

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/CND/LST-20/NGP

Mine code : 38MSH08022

- (i) Name of the Inspecting : **B014**) **CHANDRESH BOHRA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri Tripurari Choudhary
Official with
Designation
- (iv) Date of Inspection : 13/06/2019
- (v) Prev.inspection date : 28/09/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MARATHA (579.90 HA)**
- (b) **Registration NO.** : **IBM/447/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : MAHARASHTRA
- District : CHANDRAPUR
- Village : SONAPUR
- Taluka : RAJURA
- Post office : UPPARWAHI
- Pin Code : 442908
- FAX No. : 07173240008
- E-mail : sushil.paneri@ambujacement
- Phone : 07173240015
- (f) Police Station : Gad Chandur
- (g) First opening date :
- (h) Weekly day of rest : SUN
2. Address for : Maratha Cement Liemstone Mine (Lease-I)
correspondance Post-Upparwahi, Tehsil-Korpana
District-Nagpur
3. (a) Lease Number : MSH0012
- (b) Lease area : 579.9
- (c) Period of lease : 50
- (d) Date of Expiry : 30/12/2034
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : M/S AMBUJA CEMENTS LTD.
 ELEGANT BUSINESS PARK
 GREATER BOMBAY MAHARASHTRA
 Phone:
 FAX :

Owner : Shri Bimlendra Jha
 MD& CEO, Ambuja Cements
 Ltd., Elegant Business
 Park, MIDC Cross Road B,
 Andheri East, Mumbai MUMBAI
 (SUBURBAN) MAHARASHTRA
 Phone: 022-40667000
 FAX :

Agent : Shri Sushil Paneri
 Maratha Cement Works M/s
 Ambuja Cements Ltd Tehsil-
 Korpana, Chandra pur
 CHANDRAPUR MAHARASHTRA
 Phone: 07173-240012
 FAX :

Geologist
 Name : J.B.Thapa, Full Time
 Qualification : M.Sc . Geology
 Appointment/ :
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	11/06/2009
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	20/02/2015
	:	MP modif under 17(3) MCR 2016	28/01/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	The entire lease area has been explored under G1 category of inspection.
1b	Exploration over lease area for geological axis 1 or 2	Nil	Nil	Not proposed as whole lease area already explored.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserve as on 01/04/20	76.10 Million Tonnes	76.95Million Tonnes	More reserve wrt proposed because of less production.
1f	General remarks of inspecting officers on geology, exploration etc		Mineralized Area- 280.89 Ha Non- mineralized area- 319.01 Ha.	The whole Lease area has been explored upto G1 level.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	MRL 258,250,242 N2179400-2179900 E310450-311050 MRL 242-234 N2179100-2179450 E312350	MRL 258,250,242 N2179400-2179900 E310450-311050 Not Done	Violation is raised in this effect.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed for soil, waste and Mineral	7 benches in Ore and Waste. waste is found as an interburden. 0.3 to 0.6 metre soil is crapped separately.	
2c	Stripping ratio or ore to OB ratio	1:.09	1:0.11	

2d	Quantity of topsoil generation in m3	30000 m3	54016m3	Conversion factor 1m3
2e	Quantity of overburden generation in m3	Top Soil - 0.03MT, sub grade-0.001 MT, Waste- 0.131MT	Top Soil-0.05MT, Sub grade-0.14MT, Waste- 0.097MT	conversion factor soil-1, subgrade - 2.2, waste-2
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Sufficient well advance development done.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	No. of pit -2 N2179400- 2179900 - E310450-311050 MRL- 258,250,242 MRL 242-234 N2179100- N2179450- E312350-312250	No. of pit-1 RL-258,250,242 N2179400-2179900 E310450-311050 at MRL 242-234 N2179100- N2179450- E312350-312250 work not carried out.	pit no.1- Dewara pit, pit no.2 south Magazine side(work not done). Violation is raised in this effect.
3b	Quantity of ROM mineral production proposed	1.50 MT	1.4936 MT	Well with in limit.
3c	Recovery of sailable/usable mineral from ROM production	100 %	100%	
3d	Quantity of mineral reject generation	Nil	Nil	
3f	Quantity of sub grade mineral generation.	0.001 MT	0.14 MT	
3g	Grade of sub grade mineral generation	34 to 42 % CaO	34 to 42 % CaO	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical crushing	Mechanical Crushing	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	No	
3j	Provision of drilling and blasting in mineral benches	Down the Hole 115 mm dia size hole will be drilled . Rock breaker will be used for secondary breaking. Explosives will be used Aquadine, Energel, Kelvex -600, Kelvex-extra.	as per proposed	All blast induced vibration are being monitored and found well within limits. Blasting study was also carried out by TMP division, IBM.
3k	Provision of mining machineries in mineral benches	Drill Machine, Hydraulic Shovel, Dumpers, Dozers	Rock drill L-8, Komatsu shovel 800 & Dumpers of 35 Tonners and 60 Tonners and BEML Dozers are available.	Machinery are common for all three leases.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8 Mtrs	8 mtrs	The height of bench is commensurate with boom height of excavators.
3m	Total area covered under excavation/pits	As per approved Mining Plan for the period 2014-15 to 2018-19, area under excavation/pit as on 1.04.2014 was 48.54 Ha and additional area required during next five year was 40.64 Ha so total will be 89.18 Ha	At present total area under pit/excavation- 82.64 Ha.	Mining is being done with in the area proposed.
3n	Ore to OB ratio for the pit/mine during the year.	0.001MT	0.141 MT	Sub grade mineral stacked of quality CaO34-42 is stacked seperately for future use.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	separate stacks of Top soil, and waste and sub grade	separate stacking is done.	
4b	Location of topsoil, OB and mineral reject dumps	Top Soil N2179470-2179580 E310308-310420 Waste Dump- N2179100-2179400 E 310400-310500 & N2178500-2179100 E311500-312200 Sub Grade- N2178880-2179020 E311700-312150	Top Soil N2179470-2179580 E310308-310420 Waste Dump- N2179100-2179400 E 310400-310500 & N2178500-2179100 E311500-312200 Sub Grade-N2178880-2179020 E311700-312150	Worked done as per proposal.
4c	Number of dumps within lease area and outside of lease area	04 within lease area	04 within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside UPL Top Soil N2179470-2179580 E310308-310420 Waste Dump- N2179100-2179400 E 310400-310500 & N2178500-2179100 E311500-312200 Sub Grade- N2178880-2179020 E311700-312150	outside UPL. dumping done at proposed location.	
4e	Number of active and alive dumps.	04	04	Max Height of dumps 24 metre with four steps.
4f	Number of dead dumps.	nil	nil	
4g	Number of dumps established.	nil	nil	as no dump has reached to his ultimate height so no dumps has been stabilized .
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil	Nil	Garland rrain of 2500m in length, 1 metre wide and 1 metre deep provided.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not in proposal	Nil	
5b	Area under backfilling of mined out area	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			As all the mineral upto its ultimate depth is not exploited so backfilling is not proposed and not carried out.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Yes	PMCP report for the yaer 2018-19 submitted on 10.03.2019
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	1 Ha	6.32 Ha	
6d	No. of saplings planted during the year	2500 saplings	15800 saplings	

6e	Cumulative no .of plants		Total No. of trees 206419 trees with lease area. 166399 trees outside lease area.
6f	Any other method of rehabilitation	Nil	Not Applicable
6g	Cost incurred on watch and care during the year	2.93 Lakh	18.51 Lakh
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Not Applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Not Applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil	Not Applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Not Applicable
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Not Applicable
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	Not Applicable

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	Not Applicable	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	Not Applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air Monitoring, Water Quality, Noise Level Survey, Ground Vibration & Metreological data monitoring in Core & Buffer Zone proposed	done as per proposed	as per records available all the parametres are well within limit. However during inspection dust generation was found while transportation activity and violation is being raised in this effect.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM after crushing and sizing despatched to captive cement plant.	as per proposed.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical sizing	Mechanicl sizing	Impact crusher is installed where blasted rock is feed and crushed to size of -70mm and supplied to cement plant.
7c	Different grade of mineral sorted out at mines.	By blending at crusher	as proposed	all the blasted mucpile of different quality is mixed is certain proportion with use of quarry master software to get desired pile quality.

7d	Any beneficiation process at mines	No	Not applicable	only size reduction with crushing is being done.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Quarry master software is utilized to blend different grade of muck pile available at mines to get desired pile quality.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate stack of Top soil & utilized for plantation.	Top soil are stacked separately and used for plantation.	
8b	Concurrent use or storage of topsoil	For Plantation	as per proposal	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for Top Soil, Waste and sub grade are proposed.	separate Stacking done as per proposal.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No	Not Applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Plantation of matured dumps	plantation done over dead dumps.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2500 plantation proposed	15800 saplings planted	

8g	Survival rate	Not mentioned	80%	
8h	Water sprinkling on roads to control airborne dust	Water spray with water tanker	20 KL water tanker is used for dust suppression	The length of haul toad is more and loading face is at staggered location so existing tanker was not able to suppress the dust generated. Fixed type sprinkler may reduce dust generated.violation is raised in this effect.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly return should be submitted by 10th of every month for preceding month and annual return should be submitted by 30th June for preceding year.	Monthly return upto May has been submitted within timeline. Annual Return for 2017-18 was submitted wityhin time limit and 2018-19 will be submitted in due course of time.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri W.G.Tapase - Mining Engineer, Shri J.B.Thapa- Geologist, Shri T. Choudhary- Mines Manager	As Lessee running all the three lease as a single mines and have permission to keep one mine manager from DGMS	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under O/c well within proposal. working- 73.550 Ha., Area under waste desposal- 19.290 Ha., Occupied by Plant, buildings, residential, welfare buildings and roads- 10.060Ha, Other purpose (Plantation)- 26.380Ha.	
9d	Scrutiny of Annual return on afforestation	Number of trees planted within lease- 9382, Outside lease- 3453 nos.	This is for year 2017-18.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Total ROM production- 1492200 tonnes, cement grade	Scrutiny of year 2017-18 returns are done. data filled in Exploitation was of year 2018-19
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	215.62 Rs/Ton as production cost	Cost of production- 215.62 Rs/T Ex Mine Price-215.62Rs/T Sale Value- Not applicable as captive consumption
9h	Scrutiny of Annual return on fixed assets	Rock Drill-3, Dozer-3, Shovel 4 M3-3, shovel 5m3-1, dumper35 Tonner-8, dumper 55 tonner-6, Explosive Van- 2, Road Roller-1, Water Tanker- 2, Backhoe-1, Front End Loader-1, Jeep-1	All the machineries are common all three leases.

9k Scrutiny of Drill Machine- Machinerics uses is
Annual return on 3, Dozer-3, common for all three
mining Shovel--4, leases.
machinerics Dumpers(35
 Tonne)-8,
 Dumpers(60
 Tonner)-6,
 Explosive Van-
 2, Motor
 Grader-1, Road
 Roller-1,
 Backhoe-1,
 Water Tanker-
 2, Loader-1

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	27/06/2019			
MCDR17	Rule 40	27/06/2019			

Date :

(CHANDRESH BOHRA)

Indian Bureau of Mines