

**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 :** 38MSH08024

- (i) Name of the Inspecting : **KQ13** ) **KEWAL KRISHAN**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : SHRI R R PRASAD GM MINES  
Official with  
Designation
- (iv) Date of Inspection : 30/09/2018
- (v) Prev.inspection date : 08/10/2017

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **MARATHA LIMESTONE (49.00**
- (b) **Registration NO.** : **IBM/447/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : MAHARASHTRA  
District : CHANDRAPUR  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. :  
E-mail :  
Phone :
- (f) Police Station :
- (g) First opening date : 01/01/2016
- (h) Weekly day of rest :
2. Address for :  
correspondance :
3. (a) Lease Number : MSH0375
- (b) Lease area : 49
- (c) Period of lease : 50
- (d) Date of Expiry : 23/05/2056
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 :

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	15/10/2003
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	12/08/2011
		MP modif under MCR 1960	02/09/2016

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	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 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	reserves as on 01/04/2018	8.532 MT under 111 12.99 MT under 211	
1f	General remarks of inspecting officers on geology, exploration etc		Entire area has been explored under G1 level and the reserves are assessed up to the mineability of the deposit up to the floor of lower limestone.	

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N 311200-N 311600 E 2179700-E2180250	as per proposal	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	yes	as per proposal	
2c	Stripping ratio or ore to OB ratio	1:0.48	1:0.52	

2d	Quantity of topsoil generation in m3	30000	16943	
2e	Quantity of overburden generation in m3	Total= 134091 M3 Top Soil 30000m3 Sub-grade 9091m3 Reject 95000m3	Total =99972 M3 Top Soil 16943m3 Sub-grade 18029m3 Reject 65000m3	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The limestone of the lease area is medium hard and is characterized by fine to medium grains material. The strata is traversed by numerous joints and fractures. Development is adequate as per the type of deposit in the lease area.

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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	N 311200- N311600 E 2179700- E2180250  N 311200- N311600 E 2179700- E2180250	as per proposal	
3b	Quantity of ROM mineral production proposed	0.50MT	0.36MT	

3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	190000T	130000T	
3e	Grade of mineral rejects generation and threshold value declared.	Cao < 34	as per proposal	
3f	Quantity of sub grade mineral generation.	20000T	39663T	
3g	Grade of sub grade mineral generation	34 to 42 % cao	yes, as per proposal	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised crushing	yes , as per proposal	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	nil	nil	Crushing & reducing the size -80 mm for plant supply
3j	Provision of drilling and blasting in mineral benches	Yes, As per the present practice, down the hole drill machine of 150mm size drill bit are deployed for drilling the blast holes. Rock breakers are also being used for breaking oversized boulders and explosive for blasting.	as per proposal	

3k	Provision of mining machineries in mineral benches	yes	All the operations are through mechanical means as the mine is fully mechanized Category A mine	Drill, Shovel (Hydrallic), Dumper (35 T) & Dumper (55 T)
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yes	as per proposal	Bench height has been selected as 8.0 m and is suitable as per the method of mining.
3m	Total area covered under excavation/pits	25.38ha	21.85ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.48	1:0.52	
3o	Total area put in use under different heads at the end of year	Area under Mining: 25.38 ha	Area under Mining: 21.85 ha , Area under Waste Dump: 2.88 ha	
3p	Production of ROM mineral during the last five year period as applicable	2017-18-0.500 MT 2016-17-0.500 MT 2015-16-0.543 MT 2014-15-0.513 MT 2013-14-0.519 MT	2017-18- 356450 T 2016-17- 272050 T 2015-16 - 290200 T 2014-15 - 313900 T 2013-14 - 318600	
3q	General remarks of inspecting officers on method of mining etc.			Method of mining is Category A opencast and is fully mechanized , which is justified in terms of Capital expenditure, production requirements for feeding the Cement Plant.

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	yes	as per proposal	
4b	Location of topsoil, OB and mineral reject dumps	N2179800 N2179900 E 311000 - E 311100	as per proposal	
4c	Number of dumps within lease area and outside of lease area	01	01	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	within the pit limits	within the pit limits. Entire area is mineralized	towards the western side if lease.
4e	Number of active and alive dumps.	01	01	
4f	Number of dead dumps.	no such proposal	nil	
4g	Number of dumps established.	nil	nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	yes	yes	
4i	Length of Retaining wall or garland drain all along dumps	150m	as per proposal	
4j	Number of settling ponds	no such proposal	nil	

4k	Specific comments of inspecting officer on waste dump management	Previously dumping was carried on adjoining lease areas of the same lessee which has been stopped after the enactment of MCR 2016. Now waste is being dumped within the lease area and toe of the dump has been secured with garland drain and retaining wall.
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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.	no such proposal	nil	
5b	Area under backfilling of mined out area	no proposal	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.			No backfilling has been proposed upto the conceptual period and pits developed are proposed to be converted into water reservoir at conceptual stage.

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## 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	
6b	Area available for rehabilitation (ha) .	nil	nil	
6c	afforestation done (ha).	No proposals for afforestation in the lease area.	nil	
6d	No. of saplings planted during the year	no such proposal	nil	
6e	Cumulative no .of plants	nil	nil	
6f	Any other method of rehabilitation	no such proposal	nil	
6g	Cost incurred on watch and care during the year	nil	nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	nil	nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	nil	nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	nil	nil	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	nil	nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	nil	nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	no such proposal	nil	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	no such proposal	nil	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	no such proposal	not applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes, environment monitoring is proposed for core zone and buffer zone	yes, as per proposal	Under PMCP work, only environment monitoring in core and buffer zones and protective works for dumps has been carried out , which is satisfactorily.

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Mineral Conservation:

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Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM is not dispatched, instead, ROM after rushing and sizing and blended with sub-grade (if required) is being dispatched to Cement plant	yes, as per proposal	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	as per proposal	
7c	Different grade of mineral sorted out at mines.	cement grade limestone	cement grade limestone	
7d	Any beneficiation process at mines	crushing and screening	crushing and screening	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROM after crushing is being fed to kiln. Some studies are still underway to upgrade the quality alongwith higher yield at the mine level, sub-grade is being stacked separately and is being used for blending as and when required.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	yes	yes, as per prop[osal	

8b	Concurrent use or storage of topsoil	Concurrent use	For plantation purpose	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps	Dumps are maintained seperately	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	no such proposal	nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	no such proposal	nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	yes	yes	
8g	Survival rate	No plantation is proposed in the lease area, hence not applicable	nil	
8h	Water sprinkling on roads to control airborne dust	yes	3 Nos Water tanker deployed	Common for 3 leases

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty is Satisfactory within the lease area. Around the lease area, there are other two leases of the same lessee where extensive plantation has been carried out.
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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. Submitted upto August 2018 A.R. submitted upto from April 2017 to March 2018	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	yes	provided	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	yes	provided	
9d	Scrutiny of Annual return on afforestation	yes	provided	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	yes	provided	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	yes	provided	

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9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	yes	provided
9h	Scrutiny of Annual return on fixed assets	yes	provided
9k	Scrutiny of Annual return on mining machineries	yes	provided

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**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

**Date :****(KEWAL KRISHAN)**

Indian Bureau of Mines