

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

Mining Plan Modification REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/385/BNG

Mine code : 30KAR03058

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 23/09/2021
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **S.A.THAWAB**
- (b) **Registration NO.** : **IBM/19011/2014**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **RAMGAD**
- Taluka : **SANDUR**
- Post office : **SUSHILANAGAR**
- Pin Code :
- FAX No. : **08392-240462 (F),**
- E-mail : **ztco2000@yahoo.com**
- Phone : **08392-240085 (O), 984408500**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** :
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **M/S.S.A.THAWAB & COMPANY,**
C/O. ZEENATH TRANSPORT CO, COWL BAZAR,
BELLARY - 583102
3. (a) **Lease Number** : **KAR0232**
- (b) **Lease area** : **24.72**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **03/08/2021**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : S.A.THAWAB
 BELLARY KARNATAKA
 Phone:
 FAX :

Owner : S.A.THAWAB
 BELLARY KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : T. Varaprasad, Full Time
 Qualification : B.E.MINING
 Appointment/ : 21/05/2018
 Termination date

Geologist

Name : Lohit Kumar D R, Full Time
 Qualification : M.sc Geology
 Appointment/ : 09/07/2018
 Termination date

Manager

Name : A. GURURAJ
 Qualification : B.E(MINING)
 Appointment/ : 18/04/2018
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	18/04/1994
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	16/07/2002
		Mining Scheme rule 12 MCDR1988	23/11/2005
		Modif.approved Mining Scheme	09/02/2011
		Mining Scheme rule 12 MCDR1988	22/12/2014
		Mining Scheme rule 12 MCDR1988	29/03/2016
		MP review under 17(1) MCR 2016	11/12/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Proposed 2 DTH Boreholes	13 DTH Boreholes (230 M), 3 Core Drilling Boreholes (65 M) Total 295 M 1 Trail pits	Drilling & trenching was done in 2020-21 to bring into G1 Category.
1b	Exploration over lease area for geological axis 1 or 2	G1, G2& G3	G1- 21.60 Ha	After carrying out exploration in 2020-21 & 2021-22 G1 area has increased to 23.67 Ha. Unexplored /Dump area 1.05 Ha.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal.	Exploration carried out 1. Inhouse 2.Sri Balaji (DTH Boreholes) Borewells, SMIORE Colony, Sandur 3.Geotech Exploration, (Core Drilling) ReshimBhag, Nagpur.	The expenditure incurred for putting Trenching, Borehole Drilling and sampling analysis were around 3.5 lakhs.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil.	Nil.	Exploration was carried out in 21.60 Ha. in 2020-21.
1e	Balance reserve as on 01/04/20	Nil.	0.58 Million T	As per Annual Returns (2020-21).
1f	General remarks of inspecting officers on geology, exploration etc			Exploration was carried in 2020-21 & 2021-22. G1 area has increased from 21.60 Ha to 23.67 Ha. Unexplored /Dump area 1.05 Ha.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed Location of Development: N 1675277 to 1675406 & E 656253 to 656396	Actual Location of Development: N 1675296 to 1675400 & E 656289 to 656390	Nil.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal.	Mining is done in float ore Zone.	Float ore is a mixture of iron and waste rock.
2c	Stripping ratio or ore to OB ratio	1 :1	1 :0.17	Violation issued.
2d	Quantity of topsoil generation in m3	No proposal.	NIL.	No generation of topsoil.
2e	Quantity of overburden generation in m3	35000 Tons	6000Tons	Bulk density: Iron ore - 3.0 tons/M3 Waste: 2.0 tons/M3. Violation issued.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development was carried out within the proposed limits with Stripping Ratio of 1:0.17. Violation issued.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 pit proposed for Production.	Working carried out in one pit only.	App. Dimension: 101 mtr (L) x 91mtrs (W) x 3 Mtrs depth
3b	Quantity of ROM mineral production proposed	35,000 Tons	35,000 Tons	As per Annual Returns 2020-21.
3c	Recovery of sailable/usable mineral from ROM production	40% recovery proposed	40% recovery	
3d	Quantity of mineral reject generation	No proposal.	NIL.	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal.	threshold value +45 % Fe for Hematitic ore. +35 % Fe for Hematitic Siliceous ore.	No reject generated.
3f	Quantity of sub grade mineral generation.	No proposal.	NIL.	
3g	Grade of sub grade mineral generation	No proposal.	Not applicable.	No Subgrade generated.

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method proposed for segregating ROM	Mechanized method adopted for segregating ROM	One unit of Dry crushing & screening (200 TPH) deployed.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposals.	No such beneficiation study proposed and carried out.	
3j	Provision of drilling and blasting in mineral benches	No Provision of drilling & blasting in mineral benches.	No drilling & blasting were carried out as float ore Mining was done.	Excavator deployed to extract float ore .
3k	Provision of mining machineries in mineral benches	Proposed Mining machineries in mineral benches Wheel loader Volvo 3 cum-1 No Back Hoe - 1 No Tipper - 2 No's Water Tanker 12000 ltr - 1 No Crusher 200 T/H - 1 No	Following Mining machineries used: Wheel loader Volvo 3 cum-1 No Back Hoe - 1 No Tipper - 2 No's Water Tanker 12000 ltr - 1 No Crusher 200 T/H - 1 No	No change.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed bench Height-3 mt Width- More than Height	Height= 3.5 mt (Avg.) Width= More than Height.	Nil.
3m	Total area covered under excavation/pits	7.44 Ha at the end of plan period.	7.44 Ha at the end of reporting year.	As per Annual Return submitted FY 2020-21.
3n	Ore to OB ratio for the pit/mine during the year.	1: 1	1: 0.17	Ratio is in Tons.

3o	Total area put in use under different heads at the end of year	Area for Mining-7.44 Ha Waste dumps-1.05 Ha Roads - 1.62 Infrastructure s- 0.10 Ha Green Belt - 2.11 Ha At the end of plan period	Area for Mining-7.44 Ha Waste dumps-1.05 Ha Occupied by plant, buildings, residential & Roads - 1.72 Other purpose (Stock yard, Safety Zone and others) -14.51	Work done under progressive mine closure plan during the year - 1.176 Ha. Violation issued for mismatching of land use pattern.
3p	Production of ROM mineral during the last five year period as applicable	2016-17:35,000 2017-18:35,000 2018-19:35,000 2019-20: 35,000 2020-21: 35,000	2016-17: NIL 2017-18: 9,000 2018-19: 35,000 2019-20: 35,000 2020-21: 35,000	All units in tons. Actual production is within in the proposed limits.
3q	General remarks of inspecting officers on method of mining etc.			Float ore mining with the help of hydraulic excavator & Tipper were carried out.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal.	Screen Waste generated from segregation of ROM was used for Backfilling.	No separate OB Dump observed in the Mine.
4b	Location of topsoil, OB and mineral reject dumps	No proposal.	NIL.	No topsoil, OB & mineral reject generated.
4c	Number of dumps within lease area and outside of lease area	WML- 01dump OML - NIL	WML- 01 dumps OML - NIL	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dump proposed out the UPL	OB Dump (Inactive) was situated outside the UPL.	Location of Inactive Dump carried out in past: ID(AD-1) N 1675374 - 1675461 E 655974 - 656144
4e	Number of active and alive dumps.	No proposal.	Concurrent Back filling carried out in the worked-out Pit.	Nil.

4f	Number of dead dumps.	No Proposal.	Nil.	One very old dead Dump was observed within the ML area.
4g	Number of dumps established.	1 dead dump	1 dead dump stabilized	Dead dump stabilized by coir matting and plantation.
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall & garland drain proposed all along the dump in the past.	Retaining wall & garland drain maintained.	Retaining wall and garland drain are constructed all along the Dump in the past.
4i	Length of Retaining wall or garland drain all along dumps	No Proposal.	Nil.	Completed as per proposal previously at the toe of Dead Dump ID (AD-1). TW3 - 300 m GD3 - 300 m (PMCP)
4j	Number of settling ponds	No proposals.	Nil.	2 SST constructed in the past & maintained OML.
4k	Specific comments of inspecting officer on waste dump management			Screen Waste generated from segregation of ROM was used for Backfilling the excavated pit as per the proposal.

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.	Back filling Location N 1675310 - 1675397 E 656340- 656411.	Back filling Location N 1675361 -1675392 E 656340- 656411.	Back filling was done within the proposed limit.
5b	Area under backfilling of mined out area	3.0 Ha. from 2016-17 to 2020-21	1.45 Ha. was covered under Backfilled area.	Production started from 2017-18.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal.	Not applicable.	No generation of Top Soil.

5d	Total area fully reclaimed and rehabilitated	No proposal.	No area has been fully reclaimed & rehabilitated.	1.45 Ha. Area was covered under Backfilled & is in under progress.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling in the mine was in progress after fully extracting the mineral.

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 on PMCP to be submitted on 1st July every year.	PMCP report Submitted.	Submitted on 23.06.2021
6b	Area available for rehabilitation (ha) .	No proposal.	Nil.	Nil.
6c	afforestation done (ha).	Back filling - 0.60 Ha. Safety Zone - 0.43 Ha.	Gap filling done on the slope of the Inactive Dump, Back filled area, safety zone and Outside lease area.	
6d	No. of saplings planted during the year	600 saplings in Back filling area 500 saplings in Safety zone	600 saplings in Dump area (Gap filling) 500 saplings in Safety zone Others: 230 saplings in OML	Total = 1330 saplings
6e	Cumulative no .of plants	Not specified.	Saplings - 12905(WML)	Safety zone: 4464 Inactive dump: 8141 Other: 4001 as per PMCP (2020-21) submitted.
6f	Any other method of rehabilitation	No proposal.	Not applicable.	Nil.
6g	Cost incurred on watch and care during the year	25000 Rs. Per Year	Rs. 500000 Rs.	Nil.

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal.	46 mtr(L) x 22 mtr (W) x 3 Mtr.	Nil.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.6 Ha	0.1 Ha	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	500 saplings.	500 saplings.	Gap filling done in Safety Zone.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.43 Ha.	Gap filling done in Safety Zone.	1.91 Ha. covered.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Rehabilitation NA by way of Afforestation.		Nil.

6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed in core zone & buffer zone	Environmental monitoring carried out for air, water, noise & soil in core zone & buffer zone on monthly basis	Environmental monitoring is carried out by Casmo Conscious Research Laboratory, Bellary.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP activities were carried out as per the proposals

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 was carried out.	Nil.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Grade wise sorting proposed Mechanically with help of Crusher and screening plant.	Crushing & Screening process are in under process.	1 No. of Crusher and screen plant.
7c	Different grade of mineral sorted out at mines.	0-55% +55-58% 58-60% 60-62% 62-65% +65%	Below 55 % Fe, 60-62 % Fe, 62-65% Fe,	Nil.
7d	Any beneficiation process at mines	No proposal.	NIL.	Only Dry process by mobile crusher & screening.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation is taken care. Low grade ore were blended with high grade to meet the market requirement.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal.	NIL.	NIL.
8b	Concurrent use or storage of topsoil	No proposal.	Not applicable.	NIL.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Backfilling proposed.	Back filling was carried out as per the proposals.	NIL.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal.	Not applicable.	NIL.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Back filling & plantation proposed to restore & reclaim the land degraded.	Back filling & plantation is carried out to restore & reclaim the land degraded.	Gap filling in Safety zone.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	15576 1100 (2020-21) 16676	15576 1330 16906 (plantation report)	Plantation on Back filling Area & Gap filling in Safety zone.
8g	Survival rate	75%	75%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on roads to control airborne dust.	Water sprinkling done regularly on roads to control airborne dust.	1 Water tankers each of 12 KL deployed.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine was good as lessee has carried out afforestation, water sprinkling and other environmental protective measures as per RMP.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Monthly Returns submitted up to August 2020 Annual Returns submitted up to 2020-21	A.R Submitted on 30.06.2021
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri. G. Pompapathi - Mines Manager Sri. Shashidhara L -Mining - Engineer Sri. K Anil Kumar - Geologist	Sri. G. Pompapathi - Mines Manager Sri. Shashidhara L - Mining -Engineer & Geologist - Mekala Peddanna accompanied during the course of inspection.	Notice of appointment of Geologist received. Date of Appointment: 20.09.2021.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current workings (O/C) - 7.44 Ha, Dumping- 1.050 Ha. Occupied by plant, buildings, residential, welfare buildings & Roads - 1.720 Ha Other purposes (Stockyard, safety zone and others) - 14.510 Ha Work done under progressive mine closure plan during the year - 1.176.	Violation issued.	
9d	Scrutiny of Annual return on afforestation	1100 saplings planted WML 230 saplings planted WML @ 75% survival rate.	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 stock: opening balance 35000 tons, Production: 35000 tons ,Closing Stock 29000 tons.	Appears to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value: Lumps -5540.92 Rs/ton, Fines- 779 Rs/ton, Ex -mine price: Lumps-60 % to below 62 % Fe: 5194 Rs/ton, 62 % to below 65 % Fe: 5617 Rs/ton. Ex -mine price: Fines: Below 55 % 779 Rs/ton. Cost of Production =Rs.529.64/ton	Violation issued.
9h	Scrutiny of Annual return on fixed assets	Rs.634020 including plant machinery and transport equipment.	Appears to be correct.
9k	Scrutiny of Annual return on mining machineries	Wheel loader Volvo 3 cum - 1 Back Hoe 1.60 cum - 1 Tipper - 2 Water Tanker 12000 ltr - 1 Crusher 200 T/H - 1	Appears to be correct.

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)	11/10/2021			
	Rule 45(7)(i)	11/10/2021			

Date :**(ARUN KUMAR)**

Indian Bureau of Mines