

INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION
MCDR INSPECTION REPORT
Ranchi Regional Office

Mine file No: MCDR-MiFLOCu/2/2023-RCH-IBM_EZ

Mine code: 14BHR27005

Date of Inspection: 22.10.2024

General:

| Sl. No. | Particulars | Details |
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| 1. | Name of the Mines | Surda U/G Copper Mine |
| 2 | Total Lease Area (Ha) with breakup of non-forest land & forest land | 388.68 Ha Non forest : 239.65 Ha ;Forest: 149.03 Ha |
| 3. | Mine code | 14BHR27005 |
| 4 | IBM Registration Number under rule 45 of MCDR, 1988/2017 | IBM/6381/2011 |
| 5 | Name of the lessee, Address, Phone, email and fax number | Hindustan Copper Limited, Indian Copper Complex, Ghatsila |
| 6 | Village | Surda |
| 7 | Taluka/Mandal | Ghatsila |
| 8 | District | East Singhbhum |
| 9 | Pin code | 832303 |
| 10 | State | Jharkhand |
| 11 | Post Office | Ghatsila |
| 12 | Nearest Police Station | Mosabani |
| 13 | Nearest Railway station | Ghatsila |
| 14 | Date of Grant of Mining Lease | 16.06.1939 |
| 15 | Date of Execution | 26.12.1941 |
| 16 | Date of Opening of Mine | 1956 |
| 17 | Date of First Renewal, if applicable and its period & expiry | Renewal application submitted for the period of 20-year w.e.f. 16.06.1984 to 15.06.2004 and executed on 02.01.1990 |
| 18 | Date of second Renewal, if applicable and its period & expiry | Application for 2 nd renewal of the lease for a period of 10 years w.e.f. 16.06.2004 to 15.06.2014 and executed on 22.02.2007. Application for 3 rd renewal of the lease for a period of 6 years w.e.f. 16.06.2014 to 31.03.2020 and executed on 15.07.2017 Application for 4 th renewal of the lease for a period of 20 years w.e.f. 01.04.2020 to 31.03.2040 and executed on 26.09.2024 |
| 19 | Date of submission of renewal application if Mining operations are continuing under deemed extension | NA |
| 20 | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment | Shri Sanjiv Kumar Singh M/s Hindustan Copper Limited, Tamra Bhavan 1, Ashutosh Chowdhury Avenue, Kolkata -700019, West Bengal Phone: 033-22832623, Date of appointment: 09.06.2022 Email: sanjivkumarsingh@hindustancopper.com |
| 21 | Name of the Mine Agent with Address, phone email, fax number and date appointment in mines. | Shri Shyam SundarSethi Moubhnadar, Ghatsila, East-Singhbhum, Jharkhand- 832103 Mobile -9424661530 Date of appointment: 01.04.2023 Email: shyam_ss@hindustancopper.com |
| 22 | Name of the Mines Manager with Address, Phone, email, fax number and date of appointment | Shri Dibhyo Jyoti Shome, Moubhandar, Ghatsila, East- Singhbhum, Jharkhand, 832103; Mobile: 9608026844; Email: dibhyo_js@hindustancopper.com DOA in Mines: 05.09.2024; Experience: 18 yrs |

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| 23 | Name of the mining engineer, qualification and total experience with Address, phone, email, fax number and date of appointment in Mines. | Shri Dibhyo Jyoti Shome, Moubhandar, Ghatsila, East- Singhbhum, Jharkhand, 832103 Mobile: 9608026844; Email: dibhyo_js@hindustancopper.com DOA in Mines: 05.09.2024; Experience: 18 yrs |
| 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. | RAN/ESB/Cu/MP-34/2021-22;27.04.2022 Period: 01.04.2022 to 31.03.2025 |
| 26 | Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any. | RAN/ESB/Cu/MP-34/2021-22 27.04.2022 Period: 01.04.2022 to 31.03.2025 |
| 27 | Mineral(s) granted in lease and proved for mining | Copper Ore |
| 28 | Method of Mining (Opencast, Underground) | Underground |
| 29 | Category (Fully Mechanized, Others, or Manual) | Fully Mechanized |
| 30 | Captive/non-captive | Captive |

Exploration

| Sl.No | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|-------|--|--|---|--|
| 1a | Backlog of previous year | Nil | NA | |
| 1b | Exploration over lease area for Geological axis 1 or 2. | 44 U/G Borehole with 4400 meters during 2023-24 | Nil | 8446 meters Surface drilling has been carried out through M/s MECL |
| 1c | Exploration Agency & Expenditure in lakh Rupee during the year | M/s MECL | total expenditure incurred: 12.37Cr in FY 2023-24 | total expenditure incurred: 12.37Cr in FY 2023-24 |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | NA | NA | NA |
| 1e | Balance reserves | 31984095 tons at 1.00% Cu (as on 01.04.2021) | 34776858 tons at 1.00% Cu (as on 31.03.2024) | As per furnished records. |
| 1f | General remarks of inspecting officer on geology, exploration etc. | Due to the non-execution of the mining lease, mine production, and development activities has stopped in 2023-24 | | |

Development

| Sl.No | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|-------|--|--|--|--|
| 2a | Location of development w.r.t lease area | X-cut:420 mtrs Interconnect:465 mtrs Level:810 mtrs Shaft:156 mtrs Total:1851 mtrs | 0 meters 0 meters 0 meters 0 meters 0 meters | Due to the non-execution of the mining lease, mine production, and development activities has stopped in 2023-24 |
| 2b | Separate benches in top soil, overburden and mineral (Rule 15) | Nil | Nil | Due to the non-execution of the mining lease, mine production, |

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| | | | | and development activities has stopped in 2023-24 |
| 2c | Stripping ratio or ore to OB ratio | Nil | Nil | Due to the non-execution of the mining lease, mine production, and development activities has stopped in 2023-24 |
| 2d | Quantity of topsoil generation in m ³ | Nil | Nil | ok |
| 2e | Quantity of overburden generation in m ³ | Nil | Nil | Due to the non-execution of the mining lease, mine production, and development activities has stopped in 2023-24 |
| 2f | General remarks of inspecting officer on development etc. | Due to the non-execution of the mining lease, mine production, and development activities has stopped in 2023-24 | | |

Exploitation

| Sl.No | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|-------|---|---------------------------|-----------------------|---------|
| 3a | Number of pits proposal for production | Nil | Nil | NA |
| 3b | Quantity of ROM mineral production proposed(cum) | 134276 cum (386717 MT) | 0 cum (0 MT) | |
| 3c | Recovery of salable/usable mineral from ROM production (tone) | 134276 cum (386717 MT) | 0 cum (0 MT) | |
| 3d | Quantity of mineral reject generation (cum) | 20496 cum (59026 MT) | 0 cum (0 MT) | |
| 3e | Grade of mineral reject generation and threshold value declared | NA | NA | NA |
| 3f | Quantity of sub-grade mineral generation | Nil | Nil | NA |
| 3g | Grade of sub-grade mineral generation | NA | NA | NA |
| 3h | Manual/Mechanized method adopted for segregating from ROM | NA | NA | NA |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject | Nil | NA | NA |
| 3j | Provision of drilling & blasting in mineral benches | NA | NA | NA |
| 3k | Provision of mining machineries in mineral benches | NA | NA | NA |
| 3l | Whether height of benches in overburden and mineral | NA | NA | NA |

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| | suitable for method of mining proposed in MP/SOM | | | |
| 3m | Total area covered under excavation/pits | Nil | NA | NA |
| 3n | Ore to OB ratio for the pit/mine during the year | Nil | NA | NA |
| 3o | Total area put in use under different heads at the end of the year: | 66.33 | 66.33 | Within the envisaged proposal. |
| 3p | Production of ROM (in tons) mineral during last five-year period, as applicable: | 2019-20: 443110 2020-21: 317238 2021-22: 400587 2022-23: 310992 2023-24: 386717 | 2019-20: 245247 2020-21: 0 2021-22: 0 2022-23: 26746 2023-24: 0 | Due to the non-execution of the mining lease, mine production, and development activities has stopped in 2023-24 |
| 3q | General remarks of inspecting officer on method of mining etc. | Due to the non-execution of the mining lease, mine production, and development activities has stopped in 2023-24 | | |

Solid Waste Management-Dumping

| Sl.No | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|-------|---|---|-----------------------|--|
| 4a. | Separate dumping of topsoil, OB & mineral reject (Rule 32,33) | NA | NA | No proposal envisaged in the mining plan |
| 4b | Location of topsoil, & OB & mineral reject dumps | NA | NA | No proposal envisaged in the mining plan |
| 4c | Number of dumps within lease area and outside lease area | NA | NA | No proposal envisaged in the mining plan |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | NA | NA | No proposal envisaged in the mining plan |
| 4e | Number of active & alive dumps | NA | NA | No proposal envisaged in the mining plan |
| 4f | Number of dead dumps | NA | NA | No proposal envisaged in the mining plan |
| 4g | Number of dumps stabilized | NA | NA | No proposal envisaged in the mining plan |
| 4h | Whether Retaining wall or garland drain all along dumps are there | NA | NA | No proposal envisaged in the mining plan |
| 4i | Length of Retaining wall or garland drain all along dump | NA | NA | No proposal envisaged in the mining plan |
| 4j | Number of settling ponds | NA | NA | No proposal envisaged in the mining plan |
| 4k | Specific comments of inspecting officer on waste dump management | No proposal envisaged in the mining plan. | | |

Solid Waste Management-Backfilling

| Sl.No | 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 | 0 | 0 | No proposal envisaged in the mining plan |
| 5b | Area under backfilling of mined out area | 0 | 0 | No proposal envisaged in the mining plan |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | NA | NA | No proposal envisaged in the mining plan |
| 5d | Total area fully reclaimed & rehabilitated | NA | NA | No proposal envisaged in the mining plan |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc. | No proposal envisaged in the mining plan. | | |

Progressive Mine Closure Plan

| Sl.No | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|-------|--|---------------------|-----------------------|--|
| 6a | Whether Annual report on PMCP submitted on time and correctly-Rule 23E (2). | Submitted on time | Submitted on time | ok |
| 6b | Management of worked/mined out benches (i) Area available for rehabilitation (ha) (ii) Afforestation done (ha) (iii) No. of sapling 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 | NA | NA | No proposal envisaged in the mining plan |
| 6c | Compliance on reclamation and rehabilitation by back filling i) Voids available for backfilling (LxBxD) 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 | No proposal envisaged in the mining plan |
| 6d | Compliance of Rehabilitation of waste land within lease i) Afforestation ii)Area rehabilitated(ha) iii)Method of rehabilitation | NA | NA | No proposal envisaged in the mining plan |

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| 6e | Compliance of Environmental monitoring (core zone & buffer zone) | Air Quality, Surface water Quality, Ground water Quality, Noise Survey: Quarterly reporting | Air Quality, Surface water Quality, Ground water Quality, Noise Survey: Quarterly reporting | No proposal envisaged in the mining plan |
| 6f | General remarks of inspecting & progressive closure operations. | Compliance of Environmental monitoring (core zone & buffer zone) is being carried out as per envisaged proposal. | | |

Mineral Conservation

| Sl.No | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|-------|--|--|-----------------------|--|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 386717 MT (0.84 %) | 0 MT | Within the envisaged proposal. |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical | Nil | Nil | No proposal envisaged in the mining plan |
| 7c | Different grade of mineral sorted out at mines | Not proposed | NA | No proposal envisaged in the mining plan |
| 7d | Any beneficiation process at mines | No beneficiation process available at mine site. | NA | No proposal envisaged in the mining plan |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | No proposal envisaged in the mining plan | | |

Environment

| Sl.No | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|-------|---|--|--|--|
| 8a | Separate removal and utilization of topsoil (Rule 32) | NA | NA | No proposal envisaged in the mining plan |
| 8b | Concurrent use or storage of topsoil | NA | NA | No proposal envisaged in the mining plan |
| 8c | Separate dumps for overburden, waste rock rejects and fines (Rule 33) | NA | NA | No proposal envisaged in the mining plan |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | NA | NA | No proposal envisaged in the mining plan |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | NA | NA | No proposal envisaged in the mining plan |
| 8f | Baseline information on existence of plantation & additional plantation done (Rule 42) | 500 | 500 | No proposal envisaged in the mining plan |
| 8g | Survival rate | 60% | 60% | No proposal envisaged in the mining plan |
| 8h | Water sprinkling on roads to control airborne dust | Proposed | Water sprinkling is being done regularly | Ok |
| 8i | General remarks of inspecting officer on | Water sprinkling is being done regularly in and around the mine site. Plantation is being carried out This sustain the aesthetic | | |

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| aesthetic beauty in and around mines area. | beauty in and around mines area. |
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Compliance of Rule 45

| Sl.No | Item | Comments | | Remarks |
|-------|---|---|---|------------------------|
| 9a | Status of submission of Monthly and Annual returns | Monthly Return submitted up to September 2024 as on 31.10.2024; Annual Return submitted for FY 2023-2024: 29.06.24 | | Found ok with records. |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Mining Engineer: Dibhyo Jyoti Shome Mining Manager: Dibhyo Jyoti Shome Geologist: Amit Degvekar | Mining Engineer: Dibhyo Jyoti Shome Mining Manager: Dibhyo Jyoti Shome Geologist: Amit Degvekar | Found ok with records. |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Total area put to use: 66.33 ha | Total area put to use: 66.33 ha | Found ok with records. |
| 9d | Scrutiny of Annual return on afforestation | 500 number of trees planted during the year 2023-24 within the Lease area | 500 number of trees planted during the year 2023-24 within the Lease area | Found ok with records. |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & Quantity) | Nil | Nil | Found ok with records. |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Nil | Nil | Found ok with records. |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost. | 0/- | 0/- | |
| 9h | Scrutiny of Annual return on fixed assets | Rs 78,92,29,216/- | Rs 78,92,29,216/- | Found ok with records. |
| 9i | Scrutiny of Annual return on mining machineries | Winding Engine (Elect):3 Vent Fan: 2 Air Compressor:7 Generator:2 Pumps: 13 Haulage:01 Rock Shovel Loader :10 Rock Drill: 42 LHD: 4 Loco: 8 Crane:5 | Winding Engine (Elect):3 Vent Fan: 2 Air Compressor:7 Generator:2 Pumps: 13 Haulage:01 Rock Shovel Loader :10 Rock Drill: 42 LHD: 4 Loco: 8 Crane:5 | Found ok with records. |

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

Earlier Violation: Rule 11(1) dated 23.01.2019; Complied.

Current Violation: Nil