

MCDR INSPECTION REPORT

Date-26.11.2019

General

S. N.	Particulars	Details
1	Name of Inspecting officer, Designation & Accompanying person, Name of the Mine & Date of Inspection	Rajesh Kumar Das, SrACOM, Shri Dinesh Dixit, Manager Mine, Emami Cement Limestone Mines & 25.11.2019
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	395.05 ha, Non forest
3	Mine code	38CHG19001
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/16679/2013
5	Name of the lessee, Address, phone, email and fax number	Emami Cement Ltd
6	Village	Risda
7	Taluka/Mandal	Baloda Bazar
8	District	Baloda Bazar-Bhatapara
9	Pincode	493332
10	State	Chhattisgarh
11	Post office	Risda
12	Nearest police station	Baloda Bazar
13	Nearest Railway station	Bhatapara
14	Date of Grant of Mining Lease	12.11.2007
15	Date of Execution	08.09.2009
16	Date of opening of Mine	07.08.2013
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 Vivek Chawla, Date of appointment 04.02.2017, Acropolis Mall, 15 th Floor, Rajdanga Road, Kasba, EM Bypass, Kolkata-700107. vivek.chawla@emamicement.com
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Anant Kumar Mahobe, Village, Risda, Emami Cement Ltd, Date of appointment-09.04.2019, anant.mahobe@emamicement.com
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri D.P. Dixit, Date of appointment-25.05.17 Address- Village, Risda, Emami Cement Ltd dinesh.dixit@emamicement.com Phone No. - 9926277724
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Jaiprakash Dwevedi, Date of appointment 25.05.2017 Address- Village, Risda, Emami Cement Ltd Jaiprakash.dwevedi@emamicement.com Phone No. 7583807064.
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Manoj Rajnarayan kushwaha Date of appointment 20.08.2018, Phone No.-7611107110, manoj.kushwaha@emamicement.com Shri Address- Village, Risda, Emami Cement Ltd Phone no. 783807118,
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	06.10.2017 (Modification to approved Mining Plan) for period 2017-18 to 2018-19
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Review of Mining Plan approved on 14.12.2018 for period 2019-20 to 2023-24

27	Mineral(s) granted in lease and proved for mining	Limestone (Cement)
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Captive
31	Environment Clearance	Dated 6.04.2018 for 5.5 MTPA

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	20	Nil	2018-19
1b	Exploration over lease area for Geological axis 1 or 2.	20	Nil	Total area covered under G1
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	20	Nil	2018-19
1e	Balance reserves as on 01.04.2019	Under 111&122 229 Million Tons	Reserve as on 01.04.2019- 231 Million Tons	
1f	General remarks of inspecting officer on geology, exploration etc.	The area is small part of Chhattisgarh basin and comprises of dolomite, limestone and shale of Chandi formation of Raipur group. The general trend of out crop is in NE-SW direction. The beds almost horizontal as exemplified by detail mapping and drilling.. The lease area broadly drilled in 150X150m intervals and drilled 191 bore holes of approx 7563 meter but still few borehole terminate in limestone therefore lessee proposed extra bore hole.		

Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Two pit proposed, south pit & North pit	Broadly within proposal	2018-19
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	One bench in top Soil 1-3 mtrs, OB- 3.5 mtrs Two Limestone benches-10 mtrs	One bench in top Soil 1-3 mtrs, OB- 3.5 mtrs Two Limestone benches-10 mtrs	Some place bench height is more than 10 meter therefore violation pointed out.
2c	Stripping ratio or ore to OB ratio	South block 1:0.4 and north block 1:0.6	1:0.58	
2d	Quantity of topsoil generation in m ³	5775.00M ³	159429 M ³	
2e	Quantity of overburden generation in m ³	3465 M ³	558677 M ³	Due to high intercalation the OB/IB generation is more.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The top soil and OB/IB generation is more compare to proposal.		

Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	2 Nos	2 Nos	2018-19
3b	Quantity of ROM mineral production proposed	5.5 Million Tons	4790760 MT	Saleable ore 4790760
3c	Recovery of salable/usable mineral from ROM production	90%	Broadly as per proposal	Due to high intercalation of clay.
3d	Quantity of mineral reject generation	Screen reject_551719 tons	Screen reject_403906tons	2018-19
3e	Grade of mineral reject generation and threshold value declared	Threshold value CaO - 34%	Mineral reject CaO 25 to 30 %	Screen reject is waste.
3f	Quantity of sub-grade mineral generation	N.A.	N.A.	
3g	Grade of sub-grade mineral generation	N.A.	N.A.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	N.A.	N.A.	
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	
3k	Provision of mining machineries in mineral benches	Yes	Yes	HEMM is use
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	3.5 & 10 Mtrs	3.5 & 10 Mtrs	
3m	Total area covered under excavation/pits	46.0 Ha.	35.0 ha	
3n	Ore to OB ratio for the pit/mine during the year	North pit-1:0.7 South Pit-1.04	1:0.58	
3o	Total area put in use under different heads at the end of year	i) Total Exploitation area-65.13ha. ii)Road, plant ,buildings, waterstorage tank - 5.72 iii) Dump area (waste screen)=5.99 ha.	i)Total exploitation area -58 ha ii)Road, plant ,buildings -5.72 iii) Dump area (waste screen)=5.72 ha.	
3p	Production of ROM mineral during last five-year period, as applicable	Last Five year proposal 2014-15_0.5 MT 2015-16_0.5 MT 2016-17_3.17 Million tons 2017-18_5.5 Million tons 2018-19_5.5 Million Tonnes Total Propose Production-15.17 Million Tons	Last Five year 2014-15_0.0 MT 2015-16_0.0 MT 2016-17_0.99 Million tons 2017-18_3.169 Million tons 2018-19- 4.79 Million tonnes Total production-8.949 Million Tons	
3q	General remarks of inspecting officer on method of mining etc.	The method of mining is opencast using HEMM and bench height in ore is 10 meter and broadly as per proposal.		

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Yes	Yes	2018-19
4b	Location of topsoil, OB & mineral reject dumps	Topsoil Dump E615990-616184 N2393620-2393481 Location of OB- E614580-614466 N2393114-2392935 mineral Reject- E614334-614533 N2393235-2393120	Topsoil Dump- E615883-616195 N2393472-2393472 OB/SB/IB Dump- E 614364-614578 N2392936.0-2393115.0 mineral reject E614341-614517 N2393124-2393229	Major dumps are broadly as per proposed dump but material are dump here and there and accordingly violation is pointed out
4c	Number of dumps within lease area and outside lease area	3 nos	3 nos	3 Major dumps within the lease
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	South West of Lease area	South West of Lease area.	
4e	Number of active & alive dumps	01No	01No	
4f	Number of dead dumps	01no	01no	
4g	Number of dumps stabilised	1 no	1 no	
4h	Whether Retaining wall or garland drain all along dumps are there	yes	yes	
4i	Length of Retaining wall or garland drain all along dump	RW 520 mtrs, GD-818mtrs, 4884mtrs	RW 520mtrs, GD-818mtrs,4885mtrs	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management	The major dump are placed as per proposal but the actual waste generation is more w.r.t to proposal therefore waste has been dumped in many places.		

Solid Waste Management-Backfilling-N.A.

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	N.A	N.A.	
5b	Area under backfilling of mined out area	N.A	N.A.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	N.A	N.A.	
5d	Total area fully reclaimed & rehabilitated	N.A	N.A.	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Area not matured for backfilling.		

Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and	30.06.2018	Submitted PMCP report 2015-16	2018-19

	correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.		2016-17 & to be complied before 30.06.18	
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 2018-19 rehabilitation vi) Cost incurred on watch & care during the year	i) N.A. ii) 16.55 Ha iii) 41375 nos within lease). iv) v) N A vi) -	i) N.A. ii) 16.55 Ha iii) 41375nos (Within the Lease) 21105(Outside of Lease) iv) v) N.A. vi)Rs.1877464.00	2018-19
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	i) N.A.	i) N.A.	2018-19
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) N.A.	i) N.A.	2018-19
6e	Compliance of Environmental monitoring (core zone & buffer zone)		Complied	2018-19
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The PMCP compliance is broadly as per proposal.		

Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Sorting	Sorting	2018-19
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	2018-19
7c	Different grade of mineral sorted out at mines	N.A.	N.A.	2018-19
7d	Any beneficiation process at mines	Screen	Screen	2018-19
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The crushing and screening is done and blending of limestone is done of different grades to maintain the desired quality.		

Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Separate stacking & Plantation.	
8b	Concurrent use or storage of topsoil	Plantation	Plantation	2018-19

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	N.A.	N.A.	N.A.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	N.A.	N.A.	N.A.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	1220 nos saplings proposed	41375 nos of sampling done	
8g	Survival rate	80%	70%	2018-19
8h	Water sprinkling on roads to control airborne dust	By water tanker	By water tanker	2018-19
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	During the mine visit it was observed that water		

Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Annual Return for 2018-19 submitted. Monthly return upto date.		
S.N.	Item	Details GIVEN in A.R.	2018-19	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sh.DP.Dixit (Mine Manager), Sh. Jaiprakash Diwedi (Mining Engineer), Sh. Manoj Kushwaha (Geologist)	Sh.DP.Dixit (Mine Manager), Sh. Jaiprakash Diwedi (Mining Engineer), Sh. Manoj Kushwaha (Geologist)	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes given	i)Total exploitation area -58.507 ha ii)Road, plant ,buildings -5.72 iii)Use for waste disposal-3.1 ha	
9d	Scrutiny of Annual return on afforestation	Yes given	41375nos sampling within lease area Area of plantation-16.57 ha	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Yes given	403906 tons and grade is CaO<30	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM –Nil	Nil	

9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Nil	Rs. /-182.51 & cost of production Rs 197.45/-	The mine is captive mine therefore cost of production should be equal to Ex-mine price.
9i	Scrutiny of Annual return on fixed assets	Annual Return 2018-19	Rs.2794643784/- broadly for land, machineries & Plant	
9k	Scrutiny of Annual return on mining machineries	The details of mine machineries given i.e. Excavator of 6.5 cum(3 nos),Dumper 55 & 60 tons capacity(6+2 nos),Dozer 320 HP, Excavator 2cum capacity(2 nos)		

Details of violations observed during current inspection and compliance position of earlier violation pointed out:-The earlier violations already taken complied but during present inspection the following violation pointed out:

Rule	Nature of Violation observed
11(1)	<p>Mining operations should have been undertaken in accordance with the approved Mining Plan. The Modified Mining Plan was approved vide letter no. बलोदा बाज़ार / चूप /खयो-1113/2017-रायपुर dated 06.10.2017(period upto 2018-19) & Review of Mining Plan vide letter no. बलोदा बाज़ार / चूप /खयो-1176/2018-रायपुर dated 14.12.2018 and following deviation was observed during inspection</p> <ol style="list-style-type: none"> 1. The was a proposal of 20 boreholes of grid interval 150X150m of total meterage of 1270 meter in 2018-19 and 14 core boreholes of total meterage of 920 meter but till date the drilling not completed. 2. The bench height is proposed 10 meter but during mine visit it was observed that mine bench more than 15 meter in south pit of ML and bench width is also not as per proposal in many places in north pit and south pit. 3. Garland drain of 4884 mtr & 818 meter of retaining wall along the dump has been proposed in 2018-19 but the retaining wall and drainage is not proper and as per proposal. 4. The top soil and OB dumping is proposed in designated area but still OB and top soil are being dump in other places as well i.e near mine face in working pit and North side of ML along lease boundary and also side of haul road.
Rule 37(1)	Every holder of a mining lease shall take steps so that the overburden, waste rock, rejects and fines generated mining operations or tailings, slimes and fines produced during sizing, sorting and beneficiation or metallurgical operations shall be stored in separate dumps. But during the mine visit was observed that limestone is dump in OB dump.
37(2)	The dumps shall be properly secured to prevent escape of material there from in harmful quantities which may cause degradation of environment and to prevent causation of floods. It was observed that there is no proper terracing and both the dump(OB and reject dump) is near to lease boundary but still no proper retaining wall is constructed nor any control measures for dump stability.
45(5)(c) (i)	<p>While scrutiny of Annual returns 2018-19 it was observed that</p> <p>The Ex-mine price is given as Rs 182.51/- and the cost of production is mentioned as Rs197.45/- .As the mine is of captive used therefore Ex-mine price and cost of production should be same.</p>

(Rajesh Kumar Das, Senior Assistant Controller of Mines and D.O.I. 25.11.2019)