbl.geology@feegrade.com
- Phone : 06596-276161
- (f) Police Station : KOIRA
- (g) First opening date : 10/10/1961
- (h) Weekly day of rest : SAT
2. Address for : AT/PO NADIDIH  
correspondance : DIST. SUNDERGARH, ORISSA  
PIN. 770048
3. (a) Lease Number : ORI0128
- (b) Lease area : 121.41
- (c) Period of lease :
- (d) Date of Expiry : 31/03/2020
4. Mineral worked : MANGANESE ORE Associated  
IRON ORE Main

## 5. Name and Address of the

Lessee : FEEGRADE &CO.(P)LTD.  
 AT/PO BARBIL CABLE- RUNGTA  
 KEONJHAR ORISSA  
 Phone:06767--30221  
 FAX :

Owner : M D RUSTAGI, NOMINATED OWNER  
 RUNGTA OFFICE,MAIN ROAD,  
 BARBIL AT/PO- BARBIL,DIST-  
 KEONJHAR SUNDARGARH ORISSA  
 Phone:  
 FAX :

Agent : A.S.MAHAPATRA  
 Rungta Office, Main Road,  
 Barbil Keonjhar, Orissa  
 KEONJHAR ORISSA  
 Phone: 06767-276651  
 FAX : 06767-276651

## Geologist

Name : R K SHARMA,Full Time  
 Qualification : MSC GEOLOGY  
 Appointment/ : 12/07/2004  
 Termination date

## Manager

Name : Santosh Kumar Choudhary  
 Qualification : BE(Mining)  
 Appointment/ : 24/12/2013  
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	06/06/2007
Plan/Scheme of Mining		Modif.approved Mining Scheme	23/02/2010
		Mining Scheme rule 12 MCDR1988	03/03/2011
		Mining Scheme rule 12 MCDR1988	17/04/2013
		FMCP under 23C(1)	17/04/2015
		Modif.approved Mining Scheme	27/07/2015
		MP modif under MCR 1960	28/03/2016
		MP modif under 17(3) MCR 2016	30/12/2016
		FMCP under 23C(1)	03/10/2018

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No such proposal however 18 nos of boreholes were proposed during the year 2018-19.	Nil	
1b	Exploration over lease area for geological axis 1 or 2	13 nos of boreholes were proposed during the year 2018-19 to brought area under G1/G2 level.	carried out.	proposed boreholes were already drilled in 2017-18.
1c	Exploration Agencies and Expenditure in lakh rupees during the year		V.K.S. Mining services and expenditure incurred was Rs. 3142775	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	As per Modified mining plan approved on 30.12.2016 was 28.02 MT of iron ore reserves and 2.328 MT manganese reserves area 11561 t.	due to addition and depletion over the period of time the reserves as on 01/04/2019 are 21.1 mil.t. and manganese are 11561 t. iron resources are 2.32 mil.t.	
1f	General remarks of inspecting officers on geology, exploration etc		exploration has been carried out to brought area under G1/G2 level.	Nil

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	D-pit and N-pit is proposed for iron ore deposit development and Mn. quarry for managnese during the year 2018-19.	D-pit and N-pit development is carried out. Mn.quarry development is not carried out.	development is not carried out fue to poor market demand.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no top soil generation is envisaged. seperate benches in OB and mineral are proposed.	maintained.	
2c	Stripping ratio or ore to OB ratio	1:0.09 t/cu.m.	1:0.05 t/cu.m.	deviation is due to less ROM production
2d	Quantity of topsoil generation in m3	Not proposed.	Not applicable	
2e	Quantity of overburden generation in m3	542506 cu.m. during the year 2018-19	158312 cu.m.	deviation is due to less ROM production.
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 as propsoed.	

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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3 nos.	2 nos.	managnese quarry not developed due to less market demand.
3b	Quantity of ROM mineral production proposed	6 mil.t. of iron ore and 3040 t of manganese ore during the year 2018-19.	2.92 mil.t. of iron ore and Nil production of manganese ore.	deviation is due to want of Enivronment clearence.

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3c	Recovery of saleable iron 2.92 mil.t. of iron ore sailable/usable ore 5.4 mil.t. and Nil of manganese ore mineral from ROM and 2888 t of production manganese ore		
3d	Quantity of 0.6 mil.t. of Nil mineral reject iron ore and generation 152 t of manganese ore		due to less ROM production
3e	Grade of mineral +45-55% Fe for +45-55% Fe for iron ore Nil rejects iron ore and and +10-25% Mn for generation and +10-25% Mn for manganese ore threshold value manganese ore declared.		
3f	Quantity of sub addressed in Not applicable grade mineral mineral generation. rejects		
3g	Grade of sub Not applicable Nil grade mineral generation		
3h	Manual / mechanised for practciied as proposed. Mechanised iron ore and method adopted manual for for segregating manganese ore. from ROM		
3i	Any analysis or Not proposed. Nil beneficiation study proposed and carried out for sub grade mineral and rejects.		
3j	Provision of drilling and carried out drilling and blasting is blasting in proposed. mineral benches		
3k	Provision of shovel and shovel and dumper mining dumper combination is deployed machineries in combination is for excvation and mineral benches proposed for hauling. excvation and hauling.		
3l	Whether height 9 m maintained of benches in overburden and mineral suitable for method of mining proposed in MP/SOM		

3m	Total area covered under excavation/pits	50.105 ha at the end of plan period i.e. 2019-20.	42.9 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.09 t/cu.m.	1:0.05 t/cu.m.	
3o	Total area put in use under different heads at the end of year	opencast mining: 50.105 ha waste dumps: 27.889 ha, mineral storage: 7.421 ha till the end of plan period i.e. 2019-20.	opencast mining: 42.9 ha waste dumps: 20.45 ha, mineral storage: 7.421 ha	
3p	Production of ROM mineral during the last five year period as applicable	iron ore, 2014-15: 4.5MT, 2015-16: 7.451MT, 2016-17: 4.50MT, 2017-18: 5.0MT 2018-19: 6 mil.t. Manganese ore: 2013-14: 3040T 2014-15: 3600T 2015-16: 3600T 2016-17: 3000T 2017-18: 3600T 2018-19: 3040 t.	iron ore, 2014-15: 0.31MT, 2015-16: 1.49 MT, 2016-17: 2.32 MT, 2017-18: 2.87 MT 2018-19: 2.92 mil.t. Manganese ore: Nil	Less production of iron ore carried out due to want of environmental clearance. No production of manganese ore has been reported due to market constraint.
3q	General remarks of inspecting officers on method of mining etc.		production of mineral is carried out by opencast mining method.	

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	no top soil generation is envisaged and waste and mineral rejects generated are proposed be dumped seperately.	carried out as proposed.	
4b	Location of topsoil, OB and mineral reject dumps	dump-c for waste dumping	dump-c	
4c	Number of dumps within lease area and outside of lease area	1 no waste dump is proposed during the year 2018-19.	1 no.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside UPL	outside UPL	Nil
4e	Number of active and alive dumps.	1 no. during the year 2018-19	1 no.	
4f	Number of dead dumps.	Not proposed.	Not applicable	
4g	Number of dumps established.	Not applicable	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	yes provided.	provided.	
4i	Length of Retaining wall or garland drain all along dumps	already provided.	provided.	
4j	Number of settling ponds	Not proposed.	Nil	
4k	Specific comments of inspecting officer on waste dump management		waste dump management is carried out as propsoed.	Nil

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	However it is proposed do backfill over an area of 3.5 ha during year 2019-20, but could not be carried out so violation observed and communicated to lessee dated 07.01.2020.
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 proposed.	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Area not matured for backfilling	

#### 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).	PMCP report to submitted submitted before 1 st July		
6b	Area available for rehabilitation (ha) .	Nil	Nil	



6c	afforestation done (ha).	1.5 ha on dump	1.5 ha on dump	Nil
6d	No. of saplings planted during the year	8000 nos	10000 nos	
6e	Cumulative no .of plants		203148 nos	
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year		Rs 20.51 lakhs	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Not proposed	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Nil	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.5 ha safety zone area	0.5 ha
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.5 ha	0.5 ha
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	plantation	plantation
6p	Compliance of environmental monitoring (core zone and buffer zone)	periodical environmental monitoring of core zone and buffer zone are proposed.	carried out
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP measures are carried out

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wsie sorting of mineral is propsoed.	grade-wise sorting of mineral are carried out.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical for iron ore and manual for manganese.	mechanical for iron ore and manual for manganese	

7c	Different grade of mineral sorted out at mines.	+45-55% Fe and +55% Fe for iron and +10-25% Mn and +25% Mn for manganese	+45-55% Fe and +55% Fe for iron and +10-25% Mn for manganese
7d	Any beneficiation process at mines .	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		grade-wise sorting of mineral is carried out.

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**Environment :**

Sl.No.	Item	Propasals	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 propsoed.		
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)	8000 nos	10000 nos
8g	Survival rate		97%
8h	Water sprinkling on roads to control airborne dust	water sprinkling on haul roads for dust suppression is 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.

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Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and annual returns are to be submitted as per rule 45 of MCDR, 2017	submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	provided.	Graduate Mining Engineer 3, Diploma Mining Engineer 2, Geologist 1	Nil

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	provided.	opencast mining: 42.9 ha waste dumps: 20.45 ha, mineral storage: 7.421 ha	
9d	Scrutiny of Annual return on afforestation	provided.	10000 nos	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	provided.	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	provided.	ROM closing stock of iron ore is 167213 t	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	provided.	production cost Rs. 900.7	
9h	Scrutiny of Annual return on fixed assets	provided.	Rs.95467690	Nil
9k	Scrutiny of Annual return on mining machineries	provided.	SHOVEL (HYDRAULIC) 2.600 CUM 1, SHOVEL (HYDRAULIC) 2.000 CUM 2, SHOVEL (HYDRAULIC) 1.600 CUM 2 SHOVEL (HYDRAULIC) 1.200 CUM 5, SHOVEL (HYDRAULIC) 1.000 CUM 4, FRONT END LOADER 1.800 CUM 10 FRONT END LOADER 1.900 CUM 1, TIPPPER 16.000 CUM 24.	

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

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

**Date :**

(RAMKISHAN R)

Indian Bureau of Mines