

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

Review and updation of Mining Plan REPORT

Jabalpur regional office

Mine file No : MP/JBP/LAT-16

Mine code : 75MPR18015

- (i) Name of the Inspecting : **NQ08**) **KATHROJU NAVEEN**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Rakesh Chowbey Q.P and Shri Nagesh Kushwal Lesse
Official with
Designation
- (iv) Date of Inspection : 21-DEC-22
- (v) Prev.inspection date : 12-OCT-18

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KURRA (7.30 HA)**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : JABALPUR
Village : KURRA
Taluka : SIHORA
Post office : PIPARIA
Pin Code : 483220
FAX No. : NIL
E-mail : NIL
Phone : 94251500837/ 07624-265026
- (f) Police Station : SIHORA
- (g) First opening date : 01-MAR-00
- (h) Weekly day of rest : SUN
2. Address for : SHRI VINOD KUMAR SHRIVASTAVA
correspondance P.O. GANDHIGRAM (BUDAGAR), DIST. JABALPUR (M.P.)
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : LATERITE Main
MANGANESE ORE Associated

5. Name and Address of the

Lessee : VINOD KUMAR SHRIVASTAVA
 P.O.GANDHI GRAM,
 TAH.SIHORA, JABALPUR
 MADHYA PRADESH
 Phone:94251500837/ 07624-265026
 FAX :NIL

Owner : VINOD KUMAR SHRIVASTAVA
 P.O.GANDHI GRAM,
 TAH.SIHORA, JABALPUR
 MADHYA PRADESH
 Phone: 94251500837/ 07
 FAX : 07624-265026

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|-------------------------------|---|--------------------------------|-----------|
| 6. Date of approval of Mining | : | Mining Scheme rule 12 MCDR1988 | 20-JUL-09 |
| Plan/Scheme of Mining | : | Mining Scheme rule 12 MCDR1988 | 06-MAY-15 |
| | : | MP review under 17(1) MCR 2016 | 30-NOV-18 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|------------------------------|--|---|
| 1a | Backlog of previous year | 9 No's of PBH during 2018-19 | 8 No's PBH Completed during the Year 2021-22 | |
| 1b | Exploration over lease area for geological axis 1 or 2 | G-1 | G-1...5.50 ha G-2 ..1.80 ha | |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | 3.5-4.0 | 4.15 & Om Tiger Consultancy and Research Centre | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | 7.30 ah | 1.80 ha need to be explored further to bring the entire under G1 axis. | |
| 1e | Balance reserve as on 01/04/20 | 4,36,775 T | 4,36,775 T | As per the last approved document the total Mineable reserves were 5,38,791 T out of which 1,02,016 T were proposed to be exploited by the 01/04/22. But the achievement was 75,799 T hence the balance reserves as on 01.04.2022 were 4,63,011 T |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--|------------------------------|---------|
| 2a | Location of development w.r.t.lease area | E412734- E412929 N2598105- N2598210 | Working done as per Proposal | |

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| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Separate benches were proposed to be made in laterite and manganese Bearing formation. | Separate Benches are maintained. | |
| 2c | Stripping ratio or ore to OB ratio | 1:0.80 Proposed Mn production is 9491 Cu.m i.e 30371 T And the proposed waste generation is 37802 Cu.m | 1:0.80 as per the proposed | 26065T of Mn produced corresponding to the Waste generation of 32210 Cu.m. |
| 2d | Quantity of topsoil generation in m3 | No top soil is present | Not Applicable | manganese Deposit is being covered by the latterite capping on hily terrain. |
| 2e | Quantity of overburden generation in m3 | 37802 m3 of intercalated waste generation proposed with phyllitic formation. | 32210 m3 of intercalated waste reported for the RY | |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | | | 26065T of Mn produced corresponding to the Waste generation of 32210 Cu.m. Development was as per the proposal. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---------------------------------------|-----------|-------------|---------|
| 3a | Number of pit proposed for production | one | One | |

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| 3b | Quantity of ROM mineral production proposed | 30371T of Manganese ore proposed for the RY | 26065 T of Manganese ore produced against the proposed 30371 T during the RY |
| 3c | Recovery of sailable/usable mineral from ROM production | 20% | 20.18 % al,most in line with the proposed recovery with the reported deatils. |
| 3d | Quantity of mineral reject generation | Not Proposed | Nil |
| 3e | Grade of mineral rejects generation and threshold value declared. | Not Proposed | Nil |
| 3f | Quantity of sub grade mineral generation. | Not proposed | NIL |
| 3g | Grade of sub grade mineral generation | Not proposed | Nil |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Manual Segregation is proposed | mineral is being scrteneed for sorting accoring to size and later manual method for segregating phyllitic waste from manganese ore. |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | Not proposed | Nil |
| 3j | Provision of drilling and blasting in mineral benches | Not proposed | Not Applicable |
| 3k | Provision of mining machineries in mineral benches | Mining was proposed to be carried out by using excavator/loader & dumper | Excavator and trucks were being used for exploiting the mineral. |

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| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | 2m bench height in late rite capping and 5-6m height in manganese was Proposed. | Bench heights were found not systematically maintained | Bench width and heights were not systematically maintained for which violation has been issued under rule 11(1) of the MCDR 2017. |
| 3m | Total area covered under excavation/pits | 2. 87 area was proposed under excavation during the proposal period. | 2.48 ha Area was covered under pits. | As per the submitted drone data only 2.48 ha is under pits. |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0.80 was propose corresponding to the Manganese production of 30371T and the Intercalated waste generation of 37802 Cu.m | 1:0.80 was reported corresponding to the Manganese production of 26065T and the Intercalated waste generation of 32210 Cu.m | |
| 3o | Total area put in use under different heads at the end of year | 5.08 ha area ws proposed to put in sed under various heads. | 4.47 ha is put under use as per the reported data. | |
| 3p | Production of ROM mineral during the last five year period as applicable | 2017-18.....33775 ton 2018-19.....16752 ton 2019-20.....23888 ton 2020-21.....31005 ton 2021-22.....30371 ton 2022-23 (till date).....25603 ton | 2017-18....3747T 2018-19....20638T 2019-20....16295T 2020-21....12782 20T21-22....26065T 2022-23 (till date).....15135 T | Only 26065 T of Mn produced against the proposed 9491Cu.m for which violation was issued under Rule 11(1) of MCDR 2017 |

3q General remarks of inspecting officers on method of mining etc.

Only 26065 T of Mn produced against the proposed 9491Cu.m for which violation was issued under Rule 11(1) of MCDR 2017

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|---|---|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | No top soil is present seperate benches proposed in laterite and Manganese. | No top soil is present seperate beches mainting in latterite and Manganese ore. | |
| 4b | Location of topsoil, OB and mineral reject dumps | Western part of the lease area | Waste Dump-WD-3 and Waste dump-WD-4 are found extended beyond the lease boundary on Eastern side and Waste dump-WD-5 and Stack-1 encroached the lease boundary on the southern side of the lease. | |
| 4c | Number of dumps within lease area and outside of lease area | One | Two | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Western part | Extended beyond the lease on eastern side | |
| 4e | Number of active and alive dumps. | one | two | |
| 4f | Number of dead dumps. | Not Proposed | Nil | |
| 4g | Number of dumps established. | Not Proposed | Nil | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Not proposed | Nil | |

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| 4i | Length of Retaining wall or garland drain all along dumps | Not Proposed | Nil | |
| 4j | Number of settling ponds | Not Proposed | Nil | |
| 4k | Specific comments of inspecting officer on waste dump management | | | Waste Dump-WD-3 and Waste dump-WD-4 are found extended beyond the lease boundary on Eastern side and Waste dump-WD-5 and Stack-1 encroached the lease boundary on the southern side of the lease. |

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. | Not proposed | Nil | |
| 5b | Area under backfilling of mined out area | Not proposed | Nil | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | Not proposed | Nil | |
| 5d | Total area fully reclaimed and rehabilitated | Not proposed | Nil | |

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| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | Mineral is not completely exploited hence backfilling neither proposed nor carried on. Generated intercalated waste dumped on the eastern side of the lease extended beyond the lease boundary for which violation has been issued. |
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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). | To be Submitted. | Not Submitted | |
| 6b | Area available for rehabilitation (ha) . | Not Proposed | Nil | |
| 6c | afforestation done (ha) . | 0.1125 ha | Nil | |
| 6d | No. of saplings planted during the year | | 200 saplings were planted during the RY | |
| 6e | Cumulative no .of plants | | 600 | |
| 6f | Any other method of rehabilitation | Not proposed | Nil | |
| 6g | Cost incurred on watch and care during the year | Not Avaialble | NA | |

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| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | Not proposed | Nil |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | Not proposed | Nil |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area | Not proposed | Nil |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | Not proposed | Nil |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | Not proposed | Nil |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | Not proposed | Nil |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | Not proposed | Nil |

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|----|---|--------------|-----|---|
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | Not proposed | nil | |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Not proposed | Nil | |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | | | yearly report setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved mine closure plan, has not been submitted for which violation has been issued under rule 26(2) of MCDR-2017. |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------------------------|--|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Manual Sorting was proposed | Mechanised screening for sorting according to the size and then manual sorting is being performed for segregating the Manganese. | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | manual | Manual method of sorting observed. | |
| 7c | Different grade of mineral sorted out at mines. | Not proposed | Nil | |

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|----|--|--------------|---|--|
| 7d | Any beneficiation process at mines . | Not proposed | Dry Screening Observed for sorting according to size. | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | | | Manual sorting and dry screening was observed at the mines for size sorting. |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|------------------------|--|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No top soil is present | Nil | |
| 8b | Concurrent use or storage of topsoil | Not Proposed | Nil | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Dumping was proposed | Waste Dump-WD-3 and Waste dump-WD-4 are found extended beyond the lease boundary on Eastern side and Waste dump-WD-5 and Stack-1 encroached the lease boundary on the southern side of the lease. Maintenance. | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Proposed to be dumped | As proposed | |

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|----|---|--|--|--|
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Not proposed | Nil | |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | As proposed | 200 sapling planted toward south to east boundary. | |
| 8g | Survival rate | Not proposed | 80% | |
| 8h | Water sprinkling on roads to control airborne dust | Regular water sprinkling was proposed. | Water sprinkling is being carried out. | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | | | Waste Dump-WD-3 and Waste dump-WD-4 are found extended beyond the lease boundary on Eastern side and Waste dump-WD-5 and Stack-1 encroached the lease boundary on the southern side of the lease. Maintenance. Against which violation was issued. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-----------|--|---------|
| 9a | Status of submission of Monthly and Annual returns | | Monthly and Annual returns are being submitted in time | |

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| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Mining Engineer in charge ABHISHEK KUMAR Geologist in charge SOURABH BANKEY | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Covered under current (O/C) Workings 2.762 Used for waste disposal 0.419 | |
| 9d | Scrutiny of Annual return on afforestation | Given | 200 sapling were reported in Annual returns. |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | not given | No mineral reject generation found |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | 3525.710T of laterite stock and 28609.6 T Mn Below 25% given | stock details given |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Ex Mine Price is 1800 Production cost is 1205.03 | Sale value & Ex Mine Price is 1800 Production cost is 1205.03 Ex mine price of laterite Is 220 |
| 9h | Scrutiny of Annual return on fixed assets | Not reported | |
| 9k | Scrutiny of Annual return on mining machineries | | Not reported . |

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) | 03-JAN-23 | | | |
| MCDR17 | Rule 12(4) | 03-JAN-23 | | | |
| MCDR17 | Rule 26(2) | 03-JAN-23 | | | |
| MCDR17 | Rule 31(4) | 03-JAN-23 | | | |
| MCDR17 | Rule 37(2) | 03-JAN-23 | | | |

Date :

(KATHROJU NAVEEN)

Indian Bureau of Mines