

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

MCDR inspection REPORT

Bangalore regional office

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

Mine code : 30KAR03058

- (i) Name of the Inspecting : **S21**) **H M Shivakumar**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : G. Pompapathi - Manager & Mining Engineer, Bhat Sridha
Official with
Designation
- (iv) Date of Inspection : 13/10/2022
- (v) Prev.inspection date : 11/12/2009

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 :

Agent : Syed Aslam
 Zeenath Transport Company
 Zeenath House, Cowl Bazar
 Bellary BELLARY KARNATAKA
 Phone: 08392240085
 FAX : 08392240462

Mining Engineer

Name : Pompapathi Gurke, Full Time
 Qualification : Diploma in Mining and Mine surveying wit
 Appointment/ : 23/05/2020
 Termination date

Geologist

Name : BHAT SRIDHAR MADHU KESWAR, Full Time
 Qualification : M.Sc Geology
 Appointment/ : 19/09/2022
 Termination date

Manager

Name : Pompapathi Gurke
 Qualification : Diploma in Mining and Mine surveying wit
 Appointment/ : 23/05/2020
 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
	:	Modif.approved Mining Scheme	29/10/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposals. (2021-22)	5 Core Drilling Boreholes (135 M) 1 Trail pit	24 DTH Boreholes (340 M), 08 Core Boreholes 200 M) Total 540 M 86 Trial pits till date and no back log of previous years.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1 23.67 Ha Unexplored area /Dump area 1.05 Ha. As per approved Modified RMP.	Out of total 24.72Ha ML area (lease deed) exploration is carried out over an area of 23.67 Ha and proved Mineralized. Balance Unexplored area /Dump area is 1.05 Ha.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	01 Trial pit, 05 Core borehole,	Exploration carried out 1. In house 2. Geotech Exploration, (Core Drilling) Reshim Bhag, Nagpur	The expenditure incurred for Borehole Drilling and sampling analysis around 6.07 lakhs as reported.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Unexplored area /Dump area 1.05 Ha.	Exploration was carried out in 23.67Ha. In 2021-22 and Balance Unexplored area/Dump area is 1.05 Ha.
1e	Balance reserve as on 01/04/20	27,70,564 MT as on 01.10.2021	27,41,279 MT as on 01.04.2022	Total resources 27,41,279 MT & 2491220 MT Reserves as per AR submitted for the year 2021-22.
1f	General remarks of inspecting officers on geology, exploration etc			The Mining lease comprises of Iron Ore Reef deposit and float ore also which has been proved by extensive exploration.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Float ore: N 1675220 - 1675240 E 656341 - 656357, N1675160 - 1675040 E 656399 - 656463, N1675160 - 1675210 E 656728 - 656743	Float ore: N1675220-1675240 E656341 - 656357, N1675160- 1675040 E656399- 656460, N1675160- 1675210 E 656728- 656743	Mine workings carried out within proposed grid limits.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal of separate benches in topsoil, and over burden mineral	No separate benches maintained in topsoil, and overburden mineral.	During the RY Mining is done in float ore Zone.
2c	Stripping ratio or ore to OB ratio	1:0.07	1:0.07	For the Year 2021-22 - Production and development was proposed with production of 67,500 tonnes of Iron Ore and 4,577 tonnes of waste generation. It is reported to have produced only 35,000 tonnes of Iron Ore and 2590 tonnes of waste generation i.e. only about 52% & 57% of total proposed production and development quantities there by lacking in proposed Production and Development and not achieving the proposed stripping ratio. Violation issued.
2d	Quantity of topsoil generation in m3	No Proposal	No Top soil generation during the year	Float ore working and no topsoil is generated.

2e	Quantity of overburden generation in m3	4577 MT	2590 Mt (31.03.2022)	As on 31.03.2022 as per Production and development register maintained at mine Office. Violation issued for less development.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The Mining lease comprises of Iron Ore Reef deposit and float ore also which has been proved by extensive exploration. However, during the year float ore Mining is carried out with proper development of benches in the slope where float ore deposit is being worked.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3 pits proposed for production in float ore zone.	Working carried out in 3 pits. float ore zone.	3 separate pits comprising float ore deposits.
3b	Quantity of ROM mineral production proposed	67500 MT	35000 MT (31.03.2022)	As per Monitoring Committee guidelines 58100 MT(CEC Limit)
3c	Recovery of sailable/usable mineral from ROM production	100 %	100 %	
3d	Quantity of mineral reject generation	No Proposal	No mineral rejection generation during the year	
3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	NIL	<35% FE Threshold value for Iron Ores.
3f	Quantity of sub grade mineral generation.	No Proposal	Nil	No sub grade Mineral.

3g	Grade of sub grade mineral generation	No Proposal	Not applicable	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Only dry crushing & screening	Crusher 100 TPH Screening 150 TPH	Mechanized Method for crushing and screening size wise with installed Capacity of crushing plant 100 TPH & Screening 150 TPH
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	No such beneficiation study proposed and carried out. Worked in Float & Reef Ore Zone.	No sub grade mineral is generated.
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting in mineral benches	During the RY no drilling and blasting was carried out in the float ore mineral benches.	Only Excavators deployed to in the float ore Zone.
3k	Provision of mining machineries in mineral benches	Proposed Mining machineries in mineral benches Wheel loader Volvo 3 cum-1 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	The proposed Mining machineries were deployed at the mine.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Suitable bench height and width proposed in mineral benches	Suitable bench height and width maintained in mineral benches	Float Ore working: Height 3 mtrs Width 4 mtrs
3m	Total area covered under excavation/pits	7.44 Ha. At the end of the year	7.44 Ha.	As per AR submitted for the year 2021-22.

3n	Ore to OB ratio for the pit/mine during the year.	1:0.07	ROM- 35000 Ts WASTE - 2590 Ts.	Violation issued for less production and development than proposed.
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 - 0.82 Infrastructure s- 0.10 Ha Other purpose (Stock yard, Safety Zone and others) - 15.310	Area for Mining-7.44Ha Waste dumps-1.05 Ha Occupied by plant, buildings, residential & Roads - 0.92 ha Other purpose (Stock yard, Safety Zone and others) -15.310	As per Annual Return submitted FY 2021-22.
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 2021-22: 67,500	2016-17: NIL 2017-18: 9,000 2018-19: 35,000 2019-20: 35,000 2020-21: 35,000 2021-22: 35000	Only 35,000 MT achieved during the RY due to Statutory permissions
3q	General remarks of inspecting officers on method of mining etc.			Mining is done by open pit mechanized means of working in the float ore zone with proper formation of benches along the slope.

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	NIL	One old OB Dump observed in the Mine and at present concurrent backfilling is done in the mined-out float ore zone.
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	--
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal	1 OB dump (Inactive) is situated outside the UPL.	Location of Inactive Dump carried out in past: ID 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.	Concurrent Back filling carried out in the float ore worked-out Pits.
4f	Number of dead dumps.	1 Dead Dump (ID-1)	1 Dead Dump (ID-1)	Stabilized with plantation.
4g	Number of dumps established.	1 dead dump	1 dead dump stabilized	Stabilized by plantation and partially by coir mating.
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Yes, RW and GD is constructed in the past all along the dump.	GD and RW's are constructed as per the R & R Plan 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 TW3 - 300 m GD3 - 300 m (PMCP)
4j	Number of settling ponds	No proposals	Nil	2 No.s of settling pond constructed outside lease the previous plan period.
4k	Specific comments of inspecting officer on waste dump management			There is one old waste dump which has been stabilized in the past with all protective measures as per the R & R plan. During the RY concurrent backfilling of waste is done in the float ore worked out pits.

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 1675159 - 1675179 E 656708- 656752.	Back filling Location N 1675159 -1675179 E 656708- 656752.	Back filling was done within the proposed limit.
5b	Area under backfilling of mined out area	0.4 Ha	0.4 Ha. Was covered under Backfilled area.	As proposed.
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.	2.44 Ha. Area was covered under Backfilling& is in progress. As per PMCP Report.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			During the RY Concurrent Back filling is carried out in the float ore worked-out Pits which is in progress and no reclamation is proposed or carried out during the RY.

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 before 1st July of every year.	PMCP report is submitted.	PMCP Report submitted on 30/05/2022.
6b	Area available for rehabilitation (ha) .	No proposal	NIL	NIL
6c	afforestation done (ha).	0.29 Ha.(safety zone),	0.29 Ha.(safety zone),Inactive dump(Gap pilling)	As proposed and appears to be correct.

6d	No. of saplings planted during the year	290 saplings proposed - Green Belt,	325 saplings planted. Inactive dump: 150 saplings	Safety Zone: 325 saplings. OML - 75 saplings. Inactive dump: 150 which appears to be correct.
6e	Cumulative no .of plants	Not Specified	17456 saplings in all.	Safety Zone: 4789 Inactive dump: 8291, Avenue Plantation Others - 300, OML - 4076 as per PMCP 2021-22 and appears to be correct.
6f	Any other method of rehabilitation	No proposal	NIL	NIL
6g	Cost incurred on watch and care during the year	14,500 Rs. Per year	87,500 Rs. Per year	Appears to be correct.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	48 mtr(L) x 15mtr (W) x 6 Mtr	Concurrent Back filling is carried out in the float ore worked-out Pits
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.04 Ha	0.04 Ha	YES
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No proposal	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Concurrent backfilling with waste of float ore mined out pits only.	Concurrent backfilling of waste in float ore mined out pits only.	Concurrent backfilling with waste of float ore mined out pits only.

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Concurrent backfilling of float ore mined out pits.	Concurrent backfilling of float ore mined out pits.	Concurrent Back filling of waste is carried out in the float ore worked-out Pits is done.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	290 saplings	325 saplings	Gap filling done in Safety Zone.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.29 Ha.	0.29 Ha.	Gap filling done in Safety zone.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	0.29Ha, 290 no's of saplings (Gap Plantation)	325 no's of saplings (Gap Plantation)	Appears to be correct.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environment monitoring proposed in buffer zone and core Zone.	Environmental monitoring is carried out.	Environmental monitoring is carried out as per the statute by Cosmo conscious Research laboratory. Bellary.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance & progressive closure operations are carried out as per the proposals and statutory requirements.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Dry crushing & Screening plant.	Crushing Plant -100TPH, Screening Plant 150TPH	1 unit each of dry crushing & screening plants as reported are in the Mining Lease and sorting is done within the lease area.

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 and screening process are by mechanical means.	1 no. of Crusher and screen plant. Crushing and screening process are by mechanical means.
7c	Different grade of mineral sorted out at mines.	0-55% +55-58% 58-60% 60-62% 62-65% +65%	Below 55 % Fe, 62-65%Fe,	
7d	Any beneficiation process at mines .	No proposal	Nil	Only dry screen and crusher plant
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The entire mineral produced is suitably blended to bring it to salable grade thereby taking care of mineral conservation aspects.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	No utilization of topsoil	No top soil generation,
8b	Concurrent use or storage of topsoil	No proposal	Nil	No generation of top soil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Backfilling proposed	Back filling was carried out as per the proposals	During the year concurrent backfilling carried out as proposed.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	During the year concurrent backfilling with waste is carried out in the float ore mined out pits as proposed.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Concurrent backfilling with waste proposed in the float ore mined out pits.	Concurrent backfilling with waste in the float ore mined out pits as proposed is carried out.	Concurrent backfilling with waste in the float ore mined out pits as proposed is carried out.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	16906 290 (2021-22) 17196	16906 550 17456 (plantation report)	Plantation on Inactive dump and Gap filling in Safety zone is done and the numbers reported appears to be correct.
8g	Survival rate	75%	75%	Appears to be correct.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul road proposed to control airborne dust.	Water sprinkling is carried out regularly to control air pollution.	12,000 ltr capacity water tanker is engaged at the Mine as proposed.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine is good and maintained by plantation by the lessee. Also natural thick vegetation in the forest area surrounding the mine adds up to the aesthetics.

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 September 2022 Annual Returns submitted up to 2021-22	A.R Submitted on 30.06.2022	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri. G. Pompapathi - Mines Manager Sri. G. Pompapathi - Mining - Engineer Sri. Pranav Prem - Geologist	On the date of inspection following Technical Officers were present. Sri. G. Pompapathi - Mines Manager Sri. G. Pompapathi - Mining -Engineer & Geologist - Sridhar M bhat
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current workings (O/C) - 7.44Ha, Dumping- 1.050 Ha. Occupied by plant, buildings, residential, welfare buildings & Roads - 0.92 Ha Other purposes (Stockyard, safety zone and others) - 15.310Ha	In order.
9d	Scrutiny of Annual return on afforestation	475 saplings planted WML 75 saplings planted OML @75% survival rate.	Appears to be correct.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	No Mineral Reject Generation.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock: opening balance 29000 tons, Production: 35000 tons, Closing Stock 64000 tons.	Stock as per the AR submitted and as on 31/3/2022. On Date of inspection could not be verified.

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex- mine price: Lumps 62-65% 4873. Fines: below 55%- 1128.	Capitalised Expenditure such as pre-production exploration was not accounted for the exploration carried out during the year. And violation issued for rectifying part VII for Cost of Production per tonne including the cost of exploration.
9h	Scrutiny of Annual return on fixed assets	Rs.538917 including plant machinery and transport equipment	Plant and Machinery including transport equipment is not properly /rightly reflected. Violation issued.
9k	Scrutiny of Annual return on mining machineries	Wheel loader Volvo 3 cum - 1 Back Hoe 1.60 cum - 1 Tipper - 2 (16 T) Water Tanker 12000 ltr - 1 Crusher 200 T/H - 1	The machineries reported are deployed in the Mine.

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)	16/11/2022	01/02/2023	MCDR17 Rule 45(7)	16/11/2022	
MCDR17 Rule 45(7)(a)	16/11/2022	01/02/2023			

Date :

(H M Shivakumar)

Indian Bureau of Mines