

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

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/Fe-495/BNG

Mine code : 30KAR03186

- (i) Name of the Inspecting : **S006**) **SURESH PRASAD**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : **SRI VENKATESH CHALIGERI, MINES MANAGER, SRI PRAKASH M**
Official with
Designation
- (iv) Date of Inspection : 15/02/2022
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **UBBALAGUNDI IRON ORE MINE**
- (b) **Registration NO.** : **IBM/432/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **UBBLAGUNDI**
- Taluka : **SANDUR**
- Post office : **TARANAGAR**
- Pin Code : **583119**
- FAX No. : **08395250132**
- E-mail : **sunil.singh@jsw.in**
- Phone : **08395250120, 022 42861000**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **21/11/2019**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **UBBALAGUNDI VILLAGE, POST TARANAGAR**
SANDUR TALUK
BALLARY DISTRICT
3. (a) **Lease Number** :
- (b) **Lease area** :
- (c) **Period of lease** :
- (d) **Date of Expiry** :
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : JSW STEEL LIMITED
 JSW Mining office, Near
 Talur Cross Vidyanagar
 Post, Toranagallu Sandur,
 Bellary BELLARY KARNATAKA
 Phone:9448286155
 FAX :

Owner : DR. VINOD NOWAL
 DY.MANAGING DIRECTOR, M/S
 JSW STEEL LIMITED, NANDI
 IRON ORE MINE, BELLARY
 BELLARY KARNATAKA
 Phone: 9448286155
 FAX :

Agent : SUNIL KUMAR SINGH
 JSW steel Ltd., Vijayanagar
 works, Vidyanagar Po,
 Bellari, Karnataka BELLARY
 KARNATAKA
 Phone: 9449598135
 FAX : 08395250132/142

Mining Engineer
 Name : VENKATESH CHALIGERI,Full Time
 Qualification : BE MINING
 Appointment/ : 18/08/2020
 Termination date

Geologist
 Name : RITAM PATRA,Full Time
 Qualification : MSc GEOLOGY
 Appointment/ :
 Termination date

Manager
 Name : VENKATESH M CHALIGERI
 Qualification : BE in Mining
 Appointment/ : 07/02/2022
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 29/04/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NA	-
1b	Exploration over lease area for geological axis 1 or 2	8 Boreholes, Total 715m	Nil	Violation issued under rule 11(1) of MCDR, 2017. Further, the mine was expired and closed temporarily from 29.09.2020
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal.	Nil.	As exploration not undertaken.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Nil.	As per Mining Plan, G1 - 1.20 Ha G2- 1.80 Ha G3- 9.80 Ha G4- 5.67 Ha Unexplored Area- 14.42 Ha
1e	Balance reserve as on 01/04/20	5.813 MMT (as per the Approved Mining Plan)	5.173 MMT (as on 01.04.2021)	Balance Reserves shown as submitted in the Annual Return.
1f	General remarks of inspecting officers on geology, exploration etc			Exploration of 8 bore holes (715 m) was proposed for the year 2020-21. However not carried out the same. Hence, violation issued. Further, FC of the lease has expired on 20.09.2020.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	E/W: 676832 to 677045 N/S: 1665570 to 1665760.	E/W: 676850 to 677034 N/S: 1665570 to 1665750.	For year 2020-21.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches in Overburden & Mineral: 7	Benches in Overburden & Mineral: 7	No Topsoil Generation
2c	Stripping ratio or ore to OB ratio	1: 1.47 (in Tonnes)	1: 1.34 (in Tonnes)	For year 2020-21.
2d	Quantity of topsoil generation in m3	No proposal.	Not applicable.	No Topsoil Generation.
2e	Quantity of overburden generation in m3	2,49,671 m3	202,193 m3	For year 2020-21.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development proposal were not achieved in the year 2019-20 and 2020-21 fully, therefore violation issued for the deviation observed.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	-
3b	Quantity of ROM mineral production proposed	340,000 Metric Tonnes	301,281 Metric Tonnes	Since the mine is discontinuous with effect from 29.09.2020 due to FC Expiry, production target could not be achieved during FY 2020-21.
3c	Recovery of sailable/usable mineral from ROM production	95%	95%	
3d	Quantity of mineral reject generation	No proposal.	NA	No mineral reject generation as per AR 2020-21.
3e	Grade of mineral rejects generation and threshold value declared.	No proposal.	Not applicable.	THV of Fe greater than or equal to 35%

3f	Quantity of sub grade mineral generation.	No proposal.	Not applicable.	-
3g	Grade of sub grade mineral generation	No proposal.	Not applicable.	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized Method for ROM Segregation	Mechanized Method for ROM Segregation	Dry Crushing and 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 has been carried out.	-
3j	Provision of drilling and blasting in mineral benches	Drilling and Blasting is proposed for mineral benches.	Drilling and Blasting is being carried out for production purpose.	106 (2) (B) Permission obtained from DGMS as per MMR 1961.
3k	Provision of mining machineries in mineral benches	Proposed Mining Machineries: Excavators-3 Tippers-10 Drill-1 Wheel loader-2	Deployed Mining Machineries: Excavators-4 Tippers-9 Drill-1 Wheel loader-2	106 (2) (B) Permission obtained from DGMS as per MMR 1961.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height- 8m Bench Width- 8m	Bench Height- 8m Bench Width- 8m	-
3m	Total area covered under excavation/pits	15.88 Ha (for plan period, as per the Approved Mining Plan)	14.90 Ha (As on 01.04.2021)	-
3n	Ore to OB ratio for the pit/mine during the year.	1: 1.47 (in Tonnes)	1: 1.34 (in Tonnes)	

3o	Total area put in use under different heads at the end of year	Mining- 15.88 Ha Roads - 0.50 Ha Infrastructure - 0.50 Ha Waste Dumps- 10.49 Ha Mineral Storage- 1.30 Ha Others - 4.22 Ha Total - 32.89 Ha (Area considered for Financial Assurance for Plan Period, as per the Approved Mining Plan)	Mining- 14.90 Ha Roads - 0.50 Ha Infrastructure - 0.15 Ha Waste Dumps-5.40 Ha Mineral Storage- 1.30 Ha Others - 10.64 Ha Total - 32.89 Ha (as on 01.04.2021)	-
3p	Production of ROM mineral during the last five year period as applicable	2019-20: 340,000 2020-21: 340,000 2021-22: 340,000 (in Metric Tonnes)	2019-20: 339,576 2020-21: 301,281 2021-22: 0 (in Metric Tonnes)	Mine is discontinuous with effect from 29.09.2020 due to FC Expiry.
3q	General remarks of inspecting officers on method of mining etc.			

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of Overburden is proposed.	Separate dumping of Overburden is being carried out.	-
4b	Location of topsoil, OB and mineral reject dumps	OB Dump location: E/W: 677072 to 677210 N/S: 1665450 to 1665630.	OB Dump location: E/W: 677024 to 677128 N/S: 1665580 to 1665740.	-

4c	Number of dumps within lease area and outside of lease area	Within Lease Area-2 i.e. 1 Inactive Dump & 1 Active Dump Outside Lease Area- No Proposal	Within Lease Area-2 i.e. 1 Inactive Dump & 1 Active Dump Outside Lease Area- No Proposal	Inactive dump was dumped by Erstwhile lessee.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Some parts of Dump: ID-1 & PD lie inside the UPL.	Some parts of Dump: ID-1 & PD lie inside the UPL.	-
4e	Number of active and alive dumps.	Active Dump -1	Active Dump -1	-
4f	Number of dead dumps.	1 Inactive Dump	1 Inactive Dump,	As per the information, C-category Mine, inactive dumps are created by earlier lessee.
4g	Number of dumps established.	Nil	1 Inactive Dump, Stabilization Under Progress.	Stabilization Under Progress as per approved R&R Plan
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes,	Yes	For EID-1, ID-1, PD & Road
4i	Length of Retaining wall or garland drain all along dumps	Retaining Wall: TW-1: 480m TW-2: 405m TW-3: 740m Garland Drain: GD-1: 350m GD-2: 747m GD-3: 589m	Retaining Wall: TW-1: 484m TW-2: 367.5m TW-3: 626.8m Garland Drain: GD-1: 484m GD-2: 153m GD-3: 0m	For EID-1, ID-1, PD & Road
4j	Number of settling ponds	LBCD- 3 nos. GCD- 2 nos. SMCD-1 no. SST-1 No.	LBCD- 3 nos. GCD- 2 nos. SMCD-1 no. SST-0 No.	For Nala 1 & 2
4k	Specific comments of inspecting officer on waste dump management			The inactive dumps created by the earlier lessee is being stabilized by way of plantation and geotextiling by the present lessee.

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.	No proposal.	NIL	No area is completely mined out till this plan period.
5b	Area under backfilling of mined out area	No proposal.	Not applicable.	No area is completely mined out during this plan period.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal.	Not applicable.	No Topsoil Generation.
5d	Total area fully reclaimed and rehabilitated	No proposal.	Not applicable.	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Mineral in the mine area not exhausted fully. Thus no. proposal in the mining pit for backfilling.

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).	Submission of Annual report on PMCP under rule 23E(2)	Annual PMCP Report for Year 2020-21 has been submitted to IBM Office.	-
6b	Area available for rehabilitation (ha) .	NIL	NA	-
6c	afforestation done (ha).	Proposed Plantation Area- 0.37 Ha	Achieved in Safety Zone- 0.28 Ha. Outside the Lease Area- 2.97 Ha	As per the information furnished by mine management.
6d	No. of saplings planted during the year	Gap Filling and Green Belt Plantation: 1295	Achieved Within Mine Lease: 955 Outside Mining Lease: 5810	Advice to complete the plantation.
6e	Cumulative no .of plants	No proposal.	7877 Nos.	-

6f	Any other method of rehabilitation	Implementation of Bio-engineering measures for Surface Water and Dump Management as per Approved R&R Plan.	Bio-engineering measures for Surface Water and Dump Management as per Approved R&R Plan are being implemented.	-
6g	Cost incurred on watch and care during the year	No proposal.	Not applicable.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal.	Not applicable.	Mineral is not exhausted from the Pit.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal.	Not applicable.	Mineral is not exhausted from the Pit.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal.	Not applicable.	Mineral is not exhausted from the Pit.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal.	Not applicable.	Mineral is not exhausted from the Pit.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal.	Not applicable.	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No proposal.	Not applicable.	

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal.	Not applicable.	
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)	Regular Environmental Monitoring of Core and Buffer zone is proposed.	Environmental Monitoring of Core and Buffer zone is being carried out on regular basis.	Monitoring Agency- Ecomen Laboratories Pvt. Ltd. Parameters which are being Monitored: " Ambient Air Quality " Ambient Noise " Surface Water Quality " Dust Fall Measurement " Noise Monitoring (Personal Exposure) " Stack Monitoring " Personal Dust Monitoring " Fugitive Dust Monitoring " Ground Water Quality " Soil Quality
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Mineral is not exhausted from the Pit. Further, lease is granted newly through the auction process of C-category mine.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Dispatch of finished product after taking Bulk Permits from DMG.	Grade-wise dispatch.

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical Sorting	Mechanical Sorting	Dry Crushing and Screening Method
7c	Different grade of mineral sorted out at mines.	Yes	Fe<55% Fe?55-58%	-
7d	Any beneficiation process at mines	No Proposal	No beneficiation process is carried out within lease area.	Satisfactory, Mine is non-working due to FC renewal.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Topsoil Generation.	No Topsoil generated during operations.	Majority part of area is broken out.
8b	Concurrent use or storage of topsoil	No proposal.	Not applicable.	No Topsoil generated during the year 2020-21.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for overburden is proposed.	Separate dumping of overburden is being carried out.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal.	Not applicable.	-

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Not applicable.	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Gapfilling & greenbelt development No. of plantation: 1295	Plantation inside & outside the mine lease area has been carried out to increase the green cover in & around the mine Achieved Plantation- Within Mine Lease area: 955 Outside Mine Lease area: 5810	-
8g	Survival rate	80%	97%	-
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads is proposed to control airborne dust.	Water tanker have been deployed for sprinkling on roads to control airborne dust.	No. of Water Tankers:1 Capacity: 10000 Liter
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Developed mine office area with good aesthetic beauty condition.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. Submitted up to: Jan, 2021, Submitted on 08.02.2021 A.R. Submitted up to: Year 2020-21, submitted on 24.06.2021	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Mr. V. S. Sabarish & Geologist- Mr. Jagadeesha B. S.	Mr Venkatesh M Chaligeri is performing duties of Manger and Mining Engineer in the mine.	-

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	The land use pattern area covered under mining - 14.9 Ha. and dumping - 5.4 Ha.	Appears to be correct.	-
9d	Scrutiny of Annual return on afforestation	Achieved Within Mine Lease: 955 & Outside Mining Lease: 5810. The survival rate within the lease area is 97% & outside the lease area is 95%	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	Opening stock - 267951.990 Tonne ROM production - 301281.560 Tonne Closing stock -244219.4 Tonne Grade-wise Ore:- Lumps below 55% of Fe =113723.980 Tonne Fines below 55% of Fe =211290.170 Tonne.	Appears to be correct.	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine Price: 549.00 Rs./Te.		-
9h	Scrutiny of Annual return on fixed assets	The value of fixed assets (in Rs.) 0.	Fixed assets not given correctly.	Violation issued under rule 45(7) of MCDR, 2017.

9k	Scrutiny of Annual return on mining machineries	Shovel (HYDROULIC) 1.4 Cub. M.= 3 Nos. Shovel (HYDROULIC) 1 Cub. M.= 1 Nos. Wheel Loader 2.67 Cub. M. = 2 Nos. Drill Machine (102mm)=1 No. Tipper 14 Cub. M. = 9 Nos. Crsher 150 TPH = 1 No. Water Tanker 9000 Ltr.=1 No. Jeep/ Tractor 75 HP = 2 Nos. Generator 15 KWH = 1 No. Generator 10 KWH = 2 No.	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)	28/02/2022			
MCDR17	Rule 45(7)(a)	28/02/2022			

Date :

(SURESH PRASAD)

Indian Bureau of Mines