

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

Mining Plan Modification REPORT

Bangalore regional office

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

Mine code : 38KAR10009

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 27/04/2018
- (v) Prev.inspection date :

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 correspondance** : **M/s Ultra Tech Cement Ltd., Rajashree Cement Wor**
Aditya Nagar, Malkhed Road
Dist-Gulbarga-585 292
3. (a) **Lease Number** : **KAR0085**
- (b) **Lease area** : **733.71**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **03/08/2021**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : RAJASHREE CEMENTS LTD
 ADITYANAGAR, MALKHED ROAD,
 GULBARGA, GULBARGA
 KARNATAKA
 Phone:08474-306166,08441-687221
 FAX :08474-306285,08441-687229,687225,687236

Owner : OP Puranmalka
 Aditya Birla Centre, S. K.
 Ahire Ma Worli, Mumbai.400
 030 MUMBAI (SUBURBAN)
 MAHARASHTRA
 Phone: 022-66917421,
 FAX :

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

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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	NA	-
1b	Exploration over lease area for geological axis 1 or 2	No proposal	Exploration carried out as Under:G-1: 733.82 Ha	Entire ML area of 733.82 ha has been explored in G-1 Category in the year 2015-16.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	Exploration undertaken by Synergy Geotech, Nagpur previously
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	NA	-
1e	Balance reserve as on 01/04/20	-	518.4 Million Tons as on 01.04.2017	-
1f	General remarks of inspecting officers on geology, exploration etc			The lessee has drilled 250 nos of core boreholes with total meterage of 16163 in 200 m grid pattern. Entire ML covered under G-1 level of exploration

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Towards the eastern side & southern side of the existing pit (732890 E-1894250 N) to 731890E-1895080N)	Towards the eastern side & southern side of the existing pit (732890 E-1894250 N) to 731890E-1895080N)	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)	Separate benches in ore & top soil	For top soil/OB - One bench For Mineral: 7 benches	-
2c	Stripping ratio or ore to OB ratio	1:0.030	1.0.045	Stripping ratio is more due to advancement of top soil bench

2d	Quantity of topsoil generation in m3	2.44 Lac CUM	2.04 Lac CUM	-
2e	Quantity of overburden generation in m3	Nil	Nil	There is no OB except Top soil as per the approved document.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development of top soil is dependent on the limestone production which is directly proportionate to the market demand of the cement

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One Pit	One Pit	Existing pit dimension 2250m X 1297m X 60m
3b	Quantity of ROM mineral production proposed	12 Million Tons	6.69 Million tons	Less production due to less market demand
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	All the ROM so produced is feed to the crusher for manufacturing of cement.
3d	Quantity of mineral reject generation	Nil	Nil	-
3e	Grade of mineral rejects generation and threshold value declared.	No mineral reject, Limestone threshold Value: CaO-35% (Min)	Entire ROM is being utilized in their captive plant	-
3f	Quantity of sub grade mineral generation.	NA	NIL	No sub grade mineral is generated
3g	Grade of sub grade mineral generation	NA	Nil	-

3h	Manual / Mechanised method adopted for segregating from ROM	NIL	The limestone from the pit is transported by shovel dumper combination & conveyor belt to cement plant stockpile.	All the ROM is feed to crusher only.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals	No beneficiation study carried out	-
3j	Provision of drilling and blasting in mineral benches	Yes	Deep hole Drilling & blasting is carried out in limestone benches	Drilling is done by 2 drills having average spacing of 10m and a burden of 5 m. in conjunction with SME/ ANFO
3k	Provision of mining machineries in mineral benches	Excavator / Dumper combination	Excavator / Dumper combination	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes (0.5 to 3.0 mtr-Top soil), Ore : 9 to 12M	Yes (0.5 to 2.0 mtr-Top soil), Ore : 9 to 12M	Heights of the benches are kept as per provisions.
3m	Total area covered under excavation/pits	206.342 ha	168.65 Ha (as on 31.03.2018)	Less due to less production
3n	Ore to OB ratio for the pit/mine during the year.	1:0.030	1.0.045	-
3o	Total area put in use under different heads at the end of year	Pit-206.342 Ha Dumps: 40.98 ha Infrastructure 1ha Roads 2Ha Others 12.26 Ha	Pit 168.65 ha Dumps-28.29 ha Roads- 2.0 ha Infrastructure-1.0 Others -12.26	-
3p	Production of ROM mineral during the last five year period as applicable	2013-14-12.10 2014-15:11.02 2015-16:13.12 2016-17: 11.0 2017-18: 12.0	2013-14- 6.2 2014-15: 6.42 2015-16: 7.03 2016-17: 7.10 2017-18: 6.69	Unit: Million Tons

3q	General remarks of inspecting officers on method of mining etc.	The limestone production is directly related to the performance of their cement plant. Due to less demand of cement in the market, the plant could not run with its full capacity
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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)	Separate dumping of top soil proposed	There is only top soil/OB which being stacked at the earmarked places as per approved document.	-
4b	Location of topsoil, OB and mineral reject dumps	Top Soil dump EASTING NORTHING 731634.69, 1893590.45 731622.58,1893 547.15 731710.80, 1893516.18 732080.67,1893 546.69 732077.86,1893 546.69	EASTING NORTHING 731724 1893540 732327 1893584 732383 1893548 731726 1893494	Utilized for construction of bund along the lease boundary & afforestation
4c	Number of dumps within lease area and outside of lease area	09 dumps within ML & one old dump out side ML(partly)	09 dumps within ML & one old dump out side ML(partly)	Old dump shown on the plan
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Near to ML boundary as entire ML is mineralized	Near to ML boundary as per proposal	-
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	900 mtr retaining wall proposed	900 Mtr retaining wall made (south dump)	-
4j	Number of settling ponds	1 proposed	1 constructed	Near Magazine side at NE direction
4k	Specific comments of inspecting officer on waste dump management			Total area covered by soil dump was about 28.29 ha and 12.26 Ha area covered by afforestation within ML. The management of top soil was carried out as per the proposal.

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	Nil	Pit is not matured for backfilling
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 done along the lease boundary & plantation done	-
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	-

5e	General remarks of inspecting officers on backfilling and reclamation etc.	The existing pit is not matured for backfilling. The dug out pit is converted into water reservoir. Very little quantity of waste is generated. Entire broken up area cannot be backfilled.
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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).	To be submitted before 1st july of every year	Report on PMCP submitted on 27.07.20127(2016-17)	due on 1st July for 2017-18
6b	Area available for rehabilitation (ha) .	1.192 Ha	1.43 Ha	Whatever area available/mature, plantation has been done on the same.
6c	afforestation done (ha).	1.192 Ha	1.43 Ha	Whatever area available/mature, plantation has been done on the same.
6d	No. of saplings planted during the year	3700 Nos	4290 Nos	-
6e	Cumulative no .of plants	303382 Nos	314282 Nos	-
6f	Any other method of rehabilitation	NIL	NA	-
6g	Cost incurred on watch and care during the year	Rs.2.40 Lac	Rs.9.49 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	No proposal for reclamation & rehabilitation
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	NIL	NA	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	31.5 Ha	Dug out pits is used for rain water harvesting.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NA	Nil	-
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	NA	Nil	-
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NA	Nil	All the lease hold area is mineralized.
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)	Season wise environmental monitoring of ambient air quality, water quality, soil quality, soil sample analysis & noise level proposed	Season wise environmental monitoring of ambient air quality, water quality, soil sample analysis & noise level is carried out & all parameters were within the limits	-

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	The lessee had carried out PMCP activities as per the proposal.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Direct ROM dispatch to their captive cement plant.	Direct ROM dispatch to their captive cement plant having 8.9 MTPA clinkering capacity.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	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	No proposal	No mineral beneficiation except crushing	Two inpit crushers having 1200 & 1600 TPH respectively
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Beneficiation of limestone is not required as entire ore produced is being utilized with proper blending in their cement plant.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and utilization of topsoil proposed	Removal-2.04 Lac CUM of top soil generated and utilized for making bund along the lease boundary & green belt development purpose.	-

8b	Concurrent use or storage of topsoil	Top soil generated will be stacked & utilized for bund formation	2.04 Lac CUM of top soil generated and utilized for making bund along the lease boundary & green belt development purpose	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is no generation of waste rock reject & fines except top soil	Separate dumping of top soil is carried out	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	Area is not matured for reclamation and rehabilitation
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	31.5 Ha is used as water reservoir	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Entire ML area is non forest. There is proposal of 3700 nos of saplings during the year 2017-18.	Lessee has carried out plantation of 14600 nos Within ML area	-
8g	Survival rate	85%	85%	-
8h	Water sprinkling on roads to control airborne dust	Proposed	Two nos. water tanker (One no. 28 KL & one no. 22KL). Water sprinklers are also provided on the permanent haul roads.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around the mine is good as the lessee has carried out afforestation & have taken other environmental measures

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	-	M.R. Submitted upto March 2018 A.R. submitted upto 2016-17	AR due for 2017-18 on 1st July
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Yatendra Sharma, Geologist: Ravikant Shukla	Same as mentioned in AR(2016-17)	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit area-16.16 Ha, Soil Dump-land use pattern 28.29 Ha, Road & infrastructure -3 Ha	Appears to be correct	
9d	Scrutiny of Annual return on afforestation	WML: 10450 No, OML-20812 nos	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	Nil	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price=cost of production=Rs. 164.35/ton	Appears to be correct as captive mines	
9h	Scrutiny of Annual return on fixed assets	Rs. 24612318000/-	Appears to be correct	
9k	Scrutiny of Annual return on mining machineries	Crushers-3 Nos, Dozer-01 No, Dumpers-11 Nos, Loaders-03 Nos, water pumps-03 nos, Hyd. Excavator-05 nos, Drills-02 Nos, WT-02 Nos.	Same as mentioned in AR	

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 :

(ARUN KUMAR)

Indian Bureau of Mines