

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

MCDR inspection REPORT

Bangalore regional office

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

Mine code : 38KAR10009

- (i) Name of the Inspecting : **S006**) **SURESH PRASAD**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Mr. Rajesh Sambrey, Sr. Vice President & Agent Mr. Sa
Official with
Designation
- (iv) Date of Inspection : 26/12/2022
- (v) Prev.inspection date : 03/11/2018

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 correspondance** : M/s Ultra Tech Cement Ltd., Rajashree Cement Wor
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 : RAJESH SAMBREY
 ULTRATECH CEMENT LTD ADITYA
 NAGAR MALKHED RD, GULBARGA
 GULBARGA KARNATAKA
 Phone:
 FAX :

Mining Engineer
 Name : ARVIND SHENDE, Full Time
 Qualification : BE MINING FCC
 Appointment/ : 01/05/2021
 Termination date

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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	Entire lease area 715.987 Ha has been explored under G-1 Category
1b	Exploration over lease area for geological axis 1 or 2	NIL	NIL	Entire lease area 715.987 Ha has been explored under G-1 Category
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	No exploration proposal for the year 2021-22
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	--	467 Mio. Tonnes (111)	-
1f	General remarks of inspecting officers on geology, exploration etc			Entire lease area 715.987 Ha has been explored under G-1 Category. No exploration proposal for the year 2021-22

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed Location 731506 E - 1893584 N, 733987 E - 1895252 N, 730985 E - 1895435 N, 733702 E - 1894117 N	Actual workings 731506 E - 1893584 N, 733987 E - 1895252 N, 730985 E - 1895435 N, 733702 E - 1894117 N	Working is carried out within the proposed grid intervals.

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.	As per the proposals.
2c	Stripping ratio or ore to OB ratio	1:0.035	1:0.025	Production and Development with - 13% & -34 % deviation from the proposed respective quantities. As such not achieved the proposed stripping ratio in the said period. Violation issued.
2d	Quantity of topsoil generation in m3	11872	9311	OB soil excavation is less than the proposed quantities.
2e	Quantity of overburden generation in m3	170721	123703	OB soil excavation is less than the proposed quantities.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development of the pit is as per the proposals. However, Production and Development is done with -13% & - 34 % deviation from the proposed respective quantities. As such not achieved the proposed stripping ratio in the said period>Hence Violation issued.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	Single Pit Operation Dimensions are as under: East Side 733079 E - 1895011 N to 733078 E - 1894338 N South Side 732962 E - 1894245 N to 732056 E - 1894245 N West Side 730973 E - 1895395 N to 730871 E - 1894986 N	Actual work is carried with Single Pit Operation Working within the proposals East Side 733079 E -1895011 N to 733078 E -1894338 N South Side 732962 E - 1894245 N to 732056 E - 1894245 N West Side 730973 E - 1895395 N to 730871 E - 1894986 N	Production is carried out in a single large pit within the proposed grid intervals.
3b	Quantity of ROM mineral production proposed	9227117 MT	8006621 MT	This mine is captive to cement Plant. (-) 13% production is achieved from the proposed quantities and it is reported that there was less demand of cement in the market which led to less production of the limestone. Violation is issued.
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	The entire ROM is feed to in-pit crusher and no segregation of ROM is practiced.
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 no beneficiation study is carried out or proposed for sub-grade mineral and reject.
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 rows blasting carried out having average spacing of 10m and a burden of 5 m. High explosives such as Cast Booster 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 only in the mineral benches and 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 -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 Drill 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	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 :1.0 to 2.0M, Ore : 3.5 to 11M	As per proposals, benches are maintained, OB soil/OB :1.0 to 2.0M, Ore : 3.5 to 11M	Height of the benches are maintained as per proposals.
3m	Total area covered under excavation/pits	198.5ha - Single pit operation	194.63 Ha - Single pit operation	Working as a single large pit as per the proposals.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.035	1:0.025	Proposed Stripping ratio is not achieved. Violation issued.
3o	Total area put in use under different heads at the end of year	Pit: 198.5 Ha Dumps: 53.91 ha Infrastructure - 1.12 ha Roads 2.49 Ha	Pit: 194.63 ha Dumps- 48.09 ha Infrastructure-1.12 Roads- 2.49 ha	Working as per the approved proposals.

3p	Production of ROM mineral during the last five year period as applicable	2017-18: 12000000 2018-19: 9000000 2019-20: 9000000 2020-21: 9000000 2021-22: 9227117 (in MT)	2017-18: 6692606 2018-19: 7346120 2019-20: 7335676 2020-21: 6614729 2021-22: 8006621 (in MT)	Production varies w.r.t captive cement plant demand.
3q	General remarks of inspecting officers on method of mining etc.			Mining is carried out by fully mechanized method with dumper shovel combination and benches are systematically developed.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	182593 CUM	133014 CUM	There are only top soil/OB soil which is being stacked at the earmarked places as per the proposals. No overburden or mineral reject dumps.
4b	Location of topsoil, OB and mineral reject dumps	Topsoil/OB Soil dumping proposed location 731506 E - 1893584 N, 733987 E - 1895252 N, 730985 E - 1895435 N, 733702 E - 1894117 N	Topsoil/OB Soil dumping actual location 731506 E - 1893584 N, 733702 E - 1894117 N	Dump no 9, 11
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)	--	--	The entire Mining lease is a mineralized zone and all the moderate height soil dumps lie within the UPL to be rehandled for backfilling of the mined-out pits.
4e	Number of active and alive dumps.	4 Nos (dump no 8,9,10 & 11)	As proposed.	4 No's as proposed.
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	786Mtr	820Mtr	Along Dump no 11, 15, 16.
4j	Number of settling ponds	1 No	1 No	As per the proposal siltation tank made to collect the silt.
4k	Specific comments of inspecting officer on waste dump management			Dumps are systematically managed as proposed. However, lacking in plantation for stabilization of dead dumps. Violations/advise issued for improving the lag.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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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 8,9,10 & 11.	Top soil is spread on the dump as final layer for better growth of plantation.
5d	Total area fully reclaimed and rehabilitated	NIL	NA	Mineral not exhausted
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No proposals of backfilling during the reporting year or the Mining plan period.

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 submitted vide letter no. UTCL:RCW:MINES:SA:592, dated 16.06.2022	-
6b	Area available for rehabilitation (ha) .	NIL	NA	Mineral not exhausted
6c	afforestation done (ha).	2.35	2.33	Plantation is carried out as per proposals
6d	No. of saplings planted during the year	6000	6000	Plantation is carried out as per proposals
6e	Cumulative no .of plants	-	135785 Nos	-
6f	Any other method of rehabilitation	NIL	NA	-

6g	Cost incurred on watch and care during the year	6.0 Lacs	7.2 Lacs	As reported.
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	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring of Ambient air quality, water quality, noise level survey and ground vibration need to carry as per the norms and approved mining plan	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 x 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 DiggaonViliage, UdgiVillage, Alhalli Village and colony for 1 sample per day per week, 4 sample per month	i.e. 4 stations x 1 sample x 1 day x 1 week x 12 month =48 samples in year for PM10, PM2.5, Sox &Nox Water: Water quality monitoring is being done in Tanda, Udgi, Diggaon villages, & mines sump monthly. Noise level monitoring is being done at 30 locations in core zone and 3 locations in buffer zone every month. Ground vibration: the ground vibration is monitored by seismograph for every blast. Environmental monitoring (core zone & buffer zone) carried out as per statutory norms.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance on progressive closure operations are complied with. However, it was observed that green belt development is not upto the mark owing to workings over long period and balance period of lease validity. Advisory issued to improve on the same.

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	9.0 Million Ton	8.0 Million Ton	Less production reportedly due to less demand of cement in the market and mine 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.	Grade-wise mineral sorting is by Fully mechanized method.
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			The entire ROM is consumed in cement production thereby complying with Mineral conservation aspect.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Top Soil: 11872cum OB Soil:170721cum	Top Soil: 9311cum OB Soil: 123703cum	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: 7140cum OB SOIL: 99527cum	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	OB/Top Soil 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)	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 consist of waste lands & private agricultural lands. Since the inception of mines about 135785 saplings planted.	It was observed that green belt development is not upto the mark owing to workings over long period and balance period of lease validity. Advisory issued to improve on the same.
8g	Survival rate	85% (WML)	85% (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.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the Mine is good enough. However, It was observed that green belt development is not upto the mark owing to workings over long period and balance period of lease validity. Violation issued to improve on the same.

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to Mar'22 (07.04.2022) ***** A.R. Submitted up to 2021-22 (25.06.2022)		Submitted within timeline.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	NIL	NIL	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	NIL	NIL	NIL
9d	Scrutiny of Annual return on afforestation	NIL	NIL	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL	NIL	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost			It was pointed out that (a) For arriving at the cost of Production, Depreciation of Rs.8.24/- per tonne is incorrect. (b) Production proposal for financial year 2021-2022 reported as '0' is incorrect. Proposed production as per the Approved Mining Plan document needs to be given.

9h	Scrutiny of Annual return on fixed assets			<p>It was pointed out that Under value of Fixed Assets, residential value of Rs.78,62,55,765/- as at the beginning of the year with additions during the year Rs. 6,06,69,358/- reported is not correct. Under this item only value of Buildings like Industrial & Residential, Plant and machinery within the Mining lease area should be considered and reported. Accordingly cost of Production under Part-VII is to be revised</p>
9k	Scrutiny of Annual return on mining machineries	NIL	NIL	NIL

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)	12/01/2023	06/03/2023	MCDR17	Rule 45(7)	12/01/2023	06/03/2023
MCDR17	Rule 45(7)(a)	12/01/2023	06/03/2023				

Date :

(SURESH PRASAD)

Indian Bureau of Mines