

1/27305/2024

**Mining Plan Modification REPORT**

**Bangalore regional office**

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

**Mine code :** 38KAR10009

- (i) Name of the Inspecting : **S47** ) **DR. Sudhakara T.L**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Mr. Rajesh Sambrey, Sr. Vice President & Agent, Mr. Sa  
Official with  
Designation
- (iv) Date of Inspection : 06/09/2023
- (v) Prev.inspection date : 22/06/2021

**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 : kailash.jhanwar@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 : 50
- (d) Date of Expiry : 03/08/2031
4. Mineral worked : LIMESTONE Main

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## 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 : RAJESH SAMBREY  
 ULTRATECH CEMENT LTD ADITYA  
 NAGAR MALKHED RD, GULBARGA  
 GULBARGA KARNATAKA  
 Phone:  
 FAX :

Mining Engineer  
 Name : GAURAV SONI, Full Time  
 Qualification : Dip. in Min. with FCC  
 Appointment/ : 24/10/2022  
 Termination date

Geologist  
 Name : PRAMODARAN M, Full Time  
 Qualification : M.ScGeology  
 Appointment/ : 27/09/2022  
 Termination date

Manager  
 Name : SAMEER KUMAR ARORA  
 Qualification : FCC  
 Appointment/ : 30/11/2021  
 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
		MP review under 17(1) MCR 2016	03/12/2020
		Modif.approved Mining Scheme	23/07/2021

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	No exploration proposal as per the approved Mining Plan dated 23/07/2021
1b	Exploration over lease area for geological axis 1 or 2	NIL	G1	As per last approved Mining plan document, lessee has carried out 288 no. of boreholes with a total metarge of 18863m with a grid interval of 200m x 200m spacing. However, lessee has not explored the mineralized vertically .
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Entire lease area 715.987 Ha has been explored under G-1 Category
1e	Balance reserve as on 01/04/20	-	458.33 million tones (as on 01.04.2023)	As per Annual returns

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1f	General remarks of inspecting officers on geology, exploration etc	The limestone deposit bedded stratiform and tabular deposit of regular habit. Entire lease area laterally explored under G1 level (200m x 200m grid spacing), however from the borehole logs, it is observed that bore holes are ended in mineralized zone. Accordingly, in the Mining plan scrutiny advised lessee to propose deeper boreholes and assess the resources as per revised threshold value notification.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed Location single pit at 04 locations viz. (i) section D-D' (eastern part of pit), (ii) Section B-B' (western part of pit), (iii) section C-C' (South-western part of pit) and (iv) Section S-S' (south-eastern part of pit)	Production & Development were not carried out at section B-B' and section C-C'	Working not carried out at section BB' and CC'.

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2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Very thin layer of 15 to 20 cm top soil overlain the OB soil (black soil 1 to 1.5 m) - 1 bench Mineral: 7benches	As per proposal separate benches for top soil/OB - 1 bench& for Minerals- 7 benches are maintained.	Complied w.r.t proposals.
2c	Stripping ratio or ore to OB ratio	1:0.035	1:0.037	Stripping ratio is slightly high w.r.t proposal
2d	Quantity of topsoil generation in m3	13888	14180	OB soil excavation is slightly high w.r.t proposal
2e	Quantity of overburden generation in m3	199774	222148	OB soil excavation is slightly high w.r.t proposal
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			It was proposed work in single pit at 04 locations viz. (i) section D-D' (eastern part of pit), (ii) Section B-B' (western part of pit), (iii) section C-C' (South-western part of pit) and (iv) Section S-S' (south-eastern part of pit), however, Production & Development were not carried out at section B-B' and section C-C'. Violation pointed out under Rule 11(1) of MCDR, 2017.

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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	Proposed Location single pit at 04 locations viz. (i) section D-D' (eastern part of pit), (ii) Section B-B' (western part of pit), (iii) section C-C' (South-western part of pit) and (iv) Section S-S' (south-eastern part of pit)	Production & Development were not carried out at section B-B' and section C-C'	
3b	Quantity of ROM mineral production proposed	9000000 MT	8726656 MT	Production is almost achieved w.r.t. proposal
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	NA	NA	No generation of sub grade mineral
3h	Manual / Mechanised method adopted for segregating from ROM	NIL	NA	All the ROM is feed to in-pit crusher only.

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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	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/three rows blasting is carried out having average spacing 10m and burden 5 m. High explosives such as Cast Booster explosive in conjunction with SME is used for blasting. Blasting is done once a day and twice/thrice a week at the end of A-shift of mine working	Blasting is done only at mineral benches. OB soil excavated directly through backhoe
3k	Provision of mining machineries in mineral benches	Excavator / Dumper combination	Mines is having the following HEMMs: Excavators EX1200 Tata Hitachi - 6.5 m3 -3no's Ex 1900, Tata-hitachi-11m3 - 1no. Loader WA 800 11 m3 1 No. Dumpers, CAT 777D-100T-9no's Drill ATLAS COPCO, ROC L-6 (150MM dia) - 2no's Dozers CAT-D8R - 1no. Rock Breaker, PC-220-1 no. Water Tanker-2 nos (28 KL & 18 KL) Crushers L&T MAKE 1200 TPH-2no's 1600 TPH-1no.	HEMM deployed as per the proposals
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed OB soil/OB Ore : 3.5 to 11M	As per proposals, benches are maintained, OB soil/OB Ore : 3.5 to 11M	Height of the benches are kept as per provisions only

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3m	Total area covered under excavation/pits	207 Ha - Single pit operation	198.5 Ha - Single pit operation	Safety zone maintenance was lacking between Boundary Pillar Nos. BP 68 and 69A, and the excavation has been conducted within the safety zone in the said location. Violation pointed out under Rule 11(1) of MCDR
3n	Ore to OB ratio for the pit/mine during the year.	1:0.035	1:0.037	Stripping ratio is slightly high w.r.t proposal
3o	Total area put in use under different heads at the end of year	Pit: 207 Ha Dumps: 52.4 Ha Infrastructure - 1.12 ha Roads 2.49 Ha	Pit: 198.5Ha Dumps- 53.5 Ha Infrastructure-1.12 Roads- 2.73 ha	Working within the proposals
3p	Production of ROM mineral during the last five year period as applicable	2018-19: 9000000 2019-20: 9000000 2020-21: 9000000 2021-22: 9227117 2022-23: 9000000 ( in MT)	2018-19: 7346120 2019-20: 7335676 2020-21: 6614729 2021-22: 8006621 2022-23: 8726656 (in MT)	Production achieved details are as per Annual return
3q	General remarks of inspecting officers on method of mining etc.			Lessee has done the systematic mining, benches height and width are maintained as proposed in the Mining plan.

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	213662 CUM	236327 CUM topsoil	There is only top soil/OB soil which is being stacked at the earmarked places as per approved document. No overburden or mineral reject dumps.
4b	Location of topsoil, OB and mineral reject dumps	Topsoil/OB Soil dumping proposed location 730780 E - 1893573 N, 730769 E - 1895375 N, 733782 E - 1894225 N	Topsoil/OB Soil dumping actual location 733782 E - 1894225 N 731506 E - 1893584 N, 733827 E - 1894262 N	Dump no 9, 15W, 16
4c	Number of dumps within lease area and outside of lease area	Total 11 dumps (within ML) No dumps outside ML	11 dumps (within ML) No dumps outside ML	Only top soil/OB soil dumps. No rejects dumps
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	-	3 OB dumps located within the ultimate pit limit	3 OB dumps located within the ultimate pit limit
4e	Number of active and alive dumps.	4 Nos (dump no 9, 11,12& 15W)	Alive dumpNo. 9 Active dump 11, 12, 13	
4f	Number of dead dumps.	7 Nos	7 Nos (afforested)	Afforestation has been done by planting suitable saplings on the dumps
4g	Number of dumps established.	7 Nos	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 made all along the dumps	Drains made as per the proposals.
4i	Length of Retaining wall or garland drain all along dumps	1270 m (dump no. 16 -100m, dump no. 12P1 - 1000m, dump no. 12P2 - 113m; dump no. 15W - 57m)	1837 m toe wall constructed along Dump no. 12 and 16	

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4j	Number of settling ponds	1 No	1 No	As per the proposal settling tank made to collect the silt.
4k	Specific comments of inspecting officer on waste dump management			Dumps are essentially soil dumps. Lessee has made efforts to construct retaining wall and garland drain along the toe of the dumps and also carried out plantation on the dumps.

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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 Proposal for back filling	NA	Mineral not exhausted
5b	Area under backfilling of mined out area	NIL	NA	Mineral not exhausted for backfilling
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Con-current use of top soil.	Concurrent use of top soil on dump no 16.	Top soil spreading on the dump as final layer for better growth of plantation.
5d	Total area fully reclaimed and rehabilitated	NIL	NA	Mineral not exhausted

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5e	General remarks of inspecting officers on backfilling and reclamation etc.	Pits are not matured for backfilling. Further, drilled boreholes are ended in mineralized zone. In the mining plan scrutiny advised lessee to explore the mineralized zone vertically by taking up core drilling. Accordingly, lessee has proposed drilling to establish the vertical continuity of the mineralization.
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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).	-	Annual report on PMCP received on 27.06.2023	Submitted within stipulated time.
6b	Area available for rehabilitation (ha) .	No proposal	NA	Mineral not exhausted
6c	afforestation done (ha).	2.4	2.5	Plantation is carried out as per proposals
6d	No. of saplings planted during the year	6000	7077	Plantation is carried out as per proposals
6e	Cumulative no .of plants	-	346839 Nos	
6f	Any other method of rehabilitation	NIL	NA	
6g	Cost incurred on watch and care during the year	-	8.5 Lacs	

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6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	NA
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)Afforestation 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	NA
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

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6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring of Ambient air quality, water quality, noise level survey and ground vibration need month. to carry as per the norms and approved mining plan	Ambient air quality, water quality, noise level survey and ground vibration monitoring is carried out in the core zone & buffer zone every month.	All the monitoring values are within the prescribed limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Lessee has carried out the PMCP activities as per the proposal. Lessee is monitoring air quality, water quality, noise level in and around mine regularly.

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	9.0 Million Ton	8.73 Million Tons	No sorting of mineral
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NIL	All the ROM is directly feed to crusher and transported to cement plant.	Fully mechanized method of mining. No sorting of mineral
7c	Different grade of mineral sorted out at mines.	NIL	All ROM is directly feed to crusher only	No mineral is sorted out based on grade.
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			ROM produced entirely utilized in the captive cement plant.

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Environment:

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Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Top Soil: 11872cum OB Soil:170721cum	Top Soil: 14180cum OB Soil:222148 cum	Top soil separately scrapped by dozer and spread on the top of the bunds/dumps for plantation
8b	Concurrent use or storage of topsoil	Top Soil: 13888cum OB SOIL:199774cum	Top Soil: 11348cum OB Soil:134549 cum (100% utilized)	Bund formation followed by spreading of top soil as final layer for plantation purpose.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NIL	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	NIL	NA	No Overburden. OB Soil/Top Soil is used for afforestation purpose along the lease boundary.
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)	Baseline information given in mining plan as the area consist of agricultural lands and also waste rocky exposed areas.	No existence of major plantation in the area. The mining lands consists of private agricultural lands.	As reported by lessee team since the inception of mine about 346839 saplings planted in the lease area.
8g	Survival rate	85% (WML)	70% (WML)	
8h	Water sprinkling on roads to control airborne dust	Two nos. water tanker. (28 KL & 18KL capacity each)	Two nos. of water tankers with capacity 28 KL & 18 KL each is dedicatedly used for dust suppression on haul roads. Also, water sprayed on muck piles and crusher hopper to suppress the dust.	Rain water harvested at mines sump is utilized for dust suppression.

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8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Asthetic beauty in and around the mine is good.
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## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to Mar'23 (08.06.2023) ***** A.R. Submitted up to 2022-23 (27.06.2023)		Submitted within timeline
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Geologist : 1 Graduate Mining Eng. : 05 Diploma Mining Eng. : 11	Appears to be correct.	Mr. Sameer Kumar Arora, Mines Manager Mr. Gaurav Soni, Mining Engineer and Mr. Pramodaran. M, Geologist were present during the day of inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O-C) Workings : 198.48Ha Infrastructure : 3.85Ha OB soil dump : 53.54Ha	Appears to be correct.	
9d	Scrutiny of Annual return on afforestation	7077 plants within lease	Appears to be correct.	
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	Rom stock : Nil Graded ore : nil	Appears to be correct	Entire ore produced dispatched to captive plant

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9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Rs. 172.29	Appears to be correct	Captive consumption
9h	Scrutiny of Annual return on fixed assets	Rs.1868916749	Appears to be correct	
9k	Scrutiny of Annual return on mining machineries	CRUSHER 1200 T/H - 2 nos. CRUSHER 1600T/H - 1 no. SHOVEL (HYDRAULIC) 11.5 CUM - 1no. SHOVEL 6.5 CUM - 3nos. BACK HOE 0.9 CUM - 1 no. FRONT END LOADER 11CUM - 1 no. WHEEL LOADER 0.900 CUM - 1 no. DUMPER 100TONNE 9 no. BLAST HOST DRILL 152MM - 2no. DOZER 328HP - 1 no. WATER TANKER - 2nos. PUMPS - 3 nos. EXPLOSIVE VAN 9.110 TONNE - 1 ROAD ROLLER 11TONNE - 1 CRANE 16TONNE - 1	Appears to be correct	

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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
MCDR17	Rule 11(1)	13/09/2023	01/12/2023			

**Date :****(DR. Sudhakara T.L)**

Indian Bureau of Mines