

INDIAN BUREAU OF MINES  
MINERALS DEVELOPMENT 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 : 23/08/2019
- (v) Prev.inspection date : 07/12/2018

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 : 50 yrs/ As per schdu 3A of MMR Act, 1957 (amend- up to may 2015)
- (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 Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	29/05/2003
		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
		EMCP 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	Nil
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.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such specific proposal.	M/s geotech Exploration is the agency. the expenditure incurred was Rs.133.27 lakhs	Nil
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.	65 nos of boreholes were proposed for knowing the depth continuity of mineral deposit during the year 2018-19 and 150 nos of boreholes were drilled.	Nil
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.	Nil
1f	General remarks of inspecting officers on geology, exploration etc		exploration has been carried out as per the proposal.	Nil

## 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 B-Block, and C-block during the year 2018-19.	development is carried out in the proposed quarries.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	no generation of top soil is envisaged, separate benches in OB and mineral are proposed.	seperate benches in OB and mineral are maintained.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.49 t/cu.m.	1:0.3 t/cu.m.	stripping ratio not maintained so violation observed and communicated to lessee dated 06.09.2019.
2d	Quantity of topsoil generation in m3	No top soil generation is envisaged.	NA	Nil
2e	Quantity of overburden generation in m3	6225731 cu.m	3545153 cu.m.	Nil
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 as proposed in the mining plan.	Nil

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 nos of pits proposed for production.	productionn is carried out from 2 nos. of pits	Nil

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 sellable/usable mineral from ROM production	14.83 mil.t. of saleabale ore and mineral rejects: 1.59 mil.t.	11.49 mil.t. of saleabale ore and mineral rejects: 0.22 mil.t.	Nil
3d	Quantity of mineral reject generation	1.59 mil.t.	0.22 mil.t.	due to less prodcution.
3e	Grade of mineral rejects generation and threshold value declared.	+45%-55%	+45%-55%	Nil
3f	Quantity of sub grade mineral generation.	Not applicable	NA	already 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.	No such proposal.	Not applicable	Nil

3j	Provision of drilling and blasting in mineral benches	Wagon drilling of 110mm dia. Blast hole with emulsion as coloumn charge and emulsion booster alongwith delay detonator.	Wagon drilling of 110mm dia. Blast hole with emulsion as coloumn charge and emulsion booster alongwith delay detonator.	Nil
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.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 9m.	9m maintained.	Nil
3m	Total area covered under excavation/pits	245.933 ha till the end of plan period i.e. 2019-20.	245.933 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.49 t/cu.m.	1:0.3 t/cu.m.	Nil
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	Nil

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	Nil
3q	General remarks of inspecting officers on method of mining etc.		The ROM production has been carried out from B-block & C-block by opencast workings.	Nil

## Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
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.	Nil
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.	Nil
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.	waste generated is being utilised for backfilling of the mined out area.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No dumping proposals.	NA	Nil



4e	Number of active and alive dumps.	No active dumping is proposed.	the waste generated from mines is utilised for backfilling.	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 maintained.	retaining wall and garland drain are maintained.	Nil
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.	NA	Nil
4j	Number of settling ponds	Not applicable	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management		waste generated from mines is being utilised for backfilling of mined out land.	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.	full extraction of mineral from mined out area before starting backfilling is proposed.	full extraction of mineral from mined out area is ensured before backfilling.	Nil
5b	Area under backfilling of mined out area	32.6 ha during the year 2018-19.	32.6 ha	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No top soil generation is envisaged.	NA	Nil

5d	Total area fully reclaimed and rehabilitated	2.317 ha	2.317 ha	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.		backfilling is carried out in the specified area as per the mining plan.	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 be submitted before 1 st July.	submitted.	Nil
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	10.2 ha	10.2 ha	Nil
6d	No. of saplings planted during the year	32000 nos. during the year 2018-19.	48500 nos.	Nil
6e	Cumulative no .of plants		458979 nos	
6f	Any other method of rehabilitation	Not applicable	Nil	Nil
6g	Cost incurred on watch and care during the year	0.6 lakh	63. lakh	Nil
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.	Nil

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	58.99 lakh m <sup>3</sup>	35.45 lakh cu.m.	violation observed and communicated to lessee dated 06.09.2019
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	10 ha	10 ha	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	Not applicable	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not applicable	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not applicable	Nil	Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring of all environmental parameters 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.		PMCP measures are carried out as per the proposals in Mining plan.	Nil

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade-wise sorting of mineral is proposed.	grade-wise sorting of mineral is carried out.	Nil
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% - 55% Fe and +55% Fe.	45% - 55% Fe and +55% Fe.	Nil
7d	Any beneficiation process at mines	Not applicable	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	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	no top soil generation is envisaged.	NA	Nil
8b	Concurrent use or storage of topsoil	Not applicable	Nil	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.	backfillling carried out by waste.	Nil
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 as per the proposal.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	backfilling of mined out land is proposed.	carried out.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	32000 nos. during the year 2018-19.	48500 nos.	Nil
8g	Survival rate		92%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is on the haul road is proposed.	carried out.	Nil

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	aesthetic beauty in and around mines is maintained.	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	Monthly & Annual returns are to be regularly submitted by lessee.	submitted.	Nil
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	found to be in order.	Nil
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 (iii) Occupied by plant, buildings, residential, welfare buildings & roads 45.061 ha (iv) Other Purpose (Storing of mineral, Railway, etc.) 37.629 ha	deviation from the approved mining plan document regrading land use.	violation observed and communicated to lessee dated 06.09.2019
9d	Scrutiny of Annual return on afforestation	46500 nos	48500 nos	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	0.211 mil.t.	fond to be in order.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock: 1649542.120 t	found to be in order.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost Rs. 954.21	Production cost Rs. 954.21	Nil
9h	Scrutiny of Annual return on fixed assets	Rs. 483921350	Rs. 483921350	Nil
9k	Scrutiny of Annual return on mining machineries	AIR COMPRESSOR 450.000 CUM/MN - 2 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	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				
Rule 45(7)	06/09/2019				

Date : 28/11/19

*R. Dalvi*  
(RAMKISHAN R)

Indian Bureau of Mines