

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/KJR/MCDR-18/BBS

**Mine code :** 30ORI08018

- (i) Name of the Inspecting : **RAM** ) **RAMKISHAN R**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Supriti Maity, Mine Manager  
Official with  
Designation
- (iv) Date of Inspection : 25/12/2019
- (v) Prev.inspection date : 24/08/2019

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **GUALI**
- (b) **Registration NO.** : **IBM/5306/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address  
State : ORISSA  
District : KEONJHAR  
Village : GUALI  
Taluka : BARBIL  
Post office : GUALI  
Pin Code :  
FAX No. : 06767-272503  
E-mail : tpsao@sify.com  
Phone : 06767-272363, Mobile- 94370
- (f) Police Station : GUALI
- (g) First opening date : 07/06/1953
- (h) Weekly day of rest : TUE
2. Address for : VII&PO.GUALI  
correspondance POLICE STATION . BARBIL  
DIST.KEONJHAR,ORISSA,PIN.758035
3. (a) Lease Number : ORI0092
- (b) Lease area : 365.03
- (c) Period of lease :
- (d) Date of Expiry : 31/03/2020
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : RAMESH PRASAD SAO  
 NEAR GANDHI PARK  
 AT/PO.CHAIBASA  
 DIST.SINGHBHUM(W) SINGHBHUM  
 (WEST) JHARKHAND  
 Phone:56268  
 FAX :

Owner : RAMESH PRASAD SAO  
 NEAR GANDHI PARK  
 AT/PO.CHAIBASA SINGHBHUM  
 (WEST) JHARKHAND  
 Phone: 56268  
 FAX :

Agent : ABHISHEK SAO  
 NEAR GANDHI PARK AT/PO:  
 CHAIBASA SINGHBHUM WEST  
 DIST, JHARKHAND SINGHBHUM  
 (WEST) JHARKHAND  
 Phone: 06767-272363  
 FAX : 06767-272503

## Mining Engineer

Name : Bikash Ranjan Patra,Full Time  
 Qualification : B.E. Mining  
 Appointment/ : 09/11/2018  
 Termination date

## Geologist

Name : R.N. Kar,Full Time  
 Qualification : M.Sc. Geology  
 Appointment/ :  
 Termination date

## Manager

Name : Supriti Maity  
 Qualification : B.E. Mining  
 Appointment/ : 09/11/2018  
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	15/03/2005
Plan/Scheme of Mining		Modif.of approved Mining Plan	11/12/2007
		Mining Scheme rule 12 MCDR1988	22/05/2009
		Modif.approved Mining Scheme	27/10/2010
		Renewal under rule 24 MCR1960	14/09/2012
		MP review under 17(1) MCR 2016	11/12/2017
		MP modif under 17(3) MCR 2016	24/07/2018
		FMCP under 23C(1)	25/09/2018
		MS modif under MCR 1960	28/02/2019
		FMCP under 23C(1)	12/04/2019

## 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	
1b	Exploration over lease area for geological axis 1 or 2	93 nos of boreholes were proposed during the plan period from 2018-19 for G1/G2level.	59 nos were drilled during the year 2018-19.	35 nos of boreholes were drilled during the year 2019-20 after obtaining Forest clearance.
1c	Exploration Agencies and Expenditure in lakh rupees during the year		Gemco kati exploration is the Agency for exploration and Expenditure incurred was Rs 17903314.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	A total of 93 nos of boreholes were proposed during the plan period to bring G1/G2 level of area to the extent 178.804 ha .	59 nos of boreholes were drilled.	35 nos of boreholes were drilled during the year 2019-20
1e	Balance reserve as on 01/04/20	As per the approved document on 28.02.2019 the iron ore reserves are 90.363 mil.t. and the resources are 12.024 mil.t.	due to addition and depletion over the period the iron or reserves as on 01.04.2019 are 89.3 mil.t. and the resources are 12.024 mil.t.	
1f	General remarks of inspecting officers on geology, exploration etc		exploration was carried out as per the mining plan.	

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	2 nos of quarries called Topadihi and Baliasahi are proposed for developement during the year 2018-19.	development is carried out in 2 nos of quarries only.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No seperate becnhes is proposed for top soil, however removal is carried out by scrapping. seperate benches in OB and mineral are proposed.	separate benches in OB and Mineral are being maintained.
2c	Stripping ratio or ore to OB ratio	1: 0.042 t/cu.m.	1: 0.037 t/cu.m.
2d	Quantity of topsoil generation in m3	4287 cu.m.	445 cu.m.
2e	Quantity of overburden generation in m3	242490 cu.m.	210424 cu.m.
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 in 2 nos of quarries.

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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2	2	
3b	Quantity of ROM mineral production proposed	5.7 mil.t.	5.69 mil.t.	

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3c	Recovery of saleable ore sailable/usable 4.96 mil.t. mineral from ROM production	saleable ore 4.8 mil.t.
3d	Quantity of mineral reject generation	0.73 mil.t. 0.16 mil.t.
3e	Grade of mineral rejects generation and threshold value declared.	+45%-58% Fe +45%-58% Fe
3f	Quantity of sub grade mineral generation.	Addressed in mineral rejects coulumn Not applicable
3g	Grade of sub grade mineral generation	Not applicable Not applicable
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	deep hole drilling and blasting is proposed in mineral benches. carried out
3k	Provision of mining machineris in mineral benches	shovel and dumper combination deployment is proposed for excavation and hauling. shovel and dumper combination deployment is carried out for excavation and hauling.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10 m	10 m	
3m	Total area covered under excavation/pits	51.997 ha at the end of plan period i.e.2018-19.	48.28 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.042 t/cu.m.	1: 0.037 t/cu.m.	
3o	Total area put in use under different heads at the end of year	Total area put to use at the end of plan period i.e. 2019-20 is 132.18 ha.	110.435 ha.	
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 5.69 mil.t. 2015-16: 5.69 mil.t. 2016-17: 5.69 mil.t. 2017-18: 5.69 mil.t 2018-19: 5.7 mil.t.	2014-15: Nil 2015-16: Nil 2016-17: Nil 2017-18: Nil 2018-19: 5.69 mil.t.	the mine operations were suspended by DDM from year 2013 to 2018.
3q	General remarks of inspecting officers on method of mining etc.		production is carried out by opencast mining method in 2 nos of quarries.	

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Solid Waste Management - Dumping:

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Sl.No.	Item	Proposals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	seperate dumping and utilisation of top soil is proposed. seperate dumping of waste and mineral rejects are proposed.	carried out
4b	Location of topsoil, OB and mineral reject dumps	waste dump-1 and waste dump-2 are desingated areas for waste dumping and for mineral rejects MR stack-4 is designated. top soil is stored and utilised.	waste generated from mines are dumped in waste dump-1 and waste dump-2 and for mineral rejects are stacked at MR stack-4and top soil is stored and utilised.
4c	Number of dumps within lease area and outside of lease area	2 nos of dumps are proposed during the plan period which ae inside the lease area.	waste dumping is carried out in 2 nos of waste dumps with in lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside UPL	ououtside UPL
4e	Number of active and alive dumps.	2 nos of dumps two are proposed during the plan period.	
4f	Number of dead dumps.	Not applicable	Nil
4g	Number of dumps established.	Not applicable	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	retaining wall maintained. and garland drain are proposed.	

4i	Length of Retaining wall or garland drain all along dumps	2047 m & 1716 m around waste dumps and mineral reject stack during the year 2018-19.	980 m of retaining wall and No garland drain has been constructed during the year.
4j	Number of settling ponds	4 no.s	4 no.s
4k	Specific comments of inspecting officer on waste dump management		waste dumping is carried out as per the proposals in mining plan

#### 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.	Area not matured for reclamation and rehabilitation	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 reclamation and rehabilitation	

#### Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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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.		
6b	Area available for rehabilitation (ha) .	Not applicable	Nil	
6c	afforestation done (ha).	2944 nos	1055 nos	gap plantation
6d	No. of saplings planted during the year	2944 nos	1055 nos	
6e	Cumulative no .of plants		1055 nos	
6f	Any other method of rehabilitation	NA	Nil	
6g	Cost incurred on watch and care during the year		Rs.3.62 lakhs	
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 as stipulated in Environment Clearance granted by MoEF & CC and Consent to Operate granted by SPCB.	Periodical Monitoring as stipulated in Environment Clearance granted by MoEF & CC and Consent to Operate granted by SPCB is carried out.	Periodical Monitoring as stipulated in Environment Clearance granted by MoEF & CC and Consent to Operate granted by SPCB is carried out.

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**Mineral Conservation:**


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Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wise sorting id mineral is proposed.	carried out
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical
7c	Different grade of mineral sorted out at mines.	+45%-58% Fe and above 58% Fe	+45%-58% Fe and above 58% Fe
7d	Any beneficiation process at mines	Not proposed.	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)	seperate removal and utilisation of top soil is proposed.	carried out	
8b	Concurrent use or storage of topsoil	proposal for top soil removal and is concuurently utilised	carried out	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumping for waste and mineral rejects are proposed.	maintained.	

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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)	Not applicable Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2944 nos.	1055 nos
8g	Survival rate	58%	
8h	Water sprinkling on roads to control airborne dust	water sprinkling 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 mines area is maintained.	

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	monththly 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	(i) Graduate Mining Engineer - 9 (ii) Diploma Mining Engineer - 17 (iii) Geologist - 2	(i) Graduate Mining Engineer - 9 (ii) Diploma Mining Engineer - 17 (iii) Geologist - 2
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	110.432 ha land use utilisation reported.	found to be in order.
9d	Scrutiny of Annual return on afforestation	1055 nos.	1055 nos.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	168703 t	168703 t
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock is Nil	ROM closing stock is Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	production cost Rs.1227.04	production cost Rs.1227.04
9h	Scrutiny of Annual return on fixed assets	Rs. 836191713	Rs. 836191713
9k	Scrutiny of Annual return on mining machineries	SHOVEL (HYDRAULIC) 5.200 CUM - 1 dumper 30 tonnes - 15 wheel loader 4.4 cu.m. - 3	SHOVEL (HYDRAULIC) 5.200 CUM - 1 dumper 30 tonnes - 15 wheel loader 4.4 cu.m. - 3

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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