

**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 : **S47**) **DR. Sudhakara T.L**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : N Nishanth B. N- Mining Engineer Manager, Kartesh S.-
Official with
Designation
- (iv) Date of Inspection : 03/03/2022
- (v) Prev.inspection date : 20/11/2020

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 : Sri Kumaraswamy Mineral Exports Pvt Ltd
correspondance : 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 : Shantesh Gureddi Nominated Owner
 516/4, 10th Cross, Rajmahal
 Villas Extension, Sadashiv
 Nagar, BANGALORE BELLARY
 KARNATAKA
 Phone: 9845036556
 FAX :

Agent : N. Maheshwara Reddy
 BELLARY KARNATAKA
 Phone: 9448395533
 FAX :

Mining Engineer
 Name : Nishanth B N,Full Time
 Qualification : B.E.MINING
 Appointment/ : 29/08/2018
 Termination date

Geologist
 Name : VOLVOIKAR AMBRISH,Full Time
 Qualification : MSc GEOLOGY
 Appointment/ : 26/04/2019
 Termination date

Manager
 Name : P MANJUNATH
 Qualification : D IN MINING WITHFCC
 Appointment/ : 23/09/2015
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 07/03/1990
 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
 MP review under 17(1) MCR 2016 10/03/2020
 MP review under 17(1) MCR 2016 09/12/2020
 MP review under 17(1) MCR 2016 13/12/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	5 Bore Holes	9 core bore holes with a total meterage of 488m.	
1b	Exploration over lease area for geological axis 1 or 2	G1-59.36 Ha 15.92 Ha Non-Mineralized	G1-59.36 Ha 15.92 Ha Non-Mineralized	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	--	M/s. Sri Kumaraswamy Mineral Exports Pvt.Ltd. Expenditure-Rs.13.042 Lakhs.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserve as on 01/04/20	--	43.697 Million Tons	As per approved Mining Plan dated 13/12/2021. The quantity includes Hematetic Iron ore and HSIO.
1f	General remarks of inspecting officers on geology, exploration etc			Entire lease area surficial explored under G1 level. Out of 59.36Ha, potentially mineralized area is about 36.25Ha. To understand the depth continuity of the Hematetic Silicious Iron Ore (HSIO), deep drilling is required at some locations.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N 1666530 to N 1667360 E 661750 to E 662500	N 1666540 to N 1667350 E 661800 to E 662484	Development is carriedout within the proposed lateral extent.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top Soil-0 Overburden-2 Mineral-9	Top Soil-0 Overburden-2 Mineral-9	Separate benches maintained as proposed.

2c	Stripping ratio or ore to OB ratio	1:0.126	1:0.102	Ore : 1.94 million tonnes OB: 0.199 million tonnes
2d	Quantity of topsoil generation in m3	No Proposal	NIL	Working mainly in the broken-up area
2e	Quantity of overburden generation in m3	2,44,850	1,99,308	About 18% less OB generation as compared.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development is carried out within the proposed extent. Benches are maintained systematically as proposed.

Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	1940000 Tonnes	1940000 Tonnes	Proposed quantity achieved.
3c	Recovery of sailable/usable mineral from ROM production	1940000 Tonnes	1940000 Tonnes	--
3d	Quantity of mineral reject generation	No Proposal	NIL	--
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	NIL	--
3f	Quantity of sub grade mineral generation.	No Proposal	NIL	--
3g	Grade of sub grade mineral generation	No Proposal	NIL	--

3h	Manual / Mechanised method adopted for segregating from ROM	Fully Mechanized	Fully Mechanized	The Method of working is opencast Mechanized method. Excavation by Excavators, Drilling & Blasting, Loading of Ore & Waste and Crushing & Screening by mechanically.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	NIL	
3j	Provision of drilling and blasting in mineral benches	Proposed in Hard Strata. Spacing & Burden is 3.0m & 3.5m	Hard Strata. Spacing & Burden is 3.0m & 3.5m	
3k	Provision of mining machineries in mineral benches	WAGON DRILL -1 COMPRESSOR-1 EXCAVATORS-18 ROCK BREAKER - 1 WHEEL LOADERS-10 DUMPERS-26 EXTEC SCREENS-4 CRUSHERS-5 WATER TANKERS-5	WAGON DRILL -1 COMPRESSOR-1 EXCAVATORS-18 ROCK BREAKER - 1 WHEEL LOADERS-10 DUMPERS-26 EXTEC SCREENS-4 CRUSHERS-5 WATER TANKERS-5	Machinereis engaged as proposed.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB-7.5 M Mineral- 7.5M	OB-7.5 M Mineral- 7.5M	Benches are developed systematically and height of the benches maintained as proposed.
3m	Total area covered under excavation/pits	38.3141	36.841	As per Annual return 2020-21
3n	Ore to OB ratio for the pit/mine during the year.	1:0.126	1:0.102	Ore : 1.94 million tones OB: 0.199 million tonnes

3o	Total area put in use under different heads at the end of year	(i) Already exploited & abandoned by opencast (O/C) mining 0.00 (ii) Covered under current (O/C) Workings 38.3141 (iii) Reclaimed/Rehabilitated 0.00 (iv) Used for waste disposal 2.8958 (v) Occupied by plant, buildings, residential, welfare buildings & roads 2.2224 (vi) Other Purpose (Area for Sub-grade stack, Protective Measure, Bunds, Inactive dump stabilized with plantation, Safety) 15.4488 (vii) Work done under progressive mine closure plan during the year 0.000	(i) Already exploited & abandoned by opencast (O/C) mining 0.00 (ii) Covered under current (O/C) Workings 36.8415 (iii) Reclaimed/Rehabilitated 0.00 (iv) Used for waste disposal 2.8958 (v) Occupied by plant, buildings, residential, welfare buildings & roads 2.7755 (vi) Other Purpose (Area for Sub-grade stack, Protective Measure, Bunds, Inactive dump stabilized with plantation, Safety) 16.8472 (vii) Work done under progressive mine closure plan during the year 0.000	Proposed area is Lease area utilization as at the end of Plan Period as per approved Mining Plan. Actual area is as on 01/04/2021 as per Annual return
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 640000 2017-18: 640000 2018-19: 1480000 2019-20: 1640000 2020-21: 1940000 (in tonnes)	2016-17: 0 2017-18: 426000 2018-19 : 1480000 2019-20 : 1640000 2020-21 : 1940000 (in tonnes)	Year 2020-21 figures from Annual Return.

3q	General remarks of inspecting officers on method of mining etc.	Mine is fully mechanized, mechaneries engaged as proposed for development. Benches are developed systematic manner and height of the benches maintained as proposed.
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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)	Top soil -Nil Mineral Rejects-Nil	NIL	Development is mainly in the broken up area and no soil generation.
4b	Location of topsoil, OB and mineral reject dumps	WASTE DUMP N 1667060 to N 1667160 E 662140 to E 662230	N 1667060 to N 1667150 E 662150 to E 662230	Dumping carried out at proposed location.
4c	Number of dumps within lease area and outside of lease area	2 No's -Within the Lease area	2 No's -Within the Lease area	One stabilized dump and one active dump. Apart from these dumps, BHQ is separately dumped N1667670-N1667700 & E661316-E661422.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump-1 N1667450 to N1667600 E661820 to E662000 Dump-2 N 1667020 to N 1667250 E 662050 to E 662260	Dump-1 N1667450 to N1667600 E661820 to E662000 Dump-2 N 1667030 to N 1667180 E 662150 to E 662242	Except BHQ dump, waste Dumps are located outside UPL.
4e	Number of active and alive dumps.	1 No.	1 No.	
4f	Number of dead dumps.	-	-	
4g	Number of dumps established.	No proposal	Nil	Dump D1 is stabilized

4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	Retaining wall present along the toe of the dumps
4i	Length of Retaining wall or garland drain all along dumps	290m	Done	Constructed as proposed
4j	Number of settling ponds	No Proposal	NIL	
4k	Specific comments of inspecting officer on waste dump management			Dump D1 is old dump and it is stabilized. Dump 2 is active dump, terracing of the dump done systematically, slopes of the dumps covered with plantation.

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	
5b	Area under backfilling of mined out area	No proposal	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NIL	
5d	Total area fully reclaimed and rehabilitated	No proposal	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Ore exists beneath the working area, so no backfilling required at this stage.

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.	Submitted on 05.08.2021.	
6b	Area available for rehabilitation (ha) .	No proposal	NIL	
6c	afforestation done (ha).	0.05 Ha	0.0902 Ha.	
6d	No. of saplings planted during the year	500	2905	Within lease Survival rate of plantation is about 80%
6e	Cumulative no .of plants	-	428829	
6f	Any other method of rehabilitation	-	-	
6g	Cost incurred on watch and care during the year	No proposal	NIL	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	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 on backfilled area	No proposal	NIL	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NIL	

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	No proposal	NIL	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	NIL	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	NIL	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Buffer Zone and Core Zone	Ambient air quality done and submitted to respective departments regularly.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Afforestation done on safety zone and on slope of the dumps. PMCP activities were carried out in accordance to the approved Mining Plan.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1940000 (including all types of Lumps and fines with different grades)	Crushing and screening done at Mine site for separation of lumps & fines. Total production 1940000 (including all types of Lumps and fines with different grades)	ROM Mineral dispatched after dry screening

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized	Mechanized	
7c	Different grade of mineral sorted out at mines.	YES	Yes Lumps Fe 60% to below 62%: 72000 Fe 62% to below 65%: 352000 Fe 65% and above: 124000 Fines: Below 55% : 4000 55% to below 58%: 4000 58% to below 60%: 328000 Fe 60% to below 62%:360000 Fe 62% to below 65%:284000 Fe 65% and above: 524000	Grade wise sorting done as per buyer requirement
7d	Any beneficiation process at mines	Mobile Dry screening plant	Mobile Dry screening plant	Crushing & screening done as proposed.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Crushing and screening done at Mine site for separation of lumps & fines.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	NIL	Development carried out at broken up area, no top soil generated.
8b	Concurrent use or storage of topsoil	No Proposal	NIL	No top soil generated.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	WASTE DUMP N 1667060 to N 1667160 E 662140 to E 662230	Waste Dump D2 located at N 1667060 to N 1667150 E 662150 to E 662230 BHQ dumped at separate location.	BHQ and waste dumped at separate locations as proposed.

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	NIL	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Slopes of dumps covered with plantations	
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.	Plantation was done in safety Zone & dumps slopes, gap filling area as proposed.
8g	Survival rate	80%	70%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed for Dust separation	Water Tankers are arranged for water sprinkling on roads for control the dust.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around mines area is good.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to July 2021 A.R. for the year 2020-21 submitted on 30.06.2021	Annual return submitted within stipulated time.	

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	Appears to be correct.	During the day of inspection Nishant B.N., Mines Manager and Govind rao, Mining Engineer were present
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(i)Already exploited & abandoned by(O/C)mining- 0.0 ha, (ii)Covered under current (O/C) Workings- 36.841 ha, (iii) Reclaimed/Rehabilitated- 0.00 ha, (iv) used for waste disposal- 2.896 ha, (v)Occupied by plant, buildings, residential, welfare buildings & roads-2.776 ha. (vi) Other Purpose (Area for Sub-grade stack, Protective Measures, Bunds, In active dump Stabilized with plantation, Safe)-16.847 Ha.	Land use data appears to be correct	NIL
9d	Scrutiny of Annual return on afforestation	Total No of saplings-7505 No's Survival Rate- 80%	Out of 7505, 2905 saplings inside lease and of 80% survival rate, appears to be correct.	NIL

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	GRADE ORE STOCKS (in tons) (i)LUMPS: Below 55%- 309036.261 55% to below 58%- 0.04 58% to below 60%- 18.390 60% to below 62%- 28.98 62% to below 65%- 24088.49 65% and above- 20136.46 (ii)FINES: Below 55%- 0.110 55% to below 58%- 0.060 58% to below 60%- 2040.02 60% to below 62%- 24.18 62% to below 65%- 16024.38 65% and above- 32611.63	Appears to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	AVERAGE SALE VALUE- Rs. 3175 COST OF PRODUCTION- Rs. 2294.86	Appears to be correct
9h	Scrutiny of Annual return on fixed assets	82465734 Rs. Only	Appears to be correct

9k	Scrutiny of Annual return on mining machineries	WAGON DRILL -1 COMPRESSOR-1 EXCAVATORS-18 ROCK BREAKER - 1 WHEEL LOADERS- 10 DUMPERS-26 EXTEC SCREENS- 4 CRUSHERS-5 WATER TANKERS- 5	Appears to be correct	NIL
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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

Date :

(DR. Sudhakara T.L)

Indian Bureau of Mines