

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

MCDR INSPECTION REPORT

Kolkata regional office

Mine file No : CAL/JHK/SB/FE(M-8)

Mine code : 30BHR27032

- (i) Name of the Inspecting : **K004**) **B.P KERKETTA**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Dhananjay Kumar, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 21/12/2017
- (v) Prev.inspection date : 17/01/2017

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MERELGORA BARABALJURI**
- (b) **Registration NO.** : **IBM/4562/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **JHARKHAND**
- District : **SINGHBHUM (WEST)**
- Village : **MERELGORA BARABALJUR**
- Taluka : **CHAIBASA**
- Post office : **NOAMUNDI**
- Pin Code : **833201**
- FAX No. : **06582 256442**
- E-mail : **rungta_bbl@yahoo.co.in**
- Phone : **06582256861/661/761**
- (f) **Police Station** : **NOAMUNDI**
- (g) **First opening date** : **01/04/1981**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **PO:NOAMUNDI.**
correspondance **DIST:WEST SINGHBHUM.**
JHARKHAND.
3. (a) **Lease Number** : **BHR0066**
- (b) **Lease area** : **122.01**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **21/11/1994**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : RUNGTA MINES LTD.
 AT& PO: CHAIBASA DISTT :
 SINGHBHUM WEST JHARKHAND
 SINGHBHUM (WEST) JHARKHAND
 Phone:(06582) 56861
 FAX :

Owner : M.D.RUSTOGI
 RUNGTA HOUSE CHAIBASA - 833
 201 DT. - SINGHBHUM (W),
 JHARKHAND SINGHBHUM (WEST)
 JHARKHAND
 Phone: 06582-256861,25
 FAX : 06582-256442

Agent : Shri D. N. Parida
 M/s Rungta Mines Ltd Rungta
 Office At & Post : Barbil
 KEONJHAR ORISSA
 Phone:
 FAX :

Mining Engineer
 Name : DHANANJAY KUMAR,Full Time
 Qualification : B. E(MINING)
 Appointment/ : 02/02/2006
 Termination date

Geologist
 Name : I. Mukherjee,Full Time
 Qualification : M. Sc(Geo)
 Appointment/ : 12/09/2011
 Termination date

Manager
 Name : Dhananjay Kumar
 Qualification : B.E.(Min. Engg.)
 Appointment/ : 02/02/2006
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	12/07/2006
		Modif.of approved Mining Plan	28/11/2008
		Mining Scheme rule 12 MCDR1988	05/07/2011
		FMCP under 23C(1)	22/04/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	15	20	
1b	Exploration over lease area for geological axis 1 or 2	Not proposed	G1: 85.416ha. G2: 25.304ha. G3: 4.5ha.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No specific amount is mentioned.	Rs. 12.08 lakh	Exploration agency-M/s V.K.S.Mining Pvt. Ltd.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	NA	
1e	Balance reserve as on 01/04/20	Proved Reserve (111) 539736 MT (as on date- 02/11/2015 as per the approved modified mining plan)	Proved Reserve (111) 400396.51 MT (As per the annual return)	
1f	General remarks of inspecting officers on geology, exploration etc		Mining operation is carried out as per approved Modified Mining Plan as far as possible.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	The northern part of the New pit will be developed towards NW direction with the development of 6 nos of benches from 428 to 394m. the southern part of the quarry will be developed towards southwest direction with the development of 8 nos of benches from 468 to 421m.	The northern part of the New pit developed towards NW direction with the development of 5 nos of benches from 428 to 398m. the southern part of the quarry developed towards southwest direction with the development of 4 nos of benches from 468 to 444m.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No benches in top soil. The northern part of the New pit will be developed with 4 nos of benches in OB and bottom 2 nos of benches in ore. The southern part of the quarry will be developed with the development of 4 nos of benches in OB and bottom 2 benches in ore.	No benches in top soil. Northern part of New pit: 4 benches in OB and 1 bench in ore have been developed. Southern part of New pit: 3 benches in OB and 1 bench in ore have been developed.
2c	Stripping ratio or ore to OB ratio	1:10.34	1:1.55
2d	Quantity of topsoil generation in m3	Nil	Nil
2e	Quantity of overburden generation in m3	163410 m3	71336 m3

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Mining operation is carried out as per approved Modified Mining Plan as far as possible.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 nos	1 nos	
3b	Quantity of ROM mineral production proposed	60000MT	39448.56MT	
3c	Recovery of sailable/usable mineral from ROM production	10% of total excavation	10% of total excavation	
3d	Quantity of mineral reject generation	4740MT	11610.80MT	
3e	Grade of mineral rejects generation and threshold value declared.	+45 to 55% Fe	+45 to 55%Fe	
3f	Quantity of sub grade mineral generation.	4740MT	11610.80MT	
3g	Grade of sub grade mineral generation	+45% to 55%	+45% to 55%	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanised	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	It is proposed to dispatch the low grade or subgrade ore directly instead of any type of mixing.	Done as per proposal.	

3j	Provision of drilling and blasting in mineral benches	Deep Hole drilling and Control blasting	Deep Hole drilling and blasting- Shock tube is used in blasting to control the flying fragments & ground vibration. Rock Breaker is used.
3k	Provision of mining machineries in mineral benches	Excavator (1.2 cum) dumper (20MT) combination.	Excavator (1.6 cum) dumper (23MT) combination.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height-6mtr Width-10-12 mtr	Height-6mtr Width-10-12 mtr
3m	Total area covered under excavation/pits	19.18 Ha	11.15Ha
3n	Ore to OB ratio for the pit/mine during the year.	1:10.34	1:1.55
3o	Total area put in use under different heads at the end of year	32.8Ha at the end of 2018-19	26.148 Ha
3p	Production of ROM mineral during the last five year period as applicable	2010-11- 345633MT 2011-12 - 90129MT 2012-13 - 60297MT 2013-14 - 40050MT 2014-15 -40176 MT 2015-16- 90252MT 2016-17- 60000MT	2010-11- 56202MT 2011-12 -19393MT 2012-13 -54887.68MT 2013-14 -39385.4MT 2014-15 -10381.2 MT 2015-16-88945.4MT 2016-17-39448.56MT
3q	General remarks of inspecting officers on method of mining etc.		Mining is carried out as per approved Modified mining plan as far as possible.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	The low grade iron ore will be stacked separately which will be surrounded by retaining wall and garland drain.	Done as per proposal. The low grade ore generated are stacked separately in Sub grade dump-B	
4b	Location of topsoil, OB and mineral reject dumps	The OB generated was proposed to be dumped in Dump-D1 located at N500 & E700, TRL-477m & BRL-429m. Dump-C is present near Barbaljori pit which is non operative now. One subgrade dump-B is there located northern direction of mines office.	The OB generated has been dumped in Dump-D1 located at N500 & E700, TRL-477m & BRL-432m. Dump-C & subgrade Dump-B is already present.	
4c	Number of dumps within lease area and outside of lease area	2 nos of OB dump	2 nos no of OB dump	Dumps are within the lease.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump-A-N500 & E700, TRL-477m & BRL-429m	Dump-A-N500 & E700, TRL-477m & BRL-432m	200m away from the toe of the ultimate pit limit.
4e	Number of active and alive dumps.	Dump-A & Dump-C (2 nos)	Dump-A & Dump-C (2 nos)	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dumps	250m boulder retaining wall & 250m Garland drain was proposed to be constructed around dumps.	Till date 2400m boulder retaining wall & 2400m Garland drain is already constructed around dumps.	

4j	Number of settling ponds	3 no of settling ponds are proposed	3 no of settling ponds are done.
4k	Specific comments of inspecting officer on waste dump management		Mining is carried out as per approved Modified mining plan as far as possible.

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.	No proposal	No backfilling was done as the quarries are fully active	
5b	Area under backfilling of mined out area	No proposal	No backfilling was done as the quarries are fully active	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NA	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Mining is carried out as per approved Modified mining plan as far as possible.	

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).	Yes	Yes	
6b	Area available for rehabilitation (ha) .	Not proposed.	Not applicable	Within the dump 2.5ha. area has been rehabilitated.

6c	afforestation done (ha).	0.2ha	nil	
6d	No. of saplings planted during the year	1000 nos of saplings to be planted on dump area in 0.2ha .	nil	Violation for not planting total 2000nos. of trees has been issued.
6e	Cumulative no .of plants	Cumulative 16000nos.	Cumulative 15000nos.	
6f	Any other method of rehabilitation	nil	Not applicable	nil
6g	Cost incurred on watch and care during the year	Not proposed	nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed.	nil	nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed.	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not proposed.	nil	nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	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	1000nos.,cost Rs.0.3Lakhs.	1000nos.,cost Rs.0.3Lakhs.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	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)	Ambient Air Quality-4 nos of location (Quarterly) Water Quality-3nos of location (Quarterly) Noise level survey-4 nos of location (Quarterly)	Ambient Air Quality-4 nos of location (monthly) Water Quality-4nos of location (Monthly) Noise level survey-4 nos of location (Monthly)	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Mining is carried out as per approved Modified mining plan as far as possible.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	47400 MT (42660MT+50%Fe & 4740 MT -50%Fe)	33457.42MT (7882.86MT+50%Fe & 25574.56 MT -50%Fe)	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting & sizing	Manual sorting & sizing	

7c	Different grade of mineral sorted out at mines.	60-62,62-65,55-58,below55	60-62,62-65,55-58, below 55
7d	Any beneficiation process at mines .	No such. Only Manual sorting & sizing of ore was proposed to be done.	Only Manual sorting & sizing of ore was done.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Mining is carried out as per approved Modified mining plan as far as possible.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	N.A	N.A	No top soil generation.
8b	Concurrent use or storage of topsoil	N.A	N.A	No top soil generation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Dump-A-N500 & E700, TRL-477m & BRL-429m	Dump-A-N500 & E700, TRL-477m & BRL-432m	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	The over burden generated was proposed to be dumped in preselected dumping area .	The waste generated is dumped in the preselected dumping area.	Overburden, waste rocks, rejects etc are kept for restoring the mined out land.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal for backfilling as the quarry is fully active	No backfilling was done.	nil

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Existing Plantation 14000 nos. additional 2000 saplings are proposed to be planted this year.	1000 saplings are planted .
8g	Survival rate	85%	80%
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on roads by water sprinkler.	Water Sprinkling on roads by water sprinkler(16 KLD)
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Mining is carried out as per approved Modified mining plan as far as possible.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M. R. submitted upto November 2017 A. R. submitted upto 2016-17	M. R. submitted upto November 2017 A. R. submitted upto 2016-17	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer in Charge: Kumar Dhananjay, Geologist in Charge: Sri I. Mukherjee. Manager: Kumar Dhananjay	Found Correct.	

- 9c Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. Covered under current (O/C) Workings: 11.15 ha. Used for waste disposal: 8.59 ha. Occupied by plant, buildings, residential, welfare buildings & roads: 3.23 ha. Other Purpose (Mineral storage & Green belt): 3.178 ha. Found Correct.
- 9d Scrutiny of Annual return on afforestation 1000nos. Found Correct.
- 9e Scrutiny of Annual return on mineral reject generation (Grade and quantity) Mineral Reject : 11610.8 MT. MT. Grade: Below 55% Lumps Grade: Below 55% Lumps Mineral Reject : 11610.8 MT. MT. Grade: Below 55% Lumps
- 9f Scrutiny of Annual return on ROM stock and/or graded ore Opening Stock: Nil, ROM Production : 39448.56MT,Closing Stock: 16242.36MT. Opening Stock: Nil, ROM Production : 39448.56MT,Closing Stock: 16242.36MT. Found Correct.

- 9g Scrutiny of SALE VALUE: Found Correct.
Annual return on Rs. 15699620/-
sale value, Ex. and
Mine price and Rs20484416/-
production cost for -65% Fe
Grade Lump &-
55% Fe Grade
Lump
respectively
EX. MINE: Rs.
800.97/MT, Rs.
1991.61/MT for
Below 55% Fe
Grade Lump &
62% Fe to
below 65% Fe
gradeLump
respectively
PRODUCTION
COST: Rs.
1258.83/MT
including
Royalty.
- 9h Scrutiny of FIXED ASSET: Seems to be correct.
Annual return on Rs. 1489910/-
fixed assets
- 9k Scrutiny of AIR COMPRESSOR Found Correct.
Annual return on 450.000 Cfm: 1
mining BACK HOE 1.6
machineries Cum: 1
HAULER 23Ton:
4
Loader
1.74cum. : 1
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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
MCDR17	Rule 11(1)	10/01/2018	26/03/2018				
MCDR17	Rule 35(2)	10/01/2018	26/03/2018				

Date :

(B.P KERKETTA)

Indian Bureau of Mines