

INDIAN BUREAU OF MINES

MINES CONTROL AND CONSERVATION OF MINERAL DIVISION

MCDR INSPECTION REPORT

Ranchi Regional Office

I/38736/2024

Mine file No: MCDR-MiFLOFE/2/2022-RCH-IBM_EZ

Mine code: 30BHR27010

Date of Inspection: 18.07.2024

1.0 GENERAL

SN	Particulars	Details
1	Name of the Mine	Gua (Duarguiburu) Ore Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest Land - 1443.756 Ha. Non-Forest Land-0.00 Total Lease Area- 1443.756 (Ha)
3	Mine Code	30BHR27010
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5662/2011
5	Name of the lessee, Address, phone, email and fax number	Steel Authority of India Limited Ispat Bhawan, Lodi Road New Delhi- 110003 Fax No.- 011-24368779 Ph:011-24363358 Email: chairman.sail@sail.com
6	Village	Gua
7	Taluka/Mandal	Jagannathpur
8	District	West Singhbhum
9	Pincode	833213
10	State	Jharkhand
11	Post office	Gua
12	Nearest police station	Gua PS
13	Nearest Railway station	Gua
14	Date of Grant of Mining Lease	22.02.1949
15	Date of Execution	09.03.1970
16	Date of opening of Mine	1919 (Manual mining before independence of India)
17	Date of first Renewal, if applicable & its period & expiry	22.02.1979 - 21.02.2009 for 30 years
18	Date of 2nd Renewal, if applicable & its period & expiry	22.02.2009-21.02.2029 for 20 years
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	08.02.2008
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Birendra Kumar Tiwari; Director,(In-Charge) Bokaro Steel Plant, Bokaro , M/s. SAIL Jharkhand, PIN-827001;Contact No. 8895500173 Date of Appointment: 20.04.2024 Email: bsl.director@sail.in
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Kamal Bhaskar ; Chief General Manager (Mines) Gua Ore Mines, PO- Gua, West Singhbhum, Jharkhand- 833213; Ph. No.8986881568/06596- Date of Appointment: 21.07.2023 Email: kamalbhasker@sail.in
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	S. P. Das; Mines Manager, GM (Mines & E&L) Gua Ore Mines, PO- Gua West Singhbhum, Jharkhand- 833213 Ph. No. 9477702013; Date of Appointment: 16.09.2019 Email: dassankarprasad@gmail.com
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	C. N. Kumar ; DGM (Min), AIME (Min.). Appointment: May-2008 Email: dgmguamines@gmail.com
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes, Dr. T.C. Ananda, DGM (Geo) Appointment: March-2008 Email: tcanand@gmail.com

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SN	Particulars	Details
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Approved Review of Mining Plan for Plan Period 2024-25 to 2028-29 vide letter no. RAN/West Singhbhum/Fe/ROMP-7/2023-24 dated: 06.02.2024
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	NA
27	Mineral(s) granted in lease and proved for mining	Hematite
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/Scheme of mining. – 2024-25 to 2028-29

Exploration

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	167	49	Total 8535.0 meterage of core drilling exploration has been done within 361.295 Ha area .The total 635.986 Ha area has been explored at Geological axis of 1 & 2 however updating of reserve/resource has been done yet.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	No proposal was envisaged in approved document
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	No proposal was envisaged in approved document
1e	Balance reserves as on 01.04.2024	179.65 MT	175.49 MT	As on 01.04.2024 with respect to approved RMP. Reserve and resource together are 185.23 MT (+45% Fe). Reserve is 175.49 MT & Resource is 9.74 MT
1f	General remarks of inspecting officer on geology, exploration etc.	Total 8535.0 meterage of core drilling exploration has been done within 361.295 Ha area .The total 635.986 Ha area has been explored at Geological axis of 1 & 2 however updating of reserve/resource has been done yet.		

2.0 DEVELOPMENT

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
2a	Location of development w.r.t. lease area	OT Hill: 790-650 mRL , 2 nd Level: 730-680 mRL, Bai-Hill - 850-800 mRL, Rajaburu- 720-670 mRL Darbarburu- 830-790 mRL	OT Hill: 790-663 mRL , Bai-Hill SW- 850-830 mRL 2 nd Level: 730-680 mRL, Rajaburu- 720-670 mRL Darbarburu- 830-790 mRL	Less development has been achieved by lessee which is gross violation of Rule 11(1).
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Nil	Nil	As per Approved RoMP Document
2c	Stripping ratio or ore to OB ratio	1.99	2.28	Slight Variation on higher end observed
2d	Quantity of topsoil generation in m3	Nil	Nil	As per Approved RoMP Document

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2e	Quantity of overburden generation in m3	23,63,169	9,10,521.00	38% achievement done w.r.t approved quantity
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Lessee has not fully developed the mines as per the approved RoMP document.		

3.0 EXPLOITATION

SN	Item	Proposals (2023-24)		Actual work (2023-24)		Remarks
3a	Number of pits proposed for production	08		04		Within the approved proposal
3b	Quantity of ROM mineral production proposed	9400000.0 Te		4159861.0 Te		As on 31.03.2024
3c	Recovery of saleable/usable mineral from ROM production	1,25,00,000.0 Te		42,22,756.20 Te		33% achievement w.r.t approved proposal, which is a gross violation of Rule 11(1).
3d	Quantity of mineral reject generation	0.00		0.00		As per approved proposal
3e	Grade of mineral reject generation and threshold value declared	0.00		0.00		As per approved proposal
3f	Quantity of sub-grade mineral generation	0.00		0.00		As per approved proposal
3g	Grade of sub-grade mineral generation	0.00		0.00		As per approved proposal
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised		Mechanised		As per approved proposal
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Proposed		Under process for scientific results.		Under process for scientific results.
3j	Provision of drilling & blasting in mineral benches	Proposed		Done		As per approved proposal
3k	Provision of mining machineries in mineral benches	Proposed		Done		As per approved proposal
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10		10		As per approved proposal
3m	Total area covered under excavation/ pits	196.72		184.0		Within the approved proposal
3n	Ore to OB ratio for the pit/mine during the year	1.99		2.28		Slight Variation on higher end observed
3o	Total area put in use under different heads at the end of year	360.21 Ha		277.54 Ha		Within the approved proposal
3p	Production of ROM mineral during last five-year period, as applicable	Year	Prod. (MT)	Year	Prod. (MT)	Approx 44.25% achievement made w.r.t Mining Plan which is a gross violation of Rule 11(1).
		2019-20	5.97	2019-20	3.69	
		2020-21	6.03	2020-21	3.11	
		2021-22	6.85	2021-22	4.14	
		2022-23	4.90	2022-23	3.96	
		2023-24	9.40	2023-24	4.16	

3q	General remarks of inspecting officer on method of mining etc.	Lessee has not exploited the approved mineral for the year 2023-24. Approx. 44.25% of the mineral has been produced.
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4.0 SOLID WASTE MANAGEMENT-DUMPING

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Nil	Nil	As per approved proposal
4b	Location of topsoil, OB & mineral reject dumps	Nil	Nil	As per approved proposal
4c	Number of dumps within lease area and outside lease	02	02	As per approved proposal
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	N1800-N2000 - (O.T. Hill) N400-N600- (Ranichua)	N1800-N2000 - (O.T. Hill) N400-N600- (Ranichua)	As per approved proposal
4e	Number of active & alive dumps	02	02	As per approved proposal
4f	Number of dead dumps	-	-	As per approved proposal
4g	Number of dumps stabilised	02	02	As per approved proposal
4h	Whether Retaining wall or garland drain all along dumps	Yes	Yes	As per approved proposal
4i	Length of Retaining wall or garland drain all along dump	Retaining wall -393m Garland drains-393m.	Retaining wall -405m Garland drains-400m.	Found Satisfactory
4j	Number of settling ponds	02	09	Found Satisfactory
4k	Specific comments of inspecting officer	Lessee has satisfactorily performed in the area of Solid waste management-dumping.		

5.0 SOLID WASTE MANAGEMENT-BACKFILLING

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Nil	Nil	As per approved proposal
5b	Area under backfilling of mined out area	Nil	Nil	As per approved proposal
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Nil	Nil	As per approved proposal
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	As per approved proposal
5e	General remarks of inspecting officer on backfilling, reclamation etc	No working pit has been exhausted in respect of iron ore minerals hence backfilling and rehabilitation has not been done yet.		

6.0 PROGRESSIVE MINE CLOSURE PLAN

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SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.	Yes	Yes, submitted on time	As per approved proposal
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	i) Nil ii) 2.1 iii) 3100 iv) 11800 v) No vi) 1000000	i. Nil ii. 2.4 iii. 3150 iv. 14650 v. No vi. 8400000	Cost incurred on watch & care during the year data is non-exclusive and contain all the related activities (such as nursery, watch and care of jhilingburu etc.) of this mine along with other associated mine.
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	NA	NA	As per approved proposal
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	NA	NA	As per approved proposal
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air Quality-Quarterly Water Quality- Quarterly Noise Level- Quarterly	Air Quality-03 Water Quality-04 Noise Level- 04	As per approved proposal
6f	General remarks of inspecting officer on PMCP compliance & progressive	Lessee has satisfactorily performed in the area of progressive mine closure plan.		

7.0 MINERAL CONSERVATION

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Yes	As per approved proposal
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Yes, Mechanical	Yes, Mechanical	As per approved proposal
7c	Different grade of mineral sorted out at mines	Yes	Yes	As per approved proposal

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7d	Any beneficiation process at mines	Yes	NA	As per approved proposal
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Lessee has satisfactorily performed in the area of mineral conservation.		

8.0 ENVIRONMENT

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	As per approved proposal
8b	Concurrent use or storage of topsoil	Nil	Nil	As per approved proposal
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	As per approved proposal
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	As per approved proposal
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	As per approved proposal
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Saplings to be planted - 3150	Saplings to be planted - 3150	As per approved proposal
8g	Survival rate	70%	75%	Found Satisfactory
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Found Satisfactory
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Lessee has planted 3150 sapling in the mine area. Water sprinkling on roads to control airborne dust has been done by the lessee. This sustains the aesthetic beauty in and around mines.		

9.0 COMPLIANCE OF RULE 45

SN	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return submitted up to: June 2024 Annual Return submitted for FY: 2023-24		
SN	Item	Details given in A.R.	Observation of I/O	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: C.N. Kumar Geologist: Dr. T.C. Ananda Manager: S.P. Das	Mining Engineer: C. N. Kumar Geologist: Dr. T.C. Ananda Manager: S.P. Das	As per available records, found satisfactory
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 184.0 Ha. Dump: 22.69 Ha. Infra.: 17.692 Ha. Green Belt: 53.160 Ha. Total: 277.542 Ha.	Pit: 184.0 Ha. Dump: 22.69 Ha. Infra.: 17.692 Ha. Green Belt: 53.160 Ha. Total: 277.542 Ha.	As per available records, found satisfactory

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9d	Scrutiny of Annual return on afforestation	WML: 3150 Nos.	WML: 3150 Nos.	As per available records, found satisfactory
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	As per available records, found satisfactory
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Open Stock- 1747497.06 T Production- 4222756.20 T Dispatch- 3830953.40 T Closing Stock- 2139299.86 T There is no separate stock for graded ore.	Open Stock- 1747497.06 T Production- 4222756.20 T Dispatch- 3830953.40 T Closing Stock- 2139299.86 T There is no separate stock for graded ore.	As per available records, found satisfactory
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-mine price: 2831.75	Ex-mine price: 2831.75	As per available records, found satisfactory
9i	Scrutiny of Annual return on fixed assets	Rs. 2375056156	Verified from the asset register and found correct.	Verified from the asset register and found correct.
9k	Scrutiny of Annual return on mining machineries	1. Shovel-05 2. Backhoe-03 3. Dumper-09 4. Tipper-Nil 5. Rock Drill-04 6. Air Compressor-06 7. Crusher-04 8. Dozer-06	1. Shovel- 05 2. Backhoe-03 3. Dumper-09 4. Tipper-Nil 5. Rock Drill-04 6. Air Compressor-06 7. Crusher-04 8. Dozer-06	As per available records, found satisfactory

10 - Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

1. Earlier pointed out violation: Rule 45(7) dated 12.07.24 Status- Pending.
2. Violation pointed out in the current inspection are as under:
 - a. Rule 12(4B): Geological Study Report prepared in the manner specified in the Minerals (Evidence of Mineral Contents) Rules, 2015, within three months after the completion of the exploration work has also not been submitted.
 - b. Rule 11(1): It was proposed to develop 790-650 mRL in OT Hill, 850-800 mRL in Bai-Hill but 790-663 mRL in OT Hill and 850-830 mRL in Bai-Hill have been developed.
 - c. Rule 11(1): It was proposed to produce 9.40 MioT for the year 2023-24 but only 4.16 MioT has been produced which is only 44.25% of the approved proposal.
 - d. Rule 11(1): Recovery of saleable/usable mineral from ROM production was proposed to be 1,25, 00,000 T however only 42,22,756.20 Te has been achieved which is only 33% of the approved proposal.

(Vikas Kumar),
Asst. Controller of Mines,
Indian Bureau of Mines- Ranchi