

I/24474/2024

Review and updation of Mining Plan REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE-494/BNG

Mine code : 30KAR03185

- (i) Name of the Inspecting : S19) SANDEEP KUMAR SINGH
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sundraraja M.V, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 16/09/2023
- (v) Prev.inspection date : 16/12/2022

PART-I : GENERAL INFORMATION

1. (a) Mine Name : RAMA 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 : RAMGHAD
Taluka : SANDUR
Post office : SHUSHEELANAGAR
Pin Code : 583152
FAX No. : 08817199500
E-mail : SUNIL.SINGH@JSW.IN
Phone : 9449598135, 08395-245939
- (f) Police Station : SANDUR
- (g) First opening date : 15/01/2020
- (h) Weekly day of rest : SUN
2. Address for : RAMGHAD VILLAGE, SUSHEELA NAGAR POST
correspondance : SANDUR TALUK
BALLARI DISTRICT, KARANATAKA
3. (a) Lease Number : ML No 009
- (b) Lease area : 32.56 ha
- (c) Period of lease : 50 years
- (d) Date of Expiry : 12/12/2069
4. Mineral worked : IRON ORE Main

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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 : Shri Gajraj Singh Rathore,Nominated owner
 JSW Mining office Near
 Talur Cross, Vidyanagar
 Works Po-Vidyanagar, Dist-
 Ballari, Karnat BELLARY
 KARNATAKA
 Phone:
 FAX :

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

Mining Engineer

Name : Karthik Gujjal,Full Time
 Qualification : B.E(Mining)
 Appointment/ : 22/02/2021
 Termination date

Geologist

Name : Karani Singh,Full Time
 Qualification : M.Sc (Geology)
 Appointment/ : 16/12/2019
 Termination date

Manager

Name : Sundra Raja MV
 Qualification : Diploma(Mining)
 Appointment/ : 15/06/2020
 Termination date

6. Date of approval of Mining	:	MP under 16(1) of MCR 2016	31/05/2017
Plan/Scheme of Mining	:	MP modif under 17(3) MCR 2016	18/02/2021
	:	MP modif under 17(3) MCR 2016	21/04/2023

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	-
1b	Exploration over lease area for geological axis 1 or 2	8 nos. of boreholes proposed with cumulative drilling meterage of 410 m	15 nos. of exploratory boreholes drilled for the year 2022-23 with cumulative meterage of 700 m	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not mentioned	M/s. JSW Steel Ltd. Rs. 74,23,970 costs incurred.	As reported by the Lessee during inspection.
1d	Balance area to be explored to bring Geological axis in 1 or 2	G-1- 24.70 ha, G-2- 0.31 ha, G-3- 0.36 ha Unexplored area-7.19 ha (As per the last approved document)	G-1- 27.4 ha, Area proved as Non mineralized-5.16 ha.	10 nos. of exploratory boreholes proposed in the RMP document during year 2024-25 with total meterage 750 metres for the Geological sections where deeper continuity of the ore band is yet to be established.
1e	Balance reserve as on 01/04/20	25,184,303 tons of iron ore reserves as on 01/01/2023. (24620687 tons with avg. grade 57.04 % Fe and 563616 tons with avg. grade 59.21 % Fe) as per the modified mine plan document dtd 21/04/2023	25,062,844 tonnes of iron ore reserve as on 01.04.2023	As reported in AR 2022-23.
1f	General remarks of inspecting officers on geology, exploration etc			i)Reserve/Resource Reported correctly in AR 2022-23. ii)Exploratory drilling carried out as per the proposals.

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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	E 657721 to E 658127 N 1671870 to N 1672430 Section-S1-S1' to S6-S6'	Development carried out within the proposed extent as per the proposal	NIL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No topsoil generation. Separate benches proposed in OB & mineral.	Separate benches maintained in OB & mineral.	NIL
2c	Stripping ratio or ore to OB ratio	1: 0.09 in Tonnes	1: 0.07 in Tonnes (Ore-940,000 tons, Waste- 70,987 tons tons)	Lesser amount of waste encountered in the working area for year 2022-23 as reported by Lessee during inspection.
2d	Quantity of topsoil generation in m3	No Proposal	No Top Soil Generation	No Topsoil Generation
2e	Quantity of overburden generation in m3	86,475 tons~42,702 m3 proposed	70,987 tons~34,945 m3 achieved.	Lesser amount of waste encountered in the working area for year 2022-23 as reported by Lessee during inspection.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development carried out within the proposed extent as per the proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 pit proposed for Production.	Production is carried out from 1 pit.	NIL
3b	Quantity of ROM mineral production proposed	9,40,000 Tonnes proposed.	9,40,000 Tonnes achieved.	NIL

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3c	Recovery of sailable/usable mineral from ROM production	100 % proposed	100 % achieved	NIL
3d	Quantity of mineral reject generation	No proposal	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 proposal	NIL	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Only Crushing & Screening proposed.	Crushing & Screening carried out within the Lease area.	Crusher & Screen-180 TPH capacity. O/p Size 0 - 10 mm (Fines) 10-40 mm (Lumps)
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	Deep hole Drilling and Blasting is proposed for mineral benches.	Deep hole Drilling and Blasting is being carried out for production purpose. Drilling is done with drill of 102 mm dia. and slurry explosive used in conjunction with delay detonators.	Drill-102 mm dia. Explosive-Slurry Explosive.
3k	Provision of mining machineries in mineral benches	Mining Machineries proposed.	Excavators-1.6 Cum-5 nos. 0.5 Cum-1 no. Front End Loader- 2.6 Cum-4 nos. Tippers-14 Cum-14 nos. Drill-102 mm-1 no. Water tanker-10 KL-4 nos. 1.5 KL - 1no.	As reported in AR 2022-23.

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3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed Bench Height- 8m for both OB & Mineral.	Bench Height- 8m maintained for both OB & mineral.	NIL
3m	Total area covered under excavation/pits	15.83 Ha (as per the approved document)	15.83 Ha (as on 01.04.23)	As reported in AR 2022-23.
3n	Ore to OB ratio for the pit/mine during the year.	1: 0.09 in Tonnes	1: 0.07 in Tonnes (Ore-940,000 tons, Waste- 70,987 tons)	Lesser amount of waste encountered in the working area for year 2022-23 as reported by Lessee during inspection.
3o	Total area put in use under different heads at the end of year	Mining- 15.83 Ha O/B Dumps- 0.58 Ha Infra & roads- 3.23 ha	Mining- 15.83 Ha O/B Dumps- 0.58 Ha Infra & roads-3.23 ha	As reported in AR 2022-23.
3p	Production of ROM mineral during the last five year period as applicable	"2019-20: 9,40,000 "2020-21: 9,40,000 "2021-22: 9,40,000 "2022-23: 9,40,000 (in tonnes)	"2019-20:595094.6 "2020-21:939800.0 "2021-22:940000.0 "2022-23:940000.0 (in tonnes)	Mine operations started in 2019-20.
3q	General remarks of inspecting officers on method of mining etc.			The production proposals carried out as per the approved proposals.

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.	Temporary dump.

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4b	Location of topsoil, OB and mineral reject dumps	OB Dump Proposal: E 657622 to E 657721 N 1672873 to N 1672973	OB dumping carried out at earmarked location as per proposal.	Temporary dump.
4c	Number of dumps within lease area and outside of lease area	1 Active Dump Within lease area	1 Active Dump within lease area	Temporary dump.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Part of Temporary Dump is within UPL.	Part of Temporary Dump is within UPL.	NIL
4e	Number of active and alive dumps.	Active Dump-1 (Temporary dump)	Active Dump-1 (Temporary dump)	NIL
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	NIL	NA	-
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	NIL	NIL
4i	Length of Retaining wall or garland drain all along dumps	No proposal	NIL	NIL
4j	Number of settling ponds	No proposal	NIL	NIL
4k	Specific comments of inspecting officer on waste dump management			The waste dumping carried out at the earmarked location within the proposed extent as per proposal.

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	NIL

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5b	Area under backfilling of mined out area	No proposal	NIL	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	NIL	NIL
5d	Total area fully reclaimed and rehabilitated	No proposal	NIL	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No backfilling proposals.

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).	To be submitted before 1st of July Every year.	Annua PMCP report for the year 2022-23 submitted within timeline	NIL
6b	Area available for rehabilitation (ha) .	0.55 ha greenbelt/avenue plantation with 100 saplings plantation proposed.	0.01 ha greenbelt/avenue plantation with 128 saplings plantation carried out.	As reported in Annual PMCP report 2022-23.
6c	afforestation done (ha).	0.55 ha greenbelt/avenue plantation with 100 saplings plantation proposed.	0.01 ha greenbelt/avenue plantation with 128 saplings plantation carried out.	As reported in Annual PMCP report 2022-23.
6d	No. of saplings planted during the year	100 nos. of saplings plantation proposed.	128 nos. of saplings plantation carried out.	As reported in AR 2022-23.
6e	Cumulative no .of plants	1099 cumulative as per the last approved document.	1109 cumulative as on 1.04.2023.	As reported in AR 2022-23.

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6f	Any other method of rehabilitation	No proposal	NIL	NIL
6g	Cost incurred on watch and care during the year	Not Specified	Cost of Plantation -Rs. 1,93,312	As reported by the Lessee during inspection.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	NIL	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NIL	NIL
6l	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
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	NIL	NIL

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6o	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)	Regular Environmental Monitoring of Core and Buffer zone is proposed.	Environmental Monitoring of Core and Buffer zone is being carried out. Environmental monitoring report of March-23 available. All parameters within limit.	Parameters which are being Monitored: (Air, Noise, Surface water quality, Ground water & Dust).
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP measures implemented inside the mine as per the proposal.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Only Crushing & Screening proposed.	Crushing & Screening carried out within the Lease area.	Crusher & Screen-180 TPH capacity. O/p Size 0 - 10 mm (Fines) 10-40 mm (Lumps)
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Only Dry crushing and screening proposed.	Fines Fe 55-58% Fe 58-60% Fe 60-62% Lumps Fe 58-60% Fe 60-62% Fe 62-65% (Production grade range for the year 2022-23)	As reported in AR 2022-23.
7c	Different grade of mineral sorted out at mines.	Only Dry crushing and screening proposed.	Fines Fe 55-58% Fe 58-60% Fe 60-62% Lumps Fe 58-60% Fe 60-62% Fe 62-65% (Production grade range for the year 2022-23)	As reported in AR 2022-23.

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7d	Any beneficiation process at mines	No Proposal	NIL	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No specific comments.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Topsoil Generation proposal.	NIL	NIL
8b	Concurrent use or storage of topsoil	No proposal	NIL	NIL
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for overburden is proposed at Temporary dump.	Separate dumping of overburden is being carried at Temporary dump as per proposal.	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	NIL	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	NIL	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1099 cumulative as per the last approved document.	1109 cumulative as on 1.04.2023.	As reported in AR 2022-23.

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8g	Survival rate	Not Specified.	90% achieved.	As reported in AR 2022-23.
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 Tankers : 4 Capacity: 10 KL.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mines looks good.

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 August 2023: Submitted on 08.09.2023 A.R. Submitted up to FY 22-23 Submitted on 30.06.23	M.R. Submitted up to August 2023: Submitted on 08.09.2023 A.R. Submitted up to FY 22-23 Submitted on 30.06.23	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: - Karthik Gujjal A Geologist: - Karani Singh Shekhawat Manager- Sundra Raja M V	Appears to be correct	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining- 15.83 Ha O/B Dumps- 0.58 Ha Infra & roads- 3.23 ha	Appears to be correct	NIL
9d	Scrutiny of Annual return on afforestation	Plantation Within Lease - 128 nos. Survival Rate: 95%	Appears to be correct	NIL

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9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Appears to be correct	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: O/s -0.05 ton, Production - 9,40,000 tons, C/s - 0.05 ton Graded Ore O/s- 11,238.91 tons Production- 9,40,000 tons Despatch- 9,51,238 tons C/s- 0 tons.	Appears to be correct	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. Mine price: Rs/Ton, Rs 923.88 Rs/Ton (Captive mine) Cost of production: 1635.02 Rs/Ton.	Part-VI: The Ex-mine price as reported in Part-VI (3)(ii) for both lumps and fines grade wise is not furnished correctly since there is error in calculation of Cost of production under Part-VII. Violation issued under Rule 45(7) of MCDR 2017.	Part-VII: There is error in per ton cost reported for Depreciation(arriving to Rs 42.79 as per the figures reported in Part-II A(1)), Royalty (arriving to Rs 540/ton as per the figures reported in Part-III(2)(a)), DMF(arriving to Rs 54/ton as per the figures reported in Part-III(2)(d)), NMET(arriving to Rs 10.8/ton as per the figures reported in Part-III(2)(e)) and subsequently total Cost of production. Violation issued under Rule 45(7) of MCDR 2017.

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9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets: ?. 44,91,29,432.00 Depreciation on Fixed Assets: ?. 4,02,31,562.00	Part-II A(Capital Structure): The depreciation during the year as reported under Total column in Part-II A(1)(Rs 40231562/940000 tons= Rs 42.79/ton) is not matching with the Depreciation cost/ton as reported in Part-VII - Cost of production(Rs 49.19/ton).	Violation issued under Rule 45(7) of MCDR 2017.
9k	Scrutiny of Annual return on mining machineries	Excavators-1.6 Cum-5 nos. 0.5 Cum-1 no. Front End Loader- 2.6 Cum-4 nos. Tippers-14 Cum-14 nos. Drill-102 mm-1 no. Water tanker- 10 KL-4 nos. 1.5 KL - 1no.	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
Rule 45(7)(i)	04/10/2023	09/11/2023	Rule 45(7)(i)	04/10/2023	09/11/2023

Date :**(SANDEEP KUMAR SINGH)**

Indian Bureau of Mines