

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

Mining Plan Modification REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/375/BNG

Mine code : 30KAR03069

- (i) Name of the Inspecting : **P005**) **C.PARAMESHWARAN**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : S/Shri. Bagavan Mines Manager/ Nirmal Kumar AGM(Mine
Official with
Designation
- (iv) Date of Inspection : 08/05/2018
- (v) Prev.inspection date : 01/10/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SUBBARAYANAHALLI**
- (b) **Registration NO.** : **IBM/4369/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **SUBBARAYANAHALLI**
- Taluka : **SANDUR**
- Post office : **NANDIHALLI**
- Pin Code :
- FAX No. : **080-25583172,ningappaagm@re**
- E-mail : **info.mml@nic.in,ningappaagr**
- Phone : **080-25580373 (O) 98453000:**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **01/01/1980**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **M/S MML**
correspondance **NO.39, M.G.ROAD,**
BANGALORE.
3. (a) **Lease Number** : **KAR0199**
- (b) **Lease area** : **80.93**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **12/04/2019**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : MYSORE MINERALS LTD
 TTMC BUILDING A BLOCK 5th
 FLOOR BMTc SHANTINAGAR
 BANGALORE KARNATAKA
 Phone:080-25580373
 FAX :080-25580372

Owner : MYSORE MINERALS LTD
 NO.39, M.G.ROAD, BANGALORE,
 BANGALORE KARNATAKA
 Phone: 5580373,5580374
 FAX : 080-5583172

Agent : C.SHANMUGAM
 DY.GENERAL MANAGER, MML,
 OPP.ST.JOSEPH CONVENT,
 CHAMARAJANAGAR. MYSORE
 KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : C.DAYALAN,Full Time
 Qualification : 1 CLASS MINE MANAGERS COMPETANCY DIP.IN
 Appointment/ : 02/02/2004
 Termination date

Mining Engineer

Name : C.SHANMUGAN,Part Time
 Qualification : BE IN MINING, M-TECH
 Appointment/ : 01/12/2005
 Termination date

Geologist

Name : RAMESHAPPA,Full Time
 Qualification :
 Appointment/ :
 Termination date

Geologist

Name : SREEPAD.K.HEGDE,Full Time
 Qualification : M.Sc.(GEOLOGY)
 Appointment/ :
 Termination date

Manager

Name : DAYALAN YADAVA
 Qualification : FCC
 Appointment/ : 01/01/1999
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	22/12/1992
Plan/Scheme of Mining		Existing rule 11 MCDR1988	29/11/1995
		Renewal under rule 22 MCR1960	20/12/2002
		Mining Scheme rule 12 MCDR1988	23/04/2007
		Modif.of approved Mining Plan	14/09/2010

Modif.of approved Mining Plan	27/09/2013
Modif.of approved Mining Plan	31/10/2014
Mining Scheme rule 12 MCDR1988	16/04/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposals	Nil	28 core Bore holes proposed to a depth of 3000 Rmtrs and completed 1446Rmtrs during the year 2015-16 54 Bore Holes completed to a total depth of 3501 Rmtrs & exploration completed on 30.06.2015
1b	Exploration over lease area for geological axis 1 or 2	G1- 34.75 G2 -15.83	The proposed work has been carried out in the mine.	Yes it has been undertaken.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposals.	Nil	Already completed for the year 2015-16 proposals.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposals for the present document.	Nil	It will be given in the next document.
1e	Balance reserve as on 01/04/20	Given	14.89 MMT.	as above.
1f	General remarks of inspecting officers on geology, exploration etc	Given in the previous document.	yes it is given with satisfaction.	As per the previous year approved document, the lessee undertaken reduction in the Production level from 3 to 0.46 MMT as per the CEC approval.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	Given in the approved document.	E-1555 1008 944 8 976 936 5 968 920 6 992 912 10 1000 912 11 992 920 9 952 888 8 936 896 5 952 896 7 960 920 5 to E-2128 & N-1202 to N-2189	As given in the approved document.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top Soil - Nil Mineral Bench- 12	Mineral Bench- 12 No top soil & in all benches ore & overburden is only	No top soil benches at all.
2c	Stripping ratio or ore to OB ratio	1:0.11(in Tonnes)	1:0.11 (in Tonnes)	same no chnages.
2d	Quantity of topsoil generation in m3	Nil	Nil	Nil
2e	Quantity of overburden generation in m3	336,072 (in Tonnes)	184,302 (In Tonnes)	Less compare to the proposals.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Given	Not satisfactory due to benches are developed leaving the BHJ/ BHQ patches in between	Yes violation issued.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 Pit 1 Pit L x W x D 1020x280x121	Single pit with size indicated.	Yes as per teh size indicated.

3b	Quantity of ROM mineral production proposed	3.00 million tons	16,85,498Tonnes	Almost half the production lessee not acheived .
3c	Recovery of sailable/usable mineral from ROM production	Salable - 90% Waste - 10%	90% as indicated in the approved documnt.	Yes saleable as indicated has been made.
3d	Quantity of mineral reject generation	No proposals.	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Proposed	+45%Fe as per the previous year THV.	Same THV, not the present.
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	Nil	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Given mechanical.	Yes same method is adopted.	Mechanical means.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No wet process, except dry process.	dry process is adopted.	Dry process only.
3j	Provision of drilling and blasting in mineral benches	yes proposals given	drilling & blasting are used wherever required.	Drilling & Blasting techniques are used as applicable.
3k	Provision of mining machineries in mineral benches	Given in the approved document.	Yes machines are used appropriately as required.	yes used in the mineral benches.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Given appropriately.	Yes suitable bench height & width are maintained.	maintained.
3m	Total area covered under excavation/pits	25.91Ha	25.91Ha	Same as proposed.

3n	Ore to OB ratio for the pit/mine during the year.	1:0.11	1:0.10	same as proposed
3o	Total area put in use under different heads at the end of year	Mining Pit 47.24 Dumping 3.43 Mineral Storage Within UPL Top soil* - Infrastructure /Crushing plant Work shop, Buildings Etc. 0.05 Non saleable mineral - Road 0.50 Green Belt/Afforestation 3.05 Area for (Engineering Measures, Retaining Wall, Gully Plugs, Drains.) 0.66 e-auction dump area - Untouched Area 25.13 Total Area 80.06	Mining Pit 47.24 Dumping 3.43 Mineral Storage Within UPL Top soil* - Infrastructure /Crushing plant Work shop, Buildings Etc. 0.05 Non saleable mineral - Road 0.50 Green Belt/Afforestation 3.05 Area for (Engineering Measures, Retaining Wall, Gully Plugs, Drains.) 0.66 e-auction dump area - Untouched Area 25.13 Total Area 80.06	AS per the proposals.
3p	Production of ROM mineral during the last five year period as applicable	2015-16 3.00 MTPA 2016-17 3.00 MTPA 2017-18 3.00 MTPA 2018-19=2.99MMTA 2019-20=2.99 MMTA	2015-16 1.6MTPA 2016-17 2.16MTPA 2017-18 1.68MTPA 2018-19= 0.46MMTA	Targetted production not able to acheive by the lessee.

 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)	1.No top Soil 2.OB-336072Tonnes	1.No top Soil 2.OB-336072Tonnes	Same.
4b	Location of topsoil, OB and mineral reject dumps	Waste Material proposed to dump in the 4 dump yards	D-1A E - 1551 to E - 1728 N - 2122 to N - 2261	as above.
4c	Number of dumps within lease area and outside of lease area	4 Dumps within the lease area	4 Dumps within the lease area	All within the ML area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	4 Dumps of which 2 is out side the UPL & other 2 are within the UPL	4 Dumps of which 2 is out side the UPL & other 2 are within the UPL	same as reported.
4e	Number of active and alive dumps.	4 dumps are active	4 dumps are active	as reported.
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	Nil	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	yes proposed.	Yes provided.	yes constructed.
4i	Length of Retaining wall or garland drain all along dumps	Given as perr the RR approval.	Yes constructeda sper the R & R document.	yes.
4j	Number of settling ponds	given in the RR approval.	Yes as per RR approval done.	Yes done.
4k	Specific comments of inspecting officer on waste dump management	Given as per the approved document.	satisfactory.	Satisfactory.

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 proposals.	Nil	Nil

5b	Area under backfilling of mined out area	No proposals.	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposals.	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	No proposals.	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposals.	Nil	Nil

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).	Proposals given	Submitted on time.	Yes submitted on 11/7/2018.
6b	Area available for rehabilitation (ha) .	No proposals.	Nil	Nil
6c	afforestation done (ha).	nO PROPOSALS.	nIL	nIL
6d	No. of saplings planted during the year	No proposals.	nIL	nIL
6e	Cumulative no .of plants	No proposals.	nIL	niL
6f	Any other method of rehabilitation	No proposals.	nIL	nIL
6g	Cost incurred on watch and care during the year	No proposals.	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposals.	Nil	NIL

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposals.	Nil	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposals.	Nil	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposals.	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposals.	Nil	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No proposals.	nil	nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposals.	nil	nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposals.	NIL	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	No proposals.	nil	nil

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No proposals. Nil	Nil	there is no area to undertake PMCP work.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	The crusher will crush the mineral to different sizes and pass on to the screening plant where double deck screen with different size meshes of 0 to 10mm, 10 to 40mm though conveyer belts which are movable. ROM comprises of 20% of 0-10mm, 75% of 20-40mm & 5% of +40 mm. The material collected will be loaded to the tippers and transported to the stack yards for stacking.	0-10mm of Fines 10-20mm & 20-40mm of Lumps	As above.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical means.	same Mechanical method.

7c	Different grade of mineral sorted out at mines.	CATEGORY GRADE (Fe%) PERCENTAGE Non saleable 45%-50% 5% Saleable 50%-55% 10% Saleable 55%-60% 20% Saleable 60%-65% 40% Saleable +65% 25% Total +45% - 65% 100%	Non saleable 45%-50% 5% Saleable 50%-55% 10% Saleable 55%-60% 20% Saleable 60%-65% 40% Saleable +65% 25%	reported figure goes like that.
7d	Any beneficiation process at mines .	Dry process method of beneficiation proposals.	same dry process only is followed.	yes followed the same.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	proposed for systematic operation.	yes carrying out for conservation part to the satisfaction extent.	Except development part, conservation part is satisfaction.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There is no top soil recovery in this plan period as the entire activity proposed in the already broken up area.	No Top Soil is generated	Nil
8b	Concurrent use or storage of topsoil	The mine is operated since 1999 and proposed to work within the broken up area for plan period. Hence, generation top soil does not arise.	No Top Soil is generated	Nil generation in the present working.

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There are 4 dump yard identified for dumping of waste material namely D1, D1A , D5 & D5A .	over burden/ waste dumped in the D1 & D1A	No separate dumps for mineral rejects.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposals for restoring the land to its original use.	No such work has been undertaken in the ML area.	No such area is matured for such work.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposals.	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	proposed.	The ML area exhibits the existence of plantation and also the lessee undertaken such additional work where applicable.	Only in such place, where it is required have been done.
8g	Survival rate	No proposals.	60-70% survival only.	same as above.
8h	Water sprinkling on roads to control airborne dust	proposed.	Undertaken meticulously, where it is required.	Undertaken as required.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	proposed for systematic workings.	Due to small ML area/ and the production development was not matching due to stacking dumping , including the e-auctioning within the small area.	The ML area need to be reduced with Production limit.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly Returns Submitted up to June-2018 Annual Returns submitted for the year 2017-18	Given to the satisfaction of format.	satisfaction.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given for all the officers of the mine	S/Shri. M.R.K. Bagavan, Manager, R.B. raghunandhan, mining engineer & T. Ramakrishna Geologist.	All are working in the mne, as observed during the inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining= 47.24 ha, waste dump=3.43 ha, plan & building etc.,=4.9 ha 7 other purpose & RR works = 25.36 ha &	waste dump area is found to be insufficient & not adequate. this needs to be increased for better mining.	Dumping area needs to be more or back filling provision should be created after mined out area.
9d	Scrutiny of Annual return on afforestation	250 nos of saplings planted during the year with 70% of survival. within the lease and nothing outside the lease.	yes what is reported found to be correct.	Yes almost correct.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	184302t of waste & rejects were reported in both the places.	This is found to be incorrect, only waste dumping is correct.	Mineral rejects need to be removed.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock is given as 3,47,644t, production is 16,85,498t for the year 2017-18, & closing stock is 1,93,142t.	Found to be correct.	Yes as reported is found to be correct.

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production is Rs. 173/t, ex-mine price for lumps is Rs. 2774/t for 55-58%Fe, Rs. 2276/t for 58-60%Fe, rs. 2523/t for 60-62%fe, Rs. 2835/t=62-655Fe. for fines rs. 2047/t of 58-60%Fe, Rs. 2373/t =60-62%Fe, rs. 2778/t of 62-65%Fe. Lump =Sale value is rs. 2384/t for 55-58%Fe, Rs. 2225/t for 58-60%Fe, Rs. 2398/t. for 60-62%Fe, Rs. 2670/t of 62-65%Fe. Fines = Rs. 2438/t of 62-65Fe.	reported figure are found to be correct.	yes found correct.
9h	Scrutiny of Annual return on fixed assets	Rs. 863,88,920 for mine, plant, work shop, power & water installation.	Depreciation on fixed assets. were not reported.	nil
9k	Scrutiny of Annual return on mining machineries	Given as proposed in the approved document.	yes whatever the machineries are reported are found using in the mine.	machineries are working as proposed in a small areas.

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
MCDR17	Rule 11(1)	03/08/2018			

Date :

(C.PARAMESHWARAN)

Indian Bureau of Mines