

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

**Mining Plan Modification REPORT**

**Bangalore regional office**

**Mine file No :** KNT/CTD/Fe-56/BNG

**Mine code :** 30KAR07035

- (i) Name of the Inspecting : **S47** ) **DR. Sudhakara T.L**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Mr. Manjunath G - Manager (Mines), Mr. Srinivas N.R -  
Official with  
Designation
- (iv) Date of Inspection : 17/12/2021
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **BHOMMAN 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 : **CHITRADURGA**
- Village : **BEDARABOMMANAHALLI,**
- Taluka : **CHITRADURGA**
- Post office : **BEHEEMASAMUDRA**
- Pin Code : **577520**
- FAX No. :
- E-mail : **sunil.singh@jsw.in**
- Phone : **9449598135**
- (f) **Police Station** : **Bheemasamudra**
- (g) **First opening date** : **10/08/2020**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **Bheemasamudra Village & Post**  
**correspondance** : **Chitradurga Taluk & District**  
**577520**
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 : Jogi Veera Venkata Ganesh Kumar,,Full Ti  
 Qualification : M Tech (Opencast Mining)  
 Appointment/ : 15/07/2019  
 Termination date

## Geologist

Name : Mr. Deepak Patil B.S,,Full Time  
 Qualification : M.Sc., Applied Geology  
 Appointment/ : 16/07/2012  
 Termination date

## Manager

Name : L.D. BABU  
 Qualification : 1ST CLASS CERTIFICATE OF COMPETENCY  
 Appointment/ : 01/12/2016  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 31/10/2019

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	NA	Auctioned Block, Mining Operation were started in December 2020
1b	Exploration over lease area for geological axis 1 or 2	Nil	NA	Proposed in 2nd Year of Plan Period i.e. year 2021-22
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	NA	Exploration carried out by MEL erstwhile lessee in the Year 2011-12 to 2013-14
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	NA	Total G1 Area= 59 Ha. G2 Area= 3.53Ha G3 Area= 5.37 Ha G4 Area=Nil Non-Mineralized Area=25.70 Ha.
1e	Balance reserve as on 01/04/20	Reserves- 55,903,278 Tonnes  (as per approved mining plan, before commencement of mining operations)	Minable Reserves- 55,066,284 Tonnes  (as on 01.04.2021)	Actual Reserves given upto 01.04.2021 by depleting the achieved Production from FY 2020-21.
1f	General remarks of inspecting officers on geology, exploration etc			There were no proposals of exploration in the plan period. Out of 67.9 Ha mineralized area, the previous lessee has carried out exploration under G1 level: 59 Ha., G2 level: 3.53Ha and G3 level = 5.37 Ha and remaining area is non-mineralized.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	Development proposed between E.631570 to 631869 and N.1571401 to N.1571839 between section line F-F' to L-L'	Development are extending beyond the approved proposal limits in the western part between the section line F-F' to I-I'	Development are extending beyond the approved proposal limits, Violation pointed out
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No Proposal	NA	Excavation done at broken up area.
2c	Stripping ratio or ore to OB ratio	1 : 0.21 in Tonnes	1 : 0.013 in Tonnes	ORE- 8,36,994 TONNES OB - 11,240 TONNES
2d	Quantity of topsoil generation in m3	--	765 M3	Wherever topsoil found it is used for plantation
2e	Quantity of overburden generation in m3	125031.2 m3	6612.00 m3	OB removed 11,240 tonne
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development are extending beyond the approved proposal limits and not carried out in accordance with Approved Mining Plan. Violation pointed out

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01	01	Pit Dimension (1080 m x 485 m x 145 m)
3b	Quantity of ROM mineral production proposed	1000000 Tons	836994 Tons	Lessee stated that, operations commenced in December 2020
3c	Recovery of sailable/usable mineral from ROM production	100 %	100 %	NIL
3d	Quantity of mineral reject generation	No Proposal	NA	--

3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	NA	--
3f	Quantity of sub grade mineral generation.	No Proposal	NA	--
3g	Grade of sub grade mineral generation	No Proposal	NA	--
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized Method for Segregation	Mechanized Method for ROM Segregation	Dry Screening Plant - 400 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.	NIL
3j	Provision of drilling and blasting in mineral benches	No Proposal	NA	106 (2) (B) Permission obtained from DGMS as per MMR 1961.
3k	Provision of mining machineries in mineral benches	Proposed Mining Machineries: Excavators-5 Tippers-27 Drill-0 Wheel loader-5	Deployed Mining Machineries: Excavators-4 Tippers-16 Drill-0 Wheel loader-3	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height - 6m Bench Width - 8m	Bench Height - 6m Bench Width - 8m	Bench height and width are maintained as proposed
3m	Total area covered under excavation/pits	47.44 Ha	46.35 Ha	The proposed area is till plan period, not yet completed

3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.21	1 : 0.013	Ore : 836994 tonnes and OB 11240 tonnes Lessee stated that Ore to OB ratio is less due to development carried out different location as erstwhile lessee carried out the mining in proposed location.
3o	Total area put in use under different heads at the end of year	Mining-47.44 Ha Waste Dumps-13.02 Ha. Infrastructure -0.5 Ha Roads-4.92 Ha Greenbelt-2.95 Bio-Diversity-4.84 Others-19.93Ha Total - 93.60 Ha	Mining-47.02 Ha Waste Dumps-10.03 Ha Infrastructure-0.5 Ha Roads-4.92 Ha Greenbelt- 2.95 Bio-Diversity-4.84 Others - 23.34 Ha Total - 93.60 Ha	The proposed area is upto plan period
3p	Production of ROM mineral during the last five year period as applicable	2020-21:1000000 (in tonnes)	2020-21:836994 (in tonnes)	Lessee stated that, Mines operation stated from 10.12.2020 (107 days works) so production not achieved as proposed
3q	General remarks of inspecting officers on method of mining etc.			Mining operations carried out using combination of excavator tipper. Benches width and height maintained as proposed. Mining is not carried out within the proposed extent area. Violation issued.

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dump for Overburden is Proposed	Separate dump for Overburden is being carried out.	--
4b	Location of topsoil, OB and mineral reject dumps	OB Dump Proposal: E 632130 to E 632437 N 1571358 to N 1571643 Section N-N' to P-P'	OB Dump Location: E 632142 to E 632365 N 1571360 to N 1571640 Section N-N' to P-P'	OB dumping carried out at the proposed location
4c	Number of dumps within lease area and outside of lease area	Within Lease area: 01 Nos. (Proposed Active Dump)  Outside - Nil	Within Lease area: 01 Nos. (Proposed Active Dump)  Outside - Nil	--
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed Dump- Outside Ultimate Pit Limit.	Dump located at outside UPL	--
4e	Number of active and alive dumps.	Active Dump-1	Active Dump-1	
4f	Number of dead dumps.	Nil	Nil	--
4g	Number of dumps established.	Nil	Nil	--
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Nil	
4i	Length of Retaining wall or garland drain all along dumps	Retaining Wall -550 mtrs Garland drainage - 560 mtrs	Nil	Violation pointed out
4j	Number of settling ponds	No Proposal	NA	--
4k	Specific comments of inspecting officer on waste dump management			Dumping of OB carried out at the proposed location. Retaining wall and Garlandrain not constructed as proposed, Violation pointed out.

## 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	NA	No area is completely mined out in this plan period for backfilling
5b	Area under backfilling of mined out area	No proposal	NA	--
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	1300 tonnes	Top soil Stacked & Utilizing it for plantation.
5d	Total area fully reclaimed and rehabilitated	No proposal	NA	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No Proposal of backfilling. Top soil generated has been stacked separately for utilizing it for plantation.

## 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 is prepared and submitted to IBM Office on 30.06.2021.	Annual PMCP Report submitted in stipulated time
6b	Area available for rehabilitation (ha) .	Not Proposed	NA	--
6c	afforestation done (ha).	Nil	NA	Safety Zone is completely covered in vegetation.
6d	No. of saplings planted during the year	1000 (Gap filling, Green belt & Old Dump)	Nil	Violation pointed out.



6e	Cumulative no .of plants	Not Specified	Nil	Plantation not carried out as proposed.
6f	Any other method of rehabilitation	Construction of R & R structures proposed as per Approved R&R	Construction of R & R structures proposed by ICFRE and Approved by CEC	Structure are formed as recommended
6g	Cost incurred on watch and care during the year	1.5 Lakhs	Nil	Including plants
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No Proposal	NA	--
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	NA	--
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposal	NA	--
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	NA	--
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	NA	--
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No Proposal	NA	--

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Proposal	NA	--
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposal	NA	--
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 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
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Lessee has not carried out plantation, construction of Retaining wall & Garland drain as proposed. Violation pointed out. Lessee is doing Environmental Monitoring of Core and Buffer zone on regular basis.

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Mineral Conservation:

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Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting proposed within lease area.	Grade wise sorting is done within lease area.	--
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Dry Screening Method. Plant Capacity-400 TPH
7c	Different grade of mineral sorted out at mines.	YES	Lumps - Below 55% : 81697 tonnes Fines : 363697 tonnes	Lumps & fines of different grades sorted as proposed.
7d	Any beneficiation process at mines	No Proposal	No beneficiation process in mines	--
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			There is no proposal of beneficiation. Lessee is sorting different size of ore (lumps and fines) by screening.

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	1300 tonnes	Top soil generated has been stacked separately to use for plantation
8b	Concurrent use or storage of topsoil	No Proposal	NA	--
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate Dump for overburden / Waste 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	NA	--

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	NA	--
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Safety zone is completely covered in Vegetation. No. Of plantation proposed: 1000 green belt/gap plantation	Nil	Lessee has not carried out plantation a proposed, violation pointed out.
8g	Survival rate	Not Specified	Nil	--
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on road is proposed to control airborne dust.	Water tankers have been deployed for sprinkling on roads to control airborne dust.	No. of Water Tanker: 05 Capacity: 10000 Liters
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in & around the mine is good as the previous lessee had carried out afforestation & other environment protective measures were in place.

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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 November 2021: Submitted on 10.09.2021  A.R. submitted up to FY 2020-21: Submitted on 29.06.2021		Submitted in time

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Jogi Veera Venkata Ganesh Kumar. Geologist- Deepak Patil B.S Manager- L.D. Babu	Mr. Manjunath G - Manager (Mines) Mr. Srinivas N.R - Asst. Manager (Mines) Mr. Akshaya Kumar B - Asst. Manager (Mines) Mr. Deepak Patil B.S - Asst. Manager (Geology) Mr. Binay Kumar - Asst. Manager (Surveyor) were present during inspection.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited: 43.95 Ha Working: 3.07 Ha Waste Dump: 10.03 Ha Roads & Infrastructure : 4.98 Ha Others: 31.57 Ha Total Area: 93.60 Ha	Appears to be correct as reported in AR	
9d	Scrutiny of Annual return on afforestation	Plantation within Lease: 50 nos. Survival Rate: 98%	No plantation within lease	Violation pointed out
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No Mineral Reject Generated	Appears to be correct	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock: 0.00 T Production: 836694.00 T Closing Stock: 391599.10 T	Appears to be correct	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Lumps Fe 0-55% : 189 Rs./T Fines Fe 0-55% : 342 Rs./T	Appears to be correct	NIL

9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets: Rs.323616886 Depreciation on Fixed Assets: Rs.5444936	Appears to be correct	
9k	Scrutiny of Annual return on mining machineries	Back Hoe Loader- 1 Screening Plant-1 Tipper-36 Water Tanker (10 kl)-5 Wheel Loader- 4 Generator -5 Shovel- 8 Jeep/Tractor- 4	Appears to be correct	Nil

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**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)	04/01/2022	28/02/2022				

**Date :****(DR. Sudhakara T.L)**

Indian Bureau of Mines