

MCDR Report (2022-23)

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| 1) Name of Inspecting officer: | Shri Prem Prakash |
| 2) Designation | Regional Controller of Mines |
| 3) Accompanying mine official with designation | Amit Chauhan (AGM Mines), Madhab Sumohan (Mining Engineer) Arun Soni (Geologist), Amit Kumar Gautam (Surveyor) |
| 4) Date of Inspection | 22/09/2023 |
| 5) Date of Previous Inspection | 02/09/2022 |

I. GENERAL INFORMATION

| Sl. No | Particulars | Details |
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| 1 | Name of the Mine | Bharuwadih Limestone Mine (SHREE LIMESTONE MINE) |
| 2 | Total Lease Area (Ha) with breakup of Non-forest and forest land | Non- forest land - 531.126 Ha, Forest land – 0.00 Ha |
| 3 | Mine Code | 38CHG14027 |
| 4 | IBM Registration Number under rule 45 of MCDR, 1988/2017 | IBM/960/2011 |
| 5 | Name of the lessee, Address, phone, email and fax number | M/s. SHREE CEMENT LIMITED, POST BOX NO. 33, BANGUR NAGAR, BEAWAR, MASUDA, Phone No-07727203101, Email-shreebwr@shreecement.com , Fax No-07712430007 |
| 6 | Village | Semaradih-Bharuwadih |
| 7 | Taluka/Mandal | Baloda Bazar |
| 8 | District | Baloda Bazar |
| 9 | Pin Code | 493332 |
| 10 | State | Chhattisgarh |
| 11 | Post office | Baloda Bazar |
| 12 | Nearest police station | Suhela |
| 13 | Nearest Railway station | Bhatapara |
| 14 | Date of Grant of Mining Lease | 09/07/2010 |
| 15 | Date of Execution | 11/01/2011 |
| 16 | Date of opening of Mine | 17/12/2012 |
| 17 | Date of first Renewal, if applicable and its period & expiry | Not Applicable |
| 18 | Date of second Renewal, if applicable and its period & expiry | Not Applicable |
| 19 | Date of submission of renewal application if Mining Operations are continuing under deemed extension | Not Applicable |
| 20 | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment | Shri Neeraj Akhoury, address- Bangur Nagar, post box no.-33 Beawar, Pin code – 305901, Rajasthan Phone 01462-243413 fax no.- 01462-228117 Email- Neeraj.Akhoury@shreecement.com |
| 21 | Name of the Mine Agent with Address, phone, email, fax number and date of appointment | Shri Mahendra Kumar Garg, A-15, Shree Vihar, Bangur Nagar, Beawar – 305901 Raj. Phone 01462- |

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| | | 243413 fax no.- 01462-228117, Email- gargmk@shreecement.com Date of appointment – 28.02.2017 |
| 22 | Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines | Shri Amit Chauhan, B-124, SRCP colony village- Semradih, Tehsil- Baloda bazar Distt.- Balodabazar pin code- 493332, phone no. – 9214337329 Email- amit.chauhan@shreecement.com , Date of appointment in mines - 05.01.2022 |
| 23 | Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | Shri Madhab Sumohan, Qualification - B.Tech. (Mining) Total experience – 10 year C-211 SRCP Township, Balobabazar, Dist.-Balodabazar, Pin code 493332 Phone no.- 8349301298, Email- madhab.sumohan@shreecement.com , |
| 24 | Name of the Geologist , Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | Arun Soni, Qualification – M.Sc. (Geology) Experience – 10 years Address – Civil line Bhatapara, pin code- 493118 Mobile – 8085351442, Email- Arun.Soni@shreecement.com |
| 25 | Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57 of MCDR, 2017. | Yes |
| 26 | Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any. | Approval letter no. BALODABA/CHUP/KHA YO- 1219/2019/Raipur/dated 09.12.2019. Proposal period 2020-21 to 2024-25 |
| 27 | Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any. | Not Applicable |
| 28 | Mineral(s) granted in lease and proved for mining | Limestone |
| 29 | Method of Mining (Opencast, Underground) | Opencast |
| 30 | Category (Fully Mechanized, Others or Manual) | Fully Mechanized |
| 31 | Captive/Non-Captive | Captive |

II. SCIENTIFIC MINING

[Data in respect of financial year (2022-23) or cumulative, as applicable]

| Sl. No | Item | Proposals (2022-23) | Actual Work (2022-23) | Remarks |
|--------------------------|---|--|---|--|
| A. EXPLORATION: - | | | | |
| 1a | Backlog of Previous Year | Borehole – 17 Nos. (2020-2021) | Borehole – 18 Nos. (2022-2023) | Exploration completed in FY 2022-23 |
| 1b | Exploration Over Lease area for Geological Axis 1 or 2 | No exploration has been proposed in the approved Review of Mining Plan during F.Y. 2022-23 | 18 Nos. | The backlog exploration for FY 2020-21 has been completed in FY 2022-23. |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | Not specified | KHANNA & ASSOCIATES INDIA Expenditure- Rs. 2878174/- | Expenditure as reported in submitted Annual Return. |
| 1d | Balance area to be explored to bring Geological axis 1 or 2 | Nil | Nil | The entire potential mineralized area has been explored under G-1 |
| 1e | Balance reserves as on 01/04/2024 | Under 111- 176.40 million tonne | | As per the submitted Annual Return 2022-23 |
| 1f | General remarks of inspecting officer on geology, exploration etc. | No exploration has been proposed during the financial year 2022-23. However, the lessee has drilled 18 Nos. of boreholes against the backlog exploration proposal of the year 2020-21. The entire potential mineralized area has been explored under G-1 level of exploration. | | |

| Sl. No | Item | Proposals (2022-23) | Actual Work (2022-23) | Remarks |
|-----------------------|---|---|---|--|
| DEVELOPMENT: - | | | | |
| 2a | Location of development w.r.t. lease area | Development proposed in one (01) pit namely Pit No.01 | Pits have not been developed as envisaged in the approved RMP | Violation under Rule 11(1) of MCDR, 2017 pointed out in this regard. |
| 2b | Separate benches in topsoil, overburden and mineral | Separate benches proposed in OB & mineral. | Separate benches were maintained in OB & mineral. | Top Soil- 1 Nos. Overburden – 1 Nos. Mineral – 3 Nos. |
| 2c | Stripping ratio or ore to OB ratio | 1:0.25 | 1:0.49 | Tonne: Cum |
| 2d | Quantity of topsoil generation in m ³ | 103250 M ³ | 103048 M ³ | |
| 2e | Quantity of overburden generation | 2810000 M ³ | 3749592 M ³ | |

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| | in m3 | | |
| 2f | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | The actual developments have not been carried out as envisaged in the approved Review of Mining Plan. Violation of Rule 11(1) of MCDR 2017 pointed out in this regard. | |

| Sl. No | Item | Proposals (2022-23) | Actual Work (2022-23) | Remarks |
|------------------------|---|---|---|--|
| EXPLOITATION: - | | | | |
| 3a | Number of Pit Proposed for Production | Pit 01 & 02 | Pit 01 | Pit No.02 (Block-01) has not been developed as envisaged in the approved RMP. Violation under Rule 11(1) of MCDR, 2017 pointed out in this regard. |
| 3b | Quantity of ROM mineral production proposed | 11.06 Million Ton | 7.60 Million Ton | Less production to cater the needs of captive plant & low business environment |
| 3c | Recovery of Sailable/ Usable Mineral from ROM Production | 100% | 100% | |
| 3d | Quantity of mineral reject generation | No proposal | Nil | |
| 3e | Grade of mineral reject generation and threshold value declared | No proposal | Nil | |
| 3f | Quantity of sub-grade mineral generation | No proposal | Nil | |
| 3g | Grade of sub-grade mineral generation | No proposal | Nil | |
| 3h | Manual / Mechanized method adopted for segregating from ROM | Mechanized | Mechanized | |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject | No proposal | No such study carried out | |
| 3j | Provision of drilling & blasting in mineral benches | Drilling and Blasting proposed in mineral benches | Drilling and blasting were carried out in mineral benches as proposed | Depth of hole 12m, Dia of hole 150mm to 165mm, Burden-4.0m-5.0m, Spacing – 6.0m- |

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| | | | | 7.0m Type of explosive used –Slurry explosives & ANFO |
| 3k | Provision of mining machineries in mineral benches | Yes, HEMMs | HEMMs deployed | |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Mineral bench height- 12 Meter Overburden bench height- 5 | Bench height and width have been maintained as per proposal. | |
| 3m | Total area covered under excavation/pits | 268.5 Ha. up to the end of plan period 2024-25 | About 179.60 Ha. up to end of FY 2022-23 | |
| 3n | Ore to OB ratio for the pit/mine during the year | 1:0.25 | 1.0.49 | Tonne:Cum |
| 3o | Total area put in use under different heads at the end of year | Total put to use-377.67 Ha. up to 2024-25 | About 299.00 ha Up to end of F.Y. 2022-23 | |
| 3p | Production of ROM mineral during last five-year period, as applicable | 2018-2019 = 8600000T 2019-2020 = 8600000T 2020-2021 = 8600000T 2021-2022=11060000T 2022-2023=11060000T | 2018-2019 = 6572418T 2019-2020 = 5739914T 2020-2021 = 5767492T 2021-2022 = 5283713T 2022-2023 = 7602115T | As per AR 2022-23 submitted |
| 3q | General remarks of inspecting officer on method of mining etc. | Open cast working being carried out by deployment of HEMM with the help of drilling & blasting. Less production is reportedly due to less feed requirement in the captive cement plant. | | |

| Sl. No | Item | Proposals (2022-23) | Actual Work (2022-23) | Remarks |
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| SOLID WASTE MANAGEMENT - DUMPING:- | | | | |
| 4a | Separate Dumping of Topsoil, OB and Mineral Rejects | Separate dumping of Waste /OB proposed | Separate dumping for Waste /OB carried out | Top Soil dump -1 OB dump - 7 |
| 4b | Location of Topsoil, OB and Mineral Rejects Dumps | Dump-1 E609400 to E609600 N2390328 to N2390400 Dump-2 E612400 to E612600 N2389200 to N2389400 Dump-3 E610925 to E611146 N2390757 to N2390852 Dump-4 E611543 to E611699 N2390800 to N2391000 Dump-5 E612200 to E612600 N2390400 to N2390672 Dump-6 E612800 to E613200 | Waste dumps are made as proposed. However, one (01) additional waste dump is made near to dumper parking area. | Violation under Rule 11(1) pointed out |

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| | | N2389000 to N2389400 Dump-7 E612600 to E612892 N2389344 To N2389600 Dump -8 E611583 to E611968 N2388980 to N2389094 Top Soil Stack 9- E611133 to 611485 N2390708 to N2390914 | | |
| 4c | Number of Dumps within Lease & Outside Lease area | WML-08 Dumps OML- Nil | WML-09 Dumps OML- Nil | |
| 4d | Location of Dumps, within Ultimate Pit Limit | Proposed within UPL | Within UPL | |
| 4e | Number of Active & Alive Dumps | 8 | 9 | |
| 4f | No of Dead Dumps | 1 | 1 | Dump No. 7 dead dump |
| 4g | No of Dumps stabilized | 1 | 1 | |
| 4h | Whether Retaining Wall or Garland drain along Dumps are there | Yes | Not constructed fully around the dumps | Violation under 11(1) issued |
| 4i | Length of Retaining Wall or Garland drain along Dumps | Garland drain –2350 Meter Retaining wall – 2350 Meter | Not found constructed around the dumps | Violation under 11(1) issued |
| 4j | No. of Settling tanks | No proposal | Not Applicable | |
| 4k | Specific comments of inspecting officer on waste dump management | One additional waste dump has been made near to dumper parking place (Boundary Pillar-58) in about 3 Ha area without such approval in RMP. Environmental protective measures around the waste dumps have not been constructed as envisaged in RMP. Violation under Rule 11(1) of MCDR, 2017 pointed out in this regard. | | |

| Sl. No | Item | Proposals (2022-23) | Actual Work (2022-23) | Remarks |
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| SOLID WASTE MANAGEMENT - BACKFILLING: - | | | | |
| 5a | Status of part or full extraction of mineral from mined out area before starting backfilling | No proposal | Nil | No area has been exhausted fully for carrying out backfilling |
| 5b | Area under backfilling of mined out area | No proposal | Nil | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area | No proposal | Not applicable | |

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| 5d | Total area fully reclaimed and rehabilitated | No proposal | Not applicable | |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc. | Mineral has not been exhausted fully & thus no proposal was given for backfilling. | | |

| Sl. No | Item | Proposals (2022-23) | Actual Work (2022-23) | Remarks |
|---|---|--|--|---|
| PROGRESSIVE MINE CLOSURE PLAN: - | | | | |
| 6a | Whether Annual report on PMCP submitted on time and correctly - Rule 26(2) | To be submitted before 01st July every year | PMCP report received in time. | Annual Report submitted on 29.06.2023 |
| 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 | No proposal | Nil | No area is mined out fully at present |
| 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 backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means | No proposal | Nil | No area has got matured for reclamation and rehabilitation purposes |
| 6d | Compliance of Rehabilitation of waste land within lease | i) 1200 Nos. ii) 1.00 Ha. iii) By Green Belt | i) 1200 Nos. ii) About 1.00 Ha. iii) By Green Belt | 1200 Nos. samplings @ 90 survival |

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| | i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation | | | |
| 6e | Compliance of Environmental monitoring (core zone & buffer zone) | Environmental monitoring of air, water & noise proposed | Environmental monitoring of air, water & noise was carried out as per the proposal | All values of environment parameters were within permissible limits |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive closure operations | Annual PMCP report has been submitted. Plantation has been carried out as per the proposal. | | |

| Sl. No | Item | Proposals (2022-23) | Actual Work (2022-23) | Remarks |
|--------------------------------|--|--|---|---------|
| MINERAL CONSERVATION: - | | | | |
| 7a | ROM mineral dispatch or grade wise sorting within lease area | Direct ROM dispatch to their captive plant | Blasted ROM is being fed to the crusher for further sizing & dispatched to their captive cement plant by belt conveyors | |
| 7b | Method of Grade-wise mineral sorting i.e. manual or mechanical | Blending by mechanized method | Bench wise blending as per the requirement of the cement plant | |
| 7c | Different grade of mineral sorted out at mines | No proposal | Nil | |
| 7d | Any beneficiation process at mines | No proposal | Nil | |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | The run of mine ore is fed to crushers for sizing for feeding to the cement plant. Proper use of the combination of low-grade and high-grade limestone to prepare the pile by using cross belt analyzer. | | |

| Sl. No | Item | Proposals (2022-23) | Actual Work (2022-23) | Remarks |
|-----------------------|---|--|--|---|
| ENVIRONMENT: - | | | | |
| 8a | Separate removal and utilization of topsoil | Separate removal and utilization of topsoil proposed | Generated topsoil used for plantation | Topsoil generation-103048 m3, Total topsoil used for plantation |
| 8b | Concurrent use or storage of topsoil | Concurrent use for Green belt development | Concurrent used for Green belt development | |

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| 8c | Separate dumps for overburden, waste rock, rejects and fines | Separate dumps for overburden, waste rock, and rejects are proposed | Separate dumps are maintained | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No proposal | Nil | |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.) | No proposal | Nil | |
| 8f | Baseline information on existence of plantation & additional plantation done | 1200 Nos. of saplings within ML area covering 1 Ha area | With in lease area 1200 nos. saplings | |
| 8g | Survival rate | Not specified | 90 % | |
| 8h | Water sprinkling on roads to control airborne dust | Proposal has been given in the approved document for water sprinkling on roads through water tanker. | Continuous water sprinkling done on haul roads to suppress the dust generated | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Aesthetic beauty in & around the mine area was good. | | |

| Sl. No | Item | Comments | Remarks | |
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| COMPLIANCE OF RULE-45:- | | | | |
| 9a | Status of Submission of Monthly & Annual Returns | MR being submitted regularly AR Submitted up to = FY 2022-23 | | |
| Sl. No | Item | Details Given in A.R | Observation of I/Officer | Remarks |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Manager- Amit Chauhan Geologist- Arun Soni Mining Engineer- Madhab Sumohan | Employed | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | 299.96 Ha | About 299 Ha. | |
| 9d | Scrutiny of Annual return on afforestation | With in lease area 1200 @ 90 % survival | Appears to be correct | |

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| | | rate | | |
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| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity) | Nil | No generation of mineral reject reported | |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | ROM opening stock- Nil Production- 7602115 Closing stock- Nil | Appears to be correct | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | Ex. Mine price and cost of production – Rs. 268.99/Tonne Sale value- Nil | Captive consumption | |
| 9i | Scrutiny of Annual return on fixed assets | Rs. 287489628/- including Plant and Machinery including transport equipment, exploration etc. | Appears to be correct | |
| 9k | Scrutiny of Annual return on mining machineries | 6 Back hoe, 6 drill, 2 crane, 2 Crusher, 5 Dozer, 33 Dumper, 2 Explosive van, 3 Generator, 1 Motor grade, 3 Pumps, 3 water tanker | Observed deployed | |

10- Details of violations observed during current inspection: -Violation of Rule 11(1) of MCDR 2017 is pointed out after current inspection.

प्रेम प्रकाश / Prem Prakash
क्षेत्रीय खान नियंत्रक / Regional Controller of Mines
भारतीय खान ब्यूरो, रायपुर / Indian Bureau of Mines, Raipur