

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

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MP/BGT/MN-60/NGP

Mine code : 40MPR01055

- (i) Name of the Inspecting : **D025**) **S. M. DORLE**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 11/05/2016
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **WARUD (4.464H)**
- (b) **Registration NO.** :
- (c) Category : A Manual
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : BALAGHAT
Village : WARUD
Taluka : KATANGI
Post office : SHIRPUR
Pin Code :
FAX No. :
E-mail :
Phone :
- (f) Police Station :
- (g) First opening date : 01/04/2011
- (h) Weekly day of rest :
2. Address for :
correspondance :
3. (a) Lease Number : MPR2543
- (b) Lease area : 4.46
- (c) Period of lease : 20
- (d) Date of Expiry : 24/07/2028
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the
Lessee : THOMSON GAZELLE
BALAGHAT MADHYA PRADESH
Phone:
FAX :
6. Date of approval of Mining :
Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|-------------------------------|--------------------------|---------|
| 1a | Backlog of previous year | 80 meters with 4 nos of holes | Two holes with 60 meters | |
| 1b | Exploration over lease area for geological axis 1 or 2 | 4 holes two on each axis | One hole on each axis | |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | M/s Siddarth agency | M/s Siddarth agency | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | One hole on each axis | One hole on each axis | |
| 1e | Balance reserve as on 01/04/20 | 15750 MT | 20265 MT | |
| 1f | General remarks of inspecting officers on geology, exploration etc | | | Nil |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--|--|------------------------------------|
| 2a | Location of development w.r.t.lease area | Toward West to east | As per proposal | |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | One bench in top soil and one bench in mineral | As per proposal one bench in top soil and one bench in mineral | |
| 2c | Stripping ratio or ore to OB ratio | 1:4 | 1:4 | |
| 2d | Quantity of topsoil generation in m3 | 300 m3 | 300 m3 | |
| 2e | Quantity of overburden generation in m3 | 1200 | 1000 | work has been done as per proposal |

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| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | No deviation observed in development. |
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Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------|-----------------|---------|
| 3a | Number of pit proposed for production | One | As per proposal | |
| 3b | Quantity of ROM mineral production proposed | 1500MT | 88 MT | |
| 3c | Recovery of sailable/usable mineral from ROM production | 1050 MT | Nil | |
| 3d | Quantity of mineral reject generation | 1200 MT | Nil | |
| 3e | Grade of mineral rejects generation and threshold value declared. | Below 35% | Nil | |
| 3f | Quantity of sub grade mineral generation. | Nil | Nil | |
| 3g | Grade of sub grade mineral generation | Below 25% | Nil | |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Manual | Manual | |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | Nil | Nil | |
| 3j | Provision of drilling and blasting in mineral benches | Given | As per proposal | |

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|----|--|---|-----------------|-----|
| 3k | Provision of mining machineries in mineral benches | Nil | Not Applicable | |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes, one mtr in soil and 3 mtr in orebody | As per proposal | |
| 3m | Total area covered under excavation/pits | 1.5 Hect | As per proposal | |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:4 | As per proposal | |
| 3o | Total area put in use under different heads at the end of year | 2.5 hect | 2.5 hect | |
| 3p | Production of ROM mineral during the last five year period as applicable | 1500 | ---- | |
| 3q | General remarks of inspecting officers on method of mining etc. | | | Nil |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-------------------------------------|------------------|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Separate Dumps are to be set | Nil | |
| 4b | Location of topsoil, OB and mineral reject dumps | In south and east side of area | As per proposal | |
| 4c | Number of dumps within lease area and outside of lease area | 3 dumps | As per proposal. | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | East and west side of lease boundry | As per proposal | |

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|----|--|----------|---------------------|---|
| 4e | Number of active and alive dumps. | 3 | 3 | |
| 4f | Number of dead dumps. | Nil | NA | |
| 4g | Number of dumps established. | 3 | 3 | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Proposed | As per proposal | |
| 4i | Length of Retaining wall or garland drain all along dumps | 320 m | Already exist 645 M | |
| 4j | Number of settling ponds | Nil | NA. | |
| 4k | Specific comments of inspecting officer on waste dump management | | | Waste management as per existing provisions in rule |

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. | Nil | NA | |
| 5b | Area under backfilling of mined out area | Nil | NA | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | For Plantation | As per proposal | |
| 5d | Total area fully reclaimed and rehabilitated | Nil | NA | |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | | No stage of back filling at present |

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). | Yes | Nil | |
| 6b | Area available for rehabilitation (ha) . | Nil | Nil | |
| 6c | afforestation done (ha). | Nil | Nil | |
| 6d | No. of saplings planted during the year | Nil | Nil | |
| 6e | Cumulative no .of plants | Nil | Nil | |
| 6f | Any other method of rehabilitation | Nil | Nil | |
| 6g | Cost incurred on watch and care during the year | Nil | Nil | |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | Nil | Nil | |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | Nil | Nil | |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area | Nil | Nil | |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | Nil | Nil | |

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|----|---|-----|-----|-----------------------------------|
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | Nil | Nil | |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | Nil | Nil | |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | Nil | Nil | |
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | Nil | Nil | |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Nil | Nil | |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | | | No stage of backfilling till date |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|-----------|--|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Nil | Ore from ROM is being separated in +35% and +25 % of ore is separated out manually rest of the below 20%is rejected and kept separately in south direction area for the future use of ore. | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | Manual | As per proposal | |

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|----|--|-----|----|--|
| 7c | Different grade of mineral sorted out at mines. | Nil | NA | |
| 7d | Any beneficiation process at mines | Nil | NA | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | | | ROM is being separated in mines manually |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|--|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | 300 tones of soil is to be separately kept and is to be used for plantation work | As per proposal 300 tones of soil is to be separately kept and is to be used for plantation work | |
| 8b | Concurrent use or storage of topsoil | Plantation | Plantation | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | 1200 m3 overburden was generated | 480 tonnes of material was kept in dumps during development | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Should be used for the reclamation of mines pit. | Dumps are stored separately and will be utilized at end | |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Nil | NA | |

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|----|--|--|--|-------------------------|
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | 50 nos. of plants are to be plant every year | As per proposal | |
| 8g | Survival rate | 50% | 50% | |
| 8h | Water sprinkling on roads to control airborne dust | Sprinkling proposed for road | Sprinkling required for the plantation | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | | | Asthetic bueaty is good |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|----------------------------|---------|
| 9a | Status of submission of Monthly and Annual returns | M.R. Submitted upto -Jan2016 A.R. submitted upto -2014-2015 | most of columns are filled | |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | ----- --- | ----- | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Given | ----- | |
| 9d | Scrutiny of Annual return on afforestation | Not given | ----- | |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Mineral reject was generated only from old waste dumps | Nil | |

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|----|---|--|-------|--|
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | No production was reported during 2015-2016 period | ----- | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | N A | - | |
| 9h | Scrutiny of Annual return on fixed assets | Not filled up for 2014- 2015 | --- | It is found that most of the columns are filled up more or less correctly. |
| 9k | Scrutiny of Annual return on mining machineries | Not Given | Nil | |

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

| Violation observed | | Show couse position | |
|--------------------|-------------------------|---------------------|-------------------------|
| Rule NO. | Issued on Compliance on | Rule NO. | Issued on Compliance on |

Date :

(S. M. DORLE)

Indian Bureau of Mines