

## MCDR INSPECTION REPORT (2023-24)

S. N.	Particulars	Details
1	Name of the Mine	Dharma Iron Ore Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Area = 43.58 Ha Non-forest Land- 0 Ha, Forest Land- 43.58 Ha,
3	Mine code	30KAR03189
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/432/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. JSW Steel Ltd JSW Centre Bandra Kurla Complex, Bandra (East), Mumbai (Suburban), Maharashtra, PIN-400051 Phone - 022-42861000 Email: sunil.singh@jsw.in
6	Village	Ramgad
7	Taluk/Mandal	Sandur
8	District	Ballari
9	Pin code	583119
10	State	Karnataka
11	Post office	Susheelanagara
12	Nearest police station	Sandur
13	Nearest Railway station	Hospet
14	Date of Grant of Mining Lease	30.07.2020
15	Date of Execution	30.07.2020
16	Date of opening of Mine	25.09.2020
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. Gajraj Singh Rathore Dy. Managing Director M/s. JSW Steel Ltd JSW Centre Bandra Kurla Complex, Bandra (East), Mumbai (Suburban), Maharashtra, PIN-400051 Phone - 9448286017 Email: gajraj.rathore@jsw.in Date of appointment: 27.05.2022
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sunil Kumar Singh M/s. JSW Steel Ltd Dharma Iron Ore Mine JSW Mining Office, Near Talur Cross Vidyanagar (Post), Toranagallu, Sandur Taluk, Ballari – Dist, PIN-583275, Karnataka Contact: +91- 9449598135 Email: sunil.singh@jsw.in Date of appointment: 10.08.2020
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sunil Kumar Singh Ph. No. +919480694036 Sunil.kumarsingh@jsw.in Date of Appointment : 01.03.2024

23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Krishna Bhupathi Raja B BE (Mining) Total Experience- 12 Years Email – krishna.buruga@jsw.in Date of appointment: 24.06.2024
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes Details of Geologist- Som Nath Biswas M.Sc., Applied Geology Total Experience- 15 Years Email- som.biswas@jsw.in Date of appointment- 19.05.2022
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Date of Approval: 30/06/2023, for period of 2020-21 to 2024-25 Vide Letter No. 279/1106/2019/BNG 2 Years Plan Period: 2023-24 to 2024-25
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	NA
27	Mineral(s) granted in lease and proved for mining	Iron Ore
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanized, Others or Manual)	Fully Mechanized A-Category
30	Captive/ Non captive	Non Captive Mine
31	Date of inspection	16/03/2022
32	Name of accompanying mine officials with designation	Mr. Nandan Bhandary- GM (Mines) Mr. Sunil Kumar Singh – Manager (Mines) Mr. Nataraja B D – Manager (Geology) Mr. Binay Kumar – Manager (Surveyor) Mr. Krishna Bhupathi Raja B - Asst. Manager (Mining Engineer)

## Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NA	-
1b	Exploration over lease area for Geological axis 1 or 2.	4 Boreholes, Total meterage- 320m	Nil	Violation issued for not carrying out the proposed exploration.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not Specified in Mining Plan	Nil	Expenditure incurred so far Rs. 70.31 lakhs expenditure incurred during exploration in FY 2022-23.
1d	Balance area to be explored to	Nil	Nil	G1 – 26.20 Ha

	bring Geological axis in 1 or 2			Non mineralized Area- 17.38 Ha
1e	<b>Balance reserves as on 01.04.2021</b>	10.42 MMT	10.24 MMT	
1f	General remarks of inspecting officer on geology, exploration etc.	Exploration carried out in the entire lease area to G1 level as per UNFC.		

## Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	E 656090 to E 656363 and N 1674727 to N 1674970	As per Approved Mining Plan proposals	Deviation due to restricting development to the present Statutory clearances limits.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No top soil benches are proposed. OB and Mineral separate benches are proposed	No top soil benches OB and mineral separate benches maintained as per proposal.	-
2c	Stripping ratio or ore to OB ratio	1: 0.05 (in Tonnes)	1: 0.58 (in Tonnes)	Production restricted as per present EC and CEC Annual production capacity is 0.18 MMTPA, where as the ratio calculated for 0.49MMT for obtaining enhancement from CEC as well as EC from competent authority.
2d	Quantity of topsoil generation in m <sup>3</sup>	NIL	NA	-
2e	Quantity of overburden generation in m <sup>3</sup>	11,178 m <sup>3</sup>	52,330 m <sup>3</sup>	As per present EC and CEC Annual production capacity is 0.18 MMTPA. The waste generation has taken place as per the CEC and EC capacity for the year 2023-24
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development and production achieved as per the present limit of production target as per the approved mining plan.		

## Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	For year 23-24
3b	Quantity of ROM mineral proposed	490000 MT	179,739 MT	As per present EC and CEC Annual production capacity is 0.18 MMTPA. The ROM Production proposals in the approved Mining Plan for taking the approval from CEC and accord EC capacity for the year 2023-24
3c	Recovery of salable/usable mineral from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	NIL	NA	-
3e	Grade of mineral reject generation and threshold value declared	NA	NA	-
3f	Quantity of sub-grade mineral generation	NIL	NA	-
3g	Grade of sub-grade mineral generation	NA	NA	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized Method for ROM Segregation	As per approved mining plan proposals	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal	NA	-
3j	Provision of drilling & blasting in mineral benches	Drilling and Blasting is proposed for mineral benches.	As per Approved Mining Plan	106 (2) (B) Permission obtained from DGMS as per MMR 1961.
3k	Provision of mining machineries in mineral benches	Proposed Mining Machineries: Excavators-7 Rock breaker -1	As per Approved Mining Plan	

		Tippers-9 Drill-1 Wheel Loader -7 Back hoe loader-1		
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height- 8m Bench Width- 8m	Almost maintained the proposed Height and width of the benches during working.	
3m	Total area covered under excavation/pits	22.46 Ha (for plan period, as per the Approved Mining Plan)	22.51 Ha (As on 01.04.2024)	As per present EC and CEC Annual production capacity is 0.18 MMTPA.
3n	Ore to OB ratio for the pit/mine during the year	1:0.05 22,356 Tons OB 490000 Tons Ore	1:0.58 104660 Tons OB 1,79,739 Tons Ore	As per present EC and CEC Annual production capacity is 0.18 MMTPA. The ROM Production proposals in the approved Mining Plan for taking the approval from CEC and accord EC capacity for the year 2023-24
3o	Total area put in use under different heads at the end of year	Mining- 22.46 Ha Roads – 1.18 Ha Infrastructure – 0.89 Ha Waste Dumps-13.25 Ha Mineral Storage- 0.96 Ha Others – 4.84 Ha Total – 43.58 Ha	Mining- 22.51 Ha Roads – 1.39 Ha Infrastructure – 0.56 Ha Waste Dumps-13.25 Ha Mineral Storage- 0.96 Ha Others – 4.91 Ha Total – 40.46 Ha	As per present EC and CEC Annual production capacity is 0.18 MMTPA. The ROM Production proposals in the approved Mining Plan for taking the approval from CEC and accord EC capacity for the year

				2023-24
3p	Production of ROM mineral during last five-year period, as applicable	2020-21: 179,982 MT. 2021-22: 179,928 MT. 2022-23: 179,915 MT. 2023-24: 4,90,000 MT.	2020-21: 179,982 MT. 2021-22: 179,928 MT. 2022-23: 179,915 MT. 2023-24: 179,739 MT.	As per present EC and CEC Annual production capacity is 0.18 MMTPA. The ROM Production proposals in the approved Mining Plan for taking the approval from CEC and accord EC capacity for the year 2023-24
3q	General remarks of inspecting officer on method of mining etc.	Exploitation of mineral as per the Mining Plan proposals and present statutory clearances.		

### Solid Waste Management-Dumping

S. N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of Overburden is proposed.	AS per the approved Mining Plan proposals.	-
4b	Location of topsoil, OB & mineral reject dumps	E 655815 to E 655893 and N 1674853 to N 1674942	AS per the approved Mining Plan proposals.	
4c	Number of dumps within lease area and outside lease area	Active Dump (AD-1 & AD-2) Inactive Dump (ID-1 to ID-4)	Active Dump (AD-1 & AD-2) Inactive Dump (ID-1 to ID-4)	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	AD-2 as per Approved Mining Plan	AD-2 as per Approved Mining Plan	-
4e	Number of active & alive dumps	2 (AD-1 and AD-2)	2 (AD-1 and AD-2)	-
4f	Number of dead dumps	4 Inactive Dumps (ID-1 and ID-4)	4 Inactive Dumps (ID-1 and ID-4)	Inactive dumps were created by earlier lessee.
4g	Number of dumps stabilized	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes Details of Existing Retaining Wall:	The Retaining walls and Garland drains present are constructed by the erstwhile lessee and

			TW-1: 503m TW-2 :115m TW-5: 240m TW-6: 193m Details of Existing Garland Drain: GD-1: 518m GD-2: 115m GD-5: 260m GD-6: 200m	being maintained by JSW.
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	
4j	Number of settling ponds	Nil	1 Nos. (SST-4)	SST-4 is present and is constructed by the earlier lessee and being maintained by JSW.
4k	Specific comments of inspecting officer on waste dump management.	Waste management in the mine is satisfactory in this mine.		

### Solid Waste Management-Backfilling

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No Proposals	NA	
5b	Area under backfilling of mined out area	No Proposals	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposals	NA	
5d	Total area fully reclaimed & rehabilitated	No Proposals	NA	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	--		

### Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.	Submission of Annual report on PMCP under rule 23E(2)	Received in time	
6b	Area available for rehabilitation (ha)	NIL	NA	
6c	Afforestation done (ha)	2.63 Ha	1.27 Ha	
6d	No. of saplings planted during the year	2500	Achieved Within Mine Lease: 2500	Furnished in AR

6e	Cumulative no. of plants	Not specified	16454	-
6f	Any other specific 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 & care during the year	Not specified	NA	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	Not specified	NA	PMCP proposals were implemented as per the proposals in the Mining Plan and R&R works carried out as per the recommendations of ICFRE and CEC
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	Not specified	NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area	Not specified	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not specified	NA	
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	NIL	NA	
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	Not specified	NA	
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha)	Not specified	NA	
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	Not specified	NA	



6p	Compliance of Environmental monitoring (core zone & 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: <ul style="list-style-type: none"> <li>• Ambient Air Quality</li> <li>• Ambient Noise</li> <li>• Surface Water Quality</li> <li>• Dust Fall Measurement</li> <li>• Noise Monitoring (Personal Exposure)</li> <li>• Stack Monitoring</li> <li>• Personal Dust Monitoring</li> <li>• Fugitive Dust Monitoring</li> <li>• Ground Water Quality</li> <li>• Soil Quality</li> </ul>
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	PMCP proposals were implemented as per the proposals in the Mining Plan and R&R works carried out as per the recommendations of ICFRE and CEC		

### Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	AS per approved Mining Plan.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical Sorting	Mechanical Sorting	Method
7c	Different grade of mineral sorted out at mines	Yes	As per the proposals in the mining plan.	-
7d	Any beneficiation process at mines	No Proposal	NA	-
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Production developments were as per the mining plan and mineral conservation aspects were are taken care.		

### Environment

S.N	Item	Proposals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No Topsoil Generation.	NA	Majority area is broken.
8b	Concurrent use or storage of topsoil	NA	NA	No Topsoil generated
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for overburden is proposed.	AS per the proposals in the Mining PAn	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposals	NA	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	No Proposals	NA	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Green belt plantation and inactive Dump Stabilization No. of plantation: 2500	As per proposals in the approved Mining Plan	
8g	Survival rate	80%	85%	-
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:2 Capacity: 8000 Liter
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Environmental protection measures were taken care as per the statutes.		

### Compliance of Rule 45

S.N .	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to: August, 2024, Submitted on 09.09.2024 A.R. Submitted up to: Year 2023-24, submitted on 28.06.2024		-
S.N .	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Krishna Bhupathi Raja B Geologist: Som Nath Biswas Mine Manager: Sunil Kumar Singh	Appointed	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Working Area: 22.510 Ha Waste Dumps: 13.250 Ha Infrastructure & Road: 5.12 Ha Others (Safety Zone, R&R,	ok	-

		future mining area and untouched area): 5.87 Ha		
9d	Scrutiny of Annual return on afforestation	Achieved Within Mine Lease: 2500	ok	-
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No Mineral Reject Generation		-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	<b>ROM:</b> Production= 179739 MT Dispatch= 113738.99 MT	Appears to be correct	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	<b>Iron Ore Lumps:</b> Fe 58-60: Rs. 4116.64/t Fe 60-62: Rs. 4663.27/t Fe 62-65: Rs. 5400.00/t <b>Iron Ore Fines:</b> Fe 55-58: Rs. 3190.40/t Fe 58-60: Rs. 3638.02/t Fe 60-62: Rs. 4446.00/t	Appears to be correct	-
9i	Scrutiny of Annual return on fixed assets	Value of Fixed Assets: Rs. 26,22,92,190/-	Appears to be correct	-
9k	Scrutiny of Annual return on mining machineries	Shovel -4 Wheel Loader- 2 Back Hoe Loader- 1 Rock Drill-1 Crusher-2 (150 TPH) Tipper- 5 Generator- 2 Water Tanker-1 Elec. Motor-1 Jeep-1 Screening Plant-1 Pump-1	Appears to be correct	-

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