

**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/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 : Shri.Pompapathi Gurke- Mines Manager
Official with
Designation
- (iv) Date of Inspection : 19/11/2020
- (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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Proposed 2 DTH Boreholes	2 DTH Boreholes drilled at grid interval of 100 x 100 m to confirm the depth of the Mineralization before Backfilling.	Drilled total meterage of 20.00 M
1b	Exploration over lease area for geological axis 1 or 2	G1 ,G2 & G3	G1- 7.00 Ha G2 -12.61 Ha G3- 1.0 Ha.	20.68 Ha. is float ore zone within the ML area.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Exploration carried out Inhouse & expenditure incurred 5.23 Lakhs including sampling analysis.	Exploratory drilling carried out by Company own Wagon drilling machine.
1d	Balance area to be explored to bring Geological axis in 1 or 2	G3- 1.0 Ha.	G3- 1.0 Ha.	2 DTH boreholes drilled.
1e	Balance reserve as on 01/04/20	Nil	0.618 MT with the average grade of 55.74% Fe.	As per Annual Returns 2019-20
1f	General remarks of inspecting officers on geology, exploration etc			2 DTH Boreholes (20.00 m) drilled at grid interval of 100 x 100 m to confirm the depth of the Mineralization before carrying out Backfilling.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed location of development: N 1675203 to 1675367 & E 656314 to 656442	Actual location of development: N 1675259 to 1675344 & E 656364 to 656431	The actual development was carried out within the proposed grids.

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 : 1	No change
2d	Quantity of topsoil generation in m3	No proposal	NIL	No topsoil in the worked limit.
2e	Quantity of overburden generation in m3	35000 Tons	35000 Tons	Bulk density : Iron ore - 3.0 tons/cu.mtrs Waste : 2.0 tons/cu.mtrs
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 1:1.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 pit proposed for Production	App. Dimension : 109 mtr(L) x 87mtrs (W) x 3 Mtrs depth	ROM stocked over existing proposed working area. Violation issued.
3b	Quantity of ROM mineral production proposed	35,000 TONS	35,000 TONS	As per Annual Returns 2019-20
3c	Recovery of sailable/usable mineral from ROM production	40% recovery proposed	90% recovery	Higher recovery as most of the mineral was recoverable.Recovery test also done by laboatory.
3d	Quantity of mineral reject generation	No proposal	Nil	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.	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 ROM	35,000 TONS of ROM excavated and stocked separately.	One unit of Dry crushing & screening (150TPH) 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	Bulk density & recovery test 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 work float ore.
3k	Provision of mining machineries in mineral benches	Excavator & Tipper combination proposed.	Hydraulic Excavator (1.6 cum) and 16 Tonner tippers were deployed to win the ore.	Mining machineries deployed on the date of inspection.: Wheel loader Volvo 3cum - 1 ,Back Hoe - 1,Tipper - 2,Water Tanker 12000 ltr - 1,Crusher 200 T/H - 1
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= 3.0 mt (Avg.) Width= More than Height	NIL
3m	Total area covered under excavation/pits	7.44 Ha at the end of plan period	6.47 Ha at the end of reporting year.	As per Annual Return submitted FY 2019-20.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1	1 : 1	Nil
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-6.47 Ha Waste dumps-1.05 Ha Occupied by plant,buildings, residential & Roads - 1.72 Other purpose (Stock yard,Safety Zone and others) - 15.48 Work done under progressive mine closure plan during the year - 1.176 Ha.	Nil

3p	Production of ROM mineral during the last five year period as applicable	2015-16 : 35,000 2016-17 : 35,000 2017-18 : 35,000 2018-19 : 35,000 2019-20 : 35,000	2015-16: NIL 2016-17: NIL 2017-18: 9,000 2018-19: 35,000 2019-20 : 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- 01 dump OML - NIL	WML- 01 dump OML - NIL	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.	E6Location of Inactive Dump carried out in past : ID(AD-1): N 1675374 - 1675461 & E655974 - 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	1 Very Old Dead Dump (inactive) 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
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 proposed after fully extracting the mineral.	Back filling was carried out after confirming the depth of mineralization by DTH drilling & was in progress.	Location Backfilling: N 1675249 -1675367, E 656345- 656446
5b	Area under backfilling of mined out area	2.40 Ha. from 2016-17 to 2019-20	1.35 Ha. Was covered under Backfilled area.	Lower generation of OB material.
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.	1.35 Ha. was covered under Backfilled & is in progress.

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Backfilling in the mine was in progress after fully extracting the mineral. The depth of mineralization was confirmed by DTH drilling before backfilling
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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 on PMCP to be submitted on 1st July every year.	PMCP report Submitted	Submitted on 02.06.2020
6b	Area available for rehabilitation (ha) .	No proposal	Nil	Nil
6c	afforestation done (ha).	0.60 Ha	Gap filling done on the slope of the Inactive Dump,Back filled area, safety zone and Outside lease area.	2.08 Ha covered.
6d	No. of saplings planted during the year	Back filling area=600 saplings Safety zone= 500 sapling	Back filling area= 600 saplings Safety zone= 500 sapling Outside lease area = 100 saplings	Total = 1200 saplings
6e	Cumulative no .of plants	Not specified	Saplings - 11805(WML)	Safety zone : 3964, Inactive dump : 7541 Other: 300 as per PMCP (2019-20) submitted.
6f	Any other method of rehabilitation	No proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	25000 Rs. Per Year	Rs. 76,386	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	240 mtr (L) x 100 mtr (W) x 3 Mtr	168 mtr(L) x 80 mtr (W) x 3 Mtr	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	2.40 Ha	1.35 Ha	Delay restart in the mining operation & lower grneration of screen waste
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)	0.42 Ha.	Gap filling done in Safety Zone.	2.11 Ha.covered
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Rehabilitation by way of Afforestation.	Afforestation carried put	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 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 carried out within the lease area	4000 tons C-Ore, 13707.750 Fines Processed.
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%	0-55%, 58-60%, 60-62% 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 was taken care off. Grade wise sorting was carried out mechanically with help of Crusher and screening plant

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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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	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed backfilling for waste /OB.	Back filling was in progress.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling proposed	Backfilling carried out & ins in progress	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.	Plantation 0.60 Ha Back filling Area. Gap filling in Safety zone.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	WML- 14376 saplings in all OML- 15476 saplings	WML-14376 saplings OML- 15576 sapling	Plantation on Back filling Area & Gap filling in Safety zone.
8g	Survival rate	75%	75%	Nil
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 October 2020 Annual Returns submitted up to 2019-20	A.R Submitted on 30.06.2020	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri. G. Pompapathi - Manager Sri. Manjunatha - Mining Engineer Sri. S. Srinivas - Geologist	Shri. Jitta Srikanth- Geologist appointed on 01.09.2020 & Shri. Shivaputra- Mining Engineer appointed on 10.10.2020	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current workings (O/C) - 6.470 Ha , Dumping- 1.050 Ha. Occupied by plant, buildings, residential, welfare buildings & Roads - 1.720 Other purposes (Stockyard , safety zone and others) - 15.480Ha Work done under progressive mine closure plan during the year - 1.176.	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	1100 saplings WML & 100 saplings OML @ 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 : OB, Production and CB - 35000 MT	Appears to be correct	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value: Nil, Ex-Mine Price: Lumps- 60% to below 62%- Rs.2948/ton 62% to below 65%- Rs.3390/ton. Fines: Below 55% - Rs.837.91/ton Cost of Production =Rs.722.71 /ton	In the cost of production table, Royalty, DMF & NMET details have not been furnished.	Violation issued
9h	Scrutiny of Annual return on fixed assets	Rs.745906/- including plant machinery and transport equipment	Appears to be correct	
9k	Scrutiny of Annual return on mining machineries	Wheel loader Volvo 2 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)	04/12/2020			
MCDR17	Rule 45(7)(a)	04/12/2020			

Date :

(ARUN KUMAR)

Indian Bureau of Mines