

INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/SNG/MCDR-23/BBS

Mine code : 30ORI13051

- (i) Name of the Inspecting : RAM ) RAMKISHAN R  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri P.K.Satapathy, Mining Engineer  
Official with  
Designation
- (iv) Date of Inspection : 28/08/2019
- (v) Prev.inspection date : 01/10/2018

PART-I : GENERAL INFORMATION

1. (a) Mine Name : PATABEDA
- (b) Registration NO. : IBM/290/2011
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :  
State : ORISSA  
District : SUNDARGARH  
Village :  
Taluka :  
Post office : *Burai*  
Pin Code : *770048*  
FAX No. : 06767-275770  
E-mail : mgmbbl@gmail.com  
Phone : 06767-275318, 276319
- (f) Police Station : KOIRA
- (g) First opening date : 12/11/2006
- (h) Weekly day of rest : SUN
2. Address for : VILLAGE- PATABEDA,  
correspondance : P.O.- MALDA  
DISTRICT- SUNDARGARH,
3. (a) Lease Number : ORI0979
- (b) Lease area : 28.4
- (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.MGM.MINERALS (P) LTD  
 SUNDARGARH ORISSA  
 Phone:  
 FAX :

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

Agent : B. N. Mohapatra  
 2A, Forest park Bhubaneswar  
 KHURDA ORISSA  
 Phone: 0674-2596390  
 FAX : 0674-2596400

Mining Engineer  
 Name : SHRI P K SATAPATHY, Full Time  
 Qualification : B E MINING  
 Appointment/ : 01/03/2013  
 Termination date

Geologist  
 Name : SHRI M K PATNAIK, Full Time  
 Qualification : MSC (GEOLOGY)  
 Appointment/ : 01/09/2009  
 Termination date

Manager  
 Name : HIMANSHU PATTNAIK  
 Qualification : DIGREE MINING  
 Appointment/ : 11/05/2014  
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	08/11/2002
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	26/10/2007
	:	Mining Scheme rule 12 MCDR1988	01/04/2011
	:	Mining Scheme rule 12 MCDR1988	28/03/2016
	:	Modif.approved Mining Scheme	24/11/2017

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	24 nos of boreholes were proposed during the plan period i.e. from 2017-18 to 2020-21. 10 nos of boreholes were propose during the year 2018-19.	10 nos of boreholes were drilled during the eyar 2018-19.	Nil
1b	Exploration over lease area for geological axis 1 or 2	24 nos of boreholes were proposed during the plan period i.e. from 2017-18 to 2020-21 to brought area under G1/G2 level.	10 nos of boreholes were drille during the year 2018-19.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such specific proposal.	In house carried out	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	24 nos of boreholes were proposed during the plan period i.e. from 2017-18 to 2020-21 for exploring the balance area.	10 nos of boreholes were drille during the year 2018-19.	Nil

1e	Balance reserve as on 01/04/20	As per the approved documnet on 24.11.2017 the iron ore reserves are 11.11 mil.t and resources are 0.63 mil.t	due to addition and depletion of reserves over period of time the updated reserves and resources as on 01.04.2019 are 10.07 mil.t and resources are 0.63 mil.t	Nil
1f	General remarks of inspecting officers on geology, exploration etc		exploration is carried out as per the proposal in mining plan.	Nil

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	single quarry is proposed for development by opencast mining method.	development is carried out by opencast mining method in single quarry.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no top soil generation is envisaged, seperate benches in OBand mineral are proposed.	seperate benches in OB and mineral are maintained.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.035 t/cu.m. during the year 2018-19.	1:0.033 t/cu.m.	Nil
2d	Quantity of topsoil generation in m3	Not applicable	Nil	Nil
2e	Quantity of overburden generation in m3	53650 cu.m.	26500 cu.m.	less waste generated due to non availability of Ec to produce 1.5 mil.t accodringly mine was not developed fully.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	development is carried out by oencast mining method as proposed in the mining plan.	Nil
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## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Nil
3b	Quantity of ROM mineral production proposed	1.5 mil.t	0.79 mil.t	less production due to non availability of EC to produce 1.5 mil.t accordingly mine was not developed fully.
3c	Recovery of saleable/usable mineral from ROM production	saleable ore 1.25 mil.t. and mineral rejects 0.24 mil.t.	saleable ore 0.66 mil.t. and mineral rejects 0.12 mil.t.	Nil
3d	Quantity of mineral reject generation	0.24 mil.t	0.12 mil.t	Nil
3e	Grade of mineral rejects generation and threshold value declared.	+45%-58% Fe	+45%-58% Fe	Nil
3f	Quantity of sub grade mineral generation.	Not applicable	Nil	addressed in mineral rejects
3g	Grade of sub grade mineral generation	NA	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	mechanised.	mechanised	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	deep hole drilling and blasting is proposed in mineral benches.	deep hole drilling and blasting is carried out.	Nil
3k	Provision of mining machineries in mineral benches	shovel and dumper combination is proposed for excavation and hauling.	shovel and dumper combination is deployed for excavation and hauling.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10 m bench height is proposed.	maintained.	Nil
3m	Total area covered under excavation/pits	13.64 ha till the end of plan period i.e. 2020-21.	12.34 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.035 t/cu.m. during the year 2018-19.	1:0.033 t/cu.m.	Nil
3o	Total area put in use under different heads at the end of year	total area put to use under different heads till the end of plan period is 28.397 ha	28.32 ha	Nil



3p	Production of ROM mineral during the last five year period as applicable	2014-15:	2014-15: 292876 t	Nil
		536605 t	2015-16: 285480 t	
		2015-16:	2016-17: 241430 t	
		556783 t	2017-18: 293778 t	
		2016-17:	2018-19: 796000 t	
		662338 t		
		2017-18:		
		800596 t		
		2018-19:		
		1500000 t		
3q	General remarks of inspecting officers on method of mining etc.		production is carried by opencast mining method as proposed in the mining plan	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 and seperate dumping of OB and mineral rejects are proposed.	seperate dumping of Ob and mineral reects are carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	waste generated from mines is proposed to be dumped in Dump-3 and mineral rejects are stacked and blended with high grade ore as per the suitability.	waste generated from mines is dumped in Dump-3 and mineral rejects are stacked and blended with high grade ore as per the suitability.	location of mineral rejects stack is not done as per proposal so violation observed and communicated to lessee dated 06.09.2019.
4c	Number of dumps within lease area and outside of lease area	one waste dump is propsoed during the year 2018-19 with in lease area.	dumping is caried out in dump-3 as proposed.	Nil

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	beyond UPL	beyond UPL	Nil
4e	Number of active and alive dumps.	one active dump	one active dump	Nil
4f	Number of dead dumps.	Not proposed.	NA	Nil
4g	Number of dumps established.	Not proposed.	NA	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	retaining wall and garland drain are proposed all along dumps.	maintained.	Nil
4i	Length of Retaining wall or garland drain all along dumps	180 m retaining wall and 710 m garland drain	180 m retaining wall and 710 m garland drain	Nil
4j	Number of settling ponds	Not proposed.	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management		waste dumping is carried out in dump-3 as per the proposal in mining plan.	Nil

#### Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Area not matured for reclamation and rehabilitation	Nil	Nil
5b	Area under backfilling of mined out area	Not applicable	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Nil	Nil



5d	Total area fully reclaimed and rehabilitated	Not applicable Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Area not matured for reclamation and rehabilitation	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).	PMCP report to submitted be submitted before 1 st July.		Nil
6b	Area available for rehabilitation (ha) .	Not applicable Nil		Nil
6c	afforestation done (ha).	0.0875 ha	0.0875 ha	Nil
6d	No. of saplings planted during the year	140 nos	140 nos	
6e	Cumulative no .of plants	280 nos	280 nos	Nil
6f	Any other method of rehabilitation	plantation	plantation	Nil
6g	Cost incurred on watch and care during the year	Rs 3000	Rs 3000	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Not applicable Nil		Nil

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable Nil		Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not applicable Nil		
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable Nil		Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not applicable Nil		Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.0625 ha	0.0625 ha	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.0625 ha	0.0625 ha	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	plantation	plantation	Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	environmental monitoring in core and buffer zone proposed.	carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP measures were carried out as per the proposal.	Nil

#### Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wise sorting is proposed.	carried out	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	mechanical	Nil
7c	Different grade of mineral sorted out at mines.	+45%-58% Fe and +58% Fe	+45%-58% Fe and +58% Fe	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 carried out.	Nil

#### Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	no top soil generation is envisaged.	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 maintained. for OB 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	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)	140 nos	140 nos	Nil
8g	Survival rate		85%	Nil
8h	Water sprinkling on roads to control airborne dust	water sprinkling on haul roads is proposed.	water sprinkling on haul roads is carried out for dust supresion	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around mines area mainatined.	Nil

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monhtly and annual returns are to be submitted as per rule 45 of MCDR, 2017	submitted.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	(i) Graduate Mining Engineer - 4 (ii) Diploma Mining Engineer -5 (iii) Geologist -2	found to be in order.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	total land use utilisation furinshed is 28.32 ha		
9d	Scrutiny of Annual return on afforestation	140 nos	140 nos	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	0.12 mil.t	found to be in order.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock 40950 t	found to be in order.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	production cost Rs 1667	Rs 1667	Nil
9h	Scrutiny of Annual return on fixed assets	Rs 151824387	Rs 151824387	Nil
9k	Scrutiny of Annual return on mining machineries	BACK HOE 2.100 CUM - 6 BACK HOE 0.900 CUM - 3 FRONT END LOADER 0.300 CUM - 1 WHEEL LOADER 1.800 CUM - 4	found to be in order.	Nil

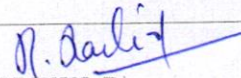




**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed			Show cause position	
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on Compliance on
MCDR17	Rule 11(1)	06/09/2019		

Date : 18/11/19

  
(RAMKISHAN R)

Indian Bureau of Mines