# INDIAN BUREAU OF MINES
# MINERALS DEVELOPMEMT AND REGULATION DIVISION

## MCDR INSPECTION REPORT

## Nagpur regional office

**Mine file No :** MAH/NAG/MN-306/NGP **Mine code : 40MSH14028**

(i) Name of the Inspecting Officer and ID No. : **M017 ) ASHISH MISHRA**

(ii) Designation : Sr. Asst. Contrl. Mines

(iii) Accompaning mine Official with Designation : Shri P. S. Shankaraiya, mines Manager

(iv) Date of Inspection : 20/09/2019

(v) Prev.inspection date : 08/09/2017

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **NEW SATUK (16.84 HA)**

**(b) Registration NO.** : **IBM/5711/2011**

(c) Category : B Manual

(d) Type of Working : Opencast

(e) Postal address

State : MAHARASHTRA
District : NAGPUR
Village : BELDONGRI
Taluka : PRSEONI
Post office : SATUK
Pin Code :
FAX No. :
E-mail :
Phone :

(f) Police Station :

(g) First opening date : 01/01/1984

(h) Weekly day of rest :

2. Address for correspondance :

3. (a) Lease Number : MSH0080
(b) Lease area : 16.84
(c) Period of lease : 50
(d) Date of Expiry : 09/10/2030

4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S MANGANESE ORE (INDIA) LTD.
3, MOUNT ROAD EXTENSION
POST BOX NO. 34, NAGPUR
(MP) NAGPUR MAHARASHTRA
Phone:
FAX :

Owner : C.P.N.PATHAK
3, MOUNT ROAD EXTN. POST
BOX NO. 34 NAGPUR NAGPUR
MAHARASHTRA
Phone: 0712 - 2545703
FAX : 0712 - 2524996

6. Date of approval of Mining Plan/Scheme of Mining :

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| Renewal under rule 22 MCR1960 | 29/04/2003 |
| Mining Scheme rule 12 MCDR1988 | 13/10/2006 |
| Mining Scheme rule 12 MCDR1988 | 21/03/2012 |
| MP review under 17(1) MCR 2016 | 04/04/2017 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
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| 1a | Backlog of previous year | 2015-16 to 2016-17: No proposals (lapsed period)<br>2017-18: Nil boreholes proposed for the year<br>2018-19: 02 boreholes were proposed to be drilled | 2015-16: 3 boreholes were drilled in the area at 20-50 m grid interval with 50 m depth for each borehole<br>2017-18: total 11 boreholes were drilled at 20-50 m grid interval and 608 m drilling meterage<br>2018-19: Nil | As the proposed exploration for 2018-19 was already completed in the year 2017-18, there is no backlog in the exploration. The area was earlier proved through 19 boreholes and additionally 14 boreholes were drilled to prove occurrence and depth continuity of ore in the area. In 2017-18, 11 boreholes were drilled out of which, only 2 boreholes intersected orebody whereas 9 boreholes were negative. |
| 1b | Exploration over lease area for geological axis 1 or 2 | G-1 | G-1 | Area has already been explored in detail with 33 nos. of boreholes as mentioned in 1a upto around 260 mRL whereas general RL is 301-304 mRL. |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | 2 boreholes for the year 2018-19 | Nil | The area was already explored in the year 2017-18 by MOIL. |

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| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Almost entire area has been proved upto G-1 level. | The lease area is divided into 3 non-contiguous blocks. The block in the western side is under active mining activities and out of 33 boreholes, 24 boreholes were drilled in this block. Besides this, second block in the eastern side to this block is having 9 boreholes. Extreme eastern block is having size and shape constraints for any mineral development. Entire hangwall side has already been proved through detailed exploration in the potentially mineralized area. | |
| 1e | Balance reserve as on 01/04/20 | Balance reserves/resources as on 01/04/2019 are furnished in the actual work details. | 111- 19731 T<br>211- 3885 T<br>Total- 23616 T | |
| 1f | General remarks of inspecting officers on geology, exploration etc | | The New Satuk deposit is a part of dumri-nandapuri belt. It is displayed in lensoid form having strike length of 150 m. The general strike of the ore body is N85E and dip varies from 35 – 45 deg due South. Being a lensoid form the deposit is thick at centre and tapper at the both ends. Braunite is the principal mineral associated with gondite rock. | Geologically the area is not very promising due to which extensive drilling has been done at 20-50 m interval through 11 core boreholes in the year 2017-18 with 608 m drilling meterage. Out of these boreholes, only 2 boreholes, BH-1 & 2 turned out to be positive and rest all have shown no occurrence of orebody. |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
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| 2a | Location of development w.r.t.lease area | Development is proposed within grids N260900 to N2361100 & E320000 to E320300 in the western pit which is already developed pit. Apart from this, mineral recovery from mineralized dumps is proposed to be carried out. | Requirement of development was quite higher as ROM:Waste ratio for the mine is around 1:8, but due to non-availability of power source from MSEB, de-watering of the pit could not be carried out and no in-situ development could be done in the area. | Development could not be done due to non availability of power source in the area from MSEB. Dewatering in the already existing water logged pit could not be done and hence, in-situ developments could not be made. Only dump working has been carried out in the area. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | There is no top soil in the proposed working area. Separate benches are proposed in the overburden and minerals (as far as possible) but due to the occurrence of ore in the area, which is lensoid, it may not be always possible to keep separate benches, however, waste shall not be allowed to mix with the ore and mineralized content shall be kept separate from waste. | No top soil benches/dump available in the area. Separate dumping/stacking of Overburden/waste and minerals generated from the mine has been done. As the orebody is in form of lense deposit, having approximate thickness of 4-6 m with a dip of 35 to 45 degrees due south, separate benches in ore and overburden is not possible. Thus, due care in sorting of ROM has been done and any mineralized content is being extracted in form of recovery of cleaned ore from ROM or recovery from mineralized dumps. | |
| 2c | Stripping ratio or ore to OB ratio | 1:8 | Not applicable as working has been done in the mineralized dumps only for recovery of Mn ore. | In-situ working could not be done due to nonavailability of power source from MSEB as mentioned in 2a. |
| 2d | Quantity of topsoil generation in m3 | Nil | Nil | |

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| 2e | Quantity of overburden generation in m3 | 2018-19: 30000 cum | Nil, as no in-situ development could be made due to non-availability of power source (no dewatering could be done to commence in-situ developments) | |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | | | As per the proposals, in-situ as well as dump working, both were proposed but only dump workings were carried out in the area due to the reasons as elaborated under item 2a. This dump working is essencial for meeting the production and mineral conservation. Considering the type of deposit, which is lensoid and outcome of the exploration carried out in the year 2017-18, for meeting 1:8 Ore:OB ratio, dewatering is required to be done prior to any development in light of general public safety. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
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| 3a | Number of pit proposed for production | One pit | Nil | Please refer item 2a of the report. |

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| 3b | Quantity of ROM mineral production proposed | 2018-19: 5000 T (3500 T fro in-situ and 1500 T from dump working) | 2018-19: 3450 T from dump working only | Dump recovery remained on higher side due to increase in demand for LGHS (low grade high silica) material containing +20% Mn. Further, overall ROM production remained within the proposed production limits and workings were in the interest of systematic development of the mine and conservation of minerals. |
| 3c | Recovery of sailable/usable mineral from ROM production | 70% of the ROM is cleaned ore while 30% of the ROM is mineral rejects. For 2018-19, 3500 T is proposed as cleaned ore and 1500 T as mineral rejects out of total 5000 T ROM (in-situ) Dump recovery is approximately 10% of the total material handled. | For in-situ workings: Not applicable/Nil For Dump Workings: approximately 15-18% | Higher recovery for Dump workings were due to inclusion of LGHS into recovered/cleaned ore. |
| 3d | Quantity of mineral reject generation | 30% of the total ROM, for 2018-19: 1500 T | For 2018-19: Nil | Reasons mentioned in item 2a. |
| 3e | Grade of mineral rejects generation and threshold value declared. | Mineral reject considered in the proposal is the material having Mn+10-20% . Threshold value is +10% Mn. | Nil as only dump working has been done in the area. | |
| 3f | Quantity of sub grade mineral generation. | Nil | Nil | |

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| 3g | Grade of sub grade mineral generation | Not applicable | Nil |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Manual sorting of ROM as well as material from dump for recovery of mineralized content. | Manual sorting has been done for mineralized dump workings. |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No such proposals | Nil |
| 3j | Provision of drilling and blasting in mineral benches | Yes, 100 m dia rock drill is proposed to be used for the purpose of drilling 7 m hole (6 m bench height and 1 m toe drilling). Spacing and burden are proposed as 3.5 m X 3.0 m. Blasting is proposed to be carried out by slurry explosives with NONEL detonating system. One third of the drill hole is proposed for stemming. These proposals are only for in-situ developments. | Nil, as only Dump Working is carried out. |

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| 3k | Provision of mining machineries in mineral benches | PC-200 hydraulic excavators (backhoe) and 14 cum capacity TATA Tippers are proposed to be deployed for mining in mineral benches. Further, 7.5 HP submersible electric pump is proposed to be deployed for de-watering of the pit. | Dump workings only were carried out through outsourced equipments and mainly maual working has been carried out. No in-situ developments could be done due to reasons elaborated under item 2a. |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Height of benches proposed is 6 m | Proposed height of benches is suitable as per the category of the mine which is category A and proposed mechanization. however, no developments were made in-situ. Existing benches, above the water level in the water logged pit were having adeqaute height as per the proposals. |
| 3m | Total area covered under excavation/pits | As per the mining plan docuent approved for the proposal period 2015-16 to 2019-20 (2015-16 & 2016-17 being lapsed period): Existing area under the pit- 3.10 ha Additional requirement- 0.16 ha Total area under pit at the end of proposal period- 3.26 ha | Area under the pit: 3.10 ha as no further in-situ development could be done in the years 2017-18 & 2018-19. |

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| 3n | Ore to OB ratio for the pit/mine during the year. | 1:8 | Not applicable as working has been done in the mineralized dumps only for recovery of Mn ore. | In-situ working could not be done due to nonavailability of power source from MSEB as mentioned in 2a. |
| 3o | Total area put in use under different heads at the end of year | Total area put to use under various heads at the end of 2018-19 is given under actual work details. | Covered under current opencast working: 3.10 ha<br>Used for waste disposal: 3.0 ha<br>Occupied by plant, building, residential, welfare, roads: 0.76 ha<br>Others -<br>a) Green belt - 0.48 ha<br>b) Mineral storage - 0.08 ha<br>Total: 7.42 ha | |
| 3p | Production of ROM mineral during the last five year period as applicable | 2017-18: 8000 T<br>2016-17: No proposals<br>2015-16: No proposals<br>2014-15: 2426 T<br>2013-14: 2898 T | 2017-18: 2338 T<br>2016-17: Nil<br>2015-16: Nil<br>2014-15: 1195 T<br>2013-14: 2611 T | |
| 3q | General remarks of inspecting officers on method of mining etc. | | | Method of mining is mechanized as loading and transport is being carried out through mechanized means. Both insitu and dump workings are under proposals but only dump working is being carried out in the area due to the reasons elaborated under item 2a. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
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| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | There is no top soil in the area proposed for development. Further, overburden/waste and minerals (including subgrade/ mineral rejects) are proposed to be kept separately. | No top soil benches/dump available in the area. Separate dumping/stacking of Overburden/waste and minerals/mineral rejects generated from the mine has been done. |
| 4b | Location of topsoil, OB and mineral reject dumps | Top Soil: Nil OB/Waste Dumps: 5 dumps- WD-1 (N2360900 to N2361100, E319900 to E320000), WD-2 (N2361000 to N2361100, E320000 to E320300), WD-3 (N2361000 to N2361100, E320300 to E320400), WD-4 & 5 (N2360900 to N2361100, E320300 to E320400) MIneral Reject Dump- One Dump at N2360800 to N2306950 & E320000 to E320150 | Existing dumps are as per the proposals. Further building of dumps due to in-situ excavation could not be done due to no in-situ working. Mineralized dumps have been worked for recovery of minerals and waste material after sorting of mienrals was dumped on existing dumps. |
| 4c | Number of dumps within lease area and outside of lease area | Top Soil: nil Waset Dumps: 5 Mineral rejects: 1 All dumps are within the lease area located in western block only. | All dumps are located within the lease area as mentioned in 'proposed'. |

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| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | ALl dumps are located outside the pit limits. | As the formation of the orebody is lensoid in the lease area, clear demarcation is being done with ongoing exploration activities. Major boreholes have shown negative results. Waste dumps WD-2 and 3 are located in footwall, WD-1, 4 & 5 are located on non-mineralized land. Black dump (mineral rejects) is in the hangwall however, due to lensoid shape of the deposit and due to lease limitations in the southern part, it is outside the pit limits. | |
| 4e | Number of active and alive dumps. | All dumps (WD-1 to 5 and one black dump) are active. | All dumps are active and no dump has been reclaimed and rehabilitated. | |
| 4f | Number of dead dumps. | Nil | Nil | |
| 4g | Number of dumps established. | No such proposals | nil | |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Yes | Garland drains and retaining walls are there all along the dumps which are located near the boundary, i.e. in the western boundary (BP-14 to BP-16) and in Northern boundary (BP-23 to BP-26). | |
| 4i | Length of Retaining wall or garland drain all along dumps | No such proposals as garland drain and retaining walls already built. | Only repair and maintenance of existing protective measures is carried out for approximately 250 m. | Total approximate length of garland drain and retaining wall is 400-500 m. |
| 4j | Number of settling ponds | No such proposals | Nil | |

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| 4k | Specific comments of inspecting officer on waste dump management | Waste dump management aspect is satisfactorily dealt with at the mine level. The dumps are surrounded by around 200-250 m garland drain and retaining wall to arrest any wash off from the dumps. The dumps are located only in the western block which is under active mining activities and other blocks are under active cultivation. No specific damage was observed due to waste dump to surrounding flora and faunna. |

Solid Waste Management - Backfilling:

| Sl.No. | Item | Propasals | Actual work | Remarks |
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| 5a | Status of part or full extraction of mineral from mined out area before starting backfilling. | No backfilling is proposed, instead the area is proposed to be converted into water reservoir at conceptual stage. | Nil | After complete & scientific exploitation of mineral, the pit is proposed to be safe guarded with fence and green belt is proposed to be developed around the pit. At the end of mine life, the total active mine area of 7.06 ha is proposed to be afforested. The area under cultivation is mainly non-mineralized and proposed to be returned at the end. |
| 5b | Area under backfilling of mined out area | No such proposals | Nil | |

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| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | No such proposals | Nil | |
| 5d | Total area fully reclaimed and rehabilitated | No such proposals | Nil | |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | | No backfilling is proposed in the area as orebody is in lensoid shape for which future scope for underground mining may sought through future exploration. Thus, at present, on the basis of level of exploration carried out in the area, instead of backfilling, securing the area through fencing and facilitating water accumulation in the excavated pit is proposed to be done at conceptual stage. |

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 on or before 30th June every year depicting work done under PMCP in the preceeding year | Yes, the report has been submitted by the lessee | |
| 6b | Area available for rehabilitation (ha) . | No such proposals | Nil | |

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| 6c | afforestation done (ha). | 0.25 ha | 0.48 ha | Geenbelt development around the road passing through the lease area in the western block near BP-27 to BP-36. |
| 6d | No. of saplings planted during the year | 2018-19: 200 Nos. | 2018-19: 200 Nos. saplings planted over 0.06 ha area alongside the road | |
| 6e | Cumulative no .of plants | 1000 saplings | 1100-1200 saplings | |
| 6f | Any other method of rehabilitation | No such proposals till conceptual stage | Nil | |
| 6g | Cost incurred on watch and care during the year | Rs 50000/- approximately | Rs 59000/- | The expenditure was incurred over plantation, environment monitoring in core and buffer zone and repair & maintenace of protective measures. |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D | No such proposals. | Nil | |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | No such proposals | Nil | |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area | No such proposals | Nil | |

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| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No such proposals | Nil | |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | No such proposals | Nil | |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | 200 saplings are proposed to be planted per year in the approved document covering total 0.06 ha area in 2017-18 to 2019-20 | 200 saplings were planted over 0.06 ha area, in future, in filling plantation shall be done to cover entire 0.06 ha as per the proposals made in the mining plan document (600 saplings over 0.06 ha by 2019-20) | |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | 0.06 ha for the year 2017-18 to 2019-20, 0.25 ha cumulative | 0.06 ha for 2018-19, cumulative area covered under green belt plantation is 0.48 ha. | |
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | Greenbelt development | As per the proposals | |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Yes, environment monitoring for various environmental parameters is proposed for core and buffer zone. | Environment monitoring is being done for air, water & noise at 4 locations for quarterly analysis. Ground vibration was not required as no blating has been done in the area. Ground water quality (drinking water) is also being analysed quarterly. | All the analysis reports shown values within permissible limits as prescribed by MoEF. |

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| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | | PMCP operations as per the present level of workings are satisfactory. Further, regular plantation is proposed and carried out in the available area (waste land within the lease). Plantation and stabilization of dumps is proposed in the mining plan at conceptual stage after maturity of the dumps. Environment monitoring is being done quarterly at prominant locations for air, water, noise and ground water quality and analysis has shown the values within the permissible limits. |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
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| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Dispatch of graded mineral after manual sorting of ROM and recovered mineral from dump | Graded ore is being dispatched from the lease area after manual sorting | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | Manual Sorting of ROM and material from mineralized dumps | Manual sorting of the material from mineralized dumps | |
| 7c | Different grade of mineral sorted out at mines. | (a) Below 25% Mn<br>(b) 25% to below 35% Mn<br>(c) 35% to below 46% Mn | As per the details given in 'proposals' | |

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| 7d | Any beneficiation process at mines . | No such proposals | Nil | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | | | Mineralized dumps are being exploited and mineral contents are being extracted from the dumps. Thus, mineral conservational aspect is satisfactory. No beneficiation is required as graded mineral is being readily sold. In the year 2018-19, LGHS (Low Grade High Silica) containg fines were also sold hence, recovery from the mineralized dumps has shown improvement. |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|---|---|---|---|---|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No such proposals | Nil | |
| 8b | Concurrent use or storage of topsoil | No such proposals | Nil | Top soil, might have been available at earlier stages, has already been utilized for plantation over 0.48 ha area. Presently no to soil is available within the proposed working area. |

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| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | There is no top soil in the area proposed for development. Further, overburden/waste and minerals (including subgrade/ mineral rejects) are proposed to be kept separately. | No top soil benches/dump available in the area. Separate dumping/stacking of Overburden/waste and minerals/mineral rejects generated from the mine has been done. | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No such proposals | Nil | No backfilling is proposed, instead the area is proposed to be converted into water reservoir at conceptual stage. Waste dumps are proposed for stabilization through plantation. |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No such proposals | Nil | After complete & scientific exploitation of mineral, the pit is proposed to be safe guarded with fence and green belt is proposed to be developed around the pit. At the end of mine life, the total active mine area of 7.06 ha is proposed to be afforested. The area under cultivation is mainly non-mineralized and proposed to be returned at the end. |

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| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | Baseline information on plantation has been furnished in the EIA/EMP given in the mining plan. Further, for 2015-16 to 2019-20 period, initial 2 years i.e., 2015-16 to 2016-17 was lapsed period and additional plantation in form of 200 saplings per year is proposed for rest 3 years prospective period to cover an area of 0.06 ha by 2019-20. | Baseline information on existing plantation is given in the mining plan document. Additional plantation over 200 saplings as proposed in the mining plan document has been done in the year 2018-19. |
| 8g | Survival rate | 80% | 81% |
| 8h | Water sprinkling on roads to control airborne dust | Yes, water sprinkling is proposed on the haul roads in the working area through water tanker. Additionally, wet drilling is proposed to control air borne dust. | Water sprinkling has been done in the working areas and ocf through small water tankers. |

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| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | The lease area is having 3 non-contiguous blocks out of which only western block is under active mining (around 6.94 ha excluding plantation) and rest of the area is mainly under active cultivation. Working is in form of dump rehandling only in the area. Plantation has been done in form of 1100-1200 saplings alongside the road passing through the lease area. Existing pit is water logged. Hence, apart from normal degradation due to mining, aesthetic beauty is satisfactory in the area. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
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| 9a | Status of submission of Monthly and Annual returns | Annual Returns are required to be submitted online before 1st July of every year for preceding year Monthly Returns are required to be submitted online before 10th of every month for preceding month | AR submitted online upto 2018-19<br>MR submitted online upto Aug'19 | |

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| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Mining Engineer: SHRI A.W. SHEIKH<br>Geologist: SHRI DEBNATH MOHANTA<br>Manager: SHRI P.S. SANKARAIAH | Correct information furnished. |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Covered under current opencast working: 3.10 ha<br>Used for waste disposal: 3.0 ha<br>Occupied by plant, building, residential, welfare, roads: 0.76 ha<br>Others -<br>a) Green belt - 0.48 ha<br>b) Mineral storage - 0.08 ha | Complete and correct information furnished |
| 9d | Scrutiny of Annual return on afforestation | (i) Number of trees planted during the year: 200 (within lease)<br>(ii) Survival: 81% | Correct information furnished |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Nil | Correct information is furnished |

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| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | ROM:<br>(a) Open Cast Workings- Nil<br>(b) Dump Workings: Opening and Closing Stocks- Nil, Production- 3450 T<br>Graded Ore:<br>(a) Below 25% Mn: Opeing Stock-0 T, Production- 539 T, Dispatch- 539 T, Closing Stock-0 T<br>(b) 25% to below 35% Mn: Opeing Stock-0 T, Production- 857 T, Dispatch- 685 T, Closing Stock- 172 T<br>(c) 35% to below 46% Mn: Opeing Stock-0 T, Production- 2054 T, Dispatch- 890 T, Closing Stock- 1164 T | Complete and correct information furnished | These stocks have also been confirmed from the MR for March'19 and Apr'19 and also from March'18 for verification of opening and closing stocks of ROM and graded ore. |

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| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Sale Value: (a) Below 25% Mn: Rs 1466498.88/- (b) 25% to below 35% Mn: Rs 4213373.14/- (c) 35% to below 46% Mn: Rs 12034721.95/- Ex-mine Price: (a) Below 25% Mn: Rs 2723/- per T (b) 25% to below 35% Mn: Rs 6143.46/- per T (c) 35% to below 46% Mn: Rs 13529/- per T Cost of production: Rs 5413.41/- per T | Complete and correct information furnished | |
| 9h | Scrutiny of Annual return on fixed assets | Nil | As the land is non-forest revenue land for which lessee has only surface rights and land is not owned by the lessee, no depreciation or fixed asset has been given for land. Correct information has been furnished. | Working machines for dump rehandling are deployed either on contractual basis or borrowed from adjacent mines of the lessee. Hence, the details for depreciation of machineries has not been furnished. |
| 9k | Scrutiny of Annual return on mining machineries | PUMPS (ELEC.)- for de-watering | Working machines for dump re-handling are deployed either on contractual basis or borrowed from adjacent mines of the lessee. Hence, the details are correct. | Only one pump is there for de-watering purpose which is not operating due to non-availabilty of power source. |

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

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

**Date :**

(**ASHISH MISHRA**)

Indian Bureau of Mines