INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/NAG/MN-319/NGP Mine code : 40MSH14046

(i) Name of the Inspecting : D025) S. M. DORLE

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : Shri S.R.Nair

Official with Designation

(iv) Date of Inspection : 26/09/2018
(v) Prev.inspection date : 12/09/2017

PART-I : GENERAL INFORMATION

. (a) Mine Name : BHANDARBODI (17.51 HA.)

(b) Registration NO. : IBM/17993/2014

(c) Category : A Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : MAHARASHTRA
District : NAGPUR
Village : BHANDARBODI

Taluka : RAMTEK

Post office : BHANDARBODI

Pin Code : 441106

FAX No.

E-mail : tminerlas2014@gmail.com

Phone :

(f) Police Station

(g) First opening date : 20/12/2012

(h) Weekly day of rest :

2. Address for : Bhimtola

correspondance Village Bhandarbodi, Tehsil- Ramtek

District-Nagpur 441106

3. (a) Lease Number : MSH0401 (b) Lease area : 17.51 (c) Period of lease : 20

(d) Date of Expiry : 08/10/2032

4. Mineral worked : MANGANESE ORE Main

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5. Name and Address of the

Lessee : M/S TIRUPATI MINERALS

PRITI NURSING HOME, SHIV NAGAR, AT & PO- TUMSAR, DISTT.-BHANDARA (MS) BHANDARA MAHARASHTRA

Phone: FAX :

6. Date of approval of Mining : Fresh under rule 22 MCR1960 28/07/2008 Plan/Scheme of Mining MP modif under 17(3) MCR 2016 01/12/2016 MP review under 17(1) MCR 2016 07/04/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--|----------------|------------------------------------|
| 1a | Backlog of previous year | Nil | Nil | |
| 1b | Exploration over lease area for geological axis 1 or 2 | Nil | Nil | |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | Nil | Not Applicable | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Proposal for exploration at G1 level | Nil | |
| 1e | Balance reserve as on 01/04/20 | Balance reserve as on 01.04.2018 55737 MT | 19069 MT | |
| 1f | General remarks of inspecting officers on geology, exploration etc | | | Presently mining is done from dump |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|-------------------------|----------------------|---------|
| 2a | Location of development w.r.t.lease area | E/W-337899 to 338275 | E/W-337900 to 338275 | |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Yes | Yes, As per proposal | |
| 2c | Stripping ratio or ore to OB ratio | 1:7 | 1:20 | |
| 2d | Quantity of topsoil generation in m3 | Nil | Nil | |
| 2e | Quantity of overburden generation in m3 | 35700 m3 | 70017 m3 | |

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc

At present no topsoil generated.Only overburden generated

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|------------------------------------|---------|
| 3a | Number of pit proposed for production | 2 nos pits proposed for production | As per proposal | |
| 3b | Quantity of ROM mineral production proposed | 27632 MT | 19069 MT | |
| 3c | Recovery of sailable/usable mineral from ROM production | 21000 MT | 5035 MT | |
| 3d | Quantity of mineral reject generation | 1104 MT | 14034 MT | |
| 3e | Grade of mineral rejects generation and threshold value declared. | Nil | 4% | |
| 3f | Quantity of sub grade mineral generation. | Nil | 14034 MT | |
| 3g | Grade of sub grade mineral generation | 7% of MN | 2% of Mn | |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Mechanised | As per proposal | |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | Nil | Only jigging and screening adopted | |
| 3ј | Provision of drilling and blasting in mineral benches | Proposed | As per proposal | |

| 3k | Provision of mining machineries in mineral benches | Yes proposed | As per proposal | |
|----|--|---|--|--|
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes | Yes | |
| 3m | Total area covered under excavation/pits | Pit- 5.50 Hect | As per Proposal | |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:7 | 1:42 | |
| 30 | Total area put in use under different heads at the end of year | Pit- 5.50 Hect Waste/reject- 4.0 hect Others-3.10 Hect Total -12.60 Hect | As per proposal | |
| 3p | Production of ROM mineral during the last five year period as applicable | Yr 2014-15- 2353 MT Yr 2015-16- 3529 MT Yr 2016-17- 2100 MT Yr 2017-18- 27632 MT | Yr 2014-15-14726 MT Yr 2015-16-16641 MT Yr 2016-17-10800 MT Yr 2017-18-19069 MT | |
| 3q | General remarks of inspecting officers on method of mining etc. | | | Due to market condition production not achieved. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|-------------------|---------|
| 4a | | lease area as | As per proposal | |
| 4b | Location of topsoil, OB and mineral reject dumps | North waste of lease area as shown in plan | f As per proposal | |

| 4c | Number of dumps within lease area and outside of lease area | 3 dumps within lease area | As per proposal | |
|----|--|------------------------------|-------------------------------|---|
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | North-west and South east | As per proposal | |
| 4e | Number of active and alive dumps. | Nil | 2 no.s dumps + 1 Mineral dump | |
| 4f | Number of dead dumps. | Nil | One | |
| 4g | Number of dumps established. | Nil | Nil | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Nil | Garland drain prepared | |
| 4i | Length of Retaining wall or garland drain all along dumps | 308 Mts | 200 mts | |
| 4j | Number of settling ponds | Nil | 2 numbers | |
| 4k | Specific comments of inspecting officer on waste dump management | | | A huge dump showing in plan is found in the lease area |

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. | No full extraction | As per proposal | |
| 5b | Area under backfilling of mined out area | Nil | Nil | |
| 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 | No area reclaimed and rehabilitated tll date | |
|----|--|-----|--|-------------------------------------|
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | | No stage for backfilling at present |

Progressive Mine Clousre Plan:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--------------|---|---------|
| ба | Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2). | Yes proposed | Annual report on PMCP submitted on time and correctly for 2017-18 | |
| 6b | Area available for rehabilitation (ha) . | Nil | Nil | |
| 6c | afforestation done (ha). | Nil | Nil | |
| 6d | No. of saplings planted during the year | 50 no. | 50 no. | |
| 6e | Cumulative no .of plants | 200 Nos. | 150 Nos. | |
| 6f | Any other method of rehabilitation | 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 | |
|--------|---|-----|-----|--|
| 61 | 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 | |
| 60 | 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. | | | At present no action has been action taken on PMCP |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual | work | Remarks |
|--------|--|---|--------|----------|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Gradewise sorting within lease area | | proposal | |

| 7b | Method of grade- wise mineral sorting i.e. manual or mechanical. | Manual | Manual | |
|----|--|------------------------|---|---|
| 7c | Different grade of mineral sorted out at mines. | Below 25% Manganese | No production reported during 2017-18 other than 25% Manganese most of the production reported from dump. | |
| 7d | Any beneficiation process at mines . | Nil | Nil | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | | | Presentlty working of mines has been stopped due to market condition, only production reported from dump. |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|------------------------------------|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | been kept | As per proposal | |
| 8b | Concurrent use or storage of topsoil | Will be used at the time of reclamation and plantation. | Only some soil used for plantation | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Overburden and waste kept separately | Asa per proposal | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | | As per proposal | |

| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | After full extraction of minerals | As per proposal | |
|----|---|-----------------------------------|--|--|
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | Given | Around 500 plants already exist in the lease area. | |
| 8g | Survival rate | Nil | 70% | |
| 8h | Water sprinkling on roads to control airborne dust | season to | As per proposal | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | | | Aesthetic beauty in and around mines is fair |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--|---------|
| 9a | Status of submission of Monthly and Annual returns | Monthly and Annual returns submitted timely | monthly return received upto September 2018 Annual return for 2017- 18 received | |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Information not Given | Presently Mines Manager is Diploma in Mining Engineering having more than 40 years of experiance | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Area for current working-5.5 Hect | Found correct | |

| 9d | Scrutiny of Annual return on afforestation | 300 Nos | Found correct with 40% survival rate |
|----|---|--|--------------------------------------|
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | 2745 Tonnes | 4 to 6 % |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | | |
| 9h | Scrutiny of Annual return on fixed assets | | |
| 9k | Scrutiny of Annual return on mining machineries | Details of machinary given Tipper 12 cum- No. Backhoe- 2.4 cum -1 No Backhoe- 4.2 cum- 1 No. | |

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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