# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### Inspection under SDF for star rating of mines REPORT

#### Bangalore regional office

Mine file No: KNT/BLR/FE/385/BNG Mine code: 30KAR03058

(i) Name of the Inspecting : P005 ) C.PARAMESHWARAN

Officer and ID No.

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine : Shri Sreenivas, Mining Geologist.

Official with Designation

(iv) Date of Inspection : 06/11/2019
(v) Prev.inspection date : 04/09/2018

PART-I : GENERAL INFORMATION

. (a) Mine Name : S.A.THWAB

(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), 98440850

(f) Police Station : SANDUR

(g) First opening date :

(h) Weekly day of rest : SUN

2. Address for : M/S.S.A.THAWAB & COMPANY,

correspondance 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

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	Three core drilling for the year 2018-19	3 DTH drilling of 30m drilling.	Not given the reasons for not carrying out Core drilling.
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2	G1- 7.00 Ha G2 -12.61 Ha, G3- 1.0 Ha	Not proposed what is the quantum of exploration for the particular scale of explorations.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Given	Exploratory drilling carried out by company own Wagon drilling machine.	Used company machine for drilling.
1d	Balance area to be explored to bring Geological axis in 1 or 2	G3- 1.0 Ha	G3- 1.0 Ha	Given proposals has been completed.
1e	Balance reserve as on 01/04/20	700480 Tons	700480 Tons	As reported in AR-2018-19.
1f	General remarks of inspecting officers on geology, exploration etc	Given proposals by the lessee.	Not undertaken as per the proposals.	Instead of Core drills/ done DTH drills, which is contarry to the proposals. Planning was not correct. The area reveals almost floats, it is better to have

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N1675027 TO N1675147 E656397 TO E656548	N1675027 TO N1675147 E656397 TO E656548	No changes in the location is concerned.
2b	<del>-</del>	exhibits float in nature	Float ore is a mixture of iron and waste rock	In general the area reveals the floats of ruddytype, also lumpy and rare appearance of insitu.
2c	Stripping ratio or ore to OB ratio			

2d	Quantity of topsoil generation in m3	No proposals.	Nil	Nil
2e	Quantity of overburden generation in m3	17500 M 3 , 35000 tons	•	Bulk density: Iron ore - 3 tons/Cu.mtr Waste - 2.0 tons/Cu.mtr
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Given	Followed as per the proposals.	No deviation in the developments.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	Yes one pit only for production, App. Dimension = 65mtr(L) x 150 mtrs (W) x 3 Mtrs depth	Yes the mining operations were found to be operated intermittently depends on the demand from the market.
3b	Quantity of ROM mineral production proposed	35,000 TONS	35,000 TONS	Proposed production achived.
3с	Recovery of sailable/usable mineral from ROM production	40% recovery proposed	40% recovery actual achived.	no changes in the target & actual.
3d	Quantity of mineral reject generation	No proposals.	Nil	Nil
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 proposals.	NIL	NIL

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method proposed for segregation of ROM	Mechanized method adopted for segregation of ROM	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	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	No proposals	Nil	NII
3k	Provision of mining machineries in mineral benches	Proposed mining machineries in mineral benches Excavator -1 Nos. Wheel loader - 1 Nos. Tipper - 2Nos. Crusher & Screen - 1 Nos.	Following mining machineries used: Excavator -1 Nos. Wheel loader - 1 Nos. Tipper - 2Nos. Crusher & Screen - 1 Nos.	No changes.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height-3 mt	Height= 3.0 mt (Avg.) Width=7-8 mt	Benches were maintained as the strata reveals the float & the medium hardness.
3m	Total area covered under excavation/pits	6.276 Ha at the end of plan period 2019-20	Actual also 6.276 Ha at the end of plan period 2019-20	Nochanges the lessee maintained within the proposed area.
3n	Ore to OB ratio for the pit/mine during the year.	1:1	1:1	No changes.
30	Total area put in use under different heads at the end of year	Waste dumps- 1.05 Ha Roads - 1.62	Area for Mining-6.276Ha Maintained within the proposed limit. Waste dumps-1.05 Ha Roads - 1.62 Infrastructures- 0.10 Ha Safety Zone- 2.11 Ha Future Mining - 13.564Ha	well maintained within the proposed limit.

3p	Production of ROM mineral during the last five year period as applicable	2014-15: NIL 2015-16: NIL 2016-17: 35,000 2017-18: 35,000 2018-19: 35,000	2014-15: NIL 2015-16: NIL 2016-17: NIL 2017-18: 9000 2018-19: 35,000	Mine started in 2017-18 onwards & maintained the desired productions.
3q	General remarks of inspecting officers on method of mining etc.	Proposals drawn as per the approved MP	well maintained to the limit.	As per the proposals production could not be achived due to starting the mine late.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate waste dump proposed	Separate waste dump maintained	No generation of top soil and mineral rejects.
4b	Location of topsoil, OB and mineral reject dumps	No generation of top soil and mineral rejects.	Back filling not started	small scale operations in the mine.
4c	Number of dumps within lease area and outside of lease area	_	Inside Mining lease- In Active Dump ID 1 Out side Mining - NIL	within the limit.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dump proposed out the UPL	Waste dump located out the UPL	yes the waste is located away from the UPL.
4e	Number of active and alive dumps.		Back filling is not started.	The ML area is not matured for back filling as the ore is not exploited.
4f	Number of dead dumps.	One dead dump	One dead dump	No change.
<b>4</b> g	Number of dumps established.	One dead dump	One dead dump stabilized	Dead dump stabilized by coir matting and plantation .
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed as per the approved R & R plan	Maintained as per the approved R & R plan	It is maintained in the ML area.

4i	Length of Retaining wall or garland drain all along dumps	and garland	Retaining wall and garland drains are constructed as per the proposals in the previous years.	260 mtrs of R W And 280 mtrs GD constructed as observed in the ML area.
4j	Number of settling ponds	No proposals	NIL	Same as above.
4k	Specific comments of inspecting officer on waste dump management	Proposed with satisfaction	The scale of production is very less & the dump management is well maintained with limited quantity.	Because of the less production, the mine is operating with low scale production.

## 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 .	Back filling not yet started due to non-matured land.	No area is matured or exploited completely to undertake BF.
5b	Area under backfilling of mined out area	Back filling proposed .	Back filling not started.	Not applicable.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Back filling proposed	Back filling not yet started.	Not possible at this stage.,
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	The lease is working under small scale.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Proposals drawn.	The proposals is not matured at this stage.	It will take some time for reclamation & rehabilitations.
	Progressive Mine (	Clousre Plan:		
Sl.No.	Item	Propasals	Actual work	Remarks

ба	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.	Submitted vide letter dated 07.06.2019	yes submitted.
6b	Area available for rehabilitation (ha) .	3.16 На	Plantation done on 3.16 Ha of inactive dumps and safety zone	under progress.
6с	afforestation done (ha).	3.16 на	Gap filling done on the slope of the inactive dump and safety zone	as above.
6d	No. of saplings planted during the year	Inactive dump= 720 saplings Safety zone= 380 sapling Inactive dump=	300 saplings Safety zone= 500 Avenue=300	Total = 1100 saplings planted so for.
6e	Cumulative no .of plants	Not specified	With in the ML Agave - 111,900 Nos. Saplings - 14376, 3.61 Ha covered within ML area.	Saplings as above.
6f	Any other method of rehabilitation	No proposal	Not applicable	Not applicable.
6g	Cost incurred on watch and care during the year	No proposal	Rs. 1,47,069.00, spent towards plantation, watering, forest fire line management and after care.	As above.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No proposal	NIL	Not applicable.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposals.	NIL	Not applicable.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No proposals.	Nil	Nil

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal NIL	NIL	Not applicable.
61	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
бп	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	Nil
60	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)	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	Proposals are being carried out in the ML area.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No proposals in majority of the cases.	Whatever applicable has been done.	From the outside agency whatevr the minimum things are being carried out.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	after crushing	ROM dispatched after crushing and screening as per proposal.	Yes as per the proposals it is being carried out.

7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	method	Mechanical method adopted by dry crushing & screening	it is done as proposed.
7c	Different grade of mineral sorted out at mines.	0-55% +55-58% 58-60% 60-62% 62-65% +65%	58-60% 60-62% Are graded and dispatched.	same thing is being done in the ML area.
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	proposals.	as per the approvals.	No deviation with respect to mineral conservation was observed during course of MCDR inspection.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposals.	Nil	Nil
8b	Concurrent use or storage of topsoil	No proposal	Not applicable.	Not applicable.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	_	Backfilling not started	Not yet started due to non availability of exploited arera in the ML area.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not applicable.	Not applicable.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Mined out pit not was matured for back filling	1.05 Ha of inactive dump (ID-1) is stabilized by afforestation with protective measures Viz., coirmatting, toe wall, Garland drains and silt settling tanks.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1100 No. of saplings proposed	1100 saplings planted inside ML area	The saplings done in the Ml area. So far 6941 saplings planted on old dumps and 3464 Saplings planted in safety zone area.
8g	Survival rate	75%	75%	same as above.
8h	Water sprinkling on roads to control airborne dust	sprinkling	Water sprinkling done regularly on roads to control airborne dust	It is being carried out.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	proposed.	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	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	to	AS per the record of IBM, Bangalore it is up to December, 2019. received through online. No off line/ hard copies of the MR.	Yes it is confirmed for the soft copy through online returns.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri. G. Pompapathi - Manager Sri. T. Varaprasad - Mining - Engineer Sri. S. Srinivas - Geologist	Same officers present during the course of inspection except Mining Engineer, in place of Sri. T. Varaprasad, Sri. Manjunatha is working	As above.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Ha , Dumping- 1.050 Ha	Covered under minig=5.5ha, waste disposal=1.050, plant Building=1.620 ha, safety zone, stacks & etc.=16.550 ha & PMCP=1.176 ha.	Variation in mining, infrastructure & PMCP for the year.
9d	Scrutiny of Annual return on afforestation	Within lease area= 1100 saplings @ 75% survival rate	same as above.	Yes above.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	same as above.
9f	Scrutiny of Annual return on ROM stock and/or graded ore		ROM: O/s -9000.00Tons, production 35000 tons, C/s -44000.00 tons with 55-65%Fe.	reported is appropriate.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The Cost of Production =Rs.705.80 /ton, the exmine price=Rs.3563 for 62-65%Fe. the cost of below 55%Fe=Rs.948/-	Cost of Production =Rs.705.80 /ton,	The sale value not drawn, since the lessee not reported any sales to any party in the annual returns. 2018-19.

9h	Scrutiny of Annual return on fixed assets	including plant	Yes during the field visit some of the machineries could be observed/ seen in the filed.	Yes it was observed in the mine.
9k	Scrutiny of Annual return on mining machineries	given in the AR some f the machneries.	Wheel loader, Back hoe, Tipper, Water tanker & Crusher. with various capacity.	The above machineries are used as and when required.

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# Details of violations observed during current inspection and compliance position of violation pointed out

Violat	cion observed	Show couse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on
Rule 11(1)	30/01/2020		
MCDR17 Rule 45(	5)(130/01/2020		

Date:

(C.PARAMESHWARAN)

Indian Bureau of Mines