INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT 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 Officer and ID No. : **R005) SHRIDHAR RAJWAR**

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine Official with Designation : Shri Dhananjay Kumar, Mines Manager and Shri Sujoy Bo

(iv) Date of Inspection : 17-JAN-17

(v) Prev.inspection date : 11-FEB-16

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-APR-81

(h) Weekly day of rest : SUN

2. Address for correspondance : PO:NOAMUNDI.
DIST:WEST SINGHBHUM.
JHARKHAND.

3. (a) Lease Number : BHR0066
(b) Lease area : 122.01
(c) Period of lease : 20
(d) Date of Expiry : 21-NOV-94

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/ Termination date : 02-FEB-06

Geologist

Name : I. Mukherjee,Full Time
Qualification : M. Sc(Geo)
Appointment/ Termination date : 12-SEP-11

Manager

Name : Dhananjay Kumar
Qualification : B.E.(Min. Engg.)
Appointment/ Termination date : 02-FEB-06

6. Date of approval of Mining Plan/Scheme of Mining :

Renewal under rule 24 MCR1960	12-JUL-06
Modif.of approved Mining Plan	28-NOV-08
Mining Scheme rule 12 MCDR1988	05-JUL-11
FMCP under 23C(1)	22-APR-15

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	During the year, 2015-16 : 20 nos. of bore holes of meteage 812m	Nil
1b	Exploration over lease area for geological axis 1 or 2	G1 : 43.82Ha. G2 : 41.36Ha.	G1 : 43.82Ha. G2 : 41.36Ha.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/s V. K. S. Mining Services No specific amount is mentioned.	Expenditure during the year : 12.08 lakh	Exploration agency-M/s V.K.S.Mining Services
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Not Applicable	Nil
1e	Balance reserve as on 01/04/20	539736 MT (as on date-27.08.2014 as per the approved modified mining plan)	528909 MT (As per the annual return)	Nil
1f	General remarks of inspecting officers on geology, exploration etc	Nil	Nil	Exploration as per schedule.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks

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 425 to 394m. The southern part of the quarry will be developed towards southwest direction with the development of 6 nos of benches from 468 to 427m.	The northern part of the New pit developed towards NW direction with the development of 5 nos of benches from 425 to 407m. The southern part of the quarry developed towards southwest direction with the development of 4 nos of benches from 463 to 440m.	Boundary Pillar found properly.
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 1 nos of bench in OB and bottom5 nos of benches in ore. The southern part of the quarry will be developed with the development of 6 nos of benches in in ore.	No benches in top soil. Northern part of New pit : 1 benches in OB and 4 bench in ore have been developed. Southern part of New pit : 6 benches in ore have been developed.	No top soil. Separate benches in all quarries for over burden and mineral.
2c	Stripping ratio or ore to OB ratio	Stripping Ratio - 1:3.2	Stripping Ratio - 1:1.55	Nil
2d	Quantity of topsoil generation in m3	Nil	Not Applicable	No top soil generation
2e	Quantity of overburden generation in m3	Quantity of overburden during the year : 289550 m^3	Quantity of overburden during the year :138600 m^3	Nil

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	During the mining operation period of 2015-16, the two new pit developed and operated by mechanised method. Boundary pillars found propterly.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	No. of proposed pit for production : 1 nos	No. of pit developed for production : 1 nos	Work is in progress as per approved mining plan.
3b	Quantity of ROM mineral production proposed	Quantity of ROM mineral production proposed during the year : 90252MT	Quantity of ROM mineral produced during the year, 2015-16 : 88945.47MT	Nil
3c	Recovery of sailable/usable mineral from ROM production	90% of total excavation	90% of total excavation	Nil
3d	Quantity of mineral reject generation	Quantity of mineral reject generation proposed : 9025.2MT	Quantity of mineral reject generated during the year, 2015-16 : 56717.53MT	Nil
3e	Grade of mineral rejects generation and threshold value declared.	+45 to 55% Fe	+45 to 55% Fe	Nil
3f	Quantity of sub grade mineral generation.	Quantity of subgrade mineral generation proposed : 9025.2MT	Quantity of subgrade mineral generated during the year 2015-16 : 56717.53MT	Nil
3g	Grade of sub grade mineral generation	+45% to 50%	+45% to 50%	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanical method adopted for segregating from ROM.	Nil

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation study proposed. It is proposed to dispatch the low grade or subgrade ore directly instead of any type of mixing.	Done as per proposal.	Nil
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.	Nil
3k	Provision of mining machineries in mineral benches	Excavator :1.2 m^3 Dumper : 20MT	Excavator :1.2 m^3 Dumper : 20MT	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of bench : 6m Width of bench : 10m to 12m	As per approved mining plan, height of benches in overburden and mineral suitable for method of mining.	Nil
3m	Total area covered under excavation/pits	Total area covered under excavation : 19.18 Ha	Total area covered under excavation :11.15Ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:3.2	1:1.55	Nil
3o	Total area put in use under different heads at the end of year	Total area put in use under different heads are : Pit : 11.15Ha. Dumps : 8.59Ha. Mineral storage : 2.64 Ha.Infrastructure : 0.65 Ha. Roads : 1.73 Ha. Green Belt : 0.538Ha. Township Area : 0.85 Ha. Total : 26.178Ha	Total area put in use under different heads are : Pit : 11.15Ha. Dumps : 8.59Ha. Mineral storage : 2.64 Ha.Infrastructure : 0.65 Ha. Roads : 1.73 Ha. Green Belt : 0.538Ha. Township Area : 0.85 Ha. Total : 26.178Ha	Nil

3p	Production of ROM mineral during the last five year period as applicable	Production of ROM proposed during the last five year 2011-12 - 90129MT 2012-13 - 60297MT 2013-14 - 40050MT 2014-15 -40176 MT 2015-16- 90252MT	Production of ROM produced during the last five year : 2011-12 -19393.3MT 2012-13 -54887.6MT 2013-14 -39385.4MT 2014-15-10381.2 MT 2015-16-88945.47MT	Nil
3q	General remarks of inspecting officers on method of mining etc.	Nil	Nil	Method of mining carried out as per approved mining plan.

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.	Done as per proposed.	Nil
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.	Nil
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 area.

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	200 meter away from the toe of the ultimate pit limit.
4e	Number of active and alive dumps.	Number of active and alive dump : 2nos	Number of active and alive dump : 2nos (Dump-A & Dump-C)	Nil
4f	Number of dead dumps.	Nil	Not applicable.	Nil
4g	Number of dumps established.	Number of dump established : NIL	Number of dump established : NIL	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES	Nil
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.	Retaining wall has been broken at many places as a result huge quantity of waste is washed away to the virgin area below the waste dump. A violation letter has been issued for rectification vide this office letter KOL/JHK/SB(W)/Fe(M-8), dated 30.03.2017.
4j	Number of settling ponds	3 no of settling ponds are proposed	3 no of settling ponds are done.	Nil
4k	Specific comments of inspecting officer on waste dump management	Nil	Nil	All the old dumps and same are utilized by tree plantation.

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	Not applicable.	No backfilling was done as the quarries are fully active.

5b	Area under backfilling of mined out area	No proposal	Not applicable	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)	Not proposed	Not applicable	Nil
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Nil	Nil	No pit/quarry exhausted. No back filling.

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. Annual Return on PMCP submitted on time.	Nil
6b	Area available for rehabilitation (ha) .	Not proposed	Not Applicable	Within the dump 2.5Ha. area is rehabilitated.
6c	afforestation done (ha).	Afforestation area proposed during the year : 0.25Ha.	Afforestation area done : 0.25Ha.	Nil
6d	No. of saplings planted during the year	Plantation of saplings proposed during the year, 2000nos.	About 2000nos. of saplings planted during the year.	Nil
6e	Cumulative no .of plants	Cumulative no. of plants : 14000nos.	Cumulative no. saplings planted : 14000nos. in the area 2.99Ha.	Nil
6f	Any other method of rehabilitation	Nil	Not Applicable.	Nil
6g	Cost incurred on watch and care during the year	Rs. 50,000/-	Rs. 50,000/-	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed	Not Applicable.	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed	Not Applicable	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Not proposed	Not Applicable	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Not Applicable	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not proposed	Not applicable	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1000 nos of saplings planted in 0.5 hect area as well as casual replacement	1000 nos of saplings planted in 0.5 hect area as well as casual replacement	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.5 hect	0.5 hect	

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)	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	Nil	Operation as per PMCP.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral despatch : 90252 MT	ROM Mineral despatch :67434.38MT (+50%Fe : 32732.37MT -50%Fe : 34701.91 MT)	NIl
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting & sizing	After production, the lump ore is sorted out and saleble lowgrade and rejects are separated manually. Big size boulders are broken by hammer into lump size ore.	Nil
7c	Different grade of mineral sorted out at mines.	Different grade of mineral sorted out at mines : 55 to 58%Fe 60 to 62% Fe 62 to 65% Fe	Different grade of mineral sorted out at mines : 55 to 58%Fe 60 to 62% Fe 62 to 65% Fe	Nil
7d	Any beneficiation process at mines .	Not proposed.	Not Applicable.	Only Manual sorting & sizing of ore.

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Nil	Nil	After production, the lump ore is sorted out and saleble lowgrade and rejects are separated manually. Big size boulders are broken by hammer into lump size ore.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	Not Applicable	No top soil generation.
8b	Concurrent use or storage of topsoil	Not proposed	Not Applicable	No top soil generation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, separate dumps for overburden, waste rocks, rejects etc.	Separates dumps are made for overburden, waste rocks, rejects etc. (Dump-A-N500 & E700, TRL-477m & BRL-432m)	Nil
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 over burden generated was proposed to be dumped in preselected dumping area .	Overburden, waste rock, 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.	2000 saplings are planted .	Nil

8g	Survival rate	Survival Rate : 85%	Survival Rate : 85%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads by water sprinkler.	Water sprinkling done by water sprinkler and water tanker.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Aesthetic beauty in and around mines area is very beautyfull.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return Submitted up to December, 2016 Annual Return submitted up to 2015-16	Found correct	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer in charge: Kumar Dhananjay Geologist in charge: I. Mukharjee Manager: Kumar Dhananjay	Found correct	Nil
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	Nil

9d	Scrutiny of Annual return on afforestation	Afforestation : 2000nos.	Afforestation done : 2000nos. Found correct	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject : 56717 MT. Grade: Below 55% Lumps	Mineral Reject :56717 MT. Grade: Below 55% Lumps	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	88945.470 MT.	88945.470 MT.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	SALE VALUE: RS. 110591425 EX. MINE: RS. 837.88, RS. 2641.28 PRODUCTION COST: RS. 1653.87	Found correct	Nil
9h	Scrutiny of Annual return on fixed assets	FIXED ASSET: RS. 1763820/-	It seems to be correct.	Nil
9k	Scrutiny of Annual return on mining machineries	AIR COMPRESSOR 450.000 CUM/MN: 1 BACK HOE 1.600 CUM: 1 HAULAGE (NON-ELEC.) 215.000 HP: 5	Found correct	Nil

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)	30-MAR-17				

Date :

(**SHRIDHAR RAJWAR**)

Indian Bureau of Mines