

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/KJR/MCDR-22/BBS-5/2K

**Mine code :** 30ORI08028

- (i) Name of the Inspecting : **RAM** ) **RAMKISHAN R**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri A.C.Biswal, Mine Manager  
Official with  
Designation
- (iv) Date of Inspection : 26/12/2019
- (v) Prev.inspection date : 23/08/2019

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **JAJANG**
- (b) **Registration NO.** : **IBM/4562/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : JAJANG
- Taluka : CHAMPUA
- Post office : JAJANG
- Pin Code : 758052
- FAX No. : 91-6582-56442
- E-mail : rungtas@satyam.net.in
- Phone : 06582-56861,56761
- (f) Police Station : Bamebari
- (g) First opening date : 13/02/1957
- (h) Weekly day of rest : TUE
2. Address for : VILL& PO: JAJANG  
correspondance POLICE STATION : JODA  
DIST: KEONJHAR, ORISSA, PIN: 758052
3. (a) Lease Number : ORI0091
- (b) Lease area : 666.15
- (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 : Rungta Mines Ltd  
 Rungta House P.O.Chaibasa  
 SINGHBHUM (WEST) JHARKHAND  
 Phone:06582-56461,56561,56661,56761  
 FAX :91-6582-56442

Owner : M/S Rungta Mines Ltd  
 M/S Rungta Mines Ltd Rungta  
 House At P.O.Chaibasa  
 SINGHBHUM (WEST) JHARKHAND  
 Phone: 06582- 56461,56  
 FAX : 91- 6582 - 5644

Agent : Shri D. N. Parida  
 M/s Rungta Mines Limited  
 Rungta House, At/Post-  
 Chaibasa Singhbhum West,  
 Jharkhand KEONJHAR ORISSA  
 Phone: 06582-256861/761/861  
 FAX : 06582-256442

## Mining Engineer

Name : SHRI RAM RAJ YADAV,Full Time  
 Qualification : A.M.I.E (IN 1989)  
 Appointment/ : 25/07/2008  
 Termination date

## Geologist

Name : D.K.MOHANTA,Full Time  
 Qualification : MSC GEOLOGY  
 Appointment/ : 22/10/2003  
 Termination date

## Geologist

Name : S.SEKHAR,Full Time  
 Qualification : MSC GEOLOGY  
 Appointment/ : 21/08/2002  
 Termination date

## Manager

Name : A.C.BISWAL  
 Qualification : A.M.I.E( MINING )  
 Appointment/ : 01/09/2001  
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	29/05/2003
Plan/Scheme of Mining	:	Modif.approved Mining Scheme	06/04/2005
	:	Mining Scheme rule 12 MCDR1988	07/03/2008
	:	Modif.approved Mining Scheme	08/05/2009
	:	Mining Scheme rule 12 MCDR1988	27/03/2012
	:	Modif.approved Mining Scheme	24/07/2015
	:	MP modif under 17(3) MCR 2016	16/09/2016
	:	MP modif under 17(3) MCR 2016	14/07/2017
	:	MP modif under 17(3) MCR 2016	13/07/2018
	:	FMCP under 23C(1)	27/09/2018

MP modif under 17(3) MCR 2016  
FMCP under 23C(1)

28/12/2018  
06/03/2019

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No such specific proposal.	150 nos of boreholes were drilled during the year 2018-19	
1b	Exploration over lease area for geological axis 1 or 2	147 nos of boreholes were proposed during the plan period over lease area for G1/G2 level.	150 nos of boreholes were drilled during the year 2018-19.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year		M/s geotech Exploration is the agency. the expenditure incurred was Rs.133.27 lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	446.889 ha area has been explored under G1 level and 51.306 ha area has been explored under G2 level	during the year 2018-19 and 150 nos of boreholes were drilled.	
1e	Balance reserve as on 01/04/20	As per the approved document on 28.12.2018 the iron ore reserves are 51.17 mil.t. and resources are 7.6 mil.t.	due to addition/depletion of reserves and resources over the period the iron ore reserves as on 01.04.2019 are 45.6 mil.t. and resources are 7.6 mil.t.	
1f	General remarks of inspecting officers on geology, exploration etc		exploration has been carried out as per the proposal.	

## 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 are proposed called as BBlock, and Cblock during the year 2018-19.	developmnet is carried out in the proposed quarries.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no generation of top soil is envisaged, seperate benches in OB and mineral are proposed.	separate benches in OB and mineral are maintained.
2c	Stripping ratio or ore to OB ratio	1:0.49 t/cu.m.	1:0.3 t/cu.m.
2d	Quantity of topsoil generation in m3	No top soil generation is envisaged.	NA
2e	Quantity of overburden generation in m3	6225731 cu.m	3545153 cu.m.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		development is carried out in 2 nos of quarries by opencast mining method.

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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	16.5 mil.t. during the year 2018-19	11.75 mil.t.	out of proposed production of 16.5 mil.t. during the year 2018-19, 12.8 mil.t. are from opencast workings and 3.7 mil.t from dump rehadling. due to lack of market demand the dump rehandling tonnage could not be achieved.
3c	Recovery of sailable/usable mineral from ROM production	14.83 mil.t. of saleabale ore	11.49 mil.t.	
3d	Quantity of mineral reject generation	1.59 mil.t.	0.22 mil.t.	
3e	Grade of mineral rejects generation and threshold value declared.	+45%-55%	+45%-55%	
3f	Quantity of sub grade mineral generation.	addressed in mineral rejects coloumn	NA	
3g	Grade of sub grade mineral generation	NA	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 propsoed.	carried out.	

3k	Provision of mining machineries in mineral benches	shovel and dumper combination are proposed for excavation and hauling.	shovel and dumper combination are deployed for excavation and hauling.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	9 m	maintained.
3m	Total area covered under excavation/pits	245.933 ha till the end of plan period i.e. 2019-20.	245.933 ha
3n	Ore to OB ratio for the pit/mine during the year.	1:0.49 t/cu.m.	1:0.3 t/cu.m.
3o	Total area put in use under different heads at the end of year	Total 407.771 ha. area put in use under different heads as per the approved mining plan till the end of plan period i.e. 2019-20.	407.711 ha
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 10.67 mt 2015-16: 16.50 mt 2016-17: 16.50 mt 2017-18: 16.50 mt 2018-19: 16.5 mt	2014-15: 5.492 mt 2015-16: 10.235 mt 2016-17: 12.493 mt 2017-18: 13.089 mt 2018-19: 11.753 mt
3q	General remarks of inspecting officers on method of mining etc.		The ROM production has been carried out from Bblock & C-block by opencast workings.

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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 generation of top soil is envisaged. waste generation from opencast workings are proposed to be backfilled.	Overburden material is utilised in reclamation of mined out portion of the quarry.
4b	Location of topsoil, OB and mineral reject dumps	no top soil dump is envisaged. OB generated is proposed to be backfilled and mineral rejects dumps are proposed	OB generated is utilised for backfilling of mined out land and mineral rejects dumps are maintained.
4c	Number of dumps within lease area and outside of lease area	no dumping proposal for the year 2018-19 as the waste generated is proposed to be backfilled.	carried out accordingly
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No dumping proposals.	NA
4e	Number of active and alive dumps.	No dumping proposals.	Nil
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 and garland drain are maintained.	retaining wall and garland drain are maintained.
4i	Length of Retaining wall or garland drain all along dumps	retaining wall and garland drain are already made and maintained all around the dumps.	retaining wall and garland drain are already made and maintained all around the dumps.



4j	Number of settling ponds	Not applicable Nil	
4k	Specific comments of inspecting officer on waste dump management		waste generated from mines is being utilised for backfilling of mined out area.

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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.	full extraction of mineral from mined out area before starting backfilling is proposed.	carried out	
5b	Area under backfilling of mined out area	32.6 ha during the year 2018-19.	32.6 ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No top soil generation is envisaged.	NA	
5d	Total area fully reclaimed and rehabilitated	2.317 ha	2.317 ha	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		backfilling is carried out	

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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).	PMCP report to be submitted before 1 st July.	submitted.	

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6b	Area available for rehabilitation (ha) .	Not applicable	Nil
6c	afforestation done (ha).	10.2 ha during the year 2018-19.	10.2 ha
6d	No. of saplings planted during the year	32000 nos. during the year 2018-19.	48500 nos
6e	Cumulative no .of plants		458979 nos
6f	Any other method of rehabilitation	NA	Nil
6g	Cost incurred on watch and care during the year		Rs 6.3 lakh
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	70.00 Lakh cu.m.	70.00 Lakh cu.m.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	58.99 lakh m3	35.45 lakh cu.m.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	10 ha	10 ha
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.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Periodical Monitoring as stipulated in Environment Clearance granted by MoEF & CC and Consent to Operate granted by SPCB.

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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 of 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% - 55% Fe and +55% Fe.	45% - 55% Fe and +55% Fe.
7d	Any beneficiation process at mines	Not propsoed.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		grade wise sorting of mineral is carried out.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	no top soil generation is envisaged.	Nil	
8b	Concurrent use or storage of topsoil	no top soil generation is envisaged.	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	waste generated from mine workings are proposed to be backfilled in the mined out area.	carried out	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	waste generated from mine workings are proposed to be used for backfilling	carried out
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	backfilling of mined out land is proposed.	carried out
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	32000 nos. during the year 2018-19.	48500 nos
8g	Survival rate		92%
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is on the haul road is proposed.	carried out
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		aesthetic beauty in and around mines 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 - 7 (ii) Diploma Mining Engineer - 5 (iii) Geologist - 3	(i) Graduate Mining Engineer - 7 (ii) Diploma Mining Engineer - 5 (iii) Geologist - 3
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	i) Covered under current (O/C) Workings 198.316 ha (ii) Used for waste disposal 44.495 ha etc.,	found to be in order.
9d	Scrutiny of Annual return on afforestation	48500 nos	48500 nos
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	0.211 mil.t.	0.211 mil.t.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock: 1649542.120 t	ROM closing stock: 1649542.120 t
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost Rs. 954.21/t	Production cost Rs. 954.21/t
9h	Scrutiny of Annual return on fixed assets	Rs. 483921350	Rs. 483921350

9k      Scrutiny of      AIR COMPRESSOR found to be in order.  
Annual return on 450.000 CUM/MN  
mining                    - 2  
machineries              BLAST HOST  
                            DRILL 110.000  
                            MM - 2  
                            AIR COMPRESSOR  
                            400.000 CUM/MN  
                            - 4  
                            WHEEL LOADER  
                            1.720 CUM - 31  
                            SHOVEL  
                            (HYDRAULIC)  
                            1.100 CUM - 28  
                            SHOVEL  
                            (HYDRAULIC)  
                            2.100 CUM - 13  
                            SHOVEL  
                            (HYDRAULIC)  
                            2.400 CUM - 10

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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