

MCDR INSPECTION REPORT: 2023-24

1)	Name of Inspecting officer:	Shri Vikrant Khedikar
2)	Designation	Senior Assistant controller of mines
3)	Accompanying mine official with designation	Shri Sanjay Kumar (Mining Engineer). Shri Sanjay Kumar Singh (Mine Manager) Shri Awadesh Kumar (Mine Surveyor). Shri Dr. Manoj Kumar (Mine Geologist)
4)	Date of Inspection	08/10/2024

General

Date of Inspection:

Sl. No.	Particulars	Details
1.	Name of the Mines	Meghahatuburu Iron Ore Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	2897.499 Ha (Entire forest area)
3.	Mine code	30BHR27018
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5662/2011
5	Name of the lessee, Address, Phone, email and fax number	M/s. Steel Authority of India Limited (SAIL) Ispat Bhawan, Lodi Road, New Delhi-110003. Phone No.: 01124367105, Mobile:8986881013 E-mail ID: envrmd@gmail.com
6	Village	Meghahatuburu
7	Taluka/Mandal	CHAIBASA
8	District	WEST SINGHBHUM
9	Pin code	833223
10	State	JHARKHAND
11	Post Office	MEGHAHATUBURU
12	Nearest Police Station	KIRIBURU
13	Nearest Railway station	Barabil / Bada jamdah
14	Date of Grant of Mining Lease	28/03/1960
15	Date of Execution	
16	Date of Opening of Mine	28.03.1960 (Lease-I 1936.06 Ha) 06.02.1973 (Lease-II 879.439 Ha) 01.10.1973 (Lease-III 82 ha)
17	Date of First Renewal, if applicable and its period & expiry	1 st RML application for lease-I submitted on 18.07.1987 for 20Yr. from 28.03.1990 to (27.03.2010) 1 st RML application for lease-II submitted on 06.01.2002 for 20Yr. from 06.02.2003 to 30.09.2023 1 st RML application for lease-III submitted on 28.09.2002 for 20Yr. from 01.10.2003 to 30.09.2023
18	Date of second Renewal, if applicable and its period & expiry	In principal approval for amalgamation of three lease (Lease-I, Lease-II, Lease-III) granted by Govt. Jharkhand vide letter no. Kha.p(Chai)-31/05-356 dated 14.03.2009. Order of extension for of amalgamated lease (2897.499 Ha) by Govt. Jharkhand vide letter no KHA/Ni(CHAI)/31-2005-1225-M dated 30.07.2019 for 20Yr. from 28.03.2010 to 27.03.2030.
19	Date of submission of renewal application if Mining operations are continuing under deemed extension	28/03/2010 to 27/03/2030, 08/11/2019, (MMGC Rule 2015)

Sl. No.	Particulars	Details
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri B. K. Tiwari, Director In-charge, Bokaro Steel Plant, Jharkhand, PIN Code:827001.
21	Name of the Mine Agent with Address, phone email, fax number and date appointment in mines.	Shri R.P Selvam Chief General Manager (Mines) I/c & Agent Meghahatuburu Iron Ore Mines, P.O- Meghahatuburu, West Singhbhum, Jharkhand- 833223. Ph. No 8986881013 Email: bslmiom@gmail.com Date of appointment:
22	Name of the Mines Manager with Address, Phone, email, fax number and date of appointment	Shri S.K Singh General Manager (Mines) Meghahatuburu Iron Ore Mines, P.O- Meghahatuburu, West Singhbhum, Jharkhand- 833223 Ph. No 9425802238 Email: miommining@gmail.com Date of appointment:
23	Name of the mining engineer, qualification and total experience with Address, phone, email, fax number and date of appointment in Mines.	Shri Sanjay Kumar Qualification: B. Tech (Mining) ; Experience: 17 years Meghahatuburu Iron Ore Mines, P.O- Meghahatuburu, West Singhbhum, Jharkhand- 833223 Ph. No 9123349054 Email: miommining@gmail.com Date of appointment: 14.09.2019 (as Engineer)
24	Whether Geologist and Mining Engineer appointed in Mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	1. Mining Plan, 314(3)/2009-MCCM(C Z)/MP, Dated: - 29/01/2010, From 01/04/2010 to 21/03/2015. 2. Review of mining plan, KOL/JHK/SB(W)/Fe/M P-141.Vol II, Dated: - 13/10/2015, From 01/04/2015 to 31/03/2020. 3. Modification in RMP, RAN/WSB/Fe/MP-02/2 018-19, Dated: - 13/06/2018, From 01/04/2018 to 31/03/2020. 4. Modification in RMP, RAN/WSB/Fe/MP-19/2 019-20, Dated: - 20/12/2019, From 01/11/2019 to 31/03/2020. 5. Review of mining plan, RAN/WSB/Fe/MP-09/2 019-20, Dated: - 27/01/2020, from 01/04/2020 to 31/03/2025. 6. Modification in RMP, RAN/WSB/Fe/MP-26/2 021-22, Dated: - 10/03/2022, From 01/03/2022 to 31/03/2025. 7. Modification in RMP, RAN/WESTSINGHBHUM/Fe/MMP-6/2023-24, Dated:07/12/2023, from 2023-24 to 2024-25
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Modification of MP RAN/WESTSINGHBHUM/Fe/ MMP-6/2023-24, Dated: 07/12/2023, from 2023-24 to 2024-25
27	Mineral(s) granted in lease and proved for mining	Iron Ore (Hematite)
28	Method of Mining(Open cast, Underground)	Open cast
29	Category(Fully Mechanized, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided)

Exploration:

Sl. No.	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	Nil	Nil	Stage-II forest clearance is in process
1b	Exploration over lease area for Geological axis 1 or 2.	Geological Mapping in Scale 1:2000, Area - 172.20Ha	Achieved	
1c	Exploration Agency & Expenditure in lakh Rupee during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	1. Remaining Area in G2 - 88.69 Ha. 2. Remaining Area in G3 - 961.44 Ha
1e	Balance reserves as on 01.04.2024...		45,91,240.00	
1f	General remarks of inspecting officer on geology, exploration etc.			Stage-II forest clearance is in process

Development:

Sl. No.	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
2a	Location of development w.r.t lease area	22 Deg 06 Min 48.20 Sec North – 85 Deg 16 Min 54.12 Sec East. 22 Deg 06 Min 18.52 Sec North – 85 Deg 16 Min 29.50 Sec East. 22 Deg 06 Min 12.64 Sec North – 85 Deg 16 Min 44.43 Sec East 22 Deg 06 Min 29.42 Sec North – 85 Deg 16 Min 54.24 Sec East.	22 Deg 06 Min 48.20 Sec North – 85 Deg 16 Min 54.12 Sec East. 22 Deg 06 Min 18.52 Sec North – 85 Deg 16 Min 29.50 Sec East. 22 Deg 06 Min 12.64 Sec North – 85 Deg 16 Min 44.43 Sec East 22 Deg 06 Min 29.42 Sec North – 85 Deg 16 Min 54.24 Sec East.	
2b	Separate benches in top soil, overburden and mineral (Rule 15)	Top Soil – Nil OB – 6 Mineral - 7	Top Soil – Nil OB – 4 Mineral - 6	Mining is carried out in ore benches. Hence there is no topsoil removal.
2c	Stripping ratio or ore to OB ratio	1:0.68	1:0.51	
2d	Quantity of topsoil generation in m3	Nil	Nil	No fresh area broken
2e	Quantity of overburden generation in m3	2220088.00	16,48,627.08	
2f	General remarks of inspecting officer on development etc.			

Exploitation

Sl. No.	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
3a	Number of pits proposal for production	1	1	
3b	Quantity of ROM mineral production proposed (Tonne)	32,28,859.00 (Tonne)	32,28,760.00 (Tonne)	
3c	Recovery of salable/usable mineral from ROM production	100 %	100%	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral reject generation and threshold value declared	Nil	Nil	
3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	Nil	Nil	

3h	Manual/Mechanized method adopted for segregating from ROM	Mechanized	Mechanized																																	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	NIL	NIL																																	
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	110 mm, SME, Electronic delay detonators.																																
3k	Provision of mining machineries in mineral benches	Yes	Yes	Shovel dumper combination.																																
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	DGMS permission obtained																																
3m	Total area covered under excavation/pits	65.00 Ha	65.00 Ha	Meghahatuburu block																																
3n	Ore to OB ratio for the pit/mine during the year	1:0.68	1:0.51																																	
3o	Total area put in use under different heads at the end of year (In Ha)	<table border="1"> <tbody> <tr> <td>Mining</td> <td align="center">172.20</td> </tr> <tr> <td>Waste Dump</td> <td align="center">41.00</td> </tr> <tr> <td>Mineral Beneficiation Plant</td> <td align="center">40.00</td> </tr> <tr> <td>Mineral Storage</td> <td align="center">27.00</td> </tr> <tr> <td>Tailing Pond</td> <td align="center">40.93</td> </tr> <tr> <td>Roads, Conveyors, pipeline, electric line, railway</td> <td align="center">140.00</td> </tr> <tr> <td>Infrastructure</td> <td align="center">23.00</td> </tr> <tr> <td>Township</td> <td align="center">131.00</td> </tr> </tbody> </table>	Mining	172.20	Waste Dump	41.00	Mineral Beneficiation Plant	40.00	Mineral Storage	27.00	Tailing Pond	40.93	Roads, Conveyors, pipeline, electric line, railway	140.00	Infrastructure	23.00	Township	131.00	<table border="1"> <tbody> <tr> <td>Mining</td> <td align="center">172.20</td> </tr> <tr> <td>Waste Dump</td> <td align="center">41.00</td> </tr> <tr> <td>Mineral Beneficiation Plant</td> <td align="center">40.00</td> </tr> <tr> <td>Mineral Storage</td> <td align="center">27.00</td> </tr> <tr> <td>Tailing Pond</td> <td align="center">40.93</td> </tr> <tr> <td>Roads, Conveyors, pipeline, electric line, railway</td> <td align="center">140.00</td> </tr> <tr> <td>Infrastructure</td> <td align="center">23.00</td> </tr> <tr> <td>Township</td> <td align="center">131.00</td> </tr> </tbody> </table>	Mining	172.20	Waste Dump	41.00	Mineral Beneficiation Plant	40.00	Mineral Storage	27.00	Tailing Pond	40.93	Roads, Conveyors, pipeline, electric line, railway	140.00	Infrastructure	23.00	Township	131.00	Kiriburu and Meghahatuburu combined as per proposal Approved MP.
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		Topsoil	0.00	Topsoil	0.00
		Effluent Treatment Plant	0.00	Effluent Treatment Plant	0.00
		Others (Magazine, Rainwater harvesting, Back Filling Area1)	110.96	Others (Magazine, Rainwater harvesting, Back Filling Area1)	110.96
		Green Belt	10.04	Green Belt	6.25
3p	Production of ROM mineral during last five-year period, as applicable	Proposed		ACTUAL	
		2019-20	5550000 T	2019-20	3851100 T
		2020-21	4016194 T	2020-21	2980710 T
		2021-22	5241313 T	2021-22	3509370 T
		2022-23	3791368 T	2022-23	3676370 T
		2023-24	3228859 T	2023-24	3228760 T
3q	General remarks of inspecting officer on method of mining etc.	Nil			

Solid Waste Management-Dumping:

Sl. No.	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
4a.	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Nil	Nil	
4b	Location of topsoil, & OB & mineral reject dumps	22 Deg 06 Min 23.06 Sec North – 85 Deg 16 Min 38.30 Sec East. 22 Deg 06 Min 21.35 Sec North – 85 Deg 16 Min 48.37 Sec East. 22 Deg 06 Min 27.76 sec North – 85 deg 16 Min 52.29 Sec East 22 Deg 06 Min 31.12 Sec North – 85 Deg 16 Min 48.55 Sec East.	22 Deg 06 Min 23.06 Sec North – 85 Deg 16 Min 38.30 Sec East. 22 Deg 06 Min 21.35 Sec North – 85 Deg 16 Min 48.37 Sec East. 22 Deg 06 Min 27.76 sec North – 85 deg 16 Min 52.29 Sec East	
4c	Number of dumps within lease area and outside lease area	10	10	8 Stabilized, including 2 backfilled area Within Lease
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within Lease	Within Lease	
4e	Number of active & alive dumps	2	2	Back filled area
4f	Number of dead dumps	8	8	External dump Stabilized by afforestation
4g	Number of dumps stabilized	8	8	External dump Stabilized by afforestation
4h	Whether Retaining wall or garland drain all along dumps are there	yes	yes	
4i	Length of Retaining wall or garland drain all along dump	Around the dumps	500m+250m cemented concrete wall	All along the bottom of waste dump

4j	Number of settling ponds	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	Backfilling of waste generated during development is practiced along with reclamation through suitable native plantation.	

Solid Waste Management-Backfilling:

Sl. No.	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Yes	Yes	Backfilling is being done on non mineralized area for the waste generated during the year.
5b	Area under backfilling of mined out area	9.150 Ha	2.12 Ha	Violation 11(1) issued for reclamation and rehabilitation 6.2: Progressive Reclamation and Rehabilitation Plan of approved Modified Mining Plan
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Nil	Nil	Nil
5d	Total area fully reclaimed & rehabilitated	9.150 Ha	6.00 Ha	Rehabilitated by plantation
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Nil		

Progressive Mine Closure Plan:

Sl. No.	Item	Proposal (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	
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (ha)	Nil	Nil	
	ii) Afforestation done (ha)	Nil	Nil	
	iii) No. of sapling planted during the year	Nil	Nil	
	iv) Cumulative no. of plants	Nil	Nil	
	v) Any other specific method of rehabilitation	Nil	Nil	
	vi) Cost incurred on watch & care during the year	Nil	Nil	
6c	Compliance on reclamation and rehabilitation by back filling			
	i) Voids available for backfilling (L x B x D)	200 Mtr x 100 Mtr x 30 Mtr	180 Mtr X 90 Mtr X 30 Mtr	
	ii) Void filled by waste/tailings	9.15 Ha	2.12 Ha	
	iii) Afforestation on the backfilled area	9.15 Ha	6.00Ha	
	iv) Rehabilitation by making water	Nil	Nil	

	reservoir			
	v) Any other specific means	Nil	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Nil Nil Nil	Nil Nil Nil	Violation 11(1) issued for reclamation and rehabilitation 6.2: Progressive Reclamation and Rehabilitation Plan of approved Modified Mining Plan
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air, Water, Noise Monitoring under CPCB rules	Air, Water, Noise) Monitoring Done Quarterly under CPCB Rules	
6f	General remarks of inspecting & progressive closure operations.	Violation 11(1) issued for reclamation and rehabilitation 6.2: Progressive Reclamation and Rehabilitation Plan of approved Modified Mining Plan		

Mineral Conservation:

Sr.N O	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Nil	Nil	All ROM is transported to crushing plant by dumper and after size segregation dispatched to captive steel plant located at Bokaro and Rourkela and Bhilai.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	Only crushing and screening is done.
7c	Different grade of mineral sorted out at mines	58 % to below 60 % Fe 60 % to Below 62 % Fe 62 % To 65 % Fe 65 % and above	58 % to below 60 % Fe 60 % to Below 62 % Fe 62 % To 65 % Fe 65 % and above	
7d	Any beneficiation process at mines	Nil	Nil	Crushing and screening at plant.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues		All ROM is transported to crushing plant by dumper and after size segregation dispatched to captive steel plant located at Bokaro and Rourkela and Bhilai.	

Environment:

Sr.NO	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	No fresh area is broken. Mining limited to broken area only.
8b	Concurrent use or storage of topsoil	Nil	Nil	
8c	Separate dumps for overburden, waste rock rejects and fines (Rule 33)	Nil	Nil	Backfilling is being done on non-mineralized area for the waste generated during the year.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Yes	Proposed- 9.150 Ha Actual: 2.12 Ha
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes	Proposed: 9.15 Ha Actual: 6.00 Ha
8f	Baseline information on existence of plantation & additional plantation done (Rule 42)	1500	2500	
8g	Survival rate	60%	>80%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Two water sprinklers of 28 KL capacity.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area.	<p>Backfilling is practiced and then reclaiming the land by suitable native plantation. Air, water and noise monitoring done as per CPCB standards.</p> <p>Violation 11(1) issued for reclamation and rehabilitation 6.2: Progressive Reclamation and Rehabilitation Plan of approved Modified Mining Plan.</p>		

Compliance of Rule 45:

Sr.NO	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Submitted		
Sr.NO	Item			Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	<p>Mining Eng- Mr. Sanjay Kumar</p> <p>Geologist- Dr. Manoj Kumar</p> <p>Manager- Mr. Sanjay Kumar Singh</p>		

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	1. Area under pit – 65.00 Ha 2. Reclaimed Area – 12.68 Ha. 3. Dumps – 24 Ha		
9d	Scrutiny of Annual return on Afforestation	6.00 Ha	5.45 Ha	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost.		Ex-Mine Price- 2477.00	
9h	Scrutiny of Annual return on fixed assets	1. Industrial Building – 926084 /- 2. Land – 70425130/- 3. Residential Building – 85518354 /- 4. Plant and Machinery – 73311136 /- 5. Repairs and exploration etc. – 0/- 6. Total - 1487305214 /-		
9i	Scrutiny of Annual return on mining machineries	1. Dumper 100.000 Tonne – 7 2. Shovel (Hydraulic) 9.500 Cum- 3 3. Dozer 416.000 Hp - 7 4. Motor Grader 280.000 Hp - 2 5. Back Hoe 1.620 Cum - 1 6. Back Hoe 1.500 Cum - 2 7. Blast Host Drill 165.000 Mm - 4 8. Crane 11.000 Tonne- 1 9. Crane 20.000 Tonne- 1 10. Crane 40.000 Tonne- 1 11. Water Tanker 9000.000 Litre – 2 12. Water Tanker 28000.000 Litre – 2		

Details of violations observed during current inspection and compliance position of earlier violation pointed out: -
Earlier Violation: - Violation letter issued under Rule 11(i) of MCDR 2017 for non compliance of approved proposals. . Lessee intimated that Mining activities restricted over Meghahatuburu Block only and Central Block not opened yet for want of Stage II FC. *Stage II clearance not obtained yet.*
Present Violation: - Violation 11(1) issued for reclamation and rehabilitation 6.2: Progressive Reclamation and Rehabilitation Plan of approved Modified Mining Plan.

Date: - 03/12/2024

**Senior Assistant controller of mines
Indian Bureau of Mines, Ranchi
(Name of inspecting officer with designation & Date)**