

MCDR INSPECTION REPORT

General

S.N.	Particulars	Details
1	File No.	CHG/BLS/LST-49/38CHG02003
2	Name of the Mine	Godadih Mahal No-2 Limestone Mine
3	Date of Inspection	20/09/2021
4	Name of Inspecting Officer	Shri Rudra N. Mishra (Senior Mining Geologist)
5	Accompanying Mine Official with Designation	1. Shri Nitesh Raghuvanshi (Agent of Mines) 2. Shri Subhash Singh, Mines Manager
6	Last date of Inspection & Officer	10/09/2020 & Shri R K Das (Sr. ACOM)
7	Total Lease Area (Ha) with breakup of non-forest and forest land	Non- forest – 95.899 hect. Forest Land: 24.414 ha Total Area: 120.313 ha
8	Mine code	38CHG02003
9	IBM Registration Number under rule 45 of MCDR,2017	IBM/4355/2011
10	Name of the Lease, Address, Phone, email and fax number	M/S Jindal Steel and Power Limited, Post Box-16, Kharsia Road, Raigarh-496001 (Chhattisgarh) Phone - +91 (0)7762-227001/02/03/04/05 Fax - +91 (0)7762-227021/22
11	Village	Godadih Mahal No-2
12	Taluka/Mandal	Tehsil: Masturi,
13	District	Bilaspur
14	Pin code	495551
15	State	Chhattisgarh
16	Post Office	Loharsi
17	Nearest Police Station	Pachpedi
18	Nearest Railway Station	Jairamnagar
19	Date of Grant of Mining Lease	05/01/2017, 11/01/2017 to 10/01/2017 (50 years)
20	Date of Execution	11/01/2017
21	Date of opening of Mine	25/09/2018
22	Date of First Renewal, if applicable and its period & expiry	Not Applicable.
23	Date of Second Renewal, if applicable and its period & expiry	Not Applicable.
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable.
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Dinesh Kumar Sraogi M/S Jindal Steel and Power Limited, Post Box-16, Kharsia Road, Raigarh-496001 (Chhattisgarh)

		Phone - +91 (0)7762-227001/02/03/04/05 Fax - +91 (0)7762-227021/22 Email-dks@jspl.com Date of appointment – 09.11.2012
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Nitesh Raghuvanshi (Agent of Mines) Godadih Mahal No-2 Limestone Mine M/S Jindal Steel and Power Limited Village- Godadih Mahal No-2, PO -Loharsi, Tehsil: Masturi, Distric- Bilaspur, Chhattisgarh Email: nitesh.raghuvanshi@jindalsteel.com
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri Subhash Singh, Mines Manager (1 st Class Mines Manager Certificate holder) Godadih Mahal No-2 Limestone Mine M/S Jindal Steel and Power Limited Village- Godadih Mahal No-2, PO -Loharsi, Tehsil: Masturi, Distric- Bilaspur, Chhattisgarh Email: subhash.singh@jindalsteel.com Date of appointment: 02/08/2021 Phone No. 9109182879
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	VL Pointed out.
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 55 & carrying out their duties as per rule 54 & 55 (MCDR 2017).	Yes, Shri Saorav Shrivastava
30	Date of Approval of Mine Plan/Modified Mine Plan with five-year period and specific condition in approval letter, if any.	Date of Approval of Modified Mining Plan 15/02/2019.and valid up to 31 st March 2021. Proposal period 2018-19 to 2020-21.
31	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	Date of Approval of Review of Mining letter no-BSP/LST/MPLN/1241/2020 dated 21/10/2021 Proposal period 2021-22 to 2025-26
32	Mineral(s) granted in lease and approved for Mining	Limestone
33	Method of Mining (Opencast, Underground)	Opencast
34	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
35	Captive/Non-Captive	Captive
36	Environmental Clearance	1.54 million tones
37	Status of Financial Assurance as per rule 27 of MCDR, 2017	MDPA Signed Performance Security submitted with Chhattisgarh State Govt., Date of expiry: 06/01/2022

Exploration

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
1a	Backlog of previous year	09	09	Drilling was stopped within ore Zone Violation pointed out.
1b	Exploration over lease area for Geological axis 1 or 2.	39.025 ha	39.05 ha	
1c	Exploration Agency & Expenditure in Rupees during the year	M/S Gem Consultants, Rs. 30,36,022.00	M/S Gem Consultants, Rs. 30,36,022.00	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	NIL		
1e	Balance reserves as on 01.04.21	Under (111): 27.22 million Tonnes Under (121): 13.53 million Tonnes Under (211): 6.64 million Tonnes Under (221): 4.33 million Tonnes		
1f	General remarks of Inspecting officer on geology, exploration etc.	<p>The limestone deposit of Chilhati belongs to the sediments of Chhattisgarh basin which is horizontal, thick bedded and classified as stromatolitic limestone of Raipur Group. The deposit is almost horizontal with a slight dip of almost 2° to 5° towards N 45°W. No structural disturbance like folds, faults and unconformity is observed in the area. Thin partings of Shale intercalation within limestone have degraded the quality of limestone in most of the limestone bands. Chocolate brown limestone is usually high in quality towards top and the quality decreases gradually at depth.</p> <p>There were three phases of exploration in the Godadih Limestone deposit. In first phase of drilling 07 Bore holes drilled by GSI, second phase 21 number of bore hole drilled by Shreeram Gemicon Pvt Ltd for M/S JSPL (2017) and third phase 18 number of bore holes drilled by Gem consultant for M/S JSPL (2020-2021).</p> <p>In additional exploration was done by M/S JSPL. Analysis of the exploration data established the following results as per UNFC norms as indicated below. 1) Flux grade limestone: > 47% of CaO: 9.88 million tonnes reserve, 2) Flux Grade Limestone: 45% - 47% of CaO: 3.67 million tonnes, 3) Cement Grade Limestone: 42% - 45% CaO: 5.66 million tonnes, 4) Blendable Grade Limestone: 38% to 42% CaO: 18.28 million tonnes, & 5) Low Grade Limestone :> 34%- 38% CaO: 14.23 million tonnes in the approved document dated 21/10/2021.</p> <p>Last phase of drilling was stopped within ore Zone Violation pointed out.</p>		

Development

S. N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
2a	Location of Development w.r.t. lease area	First bench (256-250 mRL) Second bench (250-244 mRL) for Flux Grade First bench (256-250 mRL) Second bench (250-244 mRL) for Cement Grade	First bench (256-250 mRL) Second bench (250-244 mRL) for Flux Grade North west of the pit.	
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Yes	Yes	
2c	Stripping ratio or ore to OB ratio	1:0.17	1:0.16	
2d	Quantity of topsoil generation in m ³	14100 m ³	2544.44 m ³	
2e	Quantity of overburden generation in m ³	47000 m ³	56860 m ³	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development not as per proposal. Violation pointed out.		

Exploitation

S.N	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
3a	Number of pits proposed for production	One	One	VL Pointed out
3b	Quantity of ROM mineral production proposed (2020-21)	Total: 15,40,000 T BF Grade: 4,62,000T Cement Grade: 1078,000 T	BF Grade: 240167.94 T	
3c	Recovery of Salable/usable mineral from ROM production	100% Saleable mineral Total: 15,40,000 T BF Grade: 4,62,000T Cement Grade: 10,78,000 T	BF Grade: 240167.94 T	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral reject generation and threshold value declared	< 34% CaO >4% MgO	< 34% CaO >5% MgO	
3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	34% to 38%CaO	34% to 38%CaO	
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized	Mechanized	

3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not in Proposal		Not in Proposal	
3j	Provision of drilling & blasting in mineral benches	Yes		Yes	
3k	Provision of mining machineries in mineral benches	Yes		Yes	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height: 6 m Bench width: 18 m in ore benches		Bench height: 6 m, Bench width not maintained in the ore benches as per proposal.	VL Pointed out for bench width and wrong information furnished in total area put use on annual returns.
3m	Total area covered under excavation /pits	Covered under current workings: 16.50ha		Covered under current workings: 3.315 ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.17		1:0.00 as per annual returns	
3o	Total area put in use under different heads at the end of year	Covered under current workings: 16.50ha Reclaimed /Rehabilitated: 0.00 ha, Storage for Top Soil: 0.84ha Overburden Dump: 4.60ha, Occupied by plant, buildings, residential, welfare buildings and road: 3.75 ha Other purpose (Settling Pond):0.60 ha, Green Belt: 7.25 ha Total Area of land: 33.79 ha, net area considers for calculation of F.A 26.54 ha		Covered under current workings: 3.315 ha Occupied by plant, buildings, residential, welfare buildings and road: 0.55 ha Other purpose: 0.929 ha	
3p	Production of ROM in Tones mineral during last Five-years period, as Applicable	2016-17	1.54 million Tonnes	0.00	
		2017-18	1.54 million Tonnes	0.00	
		2018-19	1.54 million Tonnes	0.00	
		2019-20	1.54 million Tonnes	500 tonnes	
		2020-21	Total: 15,40,000T BF Grade: 4,62,000T Cement Grade: 1078,000 T	240167.94 tonnes BF Grade, nil production of cement grade	

3q	General remarks of inspecting officer on method of mining etc.	Method of mining is Open cast mechanised mining with shovel and dumper combination. VL Pointed out for bench width and wrong information furnished in total area put use on annual returns and nil production of cement grade.
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Solid Waste Management-Dumping

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Proposal has been given in the approved document for the separate dumping of Top soil, OB/Waste and Mineral.	Zero OB removed as per annual return. Mineral stacked not as per proposed location.	VL pointed out
4b	Location of topsoil, OB & mineral reject dumps	Top Soil dumped along the 7.5 m in the boundary, In between the UTM Co-ordinates: N2410812 to N2410916 & E635986 to E636086 OB: 0.0635 million m ³ N2410605 to N2410736 & E 635726 to E635900. Mineral /Ore N2410966 to N2411040 & E634996 to E635056	Top Soil dumped along the 7.5 m in the boundary, OB generation: Nil Mineral stack not in proposed location	
4c	Number of Dumps within lease area and outside lease area	Within lease: one Soil dump and one OB dump Outside Lease: Nil	One Soil Dump, Nil OB Dump	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Proposed beyond ultimate Pit limit	No waste dump on mine site.one soil dump within lease.	
4e	Number of Active & Alive dumps	02	01	
4f	Number of deed dumps	Nil	Nil	

4g	Number of dumps established	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes, as per approved document garland drain will be constructed during FY 208-19	Not yet done	VL Pointed out.
4i	Length of Retaining wall or garland drain all along dump	As per approved document 1150m long garland drain	Not yet done	
4j	Number of settling ponds	01, 0.60ha area will be converted into settling pond.	Not yet done	
4k	Specific commends of inspecting officer on waste dump management	VL pointed out for not constructed garland drain, settling pond and mineral stack outside the proposed area.		

Solid Waste Management-Backfilling

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Area is premature for back filling.	Area is premature for back filling.	
5b	Area under backfilling of mined out area	NIL	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	yes	yes	
5d	Total area fully reclaimed & rehabilitated during the year	NIL	NIL	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Area is premature for back filling.		

Progressive Mine Closer Plan

S.N	Item	Proposals (2020-21)	Actual Work (2020-21)	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	Yes	Not submitted	
6b	Management of worked/mined out benches Area available for rehabilitation (Ha)			

	Afforestation done (ha)	3.00 ha, 6250 saplings	2560 Saplings	
	No. of saplings planted during the year			
	Cumulative no. of plants			
	Any other specific method of rehabilitation			
	Cost incurred on watch & care during the year			
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L*B*D) ii) Void filled by waste/tailings iii) Afforestation on the backfilling iv) Rehabilitation by making water reservoir v) Any other specific means	NA	NA	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitation iii) Method of rehabilitation	NA	NA	
6e	Compliance of Environment monitoring (core zone & buffer zone)	Proposal has been given in the approved document for regular monitoring of Ambient Air, Water Quality, Noise Vibrations	As per proposal	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	VL pointed out for less than 50% plantation during the year and not submission of yearly PMCP Report in prescribed format.		

Mineral Conservation

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	Total: 15,40,000 T BF Grade: 4,62,000T Cement Grade: 1078,000 T	240167.94 tonnes BF Grade, nil production of cement grade	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sort out at mine	BF Grade: 4,62,000T Cement Grade: 1078,000 T	240167.94 tonnes BF Grade, Cement grade: Nil	
7d	Any beneficiation process at mines	Only crushing at Mine Site	Only crushing at mine site	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Total ROM crushing in different size and feed to the steel plant.		

Environment

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Yes	Yes	VL pointed out
8b	Concurrent use or storage of topsoil	Yes	Yes	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Yes	No dumps of OB, Rejects and fines	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	No dumps of OB, Rejects and fines	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	NA	NA	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	3.00 HA 6250 Saplings	2560 saplings	
8g	Survival rate	Proposal not given	70%	
8h	Water sprinkling on roads to control airborne dust	Yes	yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	VL pointed out for less than 50% plantation.		

Compliance of Rule 45

S. N.	Item	Comments	Remarks	
9a	Status of submission of monthly and Annual returns	MR Submitted: Aug_2021 AR Submitted: 2020-2021	VL Pointed out for wrong information furnished in Annual return 2020-2021	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer not appointed, VL Pointed out		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Incomplete information furnished, VL Pointed out		
9d	Scrutiny of Annual return on afforestation	2560 saplings, 70% survival, less than 50% plantation done		
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil Mineral Reject generation		
9f	Scrutiny of Annual return on ROM stock and/or grade ore	BF Grade: Opening stock - 500 tonne, Production: 240167.94 tonnes Closing stock: 90480.68 tonne Dispatch: 150187.26 tonnes		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Ex Mine Price: Rs 448.12 Cost of Production: Rs 321.23 DMF, NMET not included in cost of production. VL Pointed out		
9i	Scrutiny of Annual return on Fixed assets	Rs – Zero as per Annual Return		
9k.	Scrutiny of Annual return on mining Machineries	Type of Machinery		Capacity of each Unit
		Back Hoe	1.170CUM	04
		Others	1.500	04
		Incomplete information furnished VL Pointed out		

Details of Violations observed during current inspection: -

नियम	उल्लंघन के प्रकार का विस्तृत ब्यौरा
Rule 11(1)	<p>The following deviations have been found in the mine from approved Scheme of Mining Plan vide letter no- Bilaspur/LST/MPLN-1189/2018 Dated 15/02/2019 for the period of 2018-19 to 2020-21.</p> <p>1) The production Proposal given in 2020-21 was BF Grade: 4,62,000T & Cement Grade: 1078,000 T, total production 15,40,000 T but against that BF grade 240167.94 tonnes produce and zero production of Cement Grade. Only dispatched 150187.26 tonnes of BF Grade.</p> <p>2) During inspection, it was observed substantial number of bore holes drilled were stopped within ore zone.</p> <p>3) Proposal of Quantity of overburden generation in 47000 m³ whereas actual 56860 m³ Overburden generated but not bumped in the proposed location as per approved mining plan.</p>

	<p>4) Proposed bench width 18 meter in ore zone but not maintained the same bench width in ore zone.</p> <p>5) During inspection, it was observed that more than one lakh tonne of limestone stacked of different sizes 0-3mm, 3mm to 10mm and 10mm to 40mm which is not mentioned in the approved plan and limestone stack yard in the mineralized zone near the pit whereas proposal was not given in the approved document.</p> <p>6) Two Crusher installed in the mineralized zone near the pit area where as the Proposal of crusher was given in different location.</p> <p>6) Afforestation: There was a proposal given for plantation of 6250 no of plants whereas less than 50 % of plantation done only 2560 no of plants have been planted.</p> <p>7) The proposal given for the 02 number of settling pond of 36000cum capacity and garland drain of 1150m not completed.</p> <p>8) Recovery factor of limestone 70% to 80% considered for the reserve estimation whereas the actual recover till date is approx. 100% recovery only mining loss may be considered.</p>
Rule 13(2)	The benches in overburden have not been kept sufficiently in advance and their workings are interfering with the working of ore or minerals.
Rule 14(4)	The ground selected for dumping of overburden, waste material, the sub-grade or non-saleable ores or minerals have not been proved for absence or presence of underlying mineral deposits before it is brought into use for dumping.
Rule - 19	<p>Machinery and plant. -(1) Where heavy earth moving machinery is used in mines, the holder of a mining lease shall maintain log books duly authenticated by the manager or mining engineer of such mines in respect of each machine showing date-wise account of hours worked, hours not worked, reasons for non-working, consumption of fuel or energy and lubricants and output of the machine during the corresponding working hours. (2) The summary of operation of each machine shall be recorded in the log book at the end of each month bringing out the percentage availability and percentage utilisation of the machine, average hourly performance and average fuel or energy consumption per hour. (3) The log books may be maintained in electronic form or in hard copy and shall be made available to the authorized officer on demand.</p> <p>The Same was not produced for verification on demand.</p>
26(2)	Yearly report before 1st day of July every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved mine closure plan, has not been submitted to competent authorities.
Rule 33	Updated print copy of the surface geological plan and sections has not been submitted before 30 th day of June for the year 2020-2021.
Rule 45 (5) (c)	<p>Discrepancies are observed in the annual return submitted for the year 2020-21</p> <p>1) The total area put to use as submitted in the return is also found incorrect.</p> <p>2) Part-II A 1. Value of fixed assets in (Rs) mentioned -Zero, it's not correct.</p> <p>3) Part -V Section -3 for limestone reserve and Resources estimated end of the year wrongly mentioned.</p> <p>4) Part -V Section -4 Overburden/waste generated nil during the year which is not correct.</p> <p>5) Part -V Section -5/6/8/9: Type and aggregate Horse power of Machinery incomplete information furnished.</p>

	6) Part -VI: Opening stock and closing stock of ROM ore at Mine head and Ex Mine Price is not correct. 7) Cost of production per tones of Limestone Rs 321.23 is lesser than Ex mine price of Limestone Rs 448.12. In case of captive mine Ex mine price is considered equal to cost of Production. Needs to be rectified
Rule 46	Notice of certain appointment–Appointment notice of Agent of Mines has not been sent in prescribed format to the authorised officer within fifteen days from the date of such appointments.
Rule 54	ROM register, Sub grade register, Mineral process register, waste generation register which are supposed to be kept in the mine for verification during inspection but were not shown to the undersigned. In this regard you are advised to furnish the above for verification
Rule 55	whole time Mining Engineer has not been employed in the mines.

Also, Star rating of mines validated

Date: 24/09/2021

Name: Rudra N Mishra
Designation: Senior Mining Geologist.