

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

**Inspection under SDF for star rating of mines REPORT**

**Bangalore regional office**

**Mine file No :** KNT/GLB/LST/11/BNG

**Mine code :** 38KAR10009

- (i) Name of the Inspecting : **M003** ) **G C MEENA**  
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Ravikanth Shukla, Geologist & D.P Mukhopadhyay, Minin  
Official with  
Designation
- (iv) Date of Inspection : 21/11/2019
- (v) Prev.inspection date : 18/01/2017

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **RAJASHREE CEMENT**
- (b) **Registration NO.** : **IBM/441/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : KARNATAKA  
District : GULBARGA  
Village : ADITYANAGAR  
Taluka : SEDEM  
Post office : MALKHED ROAD  
Pin Code :  
FAX No. : 08441-288624  
E-mail : vijaykumar.mali@adityabirla  
Phone : 08441-288888
- (f) Police Station : MALKHED
- (g) First opening date : 04/08/1981
- (h) Weekly day of rest : SUN
2. Address for : M/s Ultra Tech Cement Ltd., Rajashree Cement Wor  
correspondance Aditya Nagar, Malkhed Road  
Dist-Kalaburgi-585 292
3. (a) Lease Number : KAR0085
- (b) Lease area : 733.82
- (c) Period of lease : 20
- (d) Date of Expiry : 03/08/2021
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : M/s Ultra Tech Cement Ltd  
 Aditya Nagar, Malkhed Road  
 At-Malkhed GULBARGA  
 KARNATAKA  
 Phone:08441-288888  
 FAX :08441-288624

Owner : K C. JHANWAR, M/s Ultratech Cement Ltd  
 Ahura Center, A-Wing 1st  
 Floor, Mahakali Caves Road  
 , Andheri (E), Mumbai  
 MUMBAI (SUBURBAN)  
 MAHARASHTRA  
 Phone: 022-66917486  
 FAX : 022-66928109

Agent : VD Mali  
 Ultratech Cement Ltd.  
 Aditya Nagar Malkhed Road,  
 Gulbarga GULBARGA KARNATAKA  
 Phone: 9826909505  
 FAX :

Mining Engineer  
 Name : Yatendra Sharma, Full Time  
 Qualification : BE (Mining), 1st Class Mines Managers Ce  
 Appointment/ : 05/10/2015  
 Termination date

Geologist  
 Name : Ravikant Shukla, Full Time  
 Qualification : M.Tech (Applied Geology)  
 Appointment/ : 01/11/2013  
 Termination date

Manager  
 Name : D P Mukhopadhyay  
 Qualification : BE Mining  
 Appointment/ : 29/04/2017  
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	26/04/1990
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	02/08/1995
		Renewal under rule 22 MCR1960	19/10/2000
		Mining Scheme rule 12 MCDR1988	19/05/2006
		Mining Scheme rule 12 MCDR1988	29/07/2011
		Mining Scheme rule 12 MCDR1988	03/03/2016
		MP modif under 17(3) MCR 2016	25/05/2018

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There was No proposal in the year 2018-19. However proposal for the year 2019-20 was 22 holes ( 1200 Mtr)	2018-19 -NA 2019-20 (2700 mtr)	Entire lease area i.e. 733.82 Ha has been explored under G-1 Category in the year 2015-16. But we have proposed additional exploration in and around excavated pit to ascertain depth extent of siliceous limestone.
1b	Exploration over lease area for geological axis 1 or 2	NA	Exploration carried out as Under: G-1: 733.82 Ha G-2: NA G-3: NA	Entire lease area of 733.82 ha has been explored in G-1 Category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/s Central Drilling Associates, Nagpur, 56.70	M/s Central Drilling Associates, Nagpur, 65.43	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NA	
1e	Balance reserve as on 01/04/20	NA	503.042 Mio ton (111)	
1f	General remarks of inspecting officers on geology, exploration etc			

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	The following proposals made for development location: 732724 E - 1895130 N To 732963 E - 1895128 N,  732952 E - 1894305 N To 732062 E - 1894309 N,  732061 E- 1894336 N	732724E 1895130N 732945E 1895040N 732866E 1894307N 732178E 1894307N 732161E 1894333N	The less area developed due to less production, as cement demand is also less. The mine is captive to cement plant only.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	For top soil/OB - One bench For Mineral: 7 benches	For top soil/OB - One bench For Mineral: 7 benches	Complied with proposal made in the approved document.
2c	Stripping ratio or ore to OB ratio	1:0.040	1.0.053	Stripping ratio is more due to quantity of top soil /OB generated more in comparison to production of ore.
2d	Quantity of topsoil generation in m3	1.47 Lac CUM	1.57 Lac CUM	
2e	Quantity of overburden generation in m3	There is no separate OB other than top soil. Already shown in point no. 2d.	There is no separate OB other than top soil. Already shown in point no. 2d.	There is no OB except Top soil.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			

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**Exploitation:**


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Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	One Pit, Dimensions are as under: E- W: 2280 Mtr (730680E-1894950N to 723960E-1894950N) N-S: 1066Mtr (732490E-1895373N To (732490E-1894307N)	One Pit, Dimensions are as under: W-E: 2253 Mtr (730680E-1894950N to 732934E-1894950N) N-S: 1066 Mtr (732490E-1895373N To (732490E-1894307N)	
3b	Quantity of ROM mineral production proposed	9000000 MT	7346120 MT	This mine is captive to cement Plant & there is less demand of cement in the market leads to less production of the limestone.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	There is no reject / low grade/sub grade material generated. All the ROM so produced is feed to crusher and conveyed for manufacturing of cement.
3d	Quantity of mineral reject generation	NIL	NIL	No mineral reject is generated.
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	There is no mineral reject is generated, therefore grade & threshold value is not applicable.
3f	Quantity of sub grade mineral generation.	NIL	NIL	No sub grade mineral is generated
3g	Grade of sub grade mineral generation	NIL	NA	No generation of sub grade mineral
3h	Manual / Mechanised method adopted for segregating from ROM	NIL	NA	All the ROM is feed to crusher only.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NA	There is no rejection/ sub grade or low grade generation therefore not required.
3j	Provision of drilling and blasting in mineral benches	Yes, for ore only	Done as per proposal. Drilling is done by Atlas Copco ROC L-6 drills (2 nos) to a depth of 10m with hole diameter of 150 mm. Mostly two rows blasting carried out having average spacing of 10m and a burden of 5 m. High explosives such as Cast Booster and 125 mm dia slurry explosive in conjunction with SME/ ANFO is used for blasting. Blasting is done once a day and twice a week at the end of A-shift of mine working	Blasting is done for ore only.
3k	Provision of mining machineries in mineral benches	Excavator /Dumper combination	Complied with. Mines is having following HEMMs: Excavators EX1200 Tata Hitachi - 6.5 m3 -3nos Ex 1900,Tata-hitachi-11m3 - 1 no Ex Tata-Hitachi 1.1 CUM-1 no. Loader WA 800 11 m3 1 No. Dumpers, CAT 777D-100T-9Nos DumpersBEML- 60 T 4nos DRILLS ATLAS COPCO, ROC L-6 (150MM dia) DOZERS CAT-D8R - 1no. ROCK BREAKER,PC-220-2 nos WATER TANKER-2 nos (28 KL & 22 KL) CRUSHERS L&T MAKE 1200 TPH-2nos 1600 TPH-1no	

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes( 1.0 to 2.0mtr-OB soil/OB ), Ore : 3.5 to 10M	Yes ( 1.0 to 2.0 mtr-OB soil), Ore : 3.5 to 10M	Height of the benches are kept as per provisions only
3m	Total area covered under excavation/pits	175 ha	170.24 Ha ( as on 31.03.2019)	Less due to less production
3n	Ore to OB ratio for the pit/mine during the year.	1:0.040	1.0.053	Stripping ratio is more due to quantity of top soil /OB generated more in comparison to production of ore.
3o	Total area put in use under different heads at the end of year	Pit-175 Ha Dumps: 32.21 ha Infrastructure 1ha Roads 2Ha Others 12.26 Ha	Pit 170.24 ha Dumps-29.93 ha Roads- 2.0 ha Infrastructure-1.0 Others -12.26	Actual as on 31.03.2018
3p	Production of ROM mineral during the last five year period as applicable	2014-15:11.02 2015-16:13.12 2016-17: 11.0 2017-18: 12.0 2018-19: 09.0	2014-15: 6.42 2015-16: 7.03 2016-17: 7.10 2017-18: 6.69 2018-19: 7.35	The mine is captive to cement plant, less production due to poor cement market.
3q	General remarks of inspecting officers on method of mining etc.			

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	1.47 Lac CUM ( Top soil/OB)	1.57 Lac CUM ( Top soil/OB soil)	There is only top soil/OB soil which is being stacked at the earmarked places as per approved document.

4b	Location of topsoil, OB and mineral reject dumps	8 NO DUMP 2018-19 (total 1.63 Ha)Top Soil dump EASTING NORTHING 733005 1893743 733357 1893772 733357 1893682 733008 1893711 9 NO DUMP EASTING NORTHING 731650 1893577 731628 1893538 731297 1893580 731297 1893621	8 NO DUMP Location of top soil dump EASTING NORTHING 733005 1893743 733339 1893769 733352 1893706 733008 1893711 9 NO DUMP EASTING NORTHING 731667 1893578 731642 1893536 731531 1893603 731533 1893566	As per approved document.
4c	Number of dumps within lease area and outside of lease area	Total 10dumps (within ML) No outside ML	10 dumps (within ML) No outside ML	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Complied with In-side the UPL	Complied with In-side the UPL	All the dumps are within UPL only
4e	Number of active and alive dumps.	3 Nos	3 Nos	
4f	Number of dead dumps.	7 Nos	7 Nos	
4g	Number of dumps established.	7 (afforested)	7 Nos ( afforestation has been done by planting suitable saplings on the dumps)	
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain provided	Garland drain provided	
4i	Length of Retaining wall or garland drain all along dumps	110mtr (southdump)	150Mtr (south dump)	Garland drain has been provided in all the dumps.
4j	Number of settling ponds	1	1	Near Magazine side at NE direction
4k	Specific comments of inspecting officer on waste dump management			



Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No Proposal for back filling	Not done as the same was not proposed	
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)	Dumping along the lease boundary for plantation purpose	Dumping along the lease boundary for plantation purpose	
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			

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).		Already submitted vide letter no. UTCL/RCW/MINES /DPM/2019/468 Dated 23.06.2019	
6b	Area available for rehabilitation (ha) .	1.44	1.64	Whatever area available/mature, plantation has been done on the same.
6c	afforestation done (ha).	1.44	2.1	No proposal for reclamation & rehabilitation.
6d	No. of saplings planted during the year	3800 Nos	7600 Nos	Plantation on barren land within lease area.

6e	Cumulative no .of plants	307182 Nos	321882 Nos	Being done as per MoEF guidelines and EC condition. Report is being submitted to board & MoEF on regular basis
6f	Any other method of rehabilitation	NIL	NA	
6g	Cost incurred on watch and care during the year	Rs.2.28 Lac	Rs.4.94 Lac	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	NA	No proposal for reclamation & rehabilitation.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	NIL	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NA	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NIL	0.46	Plantation on barren land within lease area.

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NA	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NIL	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Core Zone Air quality= 384 samples/annum. Fugitive Emission = 120 samples	For core Zone: Air quality is monitoring is being carried out in 4 stations x 1 sample x 2 days x 4 weeks x 12 months = 384 samples x 24 hrs/sample Fugitive Emission: 5 stations x 2 shifts x 1 day x 12 months =120 samples (at drilling, loading, Haulage, Crusher & OB dumps) Air Quality at Buffer zone: The air quality is being carried at 4 villages/locations namely Diggaon Viliage, Udgi Village, Alhalli Village and colony for 1 sample per day per week, 4 sample per month i.e. 4 stations x 1 sa	Being done as per MoEF guidelines and EC condition. Report is being submitted to board & MoEF on regular basis
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	09.0 Mio Ton	07.35 Mio Ton	Less production due to less demand of cement in the market and min is captive to cement plant.

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NIL		Proper in-pit blending is being done as per quality requirement of the plant. All the ROM is directly feed to crusher for cement manufacturing.	
7c	Different grade of mineral sorted out at mines.	NIL		All ROM is directly feed to crusher only.	
7d	Any beneficiation process at mines	NIL	NA		No mineral reject is generated.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues				

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Removal-1.47 Lac CUM Utilization-100%	Removal-1.57 Lac CUM Utilized-1.57 Lac CUM (100%)	Bund formation for plantation purpose
8b	Concurrent use or storage of topsoil	1.47 Lac CUM 100% utilization	1.57 Lac CUM 100% utilization	Bund formation for plantation purpose
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NA	NA	There is no waste rock/reject generated.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	OB is used for afforestation purpose.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	Area is not matured for reclamation and rehabilitation.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	3800nos	7600nos	
8g	Survival rate	85%	85%	
8h	Water sprinkling on roads to control airborne dust	Two nos. water tanker. (One no. 28 KL & one no. 22KL)	Two nos. water tanker (One no. 28 KL & one no. 22KL) Water sprinklers are also provided on the permanent haul roads.	Both water tankers are deployed for water sprinkling on the road and on the blasted muck to suppress dust effectively. Water sprinklers also operated for dust suppression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			

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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	MR submitted upto Oct 2019 AR submitted for the year 2018-19.		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yatendra Sharma Mining Engineer , D P Mukhopadhyay Manager, Ravikanth Sukhla Geologist.		Actual also same

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	OC WORKING - 170.24 HA Infrastructure - 3 ha PMCP - 2.10ha Dump - 29.93ha	
9d	Scrutiny of Annual return on afforestation	WML - 7600 @85% OML - 8870 @ 90%	
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	NIL	Actual was also same
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex man price - 140.84 Rs Cost per tonne 186.73 Rs	Captive mines
9h	Scrutiny of Annual return on fixed assets	Value of fixxed assets Rs 22456077421/-	
9k	Scrutiny of Annual return on mining machineries	Blast host drill - 2 Crusher - 3 Dozer - 1 Dumper - 12 Explosioive van - 2 Front end loader - 1 Jeep/Tractor - 1 Pumps - 3 Shovel (hydraulic) - 5 Water tanker - 2	

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	29/11/2019			
MCDR17	Rule 37(5)	29/11/2019			
MCDR17	Rule 45(7)(a)	29/11/2019			

**Date :**

**(G C MEENA)**

Indian Bureau of Mines