

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT 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 : **278**) **KRISHNENDU CHATTERJEE**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Shri A. Gururaj, Manager Mines
Official with
Designation
- (iv) Date of Inspection : 04/09/2018
- (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	3 nos. of DTH holes	6 nos. of DTH holes drilled	
1b	Exploration over lease area for geological axis 1 or 2	4 Ha. of mineralized area under G1 & G2	19.9 Ha. of mineralized area under G1 & G2 stage explored.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	3.50 Lakhs.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 & G2 Stage	G1 & G2 Stage	
1e	Balance reserve as on 01/04/20	No proposal	698,000 tonnes	
1f	General remarks of inspecting officers on geology, exploration etc		No deviation in respect of geology and exploration was observed during the course of inspection.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	E 656397 to 656548 N 1675027 to 1675147	E 656397 to 656548 N 1675027 to 1675147	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Seperate benches of mineral proposed	Seperate benches of mineral maintained	Float ore mining, 3m of bench height was maintained.
2c	Stripping ratio or ore to OB ratio	1:1.5	1:0.25	Violation letter issued to the lessee dated 28.09.2018 for not maintaining the stripping ratio.
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	26250 m3	1120 m3	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Stripping ratio during F.Y. 2017-18 was proposed at 1: 1.5, but during the course of inspection it was found that only 2240 tonnes of waste was removed (backfilled) against ROM handling of 9000 tonnes.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 Pits located from Section nos. 11-11' to 16-16'.	No change in float ore workings. Diamentions of existing pits were 170m(L) X 120m(W) X 20m(D) and 200m X 160m(W) X 20m(D).	Both pits located centre of the ML area, mineralized with float iron ore. Natural fall of the topography considered for depth estimation for both pits.
3b	Quantity of ROM mineral production proposed	35000 tonnes during F.Y. 2017-18.	9000 tonnes.	Production permission given for 9000 tonnes by the monitoring committee.
3c	Recovery of sailable/usable mineral from ROM production	40% recovery of float ore proposed from total handling.	80% recovery of float ore during F.Y. 2017-18	interstitial waste was used for concurrent backfilling.
3d	Quantity of mineral reject generation	No proposal	No mineral reject generation during F.Y. 2017-18.	
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	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method proposed.	Mechanized method adopted.	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal except ROM crushing and dry screening.	Crushing and dry screening.
3j	Provision of drilling and blasting in mineral benches	No proposal for drilling and blasting.	Drilling and blasting not adopted.
3k	Provision of mining machineries in mineral benches	Proposed	Excavator, tippers and wheel loaders were used.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	3m of bench height and 6m of width was proposed.	2 to 3m of bench height and 6m of width maintained.
3m	Total area covered under excavation/pits	5.5 Ha. total	5.2 Ha. covered by both pits.
3n	Ore to OB ratio for the pit/mine during the year.	1:1.50	1:0.25
3o	Total area put in use under different heads at the end of year	24.72 Ha. proposed	24.72 Ha.
3p	Production of ROM mineral during the last five year period as applicable	2013-14: Nil 2014-15: Nil 2015-16: Nil 2016-17: 35000 tonnes 2017-18: 35000 tonnes	2013-14: Nil 2014-15: Nil 2015-16: Nil 2016-17: Nil 2017-18: 9000 tonnes
3q	General remarks of inspecting officers on method of mining etc.		Stripping ratio during F.Y. 2017-18 was proposed at 1: 1.5; only 2240 tonnes of waste was removed (backfilled) against ROM handling of 9000 tonnes, actual stripping achieved 1: 0.25. Violation of rule 11(1) issued to the lessee dated 28.09.2018.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Concurrent backfilling of mined out pit was proposed.	Concurrent backfilling adopted.	
4b	Location of topsoil, OB and mineral reject dumps	E 656446 to 656544 N 1675037 to 1675145	E 656446 to 656544 N 1675037 to 1675145	
4c	Number of dumps within lease area and outside of lease area	1 inactive dump within ML	1 inactive dump within ML	Stabilized dump.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Inactive dump located outside UPL	Outside UPL	
4e	Number of active and alive dumps.	Active dumping not proposed	No active dumping, concurrent backfilling of mined out pit.	
4f	Number of dead dumps.	01 dead dump.	01 dead dump located within ML.	
4g	Number of dumps established.	01	01	
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Retaining wall and garland drain constructed.	
4i	Length of Retaining wall or garland drain all along dumps	Proposed as per the approved R & R Plan.	240m of retaining wall constructed along the inactive dump.	
4j	Number of settling ponds	Nil within ML area	Nil within ML area, 02 nos. of settling ponds constructed outside ML.	
4k	Specific comments of inspecting officer on waste dump management		No deviation in respect of dump management was observed during the course of inspection.	

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.	Concurrent backfilling proposed in mined out pits.	Concurrent backfilling adopted.	Thickness of the float ore varies from 3 to 5m within ML area.

5b	Area under backfilling of mined out area	0.60Ha. during F.Y. 2017-18.	0.08 Ha. area backfilled with 2240 tonnes of waste.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	ML area devoid of any top soil.
5d	Total area fully reclaimed and rehabilitated	5.08 Ha. area proposed at inactive dumping area.	5.08 Ha. area reclaimed along inactive dumping area.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Concurrent backfilling commenced in float ore mined out areas after complete excavation of ore.

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 proposed.	Submitted on 09.05.2018 for F.Y. 2017-18	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	0.60 Ha. proposed	0.60 Ha.	
6d	No. of saplings planted during the year	600 nos.	700 nos.	
6e	Cumulative no .of plants	Not specified	1,25,000 nos. apprx. within and outside ML.	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	Rs. 617,420/-	Rs. 617,420/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.60 Ha. concurrent backfilling proposed	0.10 Ha.	

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 backfilled area	No proposal	Backfilled area not reclaimed and rehabilitated.	
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	No waste land involves within ML.	
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)	Season wise proposed.	Last season environment monitoring was not carried out by the lessee.	Voilation of rule 11(1) was issued to the lessee dated 28.09.2018.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	During the course of inspection it was found that last season environment monitoring was not carried out by the lessee.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM proposed to be crushed and dry screening.	ROM was being crushed and dry screening.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised Crushing	Mechanised Crushing	
7c	Different grade of mineral sorted out at mines.	Proposed for +45% Fe from the ROM	+45% Fe.	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		No deviation in respect of mineral conservation was observed during the course of inspection.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil, as mining pits were devoid of any top soil.	
8b	Concurrent use or storage of topsoil	No proposal	Nil	

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Concurrent backfilling proposed for disposal of waste.	Concurrent backfilling of mined out pits.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes proposed.	concurrent backfilling adopted.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Reclamation and rehabilitation of mined out pit were not commenced.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML area located in forest land. There was proposal of planation of 600 nos of saplings in 0.60 Ha area within ML during year 2017-18	700 nos. of saplings in 0.60 Ha area within ML planted during year 2017-18. So far 125,000 nos. of trees planted by the lessee within and outside the ML area.
8g	Survival rate	80%	70%
8h	Water sprinkling on roads to control airborne dust	proposed.	Maintained with water sprinkler.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		The aesthetic beauty in and around mine was good as lessee had carried out afforestation and other environmental protective measures as per approved RMP.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	MR submitted upto Sep. 2018. AR submitted upto F.Y. 2017-18	MR submitted upto Sep. 2018. AR submitted upto F.Y. 2017-18
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Nil Mining Geologist: Mohan Kumar.S Manager: G. Vijay Kumar	Mining Engineer: T. Vareprasad. Mining Geologist: Lohit Kumar Manager: N. Gururaj.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under O/C mining: 5.5 Ha. Old dump: 1.05 Ha. Road and infrastructure : 1.6 Ha. PMCP: 0.97 Ha.	No change in area.
9d	Scrutiny of Annual return on afforestation	700 Nos.	700 nos.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generation during F.Y. 2017-18.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock at minehead 9000 nos.	No change of ROM stock quantity, nil despatch of ROM during F.Y. 2017-18.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value: Nil (No despatch) Cost of production: Rs. 1670.24/ per tonne.	Cost of production appears to be correct.
9h	Scrutiny of Annual return on fixed assets	Rs. 1032,395/-	Fixed assets includes crusher and mining machineries including transport equipments located within ML.
9k	Scrutiny of Annual return on mining machineries	Excavator: 1 no. Tipper: 2 nos. Wheel loader: 1 no. Crusher: 1 no.	No change in mining machineries.

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	01/10/2018			
MCDR17	Rule 35(2)	01/10/2018			
MCDR17	Rule 45(5)(k)	01/10/2018			

Date :

(KRISHNENDU CHATTERJEE)

Indian Bureau of Mines