

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/MN/SNG/MCDR-16/BBS

**Mine code :** 40ORI13005

- (i) Name of the Inspecting : **RAM** ) **RAMKISHAN R**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri H.H.Panda, Mine Manager, Shri Bijay Barik, Sr.Ma  
Official with  
Designation
- (iv) Date of Inspection : 22/10/2018
- (v) Prev.inspection date : 08/01/2018

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **GANUA**
- (b) **Registration NO.** : **IBM/135/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : GANUA
- Taluka : BONAI
- Post office : MALDA
- Pin Code :
- FAX No. : 06767-275362
- E-mail : snmbbl@gmail.com
- Phone : 06767-275362
- (f) Police Station : Koira
- (g) First opening date : 06/06/1980
- (h) Weekly day of rest : MON
2. Address for : VILL: GONUA, PO: MALDA  
correspondance DIST: SUNDERGARH, ORISSA  
POLICE STATION . KOIRA
3. (a) Lease Number : ORI0694
- (b) Lease area : 13.79
- (c) Period of lease : 20
- (d) Date of Expiry : 05/06/2020
4. Mineral worked : MANGANESE ORE Main

## 5. Name and Address of the

Lessee : PRABODH MOHANTY (L/HOF S.N.MOHANTY.)  
 AT: STATION ROAD, P.O.  
 BARBIL DIST. KEONJHAR,  
 ORISSA KEONJHAR ORISSA  
 Phone:  
 FAX :

Owner : P. K. MOHANTY, L.H. OF LATE S.N. MOHANTY  
 AT: STATION ROAD, P.O.  
 BARBIL DIST. KEONJHAR,  
 ORISSA KEONJHAR ORISSA  
 Phone: 06767-275362  
 FAX : 06767-275362

Agent : T.C.Sei  
 Barbil,Keonjhar,Odisha  
 SUNDARGARH ORISSA  
 Phone: 06767-275362  
 FAX : 06767-212164

## Mining Engineer

Name : B. Samal,Full Time  
 Qualification : BE Mining  
 Appointment/ : 02/12/2012  
 Termination date

## Geologist

Name : S MOHANTY,Full Time  
 Qualification : MSC (GEOLOGY)  
 Appointment/ : 25/10/2016  
 Termination date

## Manager

Name : H. H. Panda  
 Qualification : AMIE  
 Appointment/ : 22/12/2009  
 Termination date

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	11/11/2004
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	17/03/2008
	:	Modif.approved Mining Scheme	02/08/2013
	:	Mining Scheme rule 12 MCDR1988	22/05/2014

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No such proposal.	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	4 nos of boreholes were proposed during the year 2017-18.	Nil	Total 25 nos of boreholes (planned during the plan period i.e. 2014-15 to 2018-19) were drilled in the year 2014-15
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	4 nos of boreholes were proposed during the year 2017-18.	25 nos of boreholes were drilled to brought area under G1/G2 level till the year 2017-18.	Nil
1e	Balance reserve as on 01/04/20	As per the approved document on 22.05.2014 the manganese reserves are 111: 70284 tonnes, 122: 5676 tonnes and resources are 221: 5635 tonnes, 222: 1554 tonnes, 331: 6576 tonnes	due to depletion over the period of time from year 2014-15 the manganese reserves and resources as on 01.04.2018 are 111: 66141 tonnes, 122: 5676 tonnes and resources are 221: 5635 tonnes, 222: 1554 tonnes, 331: 6576 tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	No comments to offer.	Exploration carried out as per 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	two pits called quarry-1, Gonda pit are proposed for development. grid location not specified.	two pits called quarry-1, gonda pit were developed.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No top soil generation is proposed, seperate benches in OB and mineral are proposed.	No top soil has been generate during the year 2017-18 and seperate benches in OB and mineral are mainatined.	Nil.
2c	Stripping ratio or ore to OB ratio	1:9.438 t/cu.m. for the year 2017-18.	1:11 t/cu.m.	variation is due to poor recovery in the manganese ore deposit.
2d	Quantity of topsoil generation in m3	No proposal.	Nil	Nil
2e	Quantity of overburden generation in m3	16810 cu.m. for the year 2017-18.	11545 cu.m.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No comments to offer.	Development was carried out in two pits as proposed in the mining plan.	Nil

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two pits are proposed for production called quarry-1 and gonda pit.	Production is carried out from two pits called quarry-1 and gonda pit.	Nil
3b	Quantity of ROM mineral production proposed	production of ore 1781 tonnes during the year 2017-18.	1050 tonnes.	due to poor recvoery in manganese ore.

3c	Recovery of sailable/usable mineral from ROM production	1781 t of saleable ore 1507 t of sub grade ore	1050 t of saleable ore	due to poor recovery of manganese ore.
3d	Quantity of mineral reject generation	Nil	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Nil	Nil
3f	Quantity of sub grade mineral generation.	1507 t during the year 2017-18	Nil.	due to poor recover of manganese ore.
3g	Grade of sub grade mineral generation	+10%Mn-20%Mn	+10%Mn-20%Mn	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Jack hammer drilling of 32mm dia. hole and blasting with nitro compounds explosive.	Jack hammer is carried out by drilling of 32mm dia. hole and blasting with nitro compounds explosive.	
3k	Provision of mining machineries in mineral benches	Jack hammer Drill-1, Air compressor-1, Tipper 10 T-4, Excavator 0.9 cu.m-1, Water tanker 18KL-1	The machineries used for mining are Jack hammer Drill-1, Air compressor-1, Tipper 10 T-4, Excavator 0.9 cu.m-1, Water tanker 18KL-1.	Nil

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 3m.	Bench height is suitably matched with the excavator.	Nil
3m	Total area covered under excavation/pits	4.32 ha during approved plan period. i.e. till 2018-19.	4.21 ha.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:9.43 t/cu.m. during the year 2017-18.	1:11 t/cu.m.	Nil
3o	Total area put in use under different heads at the end of year	Area covered under different heads are Pit-4.32 ha, waste dump- 1.60 ha, Plant, residential & building, roads-1.034ha & Mineral storage, plantation & others - 0.731ha. till the plan period i.e. year 2018-19.	Pit-4.32 ha, waste dump- 1.60 ha, Plant, residential & building, roads-1.034ha & Mineral storage, plantation & others -0.731ha.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2013-14 2496.000 t 2014-15 2206 t 2015-16 2225 t 2016-17 2243 t 2017-18 1781 t	2013-14 520.000 t 2014-15 882.336 2015-16 1120.670 2016-17 1090.000 2017-18 1050.000	Production of ore as proposed in the mining plan.
3q	General remarks of inspecting officers on method of mining etc.	No comments to offer.	The ROM production has been carried out from Manganese Quarry-1 & Goda pit. Jack hammer drilling of 32mm dia. hole with nitro compounds explosive is being practiced for drilling and blasting.	Nil

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not proposed.	Waste generated during mining operation is being utilised for back filling.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Dumping of waste & top soil not proposed.	Waste generated during mining operation is being utilised for back filling.	Nil
4c	Number of dumps within lease area and outside of lease area	Dumping of waste not proposed.	Waste generated during mining operation is being utilised for back filling.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumping of waste not proposed.	There are two old dumps ( Dump-1, E55/100 & N-125/175: Dump-2, E-120/220 & N-20/185) in north western part of the lease which are rehabilitated by plantation.	Nil
4e	Number of active and alive dumps.	Dumping of waste not proposed.	Nil	Nil
4f	Number of dead dumps.	Proposal not furnished in approved scheme of mining.	There are two old dumps ( Dump-1, E55/100 & N-125/175: Dump-2, E-120/220 & N-20/185) in north western part of the lease which are rehabilitated by plantation.	Nil
4g	Number of dumps established.	Proposal not furnished in approved scheme of mining.	There are two old dumps ( Dump-1, E55/100 & N-125/175: Dump-2, E-120/220 & N-20/185) in north western part of the lease which are rehabilitated by plantation.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposal not furnished in approved scheme of mining.	Retaining wall and garland drain have made around the old waste dump.	Nil

4i	Length of Retaining wall or garland drain all along dumps	Proposal not furnished in approved scheme of mining.	Nil	Nil
4j	Number of settling ponds	Proposal not furnished in approved scheme of mining.	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	No comments to offer.	Waste generated during mining operation is being utilised for back filling. There are two old dumps in north western part of the lease which are rehabilitated by plantation.	Nil

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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.	Part mined out area about 0.258 ha proposed for backfilling.	Backfilling has been carried out in partially mined out covering about 0.258 ha.	Nil
5b	Area under backfilling of mined out area	0.258 ha area proposed for backfilling.	Backfilling has been carried out in partially mined out covering about 0.258 ha.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	no generation of top soil proposed.	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	rehabilitation of waste dump area by 500 nos of saplings plantation.	rehabilitation of waste dump area by 1000 nos of saplings plantation carried out.	Nil



5e	General remarks of inspecting officers on backfilling and reclamation etc.	No comments to offer.	Concurrent backfilling of mined out area has been carried out by lessee.	Nil
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Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Not specified.	Annual return on PMCP has been submitted.	Nil
6b	Area available for rehabilitation (ha) .	Not specified.	1000 nos of saplings planted on waste dumps.	Nil
6c	afforestation done (ha).	Not specified.	1000 nos of saplings planated on waste dumps.	Nil
6d	No. of saplings planted during the year	500 nos during the year 2017-18 on waste dumps.	1000 nos carried out.	Nil
6e	Cumulative no .of plants	Not specified.	Cumulative nos. of saplings planted in the lease area is about 36800 nos.	Nil
6f	Any other method of rehabilitation	Not specified.	Nil	Nil
6g	Cost incurred on watch and care during the year	Not specified.	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	0.258 ha area proposed for backfilling.	Backfilling has been carried out in partially mined out covering about 0.258 ha.	Nil

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal.	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not proposed.	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed.	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed.	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not proposed.	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not proposed.	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed.	Nil	Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring of air, water and noise level are proposed.	Quarterly monitoring of air, water and noise level are being carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No comments to offer.	Backfilling has been carried out in partially mined out covering about 0.258 ha.	Nil

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting ,+10-25% Mn & +25-35% Mn.	Gradewise sorting of +10-25% Mn & +25-35% Mn is being practiced.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual.	Manual sorting is being practiced.	Nil
7c	Different grade of mineral sorted out at mines.	+10-25% Mn & +25-35% Mn	Different grades of minerals sorted out at mines are +10-25% Mn & +25-35% Mn.	Nil
7d	Any beneficiation process at mines .	Not proposed.	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No comments to offer.	Different grades of minerals sorted out at mines are +10-25% Mn & +25-35% Mn. The sub grade generated during mining has also been dispatched time to time as per market demand.	Nil

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#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed.	Nil	Nil
8b	Concurrent use or storage of topsoil	Not proposed.	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Dumping of waste & top soil not proposed.	Waste generated during mining operation is being utilised for back filling.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling.	Waste generated during mining operation is being utilised for back filling.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	0.258 ha area proposed for backfilling during the year 2017-18.	0.258 ha area has been backfilled during the year 2017-18.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 nos. saplings proposed.	1000 nos of saplings planted.	Nil
8g	Survival rate	Not specified.	90%.	Nil
8h	Water sprinkling on roads to control airborne dust	mobile Water sprinkler is proposed for dust suppression on haul roads.	dust suppression carried out by water sprinkling.	Nil

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No comments to offer.	Aesthetic beauty in and around mined area is maintained by plantation.	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	submit before 1st July of previous year annual return.	Monthly & Annual returns are being regularly submitted by lessee.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining Engineer-1, Diploma mining Engineer-1, Geologist-1, Surveyor-1.	Graduate Mining Engineer-1, Diploma mining Engineer-1, Geologist-1, Surveyor-1.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under different heads are Pit-4.32 ha, waste dump-1.60 ha, Plant, residential & building, roads-1.034ha & Mineral storage, plantation & others - 0.731ha.	Area covered under different heads are Pit-4.32 ha, waste dump-1.60 ha, Plant, residential & building, roads-1.034ha & Mineral storage, plantation & others - 0.731ha.	Nil
9d	Scrutiny of Annual return on afforestation	1000 nos.	1000 nos.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	700 t.	700 t.	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	closing stock of ROM is Nil 25% to below 35% Mn: 320.310 t	closing stock of ROM is Nil 25% to below 35% Mn: 320.310 t	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost Rs.10760.00	Production cost Rs.10760.00	Nil
9h	Scrutiny of Annual return on fixed assets	Fixed asset(Rs) : 616	Fixed asset(Rs) : 616	Nil
9k	Scrutiny of Annual return on mining machineries	Jack hammer Drill-1, Air compressor-1, Tipper 10 T-1, Excavator 0.9 cu.m-1, Water tanker 18KL-1	Jack hammer Drill-1, Air compressor-1, Tipper 10 T-1, Excavator 0.9 cu.m-1, Water tanker 18KL-1	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

**Date :**

(RAMKISHAN R)

Indian Bureau of Mines