

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

Review and updation of Mining Plan REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/51/BNG

Mine code : 30KAR03027

- (i) Name of the Inspecting : **P005**) **C.PARAMESHWARAN**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : S/Shri. K.V.B.V. Naidu. Mines Manager, Geologist-Meka
Official with
Designation
- (iv) Date of Inspection : 10/10/2018
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JAMBUNATH (106 AC)**
- (b) **Registration NO.** : **IBM/202/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **NCB RANGE**
- Taluka : **SANDUR**
- Post office : **KARIAGANUR**
- Pin Code :
- FAX No. : **08394-230782**
- E-mail : **goggabrothers@rediffmail.co**
- Phone : **08394-320711, 231487,23161**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **01/04/1959**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **M/S.GOGGA GURUSANTHIAH & BROS**
correspondance : **MINE OWNERS & MINERAL GRINDERS,POST BOX NO 4,**
: **NEHARU CO-OPERATIVE COLONY,HOSPET,BELLARY-583201**
3. (a) **Lease Number** : **KAR0174**
- (b) **Lease area** : **42.89**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **19/10/1989**
4. **Mineral worked** : **CLAY (OTHERS)** Associated
: **IRON ORE** Main

5. Name and Address of the

Lessee : GOGGA GURUSANTHIAH & BROS
 POST BOX NO 4, NEHARU CO-OP
 COLONY, HOSPET, BELLARY
 KARNATAKA
 Phone:08394-28787,24617
 FAX :08394-25782

Owner : Gogga Vishwanath Swamy
 Managing Partner, M/s G.G.
 & Bros. P.B.No-04, N.C.
 Colony Hospet BELLARY
 KARNATAKA
 Phone: 9448360612
 FAX :

Mining Engineer

Name : K.V.BAKTHA VASTHALA NAIDU,Full Time
 Qualification : B.E.MINING
 Appointment/ : 28/12/2012
 Termination date

Geologist

Name : MEKALA PEDDANNA,Full Time
 Qualification : Msc GEOLOGY
 Appointment/ : 28/12/2012
 Termination date

Manager

Name : K.V.BAKTHA VASTHALA NAIDU
 Qualification : B.E.MINING
 Appointment/ : 28/12/2012
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	03/10/1988
		Modif.of approved Mining Plan	17/03/1992
		Mining Scheme rule 12 MCDR1988	05/08/1994
		Renewal under rule 22 MCR1960	15/12/1998
		Mining Scheme rule 12 MCDR1988	05/01/2005
		Modif.approved Mining Scheme	14/02/2006
		Mining Scheme rule 12 MCDR1988	18/08/2009
		Modif.approved Mining Scheme	20/05/2013
		Mining Scheme rule 12 MCDR1988	27/02/2014
		Modif.approved Mining Scheme	08/09/2015
		MP modif under 17(3) MCR 2016	31/03/2017
		MP modif under 17(3) MCR 2016	21/05/2018
		FMCP under 23C(1)	05/06/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposals.	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	No proposals.	In the year 2007-08 drilled 19th DTH bore holes and total meterage is 1008 mtrs. In the year 2013 drilled 13 core bore holes and meterage 787 mtrs , in the year 2014-15, 07 core bore holes and meterage 677 mtrs G1 = 4.57 Ha. G3 = 0.11 Ha.	What is reflected in the actual is for the refernce.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	G1 = 4.57 Ha. No proposals.	nil	nilk
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 = 4.57 Ha. No proposals.	However, under progress for G2 level exploration.	yes it is under progress.
1e	Balance reserve as on 01/04/20	given	2215474.00 Ts	as above.
1f	General remarks of inspecting officers on geology, exploration etc	Furnished in the approved document.	yes it is under progress.	satisfactory as per the approved document.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N-1683413-1683772 E-653883-654235	N-1683413-1683772 E-653883-654235	Location development carried out towards North & south western direction area (AA'-HH = 4.40 Ha)

2b	Separate benches given in topsoil, overburden and minerals (Rule 15)		<table border="0"> <tr> <td>Overburden</td> <td>Top soil</td> <td></td> </tr> <tr> <td>F/W Side</td> <td>Mineral</td> <td></td> </tr> <tr> <td></td> <td>06</td> <td>00</td> </tr> <tr> <td></td> <td>04</td> <td></td> </tr> <tr> <td>H/W Side</td> <td>00</td> <td></td> </tr> <tr> <td></td> <td>06</td> <td></td> </tr> <tr> <td></td> <td>03</td> <td></td> </tr> </table>	Overburden	Top soil		F/W Side	Mineral			06	00		04		H/W Side	00			06			03		Total benches worked during the year 10 benches on F/W side , 09 benches on H/W side
Overburden	Top soil																								
F/W Side	Mineral																								
	06	00																							
	04																								
H/W Side	00																								
	06																								
	03																								
2c	Stripping ratio or ore to OB ratio	1 : 4.77	1 : 4.32	as above with slight difference.																					
2d	Quantity of topsoil generation in m3	no proposals.	The entire area is broken up and there is no topsoil in the area proposed for mining.	The entire area is broken up and there is no topsoil in the area proposed for mining.																					
2e	Quantity of overburden generation in m3	534655 Ts	496052 Ts	slight difference.																					
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Given in the approved document.	same is being followed in the field.	No change, things are satisfactory.																					

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one pit	one only.	same.Pit size = L 450 X W 250 X D 98 M
3b	Quantity of ROM mineral production proposed	1,40,000 Ts	1,39,897 Ts	all most complete.
3c	Recovery of sailable/usable mineral from ROM production	Main reef - 90% Subsidiary reef - 50%	Main reef - 90% Subsidiary reef - 80%	slight difference.
3d	Quantity of mineral reject generation	No proposals.	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No Proposals.	Nil	Nil

3f	Quantity of sub grade mineral generation.	No proposals.	Nil	Nil
3g	Grade of sub grade mineral generation	No proposals.	Nil	Sub grade mineral generation has not been considered separately, as the grade of sub grade mineral varies between 55 & 58 % Fe qty of subgrade generated is 31440.00 Ts and which will be suitably blended with HG ore.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method is proposed for segregation of ROM by C.S plant.	Mechanized method is proposed for segregation of ROM by C.S plant.	as above.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposals.	Nil	There is no proposals to comment on.
3j	Provision of drilling and blasting in mineral benches	proposed, Permission for adopting deep hole drilling & blasting obtained by 106-2 (b) under MMR 1961 from DMS	Accordingly deep hole drilling & blasting is being practiced	Rock drill of 100 mm .Diameter. Usual practice for blasting Burden is 2.00 m & Spacing is 3.00 m.
3k	Provision of mining machineries in mineral benches	proposed for machineries.	Rock drill of 100 mm .Diameter. Usual practice for blasting Burden is 2.00 m & Spacing is 3.00 m.	All the machines are operation for mining & allied activities.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Rock drill of 100 mm .Diameter. Usual practice for blasting Burden is 2.00 m & Spacing is 3.00 m.	Rock drill of 100 mm .Diameter. Usual practice for blasting Burden is 2.00 m & Spacing is 3.00 m.	same is being utilized.
3m	Total area covered under excavation/pits	12.42 Ha	12.42 Ha	No change.

3n	Ore to OB ratio for the pit/mine during the year.	1 : 4.77	1 : 4.32	slight difference.
3o	Total area put in use under different heads at the end of year	proposals made.	Area for Mining 12.42 Area for Waste Dumps 16.27 Area for S.G.M.D 1.47 Access roads (Including 1.5 roads within the pit and dump) Area for temporary sheds 0.10 7.5 mtr Boundary safety zone 2.0 Mineral stockyard 3.2 Float worked out area 3.62 Untouched area / others	as given in the approved document.
3p	Production of ROM mineral during the last five year period as applicable	2012-13 : Nil 2013-14 : 140000 Ts 2014-15 : 140000 Ts 2015-16 : 140000 Ts 2016-17 : 139950 Ts 2017-18 : :140000 Ts	2012-13 : Nil 2013-14 : 41843 Ts 2014-15 : 131856 Ts 2015-16 : 139545 Ts 2016-17 : 139859 Ts 2017-18 :139897 Ts	Almost proposed production has been achieved.
3q	General remarks of inspecting officers on method of mining etc.	proposed for systematic operation.	yes it is being carried out.	yes it is followed.

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)	Earmarked area for O.B dumping proposed in the Approved scheme of mining	O.B being dumped in the earmarked area as proposed in the scheme of mining	no change.
4b	Location of topsoil, OB and mineral reject dumps	AD 1 (OB active dump) N-1683590-1683810 E-654308-654466	AD 1 (OB active dump) N-1683590-1683810 E-654308-654466	same place.
4c	Number of dumps within lease area and outside of lease area	1 No Active dump (AD1) & 6 inactive dumps within the lease area and Outside the lease area 1 inactive dump EID1(stabilized)	1 No Active dump (AD1) &6 inactive dumps within the lease area and Outside the lease area 1 inactive dump EID1(stabilized)	01 dump active 07 dumps inactive (06 dumps within lease area , 01 dump outside lease area)
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	given in the document.	Away from the UPL.	yes away from the UPL area.
4e	Number of active and alive dumps.	Proposed one.	one only	same.
4f	Number of dead dumps.	six nos.	06 nos.	no change.
4g	Number of dumps established.	06	06	All 06 dead dumps are stabilized by plantation and coir matting.

4h	Whether Retaining wall or garland drain all along dumps are there.	Before getting modification for 2017-18 Garland Drain GD6 - 169m*2m*1m*1m already constructed and Garland Drain during 2017-18 period for same proposed 59 mtrs * W=T=1m * B=3m *H=2m	Before getting modification for 2017-18 Garland Drain GD6 - 169m*2m*1m*1m already constructed and Garland Drain during 2017-18 period for same proposed 59 mtrs * W=T=1m * B=3m *H=2m	Silt settling tank SST-3 -15m*10m*3m Stone masonry check dam SMCD-2 - 20m*1m*2m*3m	Retaining Wall & Garland drain proposed for 9 yrs have been completed in 2014 only.
		Silt settling tank SST-3 - 15m*10m*3m Stone masonry check dam SMCD-2 - 20m*1m*2m*3m			
4i	Length of Retaining wall or garland drain all along dumps	Retaining Wall & Garland drain proposed for 9 yrs have been completed in 2014 only.	Toe wall constructed at AD TW6 - 353 m *1m*3m*2m Garland Dain GD6 - 236 m*2m*1m*1m		Retaining wall of total length 1639 mtrs & garland drain of total length 1789 mtrs constructed in the year 2014.
4j	Number of settling ponds	Silt settling tank SST-3 - 15m*10m*3m	Silt settling tank SST-3 -15m*10m*3m		2 No's of silt settling ponds(SST-1 & SST-2) constructed in the year 2013
4k	Specific comments of inspecting officer on waste dump management	proposed for systematic operation.	yes it is being done.		yes it is done.

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	Since Ore body is not completely delineated, hence back filling not yet Started
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 drawn by the lessee.	There is no area matured for such operation,	Hence nil back filling.

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 given	Submitted annual report for the year 2017-18 on 18.07.2018	as per the format.
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, natural plant growth is present.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed.	Carried out environmental monitoring on core zone (Mines office, Waste dump, Haul Roads & Loading point) & Buffer zone (Vaddralli , Kariganuru, Kallahalli , Venkatagiri)	yes the lessee undertaken.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Proposals drawn what is applicable.	Yes what is applicable, which are undertaken.	Proposals were carried out in the mine.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	It was proposed to carry out sorting of grade wise mineral within the lease. 58-60 % Fe 60-62 % Fe 62-65 % Fe	As per the proposal it is being carried out sorting of grade wise mineral within the lease. 58-60 % Fe 60-62 % Fe 62-65 % Fe	as above.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	By mechanical method	Grade wise mineral sorting by mechanical method	yes as above.
7c	Different grade of mineral sorted out at mines.	yes proposed.	Grades of mineral sorted out at mines 58-60 % Fe 60-62 % Fe 62-65 % Fe	it is done.
7d	Any beneficiation process at mines .	No proposals.	nil	There is no beneficiation process except mechanical crushing & screening plant for sizing of ore.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Proposals drawn.	it is being done accordingly.	satisfactory.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No proposals.	yes no developement in the top soil	Yes workings only in the Mineralized area.
8b	Concurrent use or storage of topsoil	No proposals.	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes proposed	Accordingly, it is being carried out in the ML area.	yes it is being carried out in the ML area.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposals.	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed for dumps only.	Afforestation in the active dump 7396 No's, all along the roads 795 No's, Safety zone 500 No's around the mining area.	Yes it is done.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposals. as such.	Yes there exist natural plantation in the ML area.	yes undertaken wherever necessary.
8g	Survival rate	70%	65%	as above.
8h	Water sprinkling on roads to control airborne dust	proposed.	Three water tankers of capacities 20000 ltr's, 10000 ltr's & 5000 ltr's provided for water sprinkling on roads to suppress the dust. Apart from this we have provided 12000 liter's capacity of mobile mist vehicle fitted with nozzles to eject water mist for effective suppression of airborne dust & clearing the chlorophyll of all the trees for good photosynthesis.	yes it is observed during the field inspections.

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	proposed for systematic & scientific environmental appearance.	yes well maintained.	yes maintained.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted MR up to september, 2018 & AR for 2017-18.	submitted to the satisfaction of the format.	satisfactory.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	given as per the format.	Manager & Mining Engineer - K.V.Bhaktavatsala Naidu Geologist - Mekala Peddanna	yes they are working in the mine as per the field observation.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	furnished in the returns.	Area for Mining 12.42 Area for Waste Dumps 16.27 Area for S.G.M.D 1.47 Access roads (Including 1.5 roads within the pit and dump) Area for temporary sheds 0.10 7.5 mtr Boundary safety zone 2.0 Mineral stockyard 3.2 Float worked out area 3.62 Untouched area / others 2.32	as exist in the mine.
9d	Scrutiny of Annual return on afforestation	proposed.	Within the lease area 8691 No's of trees planted and survival rate is 65%.	satisfactory.

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No proposals.	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	furnished.	ROM stock -0.00 Ts Dump workings (SGMD) - 251256 Ts Graded ore stock - Lumps 60-62 % Fe - 4000.00 Ts 62-65 % - 5122.21 Ts 65-100 % - 93.00 Ts Fines 55-58 % - 52.00 Ts 58-60% - 9000.01 Ts 62-65 % - 3909.00 Ts 65-100 % - 66.26 Ts Reserves Proved mineral reserves (111) - 2215474 Ts Prefeasibility Mineral resource(221) - 487902 Ts Inferred mineral resource (333) - 3599465 Ts	same as above.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	furnished as per the format.	Sale value 277971543/- Lumps - 185841931/- Ex. Mine price Lumps 60-62 - 3370/- 62-65 % - 3315/- Fines 58-60% - 1866/- 62-65 % - 2911/- 65-100 % - 2220/- Production cost per tone- 642.68/-	same as above.
9h	Scrutiny of Annual return on fixed assets	Given	Value of Fixed Assets 113221853 /-	furnished.
9k	Scrutiny of Annual return on mining machineries	Given in the format	yes all the machineries are under use in the mine during the field visit.	yes satisfactory.

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
Rule 45(7)	14/11/2018				

Date :

(C.PARAMESHWARAN)

Indian Bureau of Mines