

MCDR INSPECTION REPORT 19.06.19

General

S. N.	Particulars	Details
1	Name of the Mine, Date of Inspection, Name of Inspecting officer with Designation & File No.	Shree Limestone Mine,19.06.2019 & Shri Rajesh Kumar Das, Senior Assistant Controller of Mines & CHG/RAP/LST-76/NGP
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Non forest -531.126 Hect
3	Mine code	38CHG14027
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/960/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Shree Cement ltd POST BOX NO. 33, BANGUR NAGAR, BEAWAR, (Raj)
6	Village	SEMRADIH- BHARUWADIH
7	Taluka/Mandal	Baloda Bazar
8	District	Baloda Bazar
9	Pincode	493332
10	State	CG
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(As per lease deed lease is granted for 30 years but as per sction 8A of MMDR amended ACT lease may extend upto 50 years)
16	Date of opening of Mine	17/12/2012
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
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) D.O.A:05.08.2018
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, (Raj) gargmk@shreecementltd.com Mob no. 9214337754

22	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@shreecementltd.com D.O.A:17.19.2012
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 M/s Shree Cement ltd Village – Semradih Tehsil – Baloda Bazar Dist. Baloda Bazar CG 493332. Phone no. -8349301298 sumohanm@shreecementltd.com D.O.A:04.10.2012
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Modified mining Plan, Letter No. BALODABA/CHUP/KHA YO-1125/2017 / Raipur/ Dated 30.11.17 From 2017-18to 31 st 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.	NA
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
30	Captive/Non Captive, Environmental Clearence	Captive,8.6 million Tons

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	NA	Nil	Whole ML area has been explored on G1 level
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	No exploration done	
1e	Balance reserves as on 01.04.2019(million tons)	196.4	200.5	
1f	General remarks of inspecting officer on geology, exploration	The Limestone deposit belongs to Chandi limestone formation of Raipur group of Chhattisgarh supergroup. The		

	etc.	deposit is almost flat deposit has a general strike of NE-SW. The deposit is massive, hard and compact in nature. The mineralized area is broadly explored in G1.
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Development

S.N.	Item	Proposals	Actual work	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 (Rule 15) OB bench-12M	Separate benches in topsoil, overburden and mineral has been formed (Rule 15) OB bench-12M	
2c	Stripping ratio or ore to OB ratio	1:0.28	1:0.28	
2d	Quantity of topsoil generation in m ³	530000 m ³	214510 m ³ /134068T	
2e	Quantity of overburden generation in m ³	2360000T 1310000Cub M	1742910T 1075543Cub M	1742910T 1075543Cub M Total Qty – topsoil + waste = 1876968T
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The OB/IB and generation of top soil is more as the top benches intercalation is more but development is broadly in order.		

Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	2	2	
3b	Quantity of ROM mineral production proposed	10720000 T	6572418 T	(CTO 8600000T)
3c	Recovery of salable/usable mineral from ROM production	100%	92-95%	Top benches material is screen and therefore screen reject generation is 5-8%
3d	Quantity of mineral reject generation	Not specifically mentioned	The quantity is included in waste as reported value of CaO% is 25%	
3e	Grade of mineral reject generation and threshold value declared	NA	NA	
3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA	
3i	Any analysis or beneficiation	NA	NA	

	study proposed & carried out for sub-grade mineral and reject			
3j	Provision of drilling & blasting in mineral benches	Yes	yes	Drilling m/c 165mm dia
3k	Provision of mining machineries in mineral benches	Yes	As per Proposal	Shovel 6 cum capacity, Dumper 55 tons, loader 3.3cum, Moto Grader, Road Roller
3l	Whether height of benches in overburden and 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	79.6 hact	73.3 hact	
3n	Ore to OB ratio for the pit/mine during the year	1:0.28	Broadly as per proposal	
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 – 144 Storage of Top soil – 23.8 Waste Dump – 27.6 Mineral Storage – 1.7 Infrastructure- 0.8 Roads -4.5 Township -22 Total -224.4(As per approved document)	Area under used up to March 2019 Open cast working – 73.3 Waste Disposal – 21.5 Plant /Building /Road- 3.4 Top soil – 11.3 (used for plantation) Plantation – 49.10 (Total plantation – 60.4 Ha) Total Area – 158.6 Hact	
3p	Production of ROM mineral during last five-year period, as applicable(million tons)	2014-15: 4.80 2015-16: 4.30 2016-17: 4.30 2017-18: 5.82 2018-19: 10.72	2014-15: 0.00 2015-16: 1.97 2016-17: 2.99 2017-18: 4.11 2018-19: 6.57	
3q	General remarks of inspecting officer on method of mining etc.	The method of mining is by opencast method using HEMM with shovel Dumper combination and deep hole drilling and blasting.		

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of l, 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 and in addition mineral	

			rejects dump and other area also dumping done.	
4b	Location of topsoil,	7.5M along lease boundary	7.5M along lease boundary and some top soil dump 10-15 meter inside mine 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)	Dumps which are inside UPL are temporary in nature	Dumps which are inside UPL are temporary in nature	
4e	Number of active & alive dumps	2 nos	2 nos	
4f	Number of dead dumps	NIL	NIL	
4g	Number of dumps stabilised	NA	NA	
4h	Whether Retaining wall or garland drain all along dumps are there	Where ever required	Retaining & garland drain provided where ever required	
4i	Length of Retaining wall or garland drain all along dump	700m	700m	
4j	Number of settling ponds	1nos	1 nos	
4k	Specific comments of inspecting officer on waste dump management	The waste generation is more and as the mine is new top soil and OB/IB generation is there and dump management is not appropriate therefore violation pointed out.		

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	Nil	
5b	Area under backfilling of mined out area	NA	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Yes	Top soil used for plantation and separately stacked	
5d	Total area fully reclaimed & rehabilitated	NA	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	The mine is new and area not matured for back filling.		

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	Annual report on PMCP submitted on time and correctly - Rule 23E(2)	Annual report on PMCP submitted on time and correctly - Rule	

	format as given in Annexure-20.		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 during the year	NA	NA	
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	NA	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	15 hect Green belt	@1200plants/hect 15.3 Hect (18059Nos plants) 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	PMCP proposal are broadly implemented		

Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	10.72millionT	6.57MillionT	CTO was 8.6MillionT
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	No beneficiation done except the low grade blend with high grade limestone to get desirable grade.		

Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	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	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 (Rule 41)	Proposal for year 2015-16 -- 9600 2016-17-- 9600 2017-18 -9600 2018-19 - 18000	2018-19 = 18059Nos Cumulative plantation 35657 nos +18059= 53716Nos	Outside ML 23250 Nos and cumulative 162436Nos Nos plant out side of ML Harihyar CG plant area
8g	Survival rate		89%	88%
8h	Water sprinkling on roads to control airborne dust	2 nos Water sprinkler provided to control airborne dust	2 nos Water sprinkler provided to control airborne dust	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No adverse impact observed on aesthetic beauty in and around mine.		

Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	AR & MR upto date		
S.N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes given	Shri Madhab Sumohan, Mining Engineer, Shri K.C.Sharma, Manager and Shri Arun Soni,	

			Geologist	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes given	Open cast working – 73.3 Waste Disposal – 21.5 Plant /Building /Road- 3.4 Plantation – 49.10 (Top Soil + 1 plantation – 60.4 Ha)	
9d	Scrutiny of Annual return on afforestation	Yes given	Within lease area 18059 nos saplings reported.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	screening is done for mostly top benches but as reported the screen reject is below threshold value therefore it is considered as waste	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-mine price and cost of production is 237.28 Rs	Both are same as limestone is used for captive purpose.	
9i	Scrutiny of Annual return on fixed assets	Rs 296792177/- reported		
9k	Scrutiny of Annual return on mining machineries	Yes given	As per proposal shovel, Dumper, Drill m/c, Dozer, Water tanker	

Details of violations observed during current inspection and compliance position of earlier violation pointed out:- During the present inspection following inspection pointed out

Rule	Nature of Violation observed
11(1)	<p>Mining operations should have been undertaken in accordance with the approved Mining Plan.</p> <p>The Modified Mining Plan was approved vide letter no. बलोदा बाज़ार / चूप /खयो-1125/2017-रायपुर dated 30.11.2017 and following deviation were observed during inspection</p> <ol style="list-style-type: none"> 1. The proposal given in 2018-19 for limestone production is given 10.72 million tons but actual production achieve is 6.57 million tons . 2. During the mine visit it was observed that waste dumping is not as per proposal and dumping has been dumped in many places. The waste dump is having length of 300-400m without any protective measures and the same is mixed with top soil and screen reject dump. 3. The top soil and OB dumping is proposed in designated area but still OB, screen reject and top soil are being dump in other places as well i.e near crusher no.2 and in working pit and North side of ML along lease boundary.
37(1)	<p>There is no protective measures taken around waste dump and it has been found that the waste material was escaping and washing away from the dumps and was contaminating the nearby area and extending outside lease boundary(northern side of ML near villages and houses are constructed) and no retaining wall constructed. A proper protective measure should be taken to prevent the escape of the material from the existing waste dumps.</p>

45(5) (c)(i)	During the mine visit it was observed that huge quantity of screen reject is generated and dumped in ML area and huge quantity of limestone stock between Crusher1 and crusher2 stacking is done but the same is not reflected in Annual return of 2018-19.
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The last inspection was carried out by Shri B.L.Gurjar, RCOM & Shri R.N.Mishra, SMG on dated 29.11.2018 and the violation pointed out already complied.

(Rajesh Kumar Das, Senior Assistant Controller of Mines)