

MCDR INSPECTION

General:

SL. No.	Particulars	Details
1	Name of the Mine	KHATKURBHAL LIMESTONE AND DOLOMITE MINE
	Name of Inspecting Officer with Designation	Shri Sujit Kumar Jena, JMG
	Date of Inspection	10.01.25
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Non forest Land-72.439 Ha Forest Land- Nil
3	Minecode	38ORI13028
4	IBM Registration Number under rule 45 of MCDR, 2017	IBM/4177/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Shiva Cement Limited, Village-Telighana, PO -Biringatoli, Tehsil-Kutra, Dist-Sundargarh, Odisha-770018. Email- corporate@shivacement.com Phone-9805757619
6	Village	Khatkurbahal & Kulenbahal
7	Taluka/Mandal	Kutra
8	District	Sundargarh
9	Pincode	770018
10	State	Odisha
11	Post office	Khatkurbahal
12	Nearest police station	Kutra
13	Nearest Railway station	Rajgangpur
14	Date of Grant of Mining Lease	15-01-1992
15	Date of Execution	04-11-1997
16	Date of opening of Mine	01.04.1998
17	Date of expiry	14.01.2042
18	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. Manoj Kumar Rustagi, Nominated Owner and Whole Time Director, M/s Shiva Cement Limited, Village-Telighana, PO-Biringatoli, Tehsil-Kutra, Dist-Sundargarh, Odisha-770018. Email- manoj.rustagi@jsw.in Phone- 9324039201
19	Name of the Mine Agent with	Mr. Radhe Shyam Ray,

	Address, phone, email, fax number and date of appointment	Agent and HOD Mines, M/s Shiva Cement Limited, Village-Telighana, PO- Biringatoli, Tehsil-Kutra, Dist- Sundargarh, Odisha-770018. Email- radheshyam.ray@sw.in Phone-9805757619
20	Name of the Mines Manager with Address, mobile no, email, fax number and date of appointment in mine	Mr. Santosh Kumar Jaypuria Manager Mines, M/s Shiva Cement Limited, Village-Telighana, PO-Biringatoli, Tehsil-Kutra, Dist-Sundargarh, Odisha-770018. Email- santosh.jayapuria@jsw.in Phone-8610136811
21	Name of the Mining Engineer , Qualification and total experience with Address, mobile no, email, fax/phone number and date of appointment in mine	Mr. Sanjay Kumar Pradhan. BE Mining Mining Engineer. M/s Shiva Cement Limited, Village-Telighana, PO-Biringatoli, Tehsil-Kutra, Dist-Sundargarh, Odisha-770018. Email- sanjaya.pradhan@jsw.in Phone:8827996656
22	Name of the Geologist , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Mr. Tofan Singh M. Sc. Geology, M. Phil. (Geology), M/s Shiva Cement Limited, Village-Telighana, PO -Biringatoli, Tehsil-Kutra, Dist-Sundargarh, Odisha-770018 tofان.singh@jsw.in Phone-9348896174
23	Date of Approval of Mining Plan/Review of Mining Plan/ their modifications with five-year period and specific condition in approval letter, if any.	01.12.2021 Modified mining plan approved on 12.07.2024
24	Mineral (s) granted in lease and proved for mining	Limestone
25	Method of Mining(Opencast, Underground)	Opencast
26	Category (Fully Mechanised, Others or Manual)	Fully Mechanized.
27	Captive/Non Captive	Captive
28	Present EC Capacity	1.50 Million TPA Limestone

Exploration:---

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year	NA	NA	

1b	Exploration over lease area for Geological axis 1 or 2.	Nil	72.439	Total area explored in G1 level
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	Already explored in G1 Category
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	NA	Already explored in G1 Category
1e	Balance reserves as on 01.04.2024		62780773 Tonnes	As per AR

Development:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
2a	Location of development w.r.t. lease area	Pit-1- East- 240800E North- 2466100N West-240300E South- 2465800N PIT-2- East-239900E North-2466100N West-239500E South-2465800N PIT-3- East-239000E North-2466100N West-238700E South-2466100N	Pit-1- East- 240800E North- 2466100N West-240300E South- 2465800N PIT-2- Not developed properly as per plan PIT-3- Not developed properly as per plan	V/L issued.
2b	Separate benches in topsoil, overburden and mineral	Separate benches in topsoil, overburden and mineral proposed	Separate benches in topsoil, overburden and mineral carried out	
2c	Stripping ratio or ore to OB ratio	1:0.04	1:0.07	As inter-bedded waste stripping ratio increases.
2d	Quantity of topsoil generation in m3	13217	0	No top soil generated
2e	Quantity of overburden generation in m3	66084	59587.953	

Exploitation:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
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3a	Number of pits proposed for production	3 Nos.	3 Nos.	
3b	Quantity of ROM mineral production proposed	1500120	1188271.390	
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	150012 tonne	32007.620 tonne	
3e	Grade of mineral reject generation and threshold value declared	CaO < 34% MgO > 5%	CaO < 34% MgO > 5%	
3f	Quantity of sub-grade mineral generation		Same as 3d	
3g	Grade of sub-grade mineral generation		Same as 3e	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No such proposal	NA	
3j	Provision of drilling & blasting in mineral benches	Drilling & blasting proposed	Drilling & blasting carried out as per proposal	
3k	Provision of mining machineries in mineral benches	Dumper & Excavator	Dumper & Excavator combination carried out	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height-6 Bench Width-6	Not maintained, V/L issued	
3m	Total area covered under excavation/pits	13.738	14.75	
3n	Ore to OB ratio for the pit/mine during the year	1:0.04	1:0.07	As inter-bedded waste stripping ratio increases.
3o	Total area put in use under different heads at the end of year	20.599	19.88	
3p	Production of ROM mineral during last five-years period, as applicable 2019-20 2020-21 2021-22	 315000 MT 675000 MT 1350000 MT	 79610.00 MT 72712.44 MT 96230.74 MT	

	2022-23 2023-24	1500120 MT 1500120 MT	327228.49 MT 1188271.390 MT	
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Solid Waste Management-Dumping: --

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of topsoil, OB & mineral reject proposed	As per proposal	
4b	Location of topsoil, OB & mineral reject dumps	22 ⁰ 16'50.65"/84 ⁰ 28'16.97"	22 ⁰ 16'51.56"/84 ⁰ 28'16.96"	
4c	Number of dumps within lease area and outside lease area	Within 1 Out Side: Nil	Within 1 Outside: Nil	
4d	Location of dumps w.r.t. ultimate pit limit	Outside UPL	Outside UPL	
4e	Number of active & alive dumps	01	01	
4f	Number of dead dumps	Nil	NA	
4g	Number of dumps stabilised	Nil	NA	
4h	Whether Retaining wall or garland drain all along dumps are there	NA	NA	
4i	Length of Retaining wall or garland drain all along dump	No such proposal	NA	
4j	Number of settling ponds	NA	NA	

Solid Waste Management-Backfilling: --

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
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5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No such proposal	NA	
5b	Area under backfilling of mined out area	No such proposal	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	No such proposal	NA	
5d	Total area fully reclaimed & rehabilitated	No such proposal	NA	

Progressive Mine Closure Plan: ---

SL.N.	Item	Proposals (FY 2023-24)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). (Hard copy same provided)	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of Every Year	Submitted within the stipulated time period for the reporting year.	
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	NA	Plantation done in 2.032 Ha Total 1050 nos of plantation done for the year 2023-2024 Cumulative no of plants 4700 nos in approx. 4.00 ha Cost incurred 2.50 lakhs	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the	NA	NA	

	backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means			
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	NA	NA	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring for core zone and buffer zone.	Monitoring of Air, Water etc. been carried out. In core and buffer zone	

Mineral Conservation: ---

SL.No.	Item	Proposals ((FY 2023-24)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting proposed within lease area	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	
7c	Different grade of mineral sorted out at mines	+40% CaO – Limestone 34-40% - Subgrade limestone	+40% CaO – Limestone 34-40% - Subgrade limestone	
7d	Any beneficiation process at mines	NA	NA	

Environment: --

SL.No.	Item	Proposals ((FY 2023-24)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	Yes	No top soil generated	
8b	Concurrent use or storage of topsoil	Yes	No top soil generated	

8c	Separate dumps for overburden, waste rock, rejects and fines	Separate dumps for overburden, waste rock, rejects and fines	As per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	
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	Planation of 750 saplings proposed.	1050 saplings planted	
8g	Survival rate	70%	79%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on haul roads to suppress the dust.	Water sprinkling carried out on haul roads to suppress the dust.	

Compliance of Rule 45

SL.No.	Item	COMMENTS		Remarks.
9a	Status of submission of Monthly and Annual returns	As per MCDR 2017, the monthly return is to be submitted before 10th day of every month in respect of the preceding month and AR shall be submitted before the 1st day of July each year for the proceeding financial year		Monthly and Annual returns submitted in due time frame.
S.N.	Item	Details GIVEN in A.R.	Actual in field	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	1. Sri S K Jaypuria, Mines Manager 2. Mr Tofan Singh, Geologist.	1. Sri S K Jaypuria, Mines Manager 2. Mr Tofan Singh, Geologist were present during inspection	
9c	Scrutiny of Annual return on land use pattern for area	14.75 ha(pit) 1.71 ha(Dump)	It appears to be correct.	

	under pits, reclaimed area, dumps etc.	3.42 ha (others)		
9d	Scrutiny of Annual return on afforestation	1050 nos. of sapling planted within lease area	It appears to be correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	32007.62 tonne	It appears to be correct.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	1188271.39 tonne	It appears to be correct.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	533.00	It appears to be correct.	
9i	Scrutiny of Annual return on fixed assets	261404016.00	It appears to be correct.	
9k	Scrutiny of Annual return on mining machineries	As per modification of review of mining plan.	It appears to be correct.	

Date:04.03.25

Sujit Kumar Jena
Junior Mining Geologist