

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR INSPECTION REPORT
BANGALORE REGIONAL OFFICE

File No- MCDR-MiFLOFE/30/2023-BNG-IBM_RO_BNG

Mine Code- 30KAR03166

General

| S N | Particulars | Details |
|------------|--|---|
| 1 | Name of the Mine | Dharmapura Iron Ore Mine (ML No-2543) |
| 2 | Date of Inspection | 04.10.2024 |
| 3 | Name of Inspecting Officer | Shri Ashok Kumar Pany, AME |
| 4 | Name of official accompanying inspection | Shri R. Shivananda Reddy, Mines Manager |
| 5 | Last date of Inspection & Officer | 27.12.2023 Shri Sandeep Kumar Singh, SR ACOM |
| 6 | Total Lease Area (Ha) with breakup of Non-forest and forest land | Forest Land- 10.31 ha (as per CEC) , 10.00 (as per Lease Deed) Non Forest Land- Nil Total Lease area- 10.31 ha (as per CEC) , 10.00 (as per Lease Deed) |
| 7 | Mine code | 30KAR03166 |
| 8 | IBM Registration Number under rule 45 of MCDR, 2017 | IBM/372/2011 |
| 9 | Name of the lessee, Address, phone, email and fax number | Shri U. Krishna Prasad (Legal Representative) Sri. V.N.K Menon No.6 KHB Colony, Sandur, Ballari, Karnataka-583119 Email-vnk2543@gmail.com |
| 10 | Village | Dharmapura |
| 11 | Taluka/Mandal | Sandur |
| 12 | District | Ballari |
| 13 | Pin code | 583119 |
| 14 | State | Karnataka |
| 15 | Post office | Sandur |
| 16 | Nearest police station | Sandur |
| 17 | Nearest Railway station | Yeshwanthanagar & Hosapete |
| 18 | Date of Grant of Mining Lease | 22.03.2007 |
| 19 | Date of Execution | 22.03.2007 |
| 20 | Date of Expiry | 21.03.2057 |
| 21 | Date of opening of Mine | 16.05.2007 |
| 22 | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment | NA |

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| 23 | Name of the Mine Agent with Address, phone, email, fax number and date of appointment | NA |
| 24 | Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines | Shri R. Shivananda Reddy, Laxminarayan Nilaya, Venkateshwara swamy temple road, Smiore colony, Sandur- 583119 Ph-9448395508, Email-reddyvnk2@gmail.com, Date of Appointment:18.02.2010 |
| 25 | Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | Shri Yallappa, B.E. Mining Engg, Smiore colony, Sandur- 583119 Ph- 9448286864/9886943793 Email-yallappaky123@gmail.com Date of Appointment: 13/08/2024 Experience:7 years |
| 26 | Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | Shri. Konaki Rajashekar, M.SC Geology, Smiore colony, Sandur- 583119 Ph- 9448286865/9966023524 Email-rajasekhar.k.geo@gmail.com Date of Appointment: 13.03.2024 Experience: 5 years |
| 27 | Date of Approval of Review of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any. | Modification of Mining Plan approved vide letter No. 279/869/2005/BNG dated 06.06.2023 for the period 2023-24 to 2026-27 |
| 28 | Mineral(s) granted in lease and proved for mining | Iron |
| 29 | Method of Mining(Opencast, Underground) | Opencast |
| 30 | Category (Fully Mechanized, Others or Manual) | Category-A, Fully Mechanized |
| 31 | Captive/Non Captive | Non-Captive |

Exploration

| S.N. | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|------|--------------------------|---------------------|-----------------------|-----------------|
| 1a | Backlog of previous year | Nil | NA | No Backlog from |

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| | | | | previous year. |
| 1b | Exploration over lease area during the year for Geological axis 1 or 2. | Nil | NA | No exploration proposal during the year. |
| 1c | Exploration Agency & Expenditure in lakh Rupees during the year | Nil | NA | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | As per approved MMP:- G1-6.04 Ha, Non-mineralised area-4.27 Ha | G1-6.04 Ha, Non-mineralised area-4.27 Ha | The mineralized area has been explored under G1 Level. |
| 1e | Balance reserves as on 01.04.2024 | Reserve- : 1814075 Tonne Resource : 1532046 Tonne Total : 3346121 Tonne | | The Balance reserve/resource figures as per Annual Return submitted for FY 2023-24 and after depleting production from last approved document. |
| 1f | General remarks of inspecting officer on geology, exploration etc. | The lease area is hilly in terrain with only one Ore band of Iron ore. The Iron Ore band is having a strike length of 320m with average width 170m and average depth of 26.9 m. The grade of Iron Ore varies from 58% to 65 % Fe. The potential mineralized area 6.04 ha has been explored under G1 level and no further exploration proposal. | | |

Development

| S.N. | Item | Proposals | Actual work | Remarks |
|------|---|---|---|--|
| 2a | Location of development w.r.t. lease area | N 1666350 to 1666500, E 662442 to 662550 | N 1666350 to 1666500, E 662442 to 662550 | Excavation carried out within proposed area. |
| 2b | Separate benches in topsoil, overburden and mineral | No proposal for generation of top soil. Separate Benches in overburden and mineral is proposed | Carried out | |
| 2c | Stripping ratio or ore to OB ratio | 1: 0.07 (tonne/Cum) | 1:0.07 (tonne/Cum) | |
| 2d | Quantity of topsoil generation in m ³ | Nil | Nil | |
| 2e | Quantity of overburden/waste generation in m ³ | 6512.27 Cum | 6773 Cum | |
| 2f | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | The open cast mine is developed in single pit operation with regular benches. The type of deposit is bedded, stratiform and tabular form with irregular habit. The adopted method is suitable to the type of the deposit. | | |

Exploitation

| S.N. | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
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|----|--|--|---|--|
| 3a | Number of pits proposed for production | One Pit | One Pit | |
| 3b | Quantity of ROM production proposed | 100000 tonne | 100000 tonne | |
| 3c | Recovery of salable/usable mineral from ROM production | 100000 tonne (100% of ROM) | 100000 tonne (100% of ROM) | |
| 3d | Quantity of mineral reject generation | No proposal of generation of Mineral rejects. | Nil | |
| 3e | Grade of mineral reject generation and threshold value declared | Threshold value- +45% Fe Cutoff grade- +52% Fe | As per proposal | |
| 3f | Quantity of sub-grade mineral generation | No proposal of generation of sub-grade. | Nil | |
| 3g | Grade of sub-grade mineral generation | No proposal of generation of sub-grade. | Nil | |
| 3h | Manual / Mechanized method adopted for segregating from ROM | Mechanized | Mechanized | Deployed 250TPH Crusher & Screening for segregating from ROM |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject | No beneficiation study proposed | Nil | |
| 3j | Provision of drilling & blasting in mineral benches | Provision of drilling & blasting proposed in mineral benches | No drilling blasting carried out during the year | Drilling, blasting is proposed for incidental hard rock formation. |
| 3k | Provision of mining machineries in mineral benches | Excavator – 1.6 Cum Loader- 2.5 Cum Dumper – 30 tonne | Excavator – 1.4 Cum Loader- 2.5 Cum Dumper – 25 tonne | |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Bench Height-8 m, Width- 3.5 m | Bench Height-8 m, Width- 3.5 m | The Lessee obtained relaxation from DGMS for bench width. |
| 3m | Total area covered under excavation/pits | 4.53 ha at the end of 2023-24 | 4.53 ha | Within proposed area under mining. |
| 3n | Ore to OB ratio for the pit/mine during the year | 1: 0.07 | 1: 0.07 | |

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| | | Ore- 100000 tonne Waste- 6512.27 Cum | Ore- 100000 tonne Waste- 6773 Cum | |
| 3o | Total area put in use under different heads at the end of year | Mining – 4.53 Ha. Dumps – 2.0 Ha. Infrastructure/Road – 0.71 Ha Total- 7.24 Ha | Mining – 4.53 Ha. Dumps – 2.0 Ha. Infrastructure/Road – 0.71 Ha Total- 7.24 Ha | Within proposed land use limit |
| 3p | Production of ROM mineral during last five-year period, as applicable | 2019-20-100000 Tonne 2020-21- 100000 Tonne 2021-22 -100000 Tonne 2022-23-100000 Tonne 2023-24- 100000 Tonne | 2019-20-99996 Tonne 2020-21- 99996 Tonne 2021-22 - 97850 Tonne 2022-23- 100000 Tonne 2023-24-100000 Tonne | |
| 3q | General remarks of inspecting officer on method of mining etc. | Mechanized opencast mining operation is carried out with shovel – dumper combination. The lessee obtained relaxation from DGMS for reduction of bench width in final pit profile. The stacking mineral has been carried out in scattered manner extending near to working face. The deviation pointed out to lessee vide this office violation letter dated 22.10.2024. | | |

Solid Waste Management-Dumping

| S.N | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|-----|---|--|--|---|
| 4a | Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) | Separate dumping of OB/waste proposed | Carried out | No proposal of generation of topsoil/mineral rejects. |
| 4b | Location of topsoil, OB & mineral reject dumps | Temporary Waste dumping near ID3 <u>Location:</u> N1666438 to 1666490 E 662645 to 6626475 | Temporary Waste dumping near ID3 <u>Location:</u> N1666438 to 1666490 E 662645 to 6626475 | Waste dumping carried out within proposed area. |
| 4c | Number of dumps within lease area and outside lease area | 03 Nos. – within lease area No dumps outside lease area | | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | 2 nos. (ID-1&2) - Outside UPL 1 nos. (ID-3) -Within UPL | | |
| 4e | Number of active & alive dumps | 2 nos. of active dump | 2 nos. of active dump | |
| 4f | Number of dead dumps | 01 | 01 | |
| 4g | Number of dumps stabilized | 01 | 01 | |
| 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 | Retaining wall- Nil, Garland Drain- 335 m proposed during the year 2023-24 | Garland Drain- 335 m has been constructed | |
| 4j | Number of settling ponds | No proposal | Nil | |
| 4k | Specific comments of inspecting officer on waste dump management | Waste dumping has been carried out as per the proposed location. The construction and maintenance of waste dump protective | | |

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| | | measures has been carried out. |
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Solid Waste Management-Backfilling

| S.N. | 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 | No proposal | Nil | Mineral not exhausted from pit |
| 5b | Area under backfilling of mined out area | No proposal | Nil | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | No proposal | Nil | No generation of top soil |
| 5d | Total area fully reclaimed & rehabilitated | No proposal | Nil | |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc. | The mineral has not been exhausted from quarry and no proposal of back filling during the year. | | |

Progressive Mine Closure Plan

| S.N. | Item | Proposals (2023-24) | Actual work (2023-24) | Remarks |
|------|--|---|-----------------------|--|
| 6a | Whether Annual report on PMCP submitted on time and correctly - Rule 26. | To be submitted before 1 st July | Submitted | |
| 6b | Area available for rehabilitation (ha) | No proposal | Nil | |
| 6c | Afforestation done (ha) | 0.23 ha | 0.23 ha | |
| 6d | No. of saplings planted during the year | 400 nos. | 400 nos. | |
| 6e | Cumulative no. of plants | Total 2136 nos. of tree planted. | | - |
| 6f | Any other specific method of rehabilitation | No proposal | Nil | - |
| 6g | Cost incurred on watch & care during the year | Rs. 100000.00 | Rs. 150000.00 | As reported by lessee during inspection. |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L X B X D). | No proposal | Nil | - |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings. | No proposal | Nil | - |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area. | No proposal | Nil | - |

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| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir. | No proposal | Nil | - |
| 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 | Nil | - |
| 6n | Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation | No proposal | Nil | - |
| 6o | Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation | No proposal | Nil | - |
| 6p | Compliance of Environmental monitoring (core zone & buffer zone) | Quarterly monitoring of Noise, Air and Ground water quality proposed | Monitoring carried out quarterly. | Within permissible limit. |
| 6q | General remark of inspecting officer on PMCP compliance and progressive closure operation etc. | The afforestation is carried out as per proposal during the year. | | |

Mineral Conservation

| S.N. | Item | Proposals | Actual work | Remarks |
|------|--|---|---|-----------------------------------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Grade wise sorting within lease area | Grade wise sorting within lease area | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical | Mechanized | Mechanized | |
| 7c | Different grade of mineral sorted out at mines | 60% to below 62% Fe (Lumps), 62% to below 65% Fe (Lumps), 65% Fe & above, 58% to below 60% Fe (Fines), 60% to below 62% Fe (Fines), 62% to below 65% Fe (Fines) | 60% to below 62% Fe (Lumps), 62% to below 65% Fe (Lumps), 65% Fe & above, 58% to below 60% Fe (Fines), 60% to below 62% Fe (Fines), 62% to below 65% Fe (Fines) | |
| 7d | Any beneficiation process at mines | No proposal | No Beneficiation plant exists within lease. | Dry Crushing & Screening (250TPH) |

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| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | No Beneficiation plant installed in the mine and only screening and crushing is carried out. |
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Environment

| S.N. | Item | Proposals | Actual work | Remarks |
|------|---|---|---------------|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No proposal of generation of Topsoil | Not generated | |
| 8b | Concurrent use or storage of topsoil | No proposal | Nil | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Separate waste dump proposed | Carried out | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No proposal | Nil | |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No proposal | Nil | |
| 8f | Baseline information on existence of plantation & additional plantation done (Rule 41) | 2136 Nos. of cumulative plantation up to 31.03.2024 | | |
| 8g | Survival rate | 75% | 70% | |
| 8h | Water sprinkling on roads to control airborne dust | Water sprinkling on haul roads proposed to suppress the dust | Carried out | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | The aesthetic beauty in & around the mine area is maintained. | | |

Compliance of Rule 45

| S.N. | Item | COMMENTS | | Remarks |
|------|---|---|--------------------------|---|
| 9a | Status of submission of Monthly and Annual returns | Monthly and Annual Return submitted within due time. | | |
| S.N. | Item | Details Given in AR. | Observation of I/Officer | Remarks |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Information on Mining Engineer, Geologist and Manager Furnished in the Annual Return. | The same were appointed. | The information on exploration in Sl. No. 1(i) of PART-V is not furnished |

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| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Pit – 4.53 Ha Dump – 2.0 Ha Infrastructure area- 0.71 | Within proposed land use. | correctly and the same is pointed out to lessee through show cause notice dated 22.10.2024. |
| 9d | Scrutiny of Annual return on afforestation | 400 Nos. within lease area | Plantation carried out | |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity) | Nil | Appears to be correct. | |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | ROM closing stock- Nil <u>Grade wise stock-</u> 45% to below 51% Fe (Lump)-52845.52tonne 60% to below 62% Fe (Lump)-13200.00tonne 62% to below 65% Fe (Lump)-9700.00tonne 58% to below 60% Fe (Fines)- 4000.00tonne 60% to below 62% Fe (Fines)- 14819.07tonne 62% to below 65% Fe (Fines)- 22300.64tonne | Appears to be correct. | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | Cost of production Rs. 2130.84 <u>Ex-mine price</u> 58% to below 60% Fe (Lump)- Rs.4000.00 60% to below 62% Fe (Lump)- Rs.3960.83 62% to below 65% Fe (Lump)- Rs.5547.50 65% Fe and above-Rs. 6400.00 58% to below 60% Fe (Fines)- Rs.3487.41 60% to below 62% Fe (Fines)- Rs.3999.05 62% to below 65% Fe (Fines)- Rs.5967.37 | Appears to be correct. | |
| 9i | Scrutiny of Annual return on fixed assets | Rs. 1020508.00 | Appears to be correct. | |
| 9k | Scrutiny of Annual return on mining machineries | Shovel- 1.4 Cum (2 nos.) Loader-2.5 Cum (1 nos.) Dumper- 25 Tonne (3 nos.) Water Tanker- 8 KL (1 nos.) | Deployed in the mine. | |

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

| Violation | | | Show cause | | |
|---------------------|------------|---------------|---------------------|------------|---------------|
| Rule No. | Issued on | Compliance on | Rule No. | Issued on | Compliance on |
| 11(1) of MCDR, 2017 | 22.10.2024 | -- | 45(7) of MCDR, 2017 | 22.10.2024 | -- |

(ASHOK KUMAR PANY)

Assistant Mining Engineer