

## MCDR INSPECTION

### General:

SL. No.	Particulars	Details
1	Name of the Mine	KHATKURBHAL NORTH BLOCK LIMESTONE AND DOLOMITE MINE
	Name of Inspecting Officer with Designation	Shri Sujit Kumar Jena, JMG
	Date of Inspection	11.01.25
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	156.43 Ha Forest Land- Nil
3	Minecode	38ORI373001
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- <a href="mailto:corporate@shivacement.com">corporate@shivacement.com</a> Phone-8966892531
6	Village	Khatkurbahal & Falsakani
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	26.08.2022
15	Date of Execution	15-11-2022
16	Date of opening of Mine	25.01.2023 and mines started on 29/12/2023
17	Date of expiry	14.11.2072
18	Name of the <b>Nominated Owner</b> 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 Date of appointment in mine. 01.01.2020.
19	Name of the <b>Mine Agent</b> with Address, phone, email, fax number and date of appointment	Mr. Radhe Shyam Ray, 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 <b>Mines Manager</b> with Address, mobile no, email, fax number and date of appointment in mine	Mr. Ashit Kumar Dash Manager Mines, M/s Shiva Cement Limited, Village- Telighana, PO-Biringatoli, Tehsil-Kutra, Dist-Sundargarh, Odisha-770018. Email- <a href="mailto:ashit.dash@jsw.in">ashit.dash@jsw.in</a> <a href="tel:7000841691">Phone-7000841691</a> Date of appointment in mine. 21.10.2023
21	Name of the <b>Mining Engineer</b> , Qualification and total experience with Address, mobile no, email, fax/phone number and date of appointment in mine	Mr. Chitta Ranjan Mohapatra BE Mining Mining Engineer. Total experience. 13 Years M/s Shiva Cement Limited, Village- Telighana, PO-Biringatoli, Tehsil-Kutra, Dist-Sundargarh, Odisha-770018. Email- <a href="mailto:chittaranjan.mohapatra@jsw.in">chittaranjan.mohapatra@jsw.in</a> <a href="tel:9437105803">Phone-9437105803</a> Date of appointment in mine. 24.11.2022
22	Name of the <b>Geologist</b> , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Mr. Ritesh Chattaraj M. Sc. Applied Geology, Total experience. 20 Years M/s Shiva Cement Limited, Village- Telighana, PO-Biringatoli, Tehsil-Kutra, Dist-Sundargarh, Odisha-770018 <a href="mailto:ritesh.chattaraj@jsw.in">ritesh.chattaraj@jsw.in</a> Phone- 8886687571 Date of appointment in mine. 15.07.2023
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.	20.12.2023 and Modified mining plan 11.07.2024
24	Mineral (s) granted in lease and proved for mining	Limestone and Dolomite

25	Method of Mining(Open cast, Underground)	Open cast
26	Category (Fully Mechanised, Others or Manual)	Fully Mechanized.
27	Captive/Non Captive	Non-Captive
28	Present EC Capacity	Limestone 1.6 MTPA

**Exploration: -**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	16	28	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	M/s Geo Drill Geo-technics & Survey, Pune Rs. 48,00,000	M/s Geo Drill Geo-technics & Survey, Pune Rs. 1,50,00,000	
1d	Balance area to be explored to bring Geological axis in 1 or 2	102.60 Ha	68.57 Ha	
1e	Balance reserves as on 01.04.2024		Limestone 18623160 MT Dolomite 48279600 MT	

**Development:-**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
2a	Location of development w.r.t. lease area	<b>Quarry 1</b> East- 241000E North- 2466400N West-240600E South- 2466100N  <b>Quarry 2</b> East- 239900E North- 2466300N West-239700E South- 2466100N <b>Quarry 3</b> East- 239500E North- 2466400N	<b>Quarry 1:</b> NA Mining operation not yet started.  <b>Quarry 2:</b> Not developed as per proposal <b>Quarry 3</b> East- 239500E North- 2466400N West-239200E South- 2466200N	

		West-239200E South- 2466200N		
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	1:1.0127	1:2.90	Due to interburden waste stripping ratio increases.
2d	Quantity of topsoil generation in m3	26163	0.000	
2e	Quantity of overburden generation in m3	412350	383243.94	

**Exploitation:--**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
3a	Number of pits proposed for production	3 Nos.	2 Nos.	
3b	Quantity of ROM mineral production proposed	901800	197798.40	
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	1440.00 MT	Nil	
3e	Grade of mineral reject generation and threshold value declared	CaO % = 34, MgO % = 5-15	CaO % = 34, MgO % = 5-15	
3f	Quantity of sub-grade mineral generation	Nil	NA	
3g	Grade of sub-grade mineral generation	Nil	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized method adopted	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Nil	NA	
3j	Provision of drilling & blasting in mineral	Drilling & blasting	Drilling & blasting carried out as per	

	benches	proposed	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-9	Not maintained, V/L issued	
3m	Total area covered under excavation/pits	9.84	8.29	
3n	Ore to OB ratio for the pit/mine during the year	1:1.0127	1:2.90	
3o	Total area put in use under different heads at the end of year	9.84 ha(pit) 4.46 ha(Dump) 19.88 ha (others)	8.29 ha(pit) 1.91 ha(Dump) 11.51 ha (others)	Due to less development and production
3p	Production of ROM mineral during <b>last five-years period</b> , as applicable  2023-24	NA  901800	NA  197798.40	Production started from 29 <sup>th</sup> December 2023

### 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	2466508N-24 66606N / 240 381E-240491E 2466435N-24 66503N / 239 561E-239730E 2466449N-24 66614N / 238 611E-238766E	2466449N-24 66614N / 238 611E-238766E	No top soil generated
4c	Number of dumps within lease area and outside lease area	Within 3 Out Side: Nil	Within: 1 Outside: Nil	Due to less development and production

4d	Location of dumps w.r.t. ultimate pit limit	Outside UPL	Outside UPL	
4e	Number of active & alive dumps	3	1	
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	Nil	
4i	Length of Retaining wall or garland drain all along dump	Length of Retaining wall = 425 m garland drain = 425 m	Nil	Not maintained
4j	Number of settling ponds	NA	NA	

#### **Solid Waste Management-Backfilling:--**

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
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	Nil	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	Nil	NA	
5d	Total area fully reclaimed & rehabilitated	Nil	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	<p>Management of worked/mined out benches</p> <p>i) Area available for rehabilitation (ha)</p> <p>ii) Afforestation done (ha)</p> <p>iii) No. of saplings planted during the year</p> <p>iv) Cumulative no. of plants</p> <p>v) Any other specific method of rehabilitation</p> <p>vi) Cost incurred on watch &amp; care during the year</p>	Yes	<p>Afforestation done in 2.867 Ha and total plantation 1100 (2023-2024)</p> <p>3.11 Ha and total plantation</p> <p>Cumulative plantation 5000 approx</p> <p>Total cost incurred 4.00 Lakhs</p>	
6c	<p>Compliance on reclamation and rehabilitation by backfilling</p> <p>i) Voids available for backfilling (L X B X D)</p> <p>ii) Void filled by waste/tailings</p> <p>iii) Afforestation on the backfilled area</p> <p>iv) Rehabilitation by making water reservoir</p> <p>v) Any other specific means</p>	NA	NA	
6d	<p>Compliance of Rehabilitation of waste land within lease</p> <p>i) Afforestation</p> <p>ii) Area rehabilitated (ha)</p> <p>iii) Method of rehabilitation</p>	NA	NA	
6e	<p>Compliance of Environmental monitoring (core zone &amp; buffer zone)</p>	<p>Environmental monitoring for core zone and buffer zone.</p>	<p>Monitoring of Air, Water etc. been carried out.</p>	

**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	(+42% CaO, -5% MgO) & (+15% MgO -6% SiO <sub>2</sub> )	(+42% CaO, -5% MgO) & (+15% MgO -6% SiO <sub>2</sub> )	
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	800	1100 (2023-2024)	
8g	Survival rate	75%	78%	
8h	Water sprinkling on roads to control airborne	Water sprinkling proposed on	Water sprinkling carried out on haul	



	dust	haul roads to suppress the dust.	roads to suppress the dust.	
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### 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 Ashit ku Dash, Mines Manager 2. Mr Ritesh Chattraj, Geologist.	1. Sri Ashit kumar Dash, Mines Manager 2. Mr Ritesh Chattraj, Geologist.were present during inspection	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	8.29 ha(pit) 1.91 ha(Dump) 11.51 ha (others)	It appears to be correct.	
9d	Scrutiny of Annual return on afforestation	1100 nos of sapling planted within lease area	It appears to be correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Not generated	It appears to be correct.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	197798.400 MT	It appears to be correct.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	201.55	It appears to be correct.	
9i	Scrutiny of Annual return on fixed assets	353146507.00	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:03.03.25

Sujit Kumar Jena  
Junior Mining Geologist