

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

**MCDR INSPECTION REPORT**

**Bangalore regional office**

**Mine file No :** KNT/HSN/CR/3/BNG

**Mine code :** 11KAR11004

- (i) Name of the Inspecting : **A101** ) **ARUN KUMAR**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri.Nagaraj, Mine Manager,  
Official with  
Designation
- (iv) Date of Inspection : 29/06/2017
- (v) Prev.inspection date : 28/05/2015

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **THAGADUR**
- (b) **Registration NO.** : **IBM/4369/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :  
State : KARNATAKA  
District : HASSAN  
Village : THAGADUR  
Taluka : CHANNARAYAPATNA  
Post office : BHUVANAHALLI  
Pin Code : 573131  
FAX No. : 080-22213172, 944811688  
E-mail : managertdcm@gmail.com, info  
Phone : 080-25580373/22278813, 984!
- (f) Police Station : Nuggehalli
- (g) First opening date : 24/01/1977
- (h) Weekly day of rest : SUN
2. Address for : SMT HEMALATHA IAS, MD  
correspondance Mysore Minerals Ltd,NO.3M.G.ROAD,BANGALORE--5600  
KARNATAKA-560 001.
3. (a) Lease Number : KAR0530
- (b) Lease area : 299.59
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : TITANEFRS. MAGNETIT Associated  
CHROMITE 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 : SHANKAR.LINGAIAH  
 # 39,M.G.ROAD,BANGALORE,  
 KARNATAKA-560001. BELLARY  
 KARNATAKA  
 Phone: 08395-60401,080-25580373 (O),9845300022  
 FAX : 080-25583172, 0

Geologist  
 Name : P.S.GOPALAKRISHNAPPA,Full Time  
 Qualification :  
 Appointment/ :  
 Termination date

Manager  
 Name : NAGARAJ  
 Qualification : Dip. in Mining & First MM  
 Appointment/ :  
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	08/06/1992
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	09/08/2001
		Mining Scheme rule 12 MCDR1988	06/07/2007
		Mining Scheme rule 12 MCDR1988	16/04/2014
		MP review under 17(1) MCR 2016	20/01/2017

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	20Nos. DDH	NIL	Violation issued on 13.07.2017 vide letter no.KNT/HSN/Cr-3/BNG
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	NIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	
1e	Balance reserve as on 01/04/20	-	-	As on 1/4/2017 4,79,554 Tons - Chromite
1f	General remarks of inspecting officers on geology, exploration etc			The exploration has not been carried out as per the proposal. Violation has been pointed out in this regard.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	South, Central and North Block	Development was done in the South, Central and North Block	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	4 benches of development had been carried out
2c	Stripping ratio or ore to OB ratio	Chromite: 1:25.43 TFM : 1:0.80	Chromite : Nil TFM : 1:0.50	Only 782 tons of Chromite ore extracted.
2d	Quantity of topsoil generation in m3	2500M3	50M3	

2e	Quantity of overburden generation in m3	541800M3	8600M3	Chromite: 522750 M3 TFM : 19050 M3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development carried out was as per the proposal. Total of 32 Ha of area is covered under dumps.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3 Pits	South Block-790*269*28 Central Block-326*45*12 North Block-200*14*5	No working was going on. The Maximum size of the pits in different blocks have been given
3b	Quantity of ROM mineral production proposed	Chromite: 45220M3 TFM: 51975 MTS	Chromite: 782 Tons TFM: 18248 Tons	95% recovery is taken for Chromite and 50% recovery is taken for Titaniferrous production proposals
3c	Recovery of sailable/usable mineral from ROM production	Chromite: 95% TFM: 50%	Chromite: 95% TFM: 50%	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	Below 28% Cr2O3 for Chromite Below 10% Tio2 for TFM	NA	No generation of mineral reject
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Nil	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Semi-Mechanized	No working was going on the day of inspection.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	No proposal of any analysis or beneficiation study for sub-grade mineral and reject
3j	Provision of drilling and blasting in mineral benches	Yes	Yes	Actual requirement was 30% of the total requirement of drilling
3k	Provision of mining machineries in mineral benches	One excavator 300 LC with 3 tippers combination	No machineries were deployed on the day of inspection	No working was going on the day of inspection.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6-8 Mts	Bench height in the mines was 6-8 mts	
3m	Total area covered under excavation/pits	72.70Ha including mining,OB dump & mineral storage area	33.80 Ha under Mining,32 Ha for OB dump & 2.70 Ha for mineral storage	Total of 68.5 Ha broken up.
3n	Ore to OB ratio for the pit/mine during the year.	Chromite: 1:25.43 TFM: 1:0.80	Chromite: nil TFM: 1:0.50	
3o	Total area put in use under different heads at the end of year	Mining-30.80 Ha,OB dump-32 Ha, Mineral storage 2.70 Ha,Infrastructure-5.20 Ha ,Roads,2.00 Ha and un-utilized area-538.29 Ha	Area put to use is as per the proposal	Verified from the Annual Returns.

3p	Production of ROM mineral during the last five year period as applicable	2012-13: Chromite- Nil,TFM- Nil 2013-14: Chromite- 27740 ,TFM- 33775 2014-15: Chromite- 33060,TFM- 51100 2015-16: Chromite- 39140,TFM- 51975 2016-17: Chromite- 45220,TFM- 51975	2012-13: Chromite- 2428,TFM- Nil 2013-14: Chromite- 1003 ,TFM- Nil 2014-15: Chromite- 2674,TFM- Nil 2015-16: Chromite- 1808,TFM- 5817 2016-17: Chromite- 782,TFM- 18248	No market for the TFM in the year 2012-2015. Also in the year 2016-17 only 782 Tons of chromite extracted due to low market demand and high stripping ratio.
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3q	General remarks of inspecting officers on method of mining etc.		The mine is temporarily discontinued from 06.05.2017. The mine was not working on the date of inspection.Only 782 Tons of Chromite & 18248 Tons of TFM had been extracted. The method of mining was as per the proposal. Not economical to work chromite due to low market demand and very high stripping ratio.TFM was mined from the western part of the North Block.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping proposal given for top soil & OB dump	Separate dumps maintained as per proposal	

4b	Location of topsoil, OB and mineral reject dumps	Top soil: NW of Central Block OB: NE of Central block and North block Mineral Rejects: Nil	In the proposed area on the non mineralized zone	
4c	Number of dumps within lease area and outside of lease area	12 Dumps within the mining lease area.	As per proposal	All the dumps are within lease area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL, as proposed	
4e	Number of active and alive dumps.	03 Dumps proposed	01 Dump is active	As against 3 active dumps proposed, only one dump was found to be active , reason being very low extraction of Chromite ore in the year 2016-17.No plantation on the slopes/top of the dumps is done except construction of retaining walls & garland drains.May use in future when there is demand for Chromite Ore.
4f	Number of dead dumps.	NA	05 dead dumps	
4g	Number of dumps established.	NA	04 dumps for stabilized	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Constructed retaining walls and garland drains	Constructed retaining walls and garland drains all along the dump.
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall: 450mtrs Garland Drain: 450mtrs	Retaining wall: 300mtrs Garland Drain: 500mtrs	300 Mts of retaining wall constructed as against proposed of 450 Mts.
4j	Number of settling ponds	Nil	Nil	No proposal of settling tank

4k	Specific comments of inspecting officer on waste dump management	Dumps are off advancing in nature and dump management is not satisfactory.
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#### Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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	Yes	Yes, Annual report on PMCP submitted on time
6b	Area available for rehabilitation (ha) .	Nil	Nil	No area is matured for backfilling or reclamation
6c	afforestation done (ha).	0.75 Ha proposed	0.50 Ha covered under plantation	
6d	No. of saplings planted during the year	500 Saplings	200 saplings planted	
6e	Cumulative no .of plants	2000 saplings in the plan period	5600 sapling planted in the plan period	Afforestation done with survival rate of 80%
6f	Any other method of rehabilitation	NA	Nil	No other method of rehabilitation was done
6g	Cost incurred on watch and care during the year	Rs.37500 per season	Rs. 36800 per season	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No prposal	Nil	



6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal of backfilling	No work done as per proposal	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	No work done	No area is matured for backfilling or reclamation
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.75Ha	0.50 Ha	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.75Ha	0.5Ha	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	afforestation	Done	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air, water, noise and soil sampling proposed	Air sampling -9 loc. Water sampling-2 loc Noise stations-3 loc Soil sampling -1	Environmental monitoring test Completed till March-2017

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Afforestation was proposed in the PMCP of 0.75 Ha within the Mining Lease area and had complied. Sampling at all location done as per the proposal till the last quarter.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Sizing & Sorting with in lease area	Sizing & Sorting done within lease area	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	Chromite: 28% Cr2O3 and above. TFM Fe: 53.50% Tio2 : 12.96%	As per proposal	
7d	Any beneficiation process at mines	NA	Only sizing and sorting of mineral	No beneficiation process carried out
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Conservation of mineral is done. No beneficiation is done as it is not found to be necessary. Sizing & Sorting is done manually.

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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Not applicable.	All the top soil generated is utilized

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8b	Concurrent use or storage of topsoil	Nil	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Maintained	There is no generation of rejects .
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Available	As per Proposals given in the scheme of Mining plantation is carried out	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Yes	NA	No water tanker was found on the date of inspection as temporary discontinuance was issued by the lessee.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty within the lease area is maintained

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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
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**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	13/07/2017			
MCDR17	Rule 31(1)	13/07/2017			
	Rule 27(2)	13/07/2017			

**Date :**

**(ARUN KUMAR)**

Indian Bureau of Mines