

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

Mining Plan Modification REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/408/BNG

Mine code : 30KAR03101

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : P.Manjunath, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 26/02/2020
- (v) Prev.inspection date : 11/02/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RAMANADURGA**
- (b) **Registration NO.** : **IBM/11807/2012**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **DHARMAPURA**
- Taluka : **SANDUR**
- Post office : **SANDUR**
- Pin Code :
- FAX No. : **08392-266767 (F),**
- E-mail : **kumnex@rediffmail.com**
- Phone : **08392-267484 (O), 94498419**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **17/03/1990**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **Sri Kumaraswamy Mineral Exports Pvt Ltd**
No.39B, 2nd Main, Paravathi Nagar,
BELLARY- 583102
3. (a) **Lease Number** : **KAR0329**
- (b) **Lease area** : **82.55**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **23/01/2012**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : SRI KUMARASWAMY MINERAL EXPORTS
 2 ND CROSS, LINK ROAD,
 PARVATI NAGAR, BELLARY
 KARNATAKA
 Phone:08392-79484
 FAX :

Owner : SRI KUMARASWAMY MINERAL EXPORTS
 GURUKRUPA NILAYA, NEHRU
 COLONY, BELLARY. BELLARY
 KARNATAKA
 Phone:
 FAX :

Agent : S.VIJAYAKUMAR
 BELLARY KARNATAKA
 Phone:
 FAX :

Geologist

Name : SHANMUKHAPPA MANDAL, Full Time
 Qualification : MSc GEOLOGY
 Appointment/ :
 Termination date

Manager

Name : BHARATH KUMAR.R.S
 Qualification : D.MIN.ENGG WITH F.C.C
 Appointment/ : 07/07/2004
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	07/03/1990
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	13/05/1999
	:	Mining Scheme rule 12 MCDR1988	06/06/2003
	:	Modif.approved Mining Scheme	18/04/2006
	:	Modif.of approved Mining Plan	17/08/2009
	:	Renewal under rule 24 MCR1960	18/09/2012
	:	MP review under 17(1) MCR 2016	08/03/2017
	:	MP modif under 17(3) MCR 2016	19/02/2018
	:	MP review under 17(1) MCR 2016	23/08/2018
	:	MP modif under 17(3) MCR 2016	26/02/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	6 core bore holes proposed	6 core bore holes were drilled	No backlog
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2	G1-42.46 Ha, G2-0.9792Ha	15.92 Ha is non mineralized
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	In house by M/s. Sri Kumaraswamy Mineral Exports Pvt.Ltd.	Expenditure incurred on exploration - Rs.55.88Lakhs
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Nil	Nil
1e	Balance reserve as on 01/04/20	-	35.32 Million Tons	As per submitted AR 2018-19
1f	General remarks of inspecting officers on geology, exploration etc			Exploratory holes were drilled as per proposal. Exploration has been carried out in 42.46 Ha at G1 & 0.9792Ha at G2 level respectively.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N 166520 - 1667220 & E661790 - E662480	N 166515 - 1667133 & E661842 - E662432	Development carried out within the proposed grids
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in overburden & mineral bench	Separate benches maintained in overburden & mineral bench	Overburden-2 benches & Mineral-9 benches
2c	Stripping ratio or ore to OB ratio	1:0.265	1:0.164	Violation issued
2d	Quantity of topsoil generation in m3	No proposal	Nil	Working in the broken up area

2e	Quantity of overburden generation in m3	492102 Tons	243529 Tons	Violation issued
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development of the pit was carried with in the proposed grids. Violation issued for lower handling of OB & thus distorting the stripping ratio.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit proposed	Working in one pit only	Nil
3b	Quantity of ROM mineral production proposed	1480000 Tonnes	1480000 Tonnes	Nil
3c	Recovery of sailable/usable mineral from ROM production	90%	90%	Nil
3d	Quantity of mineral reject generation	No proposal	Nil	No generation of mineral reject
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Nil	Nil
3f	Quantity of sub grade mineral generation.	No proposal	Nil	Nil
3g	Grade of sub grade mineral generation	No proposal	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized Method proposed for segregating from ROM	Mechanized Method adopted for segregating from ROM	Dry Crushing and screening

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No such beneficiation study carried out.	Nil
3j	Provision of drilling and blasting in mineral benches	Provision of drilling & blasting is made in mineral benches for hard strata	Drilling & blasting carried out by combination of slurry and Nonel detonator.	30 % of the total material handled is blasted. Spacing & Burden is 3.0m & 3.5m
3k	Provision of mining machineries in mineral benches	Provision of mining machineries made : Wagon drill -1no, Excavators-6 nos, Wheel loaders-3nos, dumpers-22 nos.	Machineries deployed: Wagon drill -1no, Excavators-12 nos, Wheel loaders-3nos, dumpers-22 nos.	Extra excavators were used for loading finished product for dispatch
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height of 7.5 mts and width of 10 mts proposed.	Bench width of 9-10 mts and Height of 7.5 mts maintained.	Nil
3m	Total area covered under excavation/pits	34.9736 Ha at the end of the plan period	33.88 Ha at the end of the reporting year	Actual Excavation pit within in the proposal limit
3n	Ore to OB ratio for the pit/mine during the year.	1:0.265	1:0.164	Violation issued
3o	Total area put in use under different heads at the end of year	Covered under workings- 34.9736 Ha, Waste dump- 5.5514 Ha, Infrastructure -0.9581 Ha, Roads-2.3780 Ha, Green belt-2.0302 Ha, others- 15.4989 Ha	Covered under workings- 33.883 Ha, Waste dump- 2.028 Ha, Infrastructure roads -3.673 Ha, others-19.776 Ha	Nil

3p	Production of ROM mineral during the last five year period as applicable	2014-15: 640000 2015-16: 640000 2016-17: 640000 2017-18: 640000 2018-19: 1480000 (in tonnes)	2014-15: Nil 2015-16: Nil 2016-17: Nil 2017-18: 426000 2018-19: 1480000 (in tonnes)	Actual production within the proposed limit
3q	General remarks of inspecting officers on method of mining etc.			Mining operation was carried out using excavator tipper combination in one pit as proposed.

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 dump for OB maintained.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Waste dump proposal :N 1666980 to N 1667200, E 662100 to E 662300	N 1666976 to N 1667184, E 662172 to E 662285	Nil
4c	Number of dumps within lease area and outside of lease area	2 No's -Within the Lease area Outside ML area- Nil	2 No's -Within the Lease area Outside ML area- Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps proposed outside the UPL	Dumps are located outside the UPL	Nil
4e	Number of active and alive dumps.	Active dump-1 No. & Alive dump-01 No	Active dump-1 No. & Alive dump-01 No	Nil
4f	Number of dead dumps.	No proposal	Nil	Nil
4g	Number of dumps established.	No proposal	Nil	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Retaining wall & garland drain provided all along the dump	Constructed in the previous years
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	RW & GD maintained
4j	Number of settling ponds	No Proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management			Waste dump management was satisfactory & was carried as per approval.

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 proposal	Nil	Mineral is not exhausted for backfilling
5b	Area under backfilling of mined out area	No proposal	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The mineral is not exhausted and the mine has been restarted in 2017-18.

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).	PMCP report to be submitted by 1st july every year	PMCP report submitted on 13.09.2019	Delayed submission
6b	Area available for rehabilitation (ha) .	No proposal	Nil	Nil
6c	afforestation done (ha).	No proposal	Nil	Nil
6d	No. of saplings planted during the year	1000 saplings proposed	1140 saplings planted	Gap plantation done
6e	Cumulative no .of plants	No proposal	584185 no of saplings planted & maintained	Nil
6f	Any other method of rehabilitation	No proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	No proposal	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	Nil

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed Environmental monitoring in Core zone and Buffer Zone.	Environmental monitoring in Core zone and Buffer Zone is carried out on regularly.	Monitoring carried out MES, Bellary. All the parameters were observed to be within the permissible limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities were carried out as per proposal.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting proposed within the lease area.	Grade wise sorting done within the lease area.	ROM Mineral dispatched after dry screening
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical sorting proposed.	Mechanical method adopted for grade wise sorting.	Dry crushing and screening of 100 TPH

7c	Different grade of mineral sorted out at mines.	Lumps & Fines (Fe%) : Below 55%, 55% to below 58%, 58% to below 60%, 60% to below 62%, 62% to below 65%, 65% and above	Lumps & Fines (Fe%) : Below 55%, 55% to below 58%, 58% to below 60%, 60% to below 62%, 62% to below 65%, 65% and above	Grade wise sorting done as per buyer requirement
7d	Any beneficiation process at mines	No proposal	Nil	Mobile Dry screening plant
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation is taken care off. Dry crushing and screening adopted in the mine.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	No generation of Top soil.
8b	Concurrent use or storage of topsoil	No proposal	Top soil is used for plantation as on when generated.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for OB proposed.	Separate dump for OB maintained.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not Applicable.	Mine has been started recently.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not applicable	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation proposed in safety Zone & dumps slopes gap filling area	Plantation was done in safety Zone & dumps slopes gap filling area & maintained regularly.	WML-1140 saplings planted
8g	Survival rate	80%	82%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul roads proposed to control airborne dust	Water tankers were deployed to control the airborne dust on haul roads and screening plant.	7 nos of water tankers each of 8000 liters capacity
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mine is well maintained.

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 March 2019 A.R. Submitted up to 2018-2019	AR submitted on 29.06.2019	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager- P.Manjunath Mining Engineer - Nishant B N Geologist- Ambarish Volvoikar	Same mine official were present during the course of inspection	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings- 33.883 ha, used for waste disposal- 2.028 ha, Occupied by plant, buildings, residential, welfare buildings & roads-3.673 ha, Other Purpose (Area for Sub-grade stack, Protective Measures, Bunds, In active dump Stabilized with plantation, Safe)-19.776 Ha.	Appears to be correct
9d	Scrutiny of Annual return on afforestation	Total No of saplings-1140 No's Survival Rate- 80%	Appears to be correct
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: OB- Nil, production -1468000 Tons, CB-12000 Tons	Appears to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Avg. Sale value: Rs. 2465/Ton, Ex- Mine price: Rs.2465/tons , cost of production:Rs. 976.81/ton	Appears to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 4,77,03,660/- including land, building plant & machineries	Appears to be correct

9k Scrutiny of wagon drill -1 Appears to be correct
Annual return on compressor-1
mining excavators-18
machineries wheel loaders-
 13
 dumpers-22
 tippers-1
 extec screens-
 4
 cruchers-3
 water tankers-
 7

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)	09/07/2020			

Date :**(ARUN KUMAR)**

Indian Bureau of Mines