

MCDR INSPECTION REPORT

**General**

S N	Particulars	Details
1	File no	CHG/BB/LST/38CHG14027
2	Name of the Mine	Shree Limestone Mine
3	Total Lease Area (Ha) with breakup of Non-forest and forest land	Non forest -531.126 Hect Forest -0.0Ha  Lease area is in four blocks Block-1 total 60.543 ha Block-2 total 8.732 ha Block-3 total 405.662 ha Block-4 total 56.189 ha
4	Mine code	38CHG14027
5	Date of Inspection	13.08.2021
6	Name of official accompanying inspection	Shri K C Sharma
7	IBM Registration Number under rule 45 of MCDR, 1988	IBM/960/2011
8	Name of the lessee, Address, phone, email and fax number	M/s Shree Cement ltd POST BOX NO. 33, BANGUR NAGAR, BEAWAR, (Raj)
9	Village	SEMRADIH- BHARUWADIH
10	Taluka/Mandal	Baloda Bazar
11	District	Baloda Bazar
12	Pincode	493332
13	State	Chhattisgarh
14	Post office	Baloda Bazar
15	Nearest police station	Suhela
16	Nearest Railway station	Bhatapara
17	Date of Grant of Mining Lease	9th July 2010
18	Date of Execution with lease period	12/01/2011 to 11/1/2061 lease period extended to 50 yrs on 14/7/2016
19	Date of opening of Mine	17/12/2012
20	Date of first Renewal/ extension of lease registration	NA
21	Lease expiry date	NA
22	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri P N Chhangani M/s. SHREE CEMENT LIMITED POST BOX NO. 33, BANGUR NAGAR, BEAWAR, (Raj)
23	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri M K Garg M/s. SHREE CEMENT LIMITED POST BOX NO. 33, BANGUR NAGAR, BEAWAR, (Raj) <a href="mailto:gargmk@shreecementltd.com">gargmk@shreecementltd.com</a> Mob no. 9214337754
24	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri K C Sharma M/s Shree Cement ltd Village – Semradih Tehsil – Baloda Bazar Dist. Baloda Bazar CG 493332. Phone no. -8349301296 sharmakrishnachandra@shreecement ltd.com

25	Name of the Mining Engineer Qualification and total experience with Address, phone, email, and date of appointment in mine	Shri Amit Chauhan M/s Shree Cement ltd Village – Semradih Tehsil – Baloda Bazar Dist. Baloda Bazar CG 493332. Phone no. -9214337329 sumohanm@shreecementltd.com
	Name of Geologist, Qualification and total experience with Address, phone, email, and date of appointment in mine	Shri Arun Soni, Qualification- MSC (Geo),6years M/s Shree Cement ltd Village – Semradih Tehsil – Baloda Bazar Dist. Baloda Bazar CG 493332. <a href="mailto:sonia@shreecement.com">sonia@shreecement.com</a> Date of appointment- 15.04.2013
26	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Geologist was not present during inspection
27	Date of Approval of Review 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 09.12.19 up to 31 <sup>st</sup> March 2025 Date- 09.12.19
28	Present mining plan validity -	31 <sup>st</sup> March 2025
29	Mineral(s) granted in lease and proved for mining	Limestone
30	Method of Mining(Open cast, Underground)	Open cast
31	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
32	Captive/Non Captive	Captive
33	Environment Clearance grant date & limit of EC.	8.6 million tones dated 30/3/2017

Scientific Mining: Compliance of proposals of approved mining plan/Review of mining.

### **Exploration**

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	
1b	Exploration over lease area for Geological axis 1 or 2.	NIL	NIL	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NIL	NIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	17 nos of bore holes up to depth of mineralization or up to 300m to know continuity of limestone	NIL	
1e	Balance reserves as on 01.04.2021		Updated reserve under 111 category is 189 million Under 211- 29.30 million tones	
1f	General remarks of inspecting officer on geology, exploration etc.	Though complete lease area is explored in G1 but 17 nos of boreholes were proposed to depth of mineralization or up to 300m to know continuity of limestone were not carried out during the year due to covid 19 issue.		

### Development

S.N.	Item	Proposals year 2020-21	Actual work	Remarks
2a	Location of development w.r.t. lease area	Block-1 Pit-2- W34.5 to 37.5 & S 10.5 to 514  Block 3 W21 to 27 S4.5 to S-10.5 And W13.5 to 19.5 S 4.5 to - S13.5	Nil work  W21 to 27 S4.5 to S-10.5  W12-W21 S7.5- S16.5	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches in topsoil, overburden and mineral has been formed. OB bench-4M-6M	Separate benches in topsoil, overburden and mineral noticed	
2c	Stripping ratio or ore to OB ratio	1:0.57	1:0.59	
2d	Quantity of topsoil generation in m <sup>3</sup>	56250 m <sup>3</sup>	5590 m <sup>3</sup>	
2e	Quantity of overburden/waste generation in m <sup>3</sup>	2067000 m <sup>3</sup>	1892824 m <sup>3</sup>	3407083 TONNES
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development is carried out mostly as per proposals		

### Exploitation

S.N.	Item	Proposal Year 2020-21	Actual work	Remarks
3a	Number of pits proposed for production	Block-1 Pit no-2  Block no-3 pit no1, 3 & 4 Bottom RL 236 mRl	No work in block1 Block -3 pit no-1 only worked and no work was carried out in pit 3 & 4 of Block 3 Actual bottom mRl 229.8 MRL	VL issued
3b	Quantity of Limestone production proposed	11.06 Million T	5.767Million T	
3c	Recovery of salable/usable mineral from ROM production	11.06Milion T	5.767Million T	CTO 8.6MT/A
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of mineral reject generation and threshold value declared	NIL	NIL	
3f	Quantity of sub-grade mineral generation	NIL	NIL	
3g	Grade of sub-grade mineral generation	NIL	NIL	
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA	

3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	NA	NA	
3j	Provision of drilling & blasting in mineral benches	Yes	Drilling by 150/165mm drill hole dia with spacing 7 * 5m burden and benches 12 m height	
3k	Provision of mining machineries in mineral benches	Yes	Excavator-6 CUM bucket capacity and 60 tonnes dumper s	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Max -ht – 12M OB 6-12M	Max -ht – 8 to 12mts OB – 2 to 6 mts	
3m	Total area covered under excavation/pits	122.083Ha	118.75Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.57	1:0.59	
3o	Total area put in use under different heads at the end of year		172.95 ha	
3p	Production of ROM mineral during last five-year period, as applicable	2016-17: tones- 43,00,000 tones 2017-18:tones- 58,20,000 tones 2018-19: tones 107,20,000 tones 2019-20: Tones 110,60,000 tones 2020-21: tones 110,60 000 t	2993943T  4112837T  6572418T  5739914T  5767492T	
3q	General remarks of inspecting officer on method of mining .	Production is 57.67lakhs tones against proposal of 110.6 lakhs tones around 52 % compared to proposals.		

#### **Solid Waste Management-Dumping**

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)			
4b	Location of topsoil, OB & mineral reject dumps	Dump -1- W6-W6.54 S3.44-S4.5 Dump-2 W3.38-W5.59 S4.5 -S 6.5 Dump -3 W17.5 – W19.5 S1.5-S3.5 Dump – 4 W12.5- W13.5 S 0.28- S2.0 Dump -5 W3.38- W5.6 S4.5-S6.5 Dump -6 E0- E2.9 S16.5-S18.5 Dump 7 W0.5-W3.0 S14.5-S16.5	Dump -1- W6-W6.54 S3.44-S4.5 Dump-2 W3.38-W5.59 S4.5 -S 6.5 Dump -3 W17.5 – W19.5 S1.5-S3.5 Dump – 4 W12.5- W13.5 S 0.28- S2.0 Dump -5 W3.38- W5.6 S4.5-S6.5 Dump -6 E0- E2.9 S16.5-S18.5 Dump 7 W0.5-W3.0 S14.5-S16.5	

4c	Number of dumps within lease area and outside lease area	Within lease -7nos Outside lease- nil	Within lease -7nos Outside lease- nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are inside UPL are temporary in nature	Dumps are inside UPL along lease boundary line	
4e	Number of active & alive dumps	All dumps are active	Waste material is put along lease boundary to made bund and safety zone	
4f	Number of dead dumps	NIL	NIL	
4g	Number of dumps stabilized	NIL	Already created band have been established with plantation	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Already created band have been established with plantation	
4i	Length of Retaining wall or garland drain all along dump		Retaining wall-50M, Garland drain-500M	
4j	Number of settling ponds		1 nos	
4k	Specific comments of inspecting officer on waste dump management	Bund along lease boundary is in progress.		

#### **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	NA	NA	Year 2020-21
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)	Use of top soil for plantation	Use of top soil for plantation	
5d	Total area fully reclaimed & rehabilitated	NIL	NIL	
5e	General remarks of inspecting officer on backfilling, reclamation etc	No backfilling as area is not mature for backfilling.		

#### **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.	Annual report on PMCP submitted on time and correctly - Rule 23E(2)	Annual report on PMCP submitted on time and correctly - Rule 23E(2)	
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	NA	NA	

	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 backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	NA	No backfilling	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	1.0Ha Green belt development	@1200plants/hect 1 Hect inside ML (1540Nos plants out side ML)Green belt	Total 59Ha,area till date has green belt
6e	Compliance of Environmental monitoring (core zone & buffer zone)	2nos of AQMS in core Zone, 2 nos AQMS in buffer zone	2nos of AQMS in core Zone, 2 nos AQMS in buffer zone 2 nos of Peizo meter with on line telemeter for water level indicator	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Only plantation proposal was there and same is imeplimented.		

### **Mineral Conservation**

S.N.	Item	Proposals	Actual work 2020-21	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	11.06MT	57.67MT limestone	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	NA	NA	
7c	Different grade of mineral sorted out at mines	NA	NA	
7d	Any beneficiation process at mines	NA	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Around 52 % production target achieved during the year.		

### **Environment**

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	56250 m <sup>3</sup>	5590 m <sup>3</sup>	
8b	Concurrent use or storage of topsoil	Green belt development	Green belt development	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	2067000 m <sup>3</sup>	1892824 m <sup>3</sup>	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	Mine being new there is no mature area for backfilling	
8f	Baseline information on existence of	Barrain land	Green belt developed	

	plantation & additional plantation done (Rule 41)		along lease boundary	
8g	Survival rate	90	80 %	
8h	Water sprinkling on roads to control airborne dust	Two nos 22KL of water sprinkler	Two nos 22KL of water sprinkler	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Green belt developed along lease boundary line and along road.		

**Compliance of Rule 45**

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Submitted		
S.N.	Item		Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Provided		Notice of geologist asked
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Under pit Rehabilitated Waste dump Others Infra -	-118.75 ha - -25.3 ha - 81 h -6.9 ha	NIL  Township plantation , topsoil storage etc- 81 ha
9d	Scrutiny of Annual return on afforestation	1200 nos with ML 15040 nos outside ML		NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Cao- 43.12 Sio2 Mgo-2.03 Al2O3-3.56 Fe2O3- 2.5 Na2O-0.32		NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Limestone – nil stock		NiL
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Used for own consumption for cement manufacturing		Total cost \ Rs 259.68 per tones
9i	Scrutiny of Annual return on fixed assets	Land, Equipment- Machinery & Others – Total fixed asset of Rs 195877375/-		None
9k	Scrutiny of Annual return on mining machineries	Efficiency of shovel and dumper given below Shovel 9 nos dumper -34 nos Dozer -5, Blast hole drill 165mm-5 nos , wheel loader-2, crusher-2 of 1200 TPH		

Machinery statement and performance is given as under.

	Equipment type & make	Capacity	Output/ hr (t/hr)
1	Excavator, PC1250-8R,	6 CUM	600T/hr
2	Dumper, N10387, HD465-7E0, 715HP,	60T	200T/hr
3	Crusher in TPH	1250 TPH	2 nos

Cost of major mining head per tones as given below.

sn	Items	Cost Rs/T of Limestone	Cost Rs/T of Total material handling
1	Loading Cost	13.67	12.25
2	Transportation Cost	16.33	15.56
3	Blasting Cost	4.70	
4	Drilling Cost	4.07	
5	Total limestone cost (including auxiliary machine Dozer, breaker, loader, grader & other light vehicle) ( excluding manpower)	43.84	
6	Overburden handling cost (excluding manpower)	34.89	

10- CSR work during year 2020-21

sr	item	Amount in Rs	Remarks
1	Water storage tanks, supply&irrigation support	921216	
2	Support to health & medical services , covid assistance	1659440	
3	Promotion of Hygienic and sanitation , public health	9436366	
4	Support to skill development	220408	
5	Social livelihood support	=527400+518794+644049+6605266=8295509/	
6	Support to transportation and services COVID relief	9436366/	
		Total Rs 20532939	

**Details of violations observed during current inspection and compliance position of earlier violation pointed out:-**

नियम	उल्लंघन के प्रकार का ब्यौरा
11(1)	<p>Mining operations in the mining lease are not being carried out in accordance with as per the proposal given in approved review of mining plan dated 9/12/2019 to the extent given below.</p> <p>a) Production of limestone was 57.67 lakhs tones against proposal of 110.6 lakhs tones, there is deviation of around 48 % compared to proposal for the year 2020-21.</p> <p>a). During the year 2020-21 , Development was proposed in block no-1 at pit -2 but no development was carried out during the year from proposed location.</p> <p>b) During the year 2020-21 , Excavation of limestone was proposed from Block-1 Pit no-2 &amp; Block -3 pit no-3 &amp; 4 but no excavation of limestone was carried out from block-1 &amp; Block -3 pit no-3 &amp; 4 and pit no-1 has gone deeper than proposal.</p>
46	It is stated that geologist as per rule 55 of MCDR 2017 is employed in mines but Notice of appointment of geologist in required form H of MCDR 2017 is not submitted with acceptance by geologist.

Star rating validated for the year 2020-21 during current inspection

भवदीय



(बी.एल.गुर्जर)

क्षेत्रीय खान नियंत्रक, भारतीय खान ब्यूरो