

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

MCDR inspection REPORT

Kolkata regional office

Mine file No : KOL/JHK/SB(W)/Fe(B-7)

Mine code : 30BHR27004

- (i) Name of the Inspecting : **K004**) **B.P KERKETTA**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sri P.K.Pradhan, Sr. Manager(Geology)
Official with
Designation
- (iv) Date of Inspection : 06/02/2020
- (v) Prev.inspection date : 17/10/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BARAIBURU TATIBA**
- (b) **Registration NO.** :
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : JHARKHAND
- District : SINGHBHUM (WEST)
- Village : BARAIBURU TATIBA
- Taluka : CHAIBASA
- Post office : BARAIBURU VIA BARAJAMDA
- Pin Code : 833221
- FAX No. : 06767-275367
- E-mail : Rjm.barbil@adityabirla.com
- Phone : 06767-275240
- (f) **Police Station** : KIRUBURU
- (g) **First opening date** : 08/12/1966
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : THE RAMESHWARA JUTE MILLS LTD
PO: BARAIBURU (VIA-BARAJAMDA)
DISTRICT: WEST SINGHBHUM, JHARKHAND-833221
3. (a) **Lease Number** : BHR0068
- (b) **Lease area** : 259
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 27/05/1986
4. **Mineral worked** : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : RAMESHWAR JUTE MILLS LTD.
P.O-BARAIBURI (VIA-
BARAJAMDA) DIIST-WEST
SINGHBHUM JHARKHAND
SINGHBHUM (WEST) JHARKHAND
Phone:033-228277
FAX :033-22825443

Owner : HUKUM CHAND DAGA
2, ROWLAND ROAD BLOCK A/1,
4TH FLOOR KOLKATA - 700 020
KOLKATA WEST BENGAL
Phone: 09830044449/ 22
FAX : 033-22825443

Agent : SHRI NAVEEN PRAKASH AGARWAL
At & PO - Barbil Dist -
Keonjhar Odisha SINGHBHUM
(WEST) JHARKHAND
Phone:
FAX :

Mining Engineer

Name : Sunil Kumar Sinha,Full Time
Qualification : AMIE (Mining)
Appointment/ : 01/12/2017
Termination date

Geologist

Name : Praween Kumar Pradhan,Full Time
Qualification : M Sc (Geology)
Appointment/ : 01/12/2017
Termination date

Manager

Name : kUMAR RANJAN
Qualification : B.Tech Mining Engineering
Appointment/ :
Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	01/11/2004
Plan/Scheme of Mining		Modif.of approved Mining Plan	13/11/2009
		Mining Scheme rule 12 MCDR1988	05/07/2011
		MP review under 17(1) MCR 2016	19/05/2017
		FMCP under 23C(1)	13/09/2018
		MP modif under 17(3) MCR 2016	23/10/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Revised proposal for exploration is 32 bore hole. 19BH in virgin Forest 7BH in diverted forest 6 BH in Non-forest	Total 17 bore hole completed. 7 BH in diverted forest 6 BH in Non-forest 4 BH by taking influence by 10-20 meter in diverted forest	The Lessee have applied for forest diversion in Form-C and yet to get clearance from forest department for the exploratory work of remaining bore hole.
		Revised proposal for exploration is 32 bore hole. 19BH in virgin Forest 7BH in diverted forest 6 BH in Non-forest		
1b	Exploration over lease area for geological axis 1 or 2	32 BH depth of each BH 30 average meters. Total Meterage of 960 meters in FY 2018-19	Exploration work started on 25.03.2018, and Lesse have completed 17 numbers of bore hole. Total is 736 meters	Rest bore hole will be completed, after getting forest clearance from forest department.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/s Geo-Exploration India	Exploration work started on 25.03.2018, but no Bore Hole was completed during 2017-18. Total Expenditure =Rs24,98,075 (excl. tax) Analysis cost =Rs 10,560 (excl. tax)	
1d	Balance area to be explored to bring Geological axis in 1 or 2	90 ha	68ha.	36 Ha is non mineralized Zone.

1e	Balance reserve as on 01/04/20	111 = 3.249 milionl ton 121/122 = 19.506 milionl ton Remaining resource 221 = 17.69 milion ton	Total reserve & resource 40.445 million ton
1f	General remarks of inspecting officers on geology, exploration etc	Mines was in operation during inspection.The lessee has drilled only 17 boreholes,(7 BH in diverted forest 6 BH in Non-forest 4 BH by taking influence by 10-20 meter in diverted forest) out of proposed 32 boreholes during 2018-19. The area lies in the saranda forest. Lessee has applied for forest clearance for exploratry BH, but as on inspection date no forest clearance was granted.	A violation letter even no. dated 27/02/2020 for shortfall in exploration has been issued .The area lies in the saranda forest. Lessee has applied for forest clearance for exploratry BH, but as on inspection date no forest clearance was granted.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Iron Ore: Zone A (Baraiburu Broken Forest Area) Quarry Nos. 3,5,7,10B, Road side, 1B, 1C &10A Zone B (Tatiba) Tatiba Face-4, 9, 11, 2, 5&7. Manganese Ore: Lucky Pit	Iron Ore: Zone A (Baraiburu Broken Forest Area) Quarry- 5, 10A, 10B, 1C Zone B (Tatiba) Tatiba: 4,5,7 Manganese Ore: Lucky Pit.	DFO Saranda allowed the Lessee for mining in phase wise manner after proper fencing of the quarries.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Nil	Top soil generation is very meager which were used in green belt area. Waste is not generated during the processing operations.	
2c	Stripping ratio or ore to OB ratio	1 : 0	1 : 0	

2d	Quantity of topsoil generation in m3	Nil	Nil
2e	Quantity of overburden generation in m3	nil	O.B.Nil ,54297MT(Waste)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Development of PIt was as per approved Mining Plan.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	13 Quarry.	8 quarry.	
3b	Quantity of ROM mineral production proposed	1049999.280 MT In 2019-20 = 2259999.33 MT	597588.350 MT In19-20 upto 4th Feb= 578807.87 MT	Broken quarries are very small in size for to achieve the target by maintaining scientific method.
3c	Recovery of sailable/usable mineral from ROM production	Saleable Mineral =936937.8 MT Sub-grade Mineral =104104.2 MT	Saleable Mineral =470406.33 MT Sub-grade Mineral =97061.18 MT	
3d	Quantity of mineral reject generation	nil	NIL	
3e	Grade of mineral rejects generation and threshold value declared.	Below 45% fe	Below 45% fe	
3f	Quantity of sub grade mineral generation.	58799.96MT	97061.180 MT	This quantity is only fine of about 50%fe
3g	Grade of sub grade mineral generation	45-54 % Fe.	45-54 % Fe.	
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.		The Lessee have deployed SGS India Private Ltd. for sampling and analysis
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting in mineral benches proposed	Drilling and blasting in mineral benches carried out.
3k	Provision of mining machineries in mineral benches	Excavator & Dumper proposed in mineral benches.	4 nos.Backhoe,2 nos. Backhoe,1 no. of Backhoe of capacity 0.9cum.,2.5cum.,1.2cum. respectively & 13 Dumper,14 dumpers are used of 30 Te , 20Te capacity respectively in mineral benches.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM		Yes
3m	Total area covered under excavation/pits	42.817ha.	23.049 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1:0.00	1:0.00
3o	Total area put in use under different heads at the end of year		Area exploited & abandoned by opencast(O/C) mining 19.026ha.,Covered under current (O/C) working 4.023ha.,Reclaimed/rehabilitated area 0.23ha.,Area occupied by plant, buildings,welfare buildings & roads 8.5ha.,Used for subgrade mineral stacking,processing area and miscellaneous 8.721ha.Total area 40.5 Ha.

3p	Production of ROM mineral during the last five year period as applicable	2013-14: 2259953 MT 2014-15: 2259743 MT 2015-16: 2259850 MT 2016-17: NA 2017-18: 1049999.28 2018-19: 1041042 MT	2013-14: 321865.830 MT 2014-15: 77345.300 MT 2015-16: 0 MT 2016-17: 0 MT 2017-18: 143883.060 MT 2018-19: 597588.350 MT 4th Feb 2019-20: 578807.87 MT	During the previous approved Plan Period mining operation was carried out only in 2011-12 (for nearly two month), May 2013 to Aug 2014 with aggregate of 16 Months. Also FC for additional area was lying pending. As such the targeted exploration & production could not been carried out.
3q	General remarks of inspecting officers on method of mining etc.		Method of mining adopted by the lessee is as per approved Modification in approved Review of 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)	No Proposal	Top soil generation is very meager which were used for existing in green belt area. Waste is not generated during the processing operations.	
4b	Location of topsoil, OB and mineral reject dumps	No Proposal	Top soil production is very meager which were used in existing green belt area	
4c	Number of dumps within lease area and outside of lease area	No Proposal	No waste dump	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No Proposal	There is no waste/O.B. dump.	
4e	Number of active and alive dumps.	No Proposal	There is no waste/O.B. dump.	
4f	Number of dead dumps.	No Proposal	There is no waste/O.B. dump.	
4g	Number of dumps established.	No Proposal	There is no waste/O.B. dump.	

4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	There is Retaining wall & Garland drain around the ROM Stock
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	56 meters of Retaining wall & Garland drain around the ROM Stock
4j	Number of settling ponds	Proposal for 01 settling Pond	01 settling pond available.
4k	Specific comments of inspecting officer on waste dump management		There is no waste dump within the leasehold area only ROM stock is available.

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 for backfilling.	None of the Pits were exhausted as such backfilling has not been done.	
5b	Area under backfilling of mined out area	No such proposal	NIL.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal	NIL	
5d	Total area fully reclaimed and rehabilitated	No proposal for fully reclaimed or rehabilitation	No work done.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		No pits have been fully exhausted as such no backfilling has been done.	

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).	Annual report on PMCP to be submitted on time and correctly.	Annual report on PMCP submitted .
6b	Area available for rehabilitation (ha) .	No proposal	NIL
6c	afforestation done (ha).	There was proposal for afforestation of 1675nos, in 2018-19	2000nos of saplings planted in 0.4ha area.Trees survived were 1200 with 60% survival rate.Cumulative 26976nos of trees were planted in 8.1ha(including Safety Zone) within Lease area and 4750 nos of trees outside the lease area.
6d	No. of saplings planted during the year	1675nos.	2000nos.
6e	Cumulative no .of plants	No proposal	Cumulative 26976nos of trees were planted in 8.1ha(including Safety Zone) within Lease area and 4750 nos of trees outside the lease area.
6f	Any other method of rehabilitation	No Proposal	Nil
6g	Cost incurred on watch and care during the year	Rs 83750/-	Rs 83100/-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NO proposal for backfilling.	NO Voids available for backfilling
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	Nil

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No Proposal	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	As per Proposal Reclamation and rehabilitation done by making Rain water harvesting pond and Bamboo Plantation in the past	Reclamation and rehabilitation was done by making Rain water harvesting pond and Bamboo Plantation in the past
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No Proposal	The area lies in the Saranda Forest so the waste land/non-mineralized land is full of trees.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposal	The area lies in the Saranda Forest so the waste land/non-mineralized land is full of trees.
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal	NIL, The area lies in the Saranda Forest so the waste land/non-mineralized land is full of trees.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposal for Environment Monitoring with respect to Core and Buffer Zone.	Environment Monitoring with respect to Core and Buffer Zone has been carried by Environmental Agency

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Mines is going to expire in 31/03/2020, and the mineral has not been extracted fully from any of the pits, most of the pits were in production. Only 2000nos of trees were planted in 0.4 ha within lease area and fencing of quarries were in progress.
----	---	--

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposal for gradewise sorting within the lease area.	Grade wise sorting done within the lease area.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical Method proposed.	Mechanical Method adopted.	
7c	Different grade of mineral sorted out at mines.	Grades to be sorted out as per proposal. 45-55% 58-60% 60-62% 62-65%	Grades sorted out in the mines 45-55% 58-60% 60-62% 62-65%	
7d	Any beneficiation process at mines	Proposal for Screening of ore	Screening of ore done at lease.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Mineral is being extracted as per proposal and is being screened and sorted in different grades before despatch.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal for Top soil removal in 2018-19	No Top soil has ben removed in 2018-19	

8b	Concurrent use or storage of topsoil	No proposal for 2018-19	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes Proposal for Separate dumps for overburden, waste rock, rejects and fines if generated	Yes subgrade fine generated has been kept seperately.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal for 2018-19	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal for Phased restoration in 2018-19	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No such proposal	The lease area lies in the Saranda Reserved Forest .However 2000nos of plantation in 0,4ha area done within the lease area.
8g	Survival rate	80%	80%
8h	Water sprinkling on roads to control airborne dust	Yes	Yes water sprinkling on roads to control air borne dust done.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		The area lies in the Saranda forest, the 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		MR and AR submitted on time
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer in charge - Sunil Kumar Sinha Manager - Awadhesh Bahadur Singh Geologist in charge - Praween Kumar Pradhan	The Following Official were present at the time of inspection - Mining Engineer in charge - Sunil Kumar Sinha Geologist in charge - Praween Kumar Pradhan
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited & abandoned by opencast (O/C) mining- 19.026 Ha. Covered under current (O/C) Workings - 4.023 Ha. Reclaimed/Rehabilitated - 0.230 Ha. Occupied by plant, welfare buildings & roads-8.5ha Other Purpose(used for subgrade, mineral stacking, processing area) - 8.721 Ha.	Already exploited & abandoned by opencast (O/C) mining- 19.026 Ha. Covered under current (O/C) Workings - 4.023 Ha. Reclaimed/Rehabilitated - 0.230 Ha. Occupied by plant, welfare buildings & roads-8.5ha Other Purpose(used for subgrade, mineral stacking, processing area) -8.721 Ha.
9d	Scrutiny of Annual return on afforestation	Number of trees planted within lease during the year - 2000 Survival rate in percentage - 80%	Number of trees planted within lease during the year - 2000 Survival rate in percentage - 60%
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Rejects generated - 0	Mineral Rejects generated - 0

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock - Opening stock - 72073.745 T Production- 597588.35Te Closing stock - 102194.585 Tons. Lumps - Graded Ore (opening Stock) - 58 - 60% = 1366.990 60-62 % = 46455.870 Tons Lump Graded Ore (closing Stock) - 58 - 60% = 2565.36Te 60-62 % = 3488.87Te, 62-65%=4243.51Te Fines -(Opening Stock) Below 55% = 4666.00 Tons 55-58% = 110181.840 tons Fines - (closing Stock) Below 55% = 796.30 Tons 55-58% = 636.92 tons, 60-62%=1888Te. 62-65%1849Te	ROM Stock - Opening stock - 72073.745 T Production-597588.35Te Closing stock - 102194.585 Tons. Lumps - Graded Ore (opening Stock) - 58 - 60% = 1366.990 60-62 % = 46455.870 Tons Lump Graded Ore (closing Stock) - 58 - 60% = 2565.36Te 60-62 % = 3488.87Te, 62-65%=4243.51Te Fines -(Opening Stock) Below 55% = 4666.00 Tons 55-58% = 110181.840 tons Fines -(closing Stock) Below 55% = 796.30 Tons 55-58% = 636.92 tons, 60-62%=1888Te. 62-65%1849Te
----	--	--	--

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine price of - (Lumps) 58-60% = Rs. 2565.36/te 60-62% = Rs.3488.84 /Tons 62-65% = Rs.4243.51/Tons Fines: Below 55%=Rs 796/Te, 55%-below 58%=Rs636/Te, 60%-below 62% = Rs1888.00/Te, 62%-below 65%Rs1849/Te Ex Mine price - (Fines) - below 55% = 796.30 Rs. 55-58% = 636.92 Rs	Ex mine price of - (Lumps) 58%-below60% = Rs. 2565.36/te 60%-below62% = Rs.3488.84 /Tons 62%-below65% = Rs.4243.51/Tons Fines: Below 55%=Rs 796/Te, 55%-below 58%=Rs636/Te, 60%-below62% = Rs1888.00/Te, 62%-below65%Rs1849/Te 62-65%= 1849.00 Rs. Ex Mine price - (Fines) - below 55% = 796.30 Rs. 55-58% = 636.92 Rs
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (in Rs) 4633677	Value of Fixed Assets (in Rs) 4633677
9k	Scrutiny of Annual return on mining machineries	Dumper - 27 Backhoe - 07 Front end loader - 05 Crusher - 1 Water tanker - 4	Dumper - 27 Backhoe - 07 Front end loader - 05 Crusher - 1 Water tanker - 4 Screening plant - 02(Contractor's)

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)	27/02/2020	22/05/2020				
MCDR17	Rule 35(2)	27/02/2020	22/05/2020				
MCDR17	Rule 45(1)	27/02/2020					

Date :

(B.P KERKETTA)

Indian Bureau of Mines