

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

**MCDR inspection REPORT**

**Bangalore regional office**

**Mine file No :** KNT/BLR/FE/12/BNG

**Mine code :** 30KAR03046

- (i) Name of the Inspecting : **A101** ) **ARUN KUMAR**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : 1. A.Guruswamy- Mines Manager 2. Imran khan-Geologist  
Official with  
Designation
- (iv) Date of Inspection : 09/01/2018
- (v) Prev.inspection date : 10/06/2015

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **DONIMALAI(NAVALUTTI 140A.**
- (b) **Registration NO.** : **IBM/4103/2011**
- (c) **Category** : **A Other than Fully Mech.**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **NAVALUTTI**
- Taluka : **SANDUR**
- Post office : **DONIMALA-TOWNSHIP**
- Pin Code :
- FAX No. : **08392-271156 (F),hrgaviappa**
- E-mail : **sumithramkt@hrgmining.com**
- Phone : **08392-279946 (O), 98862093**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **17/11/1987**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **SRI.H.R.GAVIAPPA & CO.**  
**correspondance** **III FLOOR, HRG COMPLEX, HRG CIRCLE**  
**BELLARY KARNATAKA-583101.**
3. (a) **Lease Number** : **KAR1209**
- (b) **Lease area** : **34**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **01/04/2025**
4. **Mineral worked** : **IRON ORE** **Main**

## 5. Name and Address of the

Lessee : H.R.GAVIAPPA & CO  
 PARVATHI NAGAR, BELLARY,  
 BELLARY KARNATAKA  
 Phone:08395-72083,72075  
 FAX :

Owner : H.R.GAVIAPPA & CO  
 PARVATHI NAGAR, BELLARY,  
 BELLARY KARNATAKA  
 Phone:  
 FAX :

Agent : V.K.SAMBANDAM  
 BELLARY KARNATAKA  
 Phone:  
 FAX :

## Mining Engineer

Name : GIRIDHAR JOSHI, Full Time  
 Qualification : BE MINING  
 Appointment/ : 01/01/2007  
 Termination date

## Manager

Name : SURESH BHONSLE  
 Qualification : DIP.IN MINE & MINE SURVEYING WITH FCC  
 Appointment/ : 01/11/2006  
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	03/01/1991
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	27/05/1996
		Mining Scheme rule 12 MCDR1988	01/01/2002
		Modif.approved Mining Scheme	28/09/2004
		Mining Scheme rule 12 MCDR1988	16/11/2006
		Modif.approved Mining Scheme	20/04/2010
		Modif.of approved Mining Plan	28/01/2015
		Mining Scheme rule 12 MCDR1988	14/03/2016

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	13 core boreholes in 2015-16	16 core boreholes drilled with total meterage of 750 mts	-
1b	Exploration over lease area for geological axis 1 or 2	No proposal	G1-12.95Ha G2-19.39 Ha	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Not applicable	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposals	NA	-
1e	Balance reserve as on 01/04/20	-	2338575Tons as on 01/04/2017	-
1f	General remarks of inspecting officers on geology, exploration etc	-	-	There is no proposal of exploration in the reporting year.16 core holes were drilled in 2015-16 covering about 12.95 Ha under G1-category.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed development in between DD` & EE`	Development done within the specified section lines	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in mineral bench	All benches contain ore.	Ore is vertically formed from top to bottom about 60 mts width & along with Over Burden, hence no separate benches of OB and Ore.
2c	Stripping ratio or ore to OB ratio	1:2.88	1:2.57	No significant change
2d	Quantity of topsoil generation in m3	No proposal	Nil	-

2e	Quantity of overburden generation in m3	303406 Tons	268396 Tons	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	The developments were done within the proposed grids with stripping ratio of 1:2.57.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	Working carried out in one pit only	Pit size approx.140 mts X220 Mts X50 Mts
3b	Quantity of ROM mineral production proposed	1,05,000 MT	1,04,425 MT	Actual within the proposed limit
3c	Recovery of sailable/usable mineral from ROM production	1,05,000 MT	1,04,425 MT	-
3d	Quantity of mineral reject generation	No proposal	Not applicable	-
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	NA	-
3f	Quantity of sub grade mineral generation.	21,000 MT	20,885 MT	(+45-60) Sub Grade
3g	Grade of sub grade mineral generation	+45 to -60% Fe	Fines-49.15% Lumps- 55.29%	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method proposed	Mechanised method adopted for segregating from ROM	Dry crusher & screening unit
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Not applicable	-

3j	Provision of drilling and blasting in mineral benches	Provision is made for drilling & Blasting in mineral benches	Adopted drilling & blasting to win the ore	115.00mm Dia drill m/c .ANFO with booster is used in blasting
3k	Provision of mining machineries in mineral benches	Yes, Proposed	Mechanized, Mining M/c used Hydraulic excavator-2, Rock Breaker-1, Tipper-6, Wheel Loader-1 Water Tanker-1, JCB-1	Mining M/c deployed as proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, Height-6 mts & Width -6 mts	Height-6 mts & Width -4 mts	Bench width lesser than the height of the benches.
3m	Total area covered under excavation/pits	9.8 Ha	9.8 Ha	-
3n	Ore to OB ratio for the pit/mine during the year.	1:2.88	1:2.5	No significant change
3o	Total area put in use under different heads at the end of year	Minig.9.80 Ha , Active Dump-5.88 Ha , Idle Dump-5.4 Ha Road-0.210 Ha	Minig.9.80 Ha, Active Dump-5.88 Ha Reclaimed /Rehabilitated -5.4 ha Infrastructure 3.080 Ha, Work under PMCP-2.5 Ha	Green Belt-1.8 Ha
3p	Production of ROM mineral during the last five year period as applicable	2012-13: No work 2013-14: 67,830 2014-15: 1,04,916 2015-16: 1,04,951 2016-17: 1,05,000 ( in tonnes)	2012-13: No work 2013-14: No work 2014-15: 1,03,879 2015-16: 1,04,946 2016-17: 1,04,425 ( in tonnes)	Actual production within the proposed limits
3q	General remarks of inspecting officers on method of mining etc.			Exploitation of the ore is done from one pit using heavy machineries and drilling & blasting .Reporting year production within the proposed limits.

## 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 for OB proposed	Separate dumping for OB done	-
4b	Location of topsoil, OB and mineral reject dumps	N-1662042-N-1662278 to E-675994-E-676247	Actual dumping within the proposed grids	-
4c	Number of dumps within lease area and outside of lease area	4 Dumps	Total 4 Dumps within & outside put together	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump proposed outside the ultimate pit limit	Dumping of OB outside the ultimate pit limit	-
4e	Number of active and alive dumps.	One active dump proposed	One -active & alive dump	-
4f	Number of dead dumps.	03 dumps	03 dumps are dead dumps	-
4g	Number of dumps established.	03 dead dumps proposed for stabilization	03 dead dumps stabilized	Stabilization by plantation and coir matting
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes, provision made	Retaining wall and garland drain all along dumps are there	-
4i	Length of Retaining wall or garland drain all along dumps	Garland drain- 509 m	Constructed Retaining wall of 720 mts & Garland drain of 537mts	-
4j	Number of settling ponds	Two Settling tank proposed	Constructed Two tanks as per proposal	Nil
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dumping is carried out as per the proposal. Retaining wall with garland drain in place all along the toe of the waste dump . Plantation done on Old dumps.

## 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 proposal	NA	-
5b	Area under backfilling of mined out area	No proposal	NA	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NA	-
5d	Total area fully reclaimed and rehabilitated	No proposal	NA	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			There was no proposal for backfilling in the reporting year. None of the areas of mined out pits were matured for backfilling due to occurrence of mineral at depth.

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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).	-	Annual Report n PMCP submitted on 21/07/2017	-
6b	Area available for rehabilitation (ha) .	No proposal	NA	-
6c	afforestation done (ha).	0.95 Ha	0.95 Ha	-
6d	No. of saplings planted during the year	2000	2000	-
6e	Cumulative no .of plants	12000	14000	-

6f	Any other method of rehabilitation	No proposal	NA	-
6g	Cost incurred on watch and care during the year	5.6 lakh	8.626 lakh	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No proposal	NA	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	NA	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	NA	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NA	-
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	NA	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	NA	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	NA	-

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	NA	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed in core zone & buffer zone	Environmental monitoring is done every month in core zone & buffer zone	Environmental parameters within the permissible limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities were carried out as per the approved plan and plantation done, construction of retaining wall and garland drains were in place.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within the lease area proposed	Grade wise sorting done within the lease area	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical method proposed	Mechanical method adopted	Dry crusher & screening unit
7c	Different grade of mineral sorted out at mines.	Fines :-10mm Lumps: +10 mm to -40 mm	Lumps & Fines sorted at mines	-
7d	Any beneficiation process at mines .	No proposal	NA	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Grade wise sorting & sizing done within the lease area as planned using crusher and screening arrangement. Subgrade mineral generated is blended with high grade ores.

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	No top soil is generated	-
8b	Concurrent use or storage of topsoil	No proposal	NA	Top soil is brought from outside area for plantation
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate OB dump proposed	Separate OB dump maintained	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	NA	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NA	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	0.50 Ha with 1200 proposed plantation	0.83 Ha with 2000 plantation done	-
8g	Survival rate	No proposal	70%	-
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads proposed	Two Tankers deployed for suppression of dust on haul roads.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Plantations have been done in the lease area. Two water tanker was deployed for suppression of dust .Greenery is maintained in & around the lease area.

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. Submitted up to December-2017 A.R. Submitted up to March-2017	AR submitted on 30.05.2017
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer-Mr Dilip Kumar Geologist- Mr Mohan Kumar .S, Manager-Mr A.Guruswamy	Mining Engineer- Nil Geologist- Mr Imran Khan, Manager-Mr A.Guruswamy	Mining Engineer terminated on 01/05/2017
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Cover under current working-9.8 ha Reclaimed/Rehabilitated-5.4 Ha Waste disposal-5.88 Ha Plant, buildings, residential, welfare buildings and road-3.080 Ha Work done under PMCP: 2.50 Ha	Appeared to be correct	-
9d	Scrutiny of Annual return on afforestation	2000 within the lease area with 70% survival rate.	Appeared to be correct	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	-	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Opening Stock- 6979 Tons Production- 104425 Tons Closing Stock- Nil	Appeared to be correct	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value- Rs.2009/ton Ex-mine price- Rs.2008/Ton Production cost- Rs 1501.96/Ton	Appeared to be correct
9h	Scrutiny of Annual return on fixed assets	Excavator- 3 unit Wheel Loader- 2 Unit Tipper- 3 Unit Dumper -2 Unit Rock drill(Non-Elec)-1 unit	Appeared to be correct
9k	Scrutiny of Annual return on mining machineries		

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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)	05/02/2018				
MCDR17 Rule 46(c)	05/02/2018				
MCDR17 Rule 55(1)(3)	05/02/2018				

**Date :**

**(ARUN KUMAR)**

Indian Bureau of Mines