

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-8

Mine code : 38RAJ09006

- (i) Name of the Inspecting : **J003**) **Jangid G K**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Sh. Vijay D. Mali, Sr. V. P. (Mines) & Mine Agent
Official with
Designation
- (iv) Date of Inspection : 18-AUG-22
- (v) Prev.inspection date : 28-FEB-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ADITYA**
- (b) **Registration NO.** : **IBM/441/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : RAJASTHAN
District : CHITTORGARH
Village : NEAR MEDIKA AMARANA
Taluka : CHITTORGARH
Post office : ADITYAPURAM SHAMBHUPURA
Pin Code : 312612
FAX No. : 01477-220289
E-mail : adityacement@adityabirla.co
Phone : 01472-220192-97
- (f) Police Station : Shambhupura
- (g) First opening date : 24-AUG-95
- (h) Weekly day of rest : SUN
2. Address for : Ultratech Cement Limited,
correspondance Post - Adityapuram, Sawa, Amarpura, Sindaudi
Distt - Chittorgarh (Raj.)
3. (a) Lease Number : RAJ0394
- (b) Lease area : 760.69
- (c) Period of lease : 50
- (d) Date of Expiry : 28-APR-44
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : ULTRA TECH CEMENT LTD.
 AHURA CENTRE, B-WING II
 FLOOR MAHAKALI CAVES RD.
 ANDHERI (E) MUMBAI-400093
 AMRELI GUJARAT
 Phone:022-56917800
 FAX :022-56917900

Owner : Kailash Chandra Jhanwar
 UltraTech Cement Limited
 Ahura Centre, A-WING 1st
 Floor Mahakali Caves Road
 Andheri Mumbai MUMBAI
 (SUBURBAN) MAHARASHTRA
 Phone:
 FAX :

Agent : Vijay Kumar D. Mali
 UltraTech Cement Limited
 (Unit: Aditya Cement Works)
 Adityapuram, Distt-
 Chittorgarh CHITTORGARH
 RAJASTHAN
 Phone: 9826909505
 FAX : 9826909505

Mining Engineer
 Name : Shri Kamal Paliwal, Full Time
 Qualification : B E Mining FCC
 Appointment/ : 29-JUN-10 14-DEC-21
 Termination date

Mining Engineer
 Name : Devendra Kumar Deshmukh, Full Time
 Qualification : BE (Mining)
 Appointment/ : 14-DEC-21
 Termination date

Geologist
 Name : P.S.MISHRA, Full Time
 Qualification : M.SC. M. TECH.
 Appointment/ : 21-JUN-96 30-SEP-17
 Termination date

Geologist
 Name : B.K.GANGAWAT, Full Time
 Qualification : M.SC. (GEOLOGY)
 Appointment/ : 30-SEP-17
 Termination date

Manager
 Name : Naval Kishore Sharma
 Qualification : B. E. Mining, FCC (R)
 Appointment/ : 15-DEC-11 13-DEC-20
 Termination date

Manager

Name : Yatendra Sharma
 Qualification : BE (Mining)
 Appointment/ : 14-MAY-21
 Termination date

Manager

Name : M.Senthilkumar
 Qualification : B Tech Mining
 Appointment/ : 14-DEC-20 14-MAY-21
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	25-MAY-00
Plan/Scheme of Mining		Modif.approved Mining Scheme	23-SEP-04
		Mining Scheme rule 12 MCDR1988	03-MAR-05
		Modif.approved Mining Scheme	28-NOV-05
		Renewal under rule 24 MCR1960	20-NOV-13
		Renewal under rule 24 MCR1960	20-NOV-13
		MP modif under 17(3) MCR 2016	25-FEB-19
		MP modif under 17(3) MCR 2016	10-JUL-20
		MP review under 17(1) MCR 2016	12-APR-22

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal during the year 2021-22	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	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal of exploration during the year 2021-22.	Total Lease area 760.692 Ha, Mineralized under G-1 category 687.092ha, G-2 22.95ha, G-3 0 and Non Mineralized G-4 50.65ha.	(1) The recently approved modification in review of mining plan having proposal during the year 2022-23 to convert entire G2 & G4 area into G1 level.
1e	Balance reserve as on 01/04/20	No specific proposal given in this regard.	Balance reserves as on 01.04.2022 are 254.65 million tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	Nil	Nil	No issue observed related to geology & exploration.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Pit-01 from E/W459274.7 to 460225.043 and N/S 2736520.09 to 2737303.003 Vertical Mrl 381m Pit-02 from E/W 459385.140 to 460467.051 and N/S 2735570.3 to 2736255.96 Vertical Mrl 399m Pit-03 from E/W 459692.670 to 459814.402 and N/S 2734561.387 to 2734947.248 Mrl 426m, E/W 460013.05 to 460687.009 N/S 2733203.621 to 2734110.747 Vertical Mrl 390m Pit-04 from E/W 460109.573 to 460635.950 and N/S 2732769.196to 2733142.936 Vertical Mrl 390m	Pit-01 from E/W459275 to 460225 and N/S 2736590 to 2737303 Vertical Mrl 390.28 Pit-02 from E/W 459501.13 to 460629.217 and N/S 2735624.51 to 2736250.343 Vertical Mrl 408.1 Pit-03 from E/W 459907.776 to 460860.378, N/S 2733203.62 to 2734110.747 Mrl 418 E/W 459920.970 to 459837.027 N/S 2734577.93 to 2734950.242 Vertical Mrl 391.508 Pit-04 from E/W 460320.2553 to 460641.6690 N/S 2732777.761 to 2733099.843 Vertical Mrl 390m	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposal for Separate removal of Top soil, OB and Mineral has been given.	Top Soil, OB/waste and Mineral has been removed separately.	Nil
2c	Stripping ratio or ore to OB ratio	Proposed Ore to OB ratio is 1:0.26	Ore to OB ratio is 1:0.30	
2d	Quantity of topsoil generation in m3	112500m3	12812m3	
2e	Quantity of overburden generation in m3	1176522m3	1329318m3	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Nil	The mine development is as per approved proposal.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Production from four existing pits was proposed.	Production from three existing pits was achieved during the year.	
3b	Quantity of ROM mineral production proposed	10600000 tonne	10224777 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	10000000 tonnes	9931265 tonnes	
3d	Quantity of mineral reject generation	600000 tonnes during screening.	293512 tonnes during screening.	
3e	Grade of mineral rejects generation and threshold value declared.	less than 34% CaO content with high silica.	Screen reject is having 25.20 to 33.10% of CaO	
3f	Quantity of sub grade mineral generation.	Not proposed in Mining Plan.	Not generated.	
3g	Grade of sub grade mineral generation	Not proposed in Mining Plan	Not generated and so not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No	No	

3j	Provision of drilling and blasting in mineral benches	Yes, Drill size 115mm with Burden & spacing of 4-5m & 6-7m respectively for blasting.	Yes, same is established and continued.
3k	Provision of mining machineries in mineral benches	Mining in mineral benches fully mechanized by HEMM i.e. Shovel ,dumper dozer etc.	Fully mechanized method of Mining in mineral benches by HEMM i.e. Shovel,dumper,dozer etc.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed Height is 9.0m to 11m in mineral and overburden benches.	Yes. actual height of benches is 9.0 to 11.0 m in mineral and overburden benches.
3m	Total area covered under excavation/pits	The area under excavation at the end of plan period is 274.627 Ha. However area for the year 2021-22 is not indicated in Mining Plan.	The area under pits is 230.860Ha.
3n	Ore to OB ratio for the pit/mine during the year.	Planned Ore to OB ratio is 1:0.26	Actual Ore to OB ratio is 1:0.30
3o	Total area put in use under different heads at the end of year	Total area put to use at the end of plan period is 376.95 excluding plantation area.	Actual area put in use is 316.17 Ha. area at the end of year 2021-22 excluding plantation area.
3p	Production of ROM mineral during the last five year period as applicable	Production proposal of ROM from 2017-18 to 2021-22 is 10869565t, 10869565t, 12425560t, 10600000t, 10600000t respectively.	Actual ROM Production from 2017-18 to 2021-22 is 9683358t, 8897941t, 7330044t, 8274385t, 10224777t respectively.

3q General remarks
of inspecting
officers on
method of mining
etc.

As per proposals.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes, Separate dumping of the top soil, OB/waste and Mineral reject has been proposed.	Yes, Separate dumping of the top soil, OB/waste and Mineral reject has been observed and carried out.	
4b	Location of topsoil, OB and mineral reject dumps	Top soil- 2735807N to 2736084N & 459105E to 459232E OB Dump- Dump-G 2734623N to 2735157N & 460641E to 461061E Dump-D 460612.892E to 460836.695 E & 2735655.961 N to 2736071.229 N Screen Dump Dump-E 2735455.961 N to 735611.469 N & 460668.413 E 460972.262 E	Yes, Dumping of top soil, OB & mineral reeject is being carried out at designated place as per proposal.	
4c	Number of dumps within lease area and outside of lease area	Seven dumps inside lease area are there, which includes Three Nos OB Dumps and Four Dumps of Screen Reject. Proposal is on existing dumps.	Dumping of OB and screen reject is carried out as per proposals.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	All dumps are located beyond the ultimate pit limit	All dumps are located beyond the ultimate pit limit	

4e	Number of active and alive dumps.	Five dumps are active and in use.	Five dumps are active and in use.
4f	Number of dead dumps.	Two dumps are inactive and not in use.	Two dumps are inactive and not in use.
4g	Number of dumps established.	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes proposal given.	Yes, it is there.
4i	Length of Retaining wall or garland drain all along dumps	500m garland drain proposed along dumps during the year 2021-22.	500m garland drain made along dumps in the year 2021-22.
4j	Number of settling ponds	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management		

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.	None of the pit is matured and planned for backfilling. No proposal except dumping of waste.	Nil	
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)	Yes, soil is planned to use for plantation concurrently as well.	Yes	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	

5e General remarks of inspecting officers on backfilling and reclamation etc. Nil

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).	Holder of mining lease has to submit PMCP report before 1st day of July every year under rule 26 of MCDR, 2017.	PMCP report for the year 2021-22 has been submitted on time.	
6b	Area available for rehabilitation (ha) .	1.0ha	1.0ha	
6c	afforestation done (ha).	1.0ha	1.0ha	
6d	No. of saplings planted during the year	2000 nos	2018 nos	
6e	Cumulative no .of plants		212197 nos	
6f	Any other method of rehabilitation	Not specified in Mining Plan	212197 nos plantation done within lease area up-to 2021-22	
6g	Cost incurred on watch and care during the year	600000	600000	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Applicable	Not Applicable	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Applicable	Not Applicable	

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	Not Applicable	Not Applicable	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Applicable	Not Applicable	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Applicable	Not Applicable	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Nil	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Nil	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not Applicable	Not Applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Regular monitoring in core zone and buffer zone was proposed.	Regular monitoring in core zone and buffer zone is carried out on quarterly basis.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Nil	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	10600000 ROM	10224777 tonnes ROM actual despatched and 9931265.00 tonnes cement grade production.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical screening process during Limestone crushing	Mechanical screening process during Limestone crushing
7c	Different grade of mineral sorted out at mines.	Cement grade only.	Cement grade only produced and despatched.
7d	Any beneficiation process at mines	No	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Nil

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes, 18,000m3 was planned	Yes, 20,500 m3 is separately removed and used.	
8b	Concurrent use or storage of topsoil	Yes, it is planned for plantation work.	Yes, it is used for plantation work.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Separate dumps are made for OB, waste and mineral reject.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal, except dumping.	Not used so far. It is dumped.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2018 nos were proposed	2118 planted and survived trees are 1751 with 82% rate of survival.
8g	Survival rate	85-90%	86%
8h	Water sprinkling on roads to control airborne dust	By diesel truck mounted Water Tankers	By diesel truck/dumper mounted Water Tankers
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	As per rule 45 of MCDR, monthly and annual returns to be submitted.	M.R Submitted upto July 22 and A.R. upto 2021-22 within due date.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mr. Yatendra Sharma, Mines Manager, Mr. Devendra Deshmukh is Mining Engineer and Shri Bhupendra Kumar Gangawat is Geologist	Reported correctly and accompanied during inspection.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Current Working 230.86ha, Used for Waste Disposal (Dumps) 43.49 Ha, Occupied by plant,building residential, welfare building and road 36.910 Ha, Topsoil & Mineral storage 3.910ha and Plantation 1.0 Ha.	Found in order.
9d	Scrutiny of Annual return on afforestation	Plantation 2018 nos with Survival rate of 81.43%.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	293512 tonne screen reject generated	Yes, reported quantity with 25-33 CaO seems to be correct.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Zero	Zero
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Rs. 205.35 Ex. Mine price and cost of production	No sale of the mineral as it is a captive mine.
9h	Scrutiny of Annual return on fixed assets	The value of fixed asset furnished is Rs. 1314635883	Appears to be correct.
9k	Scrutiny of Annual return on mining machineries	Shovel, Dumpers, Wheel loader, Dozer, Road roller, Motorgrader etc.	All these machineries are in operation.

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 :

(Jangid G K)

Indian Bureau of Mines