MCDR INSPECTION REPORT

General

S.N.	Particulars	Details
1	Name of the Mine Date of Inspection: Name of Inspecting Officer	Shree Limestone Mine (MCDR Inspection) 29/11/2018 Shri B. L Gujar (RCOM)& Rudra N Mishra (SMG)
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Non-forest -531.126 Hect Forest -0.0Ha
3	Mine code	38CHG14027
4	IBM Registration Number under rule 45 of MCDR,1988	IBM/960/2011
5	Name of the Lease, Address, Phone, email and fax number	M/s Shree Cement ltd Post box no. 33, Bangur nagar, Beawar, (Raj) Pin Code-305901, Phone No.-01462-228101-6 Fax-0146-228117 Email: shreebwr@shreecementltd.com
6	Village	Semradih- 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	9 th July 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	N.A.
18	Date of Second Renewal, if applicable and its period & expiry	N.A.
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	N.A.
20	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) Pin Code-305901, Phone No.-01462-228101-6 Fax-0146-228117 Email: shreebwr@shreecementltd.com Date of Appointment: 05/8/2018
21	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, Rajasthan.

		Pin code: 305901. Mobile: 9214337754 Email: - gargmk@shreecementltd.com Date of Appointment: 28/02/2017
22	Name of the Mine 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 Chhattisgarh-49333 Phone no. -8349301296 sharmakrishnachandra@shreecementltd.com Date of Appointment: 17/12/2012
23	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Madhab Sumohan M/s Shree Cement ltd Village – Semradih Tehsil – Baloda Bazar Dist. Baloda Bazar CG 493332. Total Experience: 09 years Phone no. -8349301298 sumohanm@shreecementltd.com Date of Appointment: 04/10/2012
24	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Yes
25	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	30.11.17 (Modified Mining Plan) Letter No. Balodaba/Chup/Kha Yo-1125/2017 / Raipur/ Dated 30.11.17. Modified Mine Plan period: 1/04/2017 To 31st March 2020 Review of Mining Plan with five-year period: 1/04/2015 To 31st March 2020
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	Nil
27	Mineral(s) granted in lease and approved for Mining	Limestone
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanized, Others or Manual)	Fully mechanised
30	Captive/Non-Captive	Captive mine
31	Environmental Clearance	8.6 Million tonnes

Exploration

S.N.	Item	Proposals (2017-18)	Actual Work (2017-18)	Remarks
1a	Backlog of previous year	Nil	Nil	Entire lease area
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	

1c	Exploration Agency & Expenditure in Lakh Rupees during the year	NA	NA	already explored under G1category
1d	Balance area to be explored to bring Geological axis in 1 or 2.	NA	NA	
1e	Balance reserves as on 01.04.2018	194.12 Million Tonnes	Under 111&122:194.12 Million Tonnes Under 222&211:29.30 Million Tonnes	
1f	General remarks of Inspecting officer on geology, exploration etc.	The Limestone deposit of Shree Limestone mine belongs to Chandi Limestone Formation of Raipur group of Chhattisgarh supergroup. The Limestone strata have a general strike of NE-SW with a gentle dip of 5° to 6° due NW. The area around Risda- Kukurdih is a small part of Chhattisgarh basin and comprises of dolomite, limestone and shale. The limestone of the area is fine grained, massive hard and compact in nature. The limestone is Stromatolitic with thin veins of calcite. It is seen that the limestone grades into shaly limestone than shale towards the southern part of the area. This limestone has thin intercalation and partings of the shale also. The eastern part of the deposit has inclusion of the shale in the limestone.		

Development

S.N.	Item	Proposals (2017-18)	Actual Work (2017-18)	Remarks
2a	Location of Development w.r.t. lease area	Block no3	Block no3	
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Separate benches in topsoil, overburden and mineral has been formed, OB bench-12M	Separate benches in topsoil, overburden and mineral has been formed OB bench-12M	
2c	Stripping ratio or ore to OB ratio	1:0.56	1:0.28	
2d	Quantity of topsoil generation in m^3	600000 m^3	258075 m^3	
2e	Quantity of overburden generation in m^3	3070000T 1070000Cub M	1185182T 658434Cub M	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development is in order. Due to high intercalation the OB/IB generation is more.		

Exploitation

S.N.	Item	Proposals (2017-18)	Actual Work (2017-18)	Remarks
3a	Number of pits proposed for production	2	2	
3b	Quantity of ROM mineral production proposed (2017-18)	5820000T	4112837 T	EC :8.6 MT. (CTO 4160000 T)
3c	Recovery of Salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject	Nil	Nil	

	generation			
3e	Grade of mineral reject generation and threshold value declared	Cao< 34% MgO> 4%	CaO< 34% MgO>4%	
3f	Quantity of sub-grade mineral generation	Not Proposed in approved document	NIL	
3g	Grade of sub-grade mineral generation	NA	NA	
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized method adopted	Mechanized method adopted	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Proposed in approved document	NA	
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 & mineral suitable for method of mining proposed in MP/SOM	Yes Max –ht – 12M OB -12M	Yes Max –ht – 12M OB – 7M	
3m	Total area covered under excavation /pits	At end of MP march 2020 144Hact.	At end of March 2018 58.93 hact	
3n	Ore to OB ratio for the pit/mine during the year	1:0.56	1:0.28	
3o	Total area put in use under different heads at the end of year	Area up to MP period up to March 2020 Area under mining – 144ha Storage of Top soil – 23.8 ha Waste Dump – 27.6 ha Mineral Storage – 1.7 ha Infrastructure- 0.8 ha Roads -4.5 ha Township -22 ha Total -224.4 ha	Area under used up to March 2018 Open cast working – 58.93 ha Waste Disposal – 18.5 ha Plant /Building /Road- 3.4 ha Top soil – 10 ha Plantation – 16.84 ha Total Area – 107.67Hact	
3p	Production of ROM mineral during last five-years period, as Applicable (in tons)	2013-14(1st yr)	2.4 MT	0.0 MT
		2014-15 (2nd yr)	4.8 MT	0.0 MT
		2015-16 (3rd yr)	4.3 MT	1.97MT
		2016-17(4th yr)	4.3 MT	2.99MT
		2017-18(5th yr)	5.82 MT	4.11 MT
3q	General remarks of inspecting officer on method of mining etc	Method of mining is Open cast mechanized mining with shovel dumper combination		

Solid Waste Management-Dumping

S.N.	Item	Proposals (2017-18)	Actual Work (2017-18)	Remark
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Dump -1 W2-W4.5 S15-S17 Dump-2 S 4.5-S 6.5 & W 3.0-W 5.0	Dump -1 W2-W4.5 S15-S17 Dump-2 S 4.5-S 6 & W 3.0-W 5.0	Violation Pointed out
4b	Location of topsoil, OB & mineral reject dumps	7.5M along lease boundary	7.5M along lease boundary	
4c	Number of Dumps within lease area and outside lease area	2 nos within ML & it is active	2 nos within ML & it is active	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	between grid line W 4.5 to W6 and S 4.5 to S 6.5	between grid line W 6 to W9 and S 1.5 to S 4.5	
4e	Number of Active & Alive dumps	2 nos	2 nos	
4f	Number of deed dumps	Nil	Nil	
4g	Number of dumps established	NA	NA	
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain along the dump	yes	
4i	Length of Retaining wall or garland drain all along dump	Garland drain length 700m	700m along the dump	
4j	Number of settling ponds	1nos	1 nos	
4k	Specific commends of inspecting officer on waste dump management	Waste isn't being dump at designated place as per approved documents. Violation Pointed out		

Solid Waste Management-Backfilling

S.N.	Item	Proposals (2017-18)	Actual Work (2017-18)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not Proposed in approved document	Area not matured for backfilling	Production started from 2015-16. Its a new mine so No backfilling.
5b	Area under backfilling of mined out area	Not Proposed in approved document	Area not matured for backfilling	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Top soil within existing quarry	NA	
5d	Total area fully reclaimed &	Not	Area not	

	rehabilitated	Proposed in approved document	matured for reclaimed & rehabilitated	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Area not matured for backfilling and reclamation & rehabilitation.		

Progressive Mine Closer Plan

S. N.	Item	Proposals (2017-18)	Actual Work (2017-18)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 26 (2) of MCDR 2017. Details should be given in the format as given in Annexure-20	Annual report on PMCP submitted.	Annual report on PMCP submitted.	
6b	Management of worked/mined out benches	NA	NA	
	Area available for rehabilitation (Ha)			
	Afforestation done (ha)			
	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	15 hect Green belt	@1200plants/hect 15.3 Hect (18059Nos plants)	
6e	Compliance of Environment 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	Air Quality Management System (AQMS)
6f	General remarks of inspecting officer	PMCP proposal are implemented.		

	on PMCP compliance & progressive closer operations	

Mineral Conservation

S.N.	Item	Proposals (2017-18)	Actual Work (2017-18)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	5820000T	4112837T	CTO was 4160000T
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sort out at mine	Above 34% CaO grade	Above 34% CaO	
7d	Any beneficiation process at mines	Not Proposed in approved document	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	ROM directly feed into the crusher and no subgrade material generated.		

Environment

S.N.	Item	Proposals (2017-18)	Actual Work (2017-18)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Separate removal of top soil	Separate removal of top soil	
8b	Concurrent use or storage of topsoil	storage of topsoil and use for plantation	storage of topsoil and Use for plantation	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Separate dumps for overburden, waste rock, rejects	There is no reject at present	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed in approved document	In future OB will be backfilled	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed in approved document	NA	
8f	Baseline information on existence of plantation & additional plantation done (Rule 44 of MCDR 2017)	Proposal for year 2015-16 – 9600 Nos 2016-17— 9600 Nos 2017-18 -	Cumulative plantation 28054 nos Additional 18057Nos Jun-july 2018	Outside ML 23250 Nos & cumulative 162436Nos Nos plant out side of ML Harihyar CG

		9600 Nos		plant area
8g	Survival rate	89%	90%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Centralised water sprinkling system on haul road and crusher	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	EMP parameters are regularly being monitored.		

Compliance of Rule 45

S. N.	Item	Comments		Remarks
9a	Status of submission of monthly and Annual returns	M.R. Submitted upto– Oct-2018		
		A.R. submitted upto- 2017-18		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer-Shri madhav Sumohan, & Manager Shri K.C. Sharma		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Under pits-58.930 ha., waste disposa- 18.50 ha., top soil & afforestation-26.839 ha. & for infrastructure and others -3.4 ha.		
9d	Scrutiny of Annual return on afforestation	Within Lease area: 13054 nos saplings planted Outside Lease area: 23250 nos saplings planted		
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil		
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Nil		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Ex. Mine price: Rs.205.00 & Cost of production-245.46 Rs		
9i	Scrutiny of Annual return on Fixed assets	Rs 1893860651/-		
9k	Equipment	Nos	Capacity	
Scrutiny of Annual return on mining Machineries		Dumper	16	55 MT
		Blast Hole Drill	3	165 mm
		Loader	2	3.3 CUM
		Dozer	2	320 HP
		Backhoe cum Rock breaker	3	6 Cu.m
		Explosive Van	1	5.00 T
		Motor Grader	1	160.0HP
		Road Roller	1	3.00T

	Water Tanker	2	22 KL
	Crusher	2	1400.00 T/H
	Crane	1	1400.00 T

10. Details of Violations observed during current inspection

नियम	उल्लंघन के प्रकार का ब्यौरा
11(2)	Mining operations in the mining lease are not being carried out in accordance with as per the proposal given in approved modified mining plan dated 30/11/2017 to the extent given below.
	a) Waste dumping proposal for the year 2017-18 and 2018-19 was planned between grid line W 4.5 to W6 and S 4.5 to S 6.5 where as waste dump is being carried out at other places between grid line W 6 to W9 and S 1.5 to S 4.5
	b) During the inspection of mine, it was observed that unsafe charging /blasting practice was being carried out without following the rules and permission granted as per MMR 1961 as mentioned in approved mining plan. A standard operating procedure for Charging and Blasting of Blast holes are not being followed.
	c)Limestone benches and over burden benches in mine are not properly maintained as per proposal given in approved mining plan.
27(4)	The plans and sections of mining lease have not been maintained up to date within three months period.
45(7)	On scrutiny of annual and monthly return of mine it is noticed that cost of production per tones of limestone Rs 245.46 is higher than Ex mine price (Rs 205.00) of mineral. In case of captive mine Ex mine price is considered equal to cost of Production. Needs to be rectified.
55(1)(C)	A whole time Geologist have not been employed in the mine for carrying out mining operations in accordance with MCDR 2017 rules.

Last Inspection Details: Shri R. K. Das (Sr ACOM) and Shri Rudra N Mishra (Senior Mining Geologist) held on dated 02/08/2017.

Violations pointed out during last inspections have been complied.

Date: 10/12/2018

Name: Shri B. L. Gujar

Designation: Regional controller of Mines,

Indian Bureau of Mines, Raipur.