

**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 : Mr.D.N. Parida, Mines Agent, Mr. Abhijit Sen, AVP(Geo), K
Official with
Designation
- (iv) Date of Inspection : 16/03/2020
- (v) Prev.inspection date : 15/12/2018

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 : Sri Hirak Mazumder
 Rungta House chaibasa
 Singhbhum(W) SINGHBHUM
 (WEST) JHARKHAND
 Phone: 0651256761
 FAX :

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
		MP modif under 17(3) MCR 2016	04/05/2018
		FMCP under 23C(1)	14/06/2018
		MP review under 17(1) MCR 2016	07/01/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	35 BH to drill in 2018-19	NIL	Violation had been issued vide letter dated 22/10/2019, based on inspection on 13/09/2019 for Rule 11(1) & 26(2). It has been complied on 02/12/2019.
1b	Exploration over lease area for geological axis 1 or 2	Proposal to explore in G1 Level	NIL	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	NIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	4.54 Ha. of G3 area was to be explored in G1	NIL	
1e	Balance reserve as on 01/04/20	403704 MT (as on date- 01.10.2018 as per the approved modified mining plan)	400217 MT (As per the annual return)	

1f	General remarks of inspecting officers on geology, exploration etc	NO exploration has been carried out during 2018-19, a total of 368 Bh's of 21102 metarage has already been drilled ; Area explored G1 (85.416 Ha. Non-forest) G2 (25.264 Ha. Non-Forest), G3 4.54 Ha. G3 area cannot be further be explored due to non-permission of the Private land.	NO exploration has been carried out during 2018-19, a total of 368 Bh's of 21102 metarage has already been drilled ; Area explored G1 (85.416 Ha. Non-forest) G2 (25.264 Ha. Non-Forest), G3 4.54 Ha. G3 area cannot be further be explored due to non-permission of the Private land.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	The southern part of the New Pit is to be developed towards southwest direction with the development of 9 nos of benches from 463 to 409m.	The southern part of the quarry developed towards southwest direction with the development of 6 nos of benches from 464.97 to 433.16m	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No benches in top soil. The southern part of the quarry will be developed with the development of 4 nos of benches in OB and bottom 5 benches in ore	No benches in top soil. Southern part of New pit: 4 benches in OB and 2 bench in ore have been developed	

2c	Stripping ratio or ore to OB ratio	1:1.43	NIL	The total ore generated is low grade ore. So, no waste generated.
2d	Quantity of topsoil generation in m3	NIL	NIL	
2e	Quantity of overburden generation in m3	215550 m3	NIL	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	The southern part of the quarry developed towards southwest direction with the development of 6 nos of benches from 464.97 to 433.16m. There is no benches in top soil. 4 benches in OB and 2 bench in ore have been developed.	The southern part of the quarry developed towards southwest direction with the development of 6 nos of benches from 464.97 to 433.16m. There is no benches in top soil. 4 benches in OB and 2 bench in ore have been developed. Development of PIt is as per approved MP.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01 Nos.	01 Nos.	
3b	Quantity of ROM mineral production proposed	150000MT	3487MT	
3c	Recovery of sailable/usable mineral from ROM production	80% measured from Iron ore pockets	80% measured from Iron ore pockets	
3d	Quantity of mineral reject generation	15000MT	3701.02MT	
3e	Grade of mineral rejects generation and threshold value declared.	+45 to 50% Fe	+45 to 50% Fe	

3f	Quantity of sub grade mineral generation.	15000MT	3701.02MT	
3g	Grade of sub grade mineral generation	+45% to 50%	+45% to 50%	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
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	Yes	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	Yes	Excavator(1.2 cum) & dumper (20MT) 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	15.24 Ha at the end the plan period	11.15Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:1.43	NIL	The total ore generated is low grade ore. So, no waste generated
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	2013-14-40050MT 2014-15-40176MT 2015-16-90252MT 2016-17-60000MT 2017-18-60000MT 2018-19-150000MT	2013-14-39385.4MT 2014-15-10381.2 MT 2015-16-88945.47MT 2016-17-39448.56MT 2017-18-6242 MT 2018-19-3487MT
3q	General remarks of inspecting officers on method of mining etc.	Opencast Method of mining is as proposed in MP is being practised in the mine.	Opencast Method of mining is as proposed in MP is being practised in the mine.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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 of OB dump	
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	
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	Repairing of retaining wall. & garland drain was proposed.	Repairing of retaining wall. & garland drain has been done.	Till date 2700m boulder retaining wall & 2550m Garland drain is already constructed around dumps.
4j	Number of settling ponds	NIL	NIL	
4k	Specific comments of inspecting officer on waste dump management	There is 2 nos no of OB dump. 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.	There is 2 nos no of OB dump. 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.	

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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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	NIL	
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		No backfilling was done as the quarries are fully active	No backfilling was done as the quarries are fully active

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) .	NIL	NIL	
6c	afforestation done (ha).	2000 nos of saplings planted in 0.5 hect area as well as casual replacement	2350 nos of saplings are planted (casual replacement)	
6d	No. of saplings planted during the year	2000 saplings	2350 nos of saplings are planted (Casual replacement)	
6e	Cumulative no .of plants	Not proposed.	16350nos.	

6f	Any other method of rehabilitation	NIL	NIL
6g	Cost incurred on watch and care during the year	NIL	nearly 01 lakhs Rs. only as reported during inspection.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	2000 nos of saplings.	2350 nos of saplings are planted (Casual replacement)
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NIL	Rehabilitation in Progress.

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	By plantation	
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.		Plantation is being done in the Old dump, including casual replacement of the plants.	Plantation is being done in the Old dump, including casual replacement of the plants.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade Wise sorting within the lease area.	Grade Wise sorting within the lease area.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	55-58 % Fe 60-62 % Fe 62-65 % Fe	55-58 % Fe 60-62 % Fe 62-65 % Fe	
7d	Any beneficiation process at mines .	No such. Only Manual sorting & sizing of ore is proposed	No such. Only Manual sorting & sizing of ore is proposed	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Different grades of Ore is being manually sorted out within the lease area.	Different grades of Ore is being manually sorted out within the lease area.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIL	NIL	
8b	Concurrent use or storage of topsoil	NIL	NIL	
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 overburden generated is proposed to be dumped in preselected dumping area .	The waste generated is dumped in the preselected dumping area.	
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 is done.	
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.	2350 saplings are planted .	Tilldate 16350 nos of plantation has been already been planted.
8g	Survival rate	80%	80%	

8h	Water sprinkling on roads to control airborne dust	Yes	Yes ,16KLD capacity Water Tanker used.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Tilldate 16350 nos of plantation has been already been planted. aesthetic beauty in and around mines area is good.	Tilldate 16350 nos of plantation has been already been planted. aesthetic beauty in and around mines area is good.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M. R. submitted upto August'2019 A. R. submitted upto 2018-19	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mr Kumar Dhananjay, BE(Mining), 18 years of experience as Mining engineer and Mr Indrajit Mukherjee, M.Sc (Geology), 15 years of experience as mining geologist are appointed in this mine.	Mr Kumar Dhananjay, BE(Mining), 18 years of experience as Mining engineer and Mr Indrajit Mukherjee, M.Sc (Geology), 15 years of experience as mining geologist are appointed in this mine.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current working - 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 etc) - 3.178 Ha.	Covered under current working - 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 etc) - 3.178 Ha.
9d	Scrutiny of Annual return on afforestation	2350 nos	2350 nos
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	3701.02MT below 55% Fe	3701.02MT below 55% Fe
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Below 55%Fe- 12877.38MT 62-65%Fe- 0.02MT 65%Fe& above- 301.02MT	Below 55%Fe- 12877.38MT 62-65%Fe-0.02MT 65%Fe& above-301.02MT
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine price (in Rs)- (Lumps) Below 55%Fe- 1200.00 +65%Fe-3935.33	Ex Mine price (in Rs)- (Lumps) Below 55%Fe-1200.00 +65%Fe-3935.33
9h	Scrutiny of Annual return on fixed assets	Rs 14,81,140/-	Rs 14,81,140/-
9k	Scrutiny of Annual return on mining machineries	Compressor with wagon drill - 01 Back hoe - 01 Hauler - 04 Loader - 01	Compressor with wagon drill - 01 Back hoe - 01 Hauler - 04 Loader - 01

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 :

(B.P KERKETTA)

Indian Bureau of Mines