

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

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/NAG/MN-324/NGP

Mine code : 40MSH14052

- (i) Name of the Inspecting : **M017**) **ASHISH MISHRA**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri P.S Sankaraiah, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 19/09/2019
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BELDONGRI (12.99 HA)**
- (b) **Registration NO.** : **IBM/5711/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : MAHARASHTRA
District : NAGPUR
Village :
Taluka :
Post office :
Pin Code :
FAX No. :
E-mail : mm.bl@moil.nic.in
Phone : 07102202022
- (f) Police Station :
- (g) First opening date : 01/01/2000
- (h) Weekly day of rest : SUN
2. Address for :
correspondance :
3. (a) Lease Number :
(b) Lease area :
(c) Period of lease :
(d) Date of Expiry :
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S MOIL LIMITED
MOIL BHAWAN, 1-A, KATOL
ROAD CHHAONI NAGPUR NAGPUR
MAHARASHTRA
Phone:
FAX :

Owner : DEEPANKAR SHOME
1-A, MOIL BHAVAN KATOL ROAD
NAGPUR NAGPUR MAHARASHTRA
Phone:
FAX :

Agent : A. V. MASADE
MUNSAR MINE RAMTEK NAGPUR
NAGPUR MAHARASHTRA
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	As per the approved mining plan document for a period of 2017-18 to 2019-20, proposed boreholes are as follows: 2017-18- 2 boreholes 2018-19- 1 borehole Overall 300 m drilling is proposed to be carried out through 3 boreholes proposed.	3 vertical Bore holes with 350 meter drilling were drilled at the proposed location in the year 2017-18 itself that proved negative and no ore-zone has been intersected in any of the boreholes. Hence, no backlog for exploration is existing for the area.	The area was earlier proved (through pits and trenches) only for the occurrence of boulders and float deposit. BH-1 & 15 in the adjacent lease area of 26.66 ha have proved that the orebody has no further extensions towards the lease area of 12.99 ha (as the orebody has a dip of almost 70-80 deg in 26.66 ha). This exploration has further proved that the area is devoid of any in-situ deposits. Only old mineralized dumps are available in the area that are being exploited for recovery of minerals.

1b	Exploration over lease area for geological axis 1 or 2	G-1 & G-2	G-1 & G-2	The area has been earlier proved through drilling boreholes in the adjacent 26.66 ha lease. Further, for float occurrence, pits and trenches were made previously. Now, the area has been further proved for devoid of mineralization through 3 boreholes within the lease area. Hence, detailed exploration (G-1) has been done in the area. G-2 reserves/probable reserves are considered for the mineral reserves available in the mineralized dumps.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration is proposed to be carried out by MOIL Ltd.	Exploration was carried out by MOIL Ltd. with an expenditure of Rs 2100000/-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil after the exploration through 3 boreholes as the lease period is limited to 31.03.2020 only.	Nil the area has been proved for no underlying deposits.	This lease is having only Dump reserves and only dump mining is being carried out in the lease. Maximum part of the lease area is covered under agricultural activities for which surface rights are not held by the lessee. Rest of the area is having dumps and sorting yards.
1e	Balance reserve as on 01/04/20	Balance Dump reserves available in the area are given under Actual work details.	Balance Dump Reserves as on 01.04.2019: 32500 T (approximately)	

1f	General remarks of inspecting officers on geology, exploration etc	Reserves are in for of Dump reserves only. Exploration has proved that the area is devoid of any economically workable deposit hence around 6-7 ha area is not acquired by the lessee and is under cultivation. Reserve estimation has been done by dump characterization through trenching and pitching.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Dump working in the Northern part (Black Dump-6) & Western part (Black Dump-5) of the lease. Development is proposed within the lease area.	Development was done for the said mineralized dumps, but development was very low due to low demand, method of working (manual) and scope of working (for dump working-identification of the mineral bands within the mineralized dumps).	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Not applicable	As no in-situ working is there in the lease area, this item is not applicable.	
2c	Stripping ratio or ore to OB ratio	Not applicable	As no in-situ working is there in the lease area, this item is not applicable. Approximate recovery from the mineralized dumps is 15%.	
2d	Quantity of topsoil generation in m3	Not applicable	Nil	
2e	Quantity of overburden generation in m3	Not applicable	Nil	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development, in the form of dump development is available in the lease area. Material from the dump is brought to the OCF where it is being sorted manually for recovery of minerals. Remaining material, which is waste, is being dumped to waste dump. All operations were manual in the area during 2018-19.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Not applicable	Nil	2 Mineralized dumps, Black Dump-5 & 6 were proposed for re-handling to recover the mineral lying therein.
3b	Quantity of ROM mineral production proposed	Not applicable Dump Working production proposed: 370 T (2018-19)	Actual dump working production: 71 T (2018-19)	
3c	Recovery of sailable/usable mineral from ROM production	Not applicable 15% recovery from the dumps is proposed.	Recovery from the dump was as per the proposals.	
3d	Quantity of mineral reject generation	No such proposals	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No such proposals	Nil	
3f	Quantity of sub grade mineral generation.	No such proposals	Nil	
3g	Grade of sub grade mineral generation	No such proposals	Nil	

3h	Manual / Mechanised method adopted for segregating from ROM	Not applicable Dump working is proposed through manual sorting	As per the proposals, manual sorting of the material from the dump has been carried out.	
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	Not applicable	Nil Dump working has been carried out manually without any drilling or blasting.	
3k	Provision of mining machineries in mineral benches	Not applicable	Nil Dump working has been carried out manually without any mechanization.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Not applicable	Nil	
3m	Total area covered under excavation/pits	Nil	Nil	Only dump working is being carried out in the area.
3n	Ore to OB ratio for the pit/mine during the year.	Not Applicable	Nil	
3o	Total area put in use under different heads at the end of year	Total area put to use under different heads as on 01.04.2019 is given in actual work details.	Area covered under: Waste dumps=2.40 ha Mineral Storage=0.86 ha Infrastructure =0.025 ha Roads=0.14 ha Total=3.425 ha	

3p	Production of ROM mineral during the last five year period as applicable	Nil	<p>Nil. Only dump working in the lease area.</p> <p>Dump production for last five years is :</p> <p>2013-14: Proposed 200 T Actual production 200 T</p> <p>2014-15: Proposed 200 T Actual production 185 T</p> <p>2015-16: Proposed 200 T Actual production 200 T</p> <p>2016-17: Proposed 200 T Actual production 150 T</p> <p>2017-18: Proposed 200 T Actual production 200 T</p>	
3q	General remarks of inspecting officers on method of mining etc.			<p>Only dump working is being done and mineral from the dumps is being extracted.</p> <p>Recovery from the dumps is approximately 15%.</p>

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not applicable for top soil/OB. Separate dumps for waste and mineral rejects (Mneralized dumps) are proposed in the area.	Not applicable for top soil/OB. Separate dumps for waste and mineral rejects (Mneralized dumps) are available in the area. Only dump working is being carried out in the area and left out waste after extraction of mineralized content is being dumped into waste dumps which are located away from the mineralized dumps.	

4b	Location of topsoil, OB and mineral reject dumps	No top soil dump. Waste Dump: One at N5750 to N5850 & E5450 to E5550 (local Grid) Mineral rejects (mineralized) dumps: Three at N5600 to N5700 & E5500 to E5600 (Black Dump-4), N5750 to N5850 & E5550 to E5600 (Black Dump-5) & N5850 to N5900 & E5450 to E5600 (Black Dump-6)	As per the proposals.	
4c	Number of dumps within lease area and outside of lease area	3 mineralized dumps and one waste dump, all within the lease area.	As per the proposals	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not applicable	Nil	
4e	Number of active and alive dumps.	One waste dump and 3 mineralized dumps, all are active	As per the proposals	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	No such proposals	Nil	Plantation over dumps is proposed to be carried out during closure period.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes, around the waste dump in western part.	

4i	Length of Retaining wall or garland drain all along dumps	No specific proposals as the dumps are located well within the lease area far from the boundary and adjacent to this, there is a lease of 26.66 ha belonging to MOIL Ltd.	As recommended during last inspection of the area on 28/02/2017, garland drain and retaining wall for around 50 m was constructed in the western part of the lease area.	
4j	Number of settling ponds	No such proposals	Nil	
4k	Specific comments of inspecting officer on waste dump management			Waste left out after the extraction of mineral is being dumped at earmarked location within the lease area. The dump is active dump hence stabilization has not been carried out. proposals have been given to carry out plantation over the waste dump during closure period.

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 applicable	Nil, as the area has been proved for no underlying deposits.	
5b	Area under backfilling of mined out area	Not applicable	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Nil	

5d	Total area fully reclaimed and rehabilitated	Not applicable Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		The section is not applicable as there is no underlying deposits in the area. No area is covered under pits and hence, backfilling is not applicable.

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	Report has been submitted by the lessee	
6b	Area available for rehabilitation (ha) .	Nil	Nil	Out of 12.99 ha area, approximately 3.425 ha area is covered under (dump) mining and allied activities. Apart from this area, around 7 ha area is under active cultivation for which, no surface rights are presently held by the lessee. Hence, practically, the area available for reclamation and rehabilitation is Nil. It is proposed to carry out reclamation and rehabilitation works during the closure period.

6c	afforestation done (ha).	Nil	Nil	Afforestation proposals are being made in the adjacent lease area of 26.66 ha only.
6d	No. of saplings planted during the year	Nil	Nil	
6e	Cumulative no .of plants	Nil	Nil	Reclamation and rehabilitation is proposed to be carried out during closure period only as per the land schedule/surface rights held by the lessee and as per the method of working.
6f	Any other method of rehabilitation	No such proposals	Nil	
6g	Cost incurred on watch and care during the year	Yes, proposed for entire Beldongri Mine having areas 26.66 ha and 12.99 ha.	Combined expenditure for both the leases is around 2.88 lakh rupees.	Monitoring of various environmental parameters is being done as per the MoEF guidelines but the data is available for complete beldongri mine having combined expenditures for both leases 12.99 ha and 26.66 ha.
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
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	No such proposals	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No such proposals	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposals	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes, environment monitoring in the core zone and buffer zone is proposed to be carried out for combined Beldongri mine having leases 26.66 ha & 12.99 ha	As per the proposals

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Under PMCP/Closure operations, only environmental monitoring is being done in the lease area in alliance with the other main lease area of 26.66 ha. Apart from this, other closure activities such as afforestation etc are being done in the main lease having area of 26.66 ha only. Reclamation and rehabilitation in the instatnt lease area is proposed to be carried out during closure period.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting from the mineralized dumps within lease area	As per the proposals	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	(a) Below 25% Mn (b) 25% to below 35% Mn	As per the proposals	
7d	Any beneficiation process at mines	No such proposals	Nil, as the recovered mineral is readily saleable.	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	As mineralized dumps are being extracted for the mineral contents with 15% recovery of the mineral, mineral conservation aspects are truly followed in the lease area. No beneficiation is required/practiced by the lessee.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not applicable	Nil	
8b	Concurrent use or storage of topsoil	Not applicable	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not applicable for top soil/OB. Separate dumps for waste and mineral rejects (Mneralized dumps) are proposed in the area.	Not applicable for top soil/OB. Separate dumps and mineral rejects (Mneralized dumps) are available in the area. Only dump working is being carried out in the area and left out waste after extraction of mineralized content is being dumped into waste dumps which are located away from the mineralized dumps.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals	Nil	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposals	Nil	Reclamation and rehabilitation is proposed to be carried out during closure period only as per the land schedule/surface rights held by the lessee and as per the method of working.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information on existence of plantation is given in the mining plan document. No additional plantation is proposed to be carried out in the area till the closure period. Reclamation and rehabilitation is proposed to be carried out during closure period only as per the land schedule/surface rights held by the lessee and as per the method of working.	As per the proposals	
8g	Survival rate	No such proposals	Not applicable	
8h	Water sprinkling on roads to control airborne dust	Yes, water sprinkling through small tankers available from the adjacent lease area of 26.66 ha is proposed to be carried out near the working area and OCF (Ore Cleaning Floor)	As per the proposals.	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Overall good as no mechanized mining in the lease area only manual sorting of the dump material is being done. Further, most part of the lease area is not under the surface rights of the lessee and is under agriculture. Plantation work has been done in the contiguous and adjacent lease area of 26.66 ha located in the western side of this lease area.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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 MR submitted online upto Aug'19	Previously AR was submitted for combined lease areas of 26.66 ha and 12.99 ha both areas. 2018-19 onwards, separate returns are being submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri. Kamlesh Fulzele Geologist: Shri. D.Mohanta Manager: Shri. P.S. Sankaraiah	Complete and correct information has been furnished.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Lease area (surface area) utilisation as at the end of year (hectares): Used for waste disposal: 2.40 Occupied by plant, buildings, residential, welfare buildings & roads: 0.165 Other Purpose: 0.86	Area covered under: Waste dumps=2.40 ha Mineral Storage=0.86 ha Infrastructure =0.025 ha Roads=0.14 ha Total=3.425 ha	Complete and correct information has been furnished.
9d	Scrutiny of Annual return on afforestation	Nil	Correct information furnished as per the proposals made in the approved mining plan document for the area.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Correct information furnished	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Dump Working: Opening and Closing Stocks- Nil, Production 71 T Graded Ore: (a) Below 25% Mn: Opeing Stock-129 T, Production- 71 T, Dispatch- 200 T, Closing Stock-0 T (b) 25% to below 35% Mn: Opeing Stock- 42 T, Production- 0 T, Dispatch- 27 T, Closing Stock- 15 T	Complete and correct information furnished. As for previous years, combined returns have been filed for 26.66 ha & 12.99 ha areas, verification of stocks could not be done from previous years.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	<p>Sale Value:</p> <p>(a) Below 25% Mn: Rs 399660/-</p> <p>(b) 25% to below 35% Mn: Rs 190808/-</p> <p>Ex. Mine Price:</p> <p>(a) Below 25% Mn: Rs 2000/- per T</p> <p>(b) 25% to below 35% Mn: Rs 6941/- per T</p> <p>Cost of Production: Rs 5413.41/- per T</p>	<p>Cost of production has been calculated for combined lease of 26.66 ha and 12.99 ha as employment and other expenditures have been done at mine level comprising of both the leases. Rest part is complete and correct.</p>
9h	Scrutiny of Annual return on fixed assets	Nil	<p>The land within the lease area is private land and surface rights are not held for approximately 7 ha. For rest of the area, consent has been taken. Hence, value of fixed assets has been considered as Nil. Further, there is no building or infrastructure, or mechanization is available in the area. Thus, the information is correct.</p>
9k	Scrutiny of Annual return on mining machineries	Nil	<p>No mechanization is there in the area. Hence, correct information is furnished.</p>

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 :

(ASHISH MISHRA)

Indian Bureau of Mines