

MCDR INSPECTION REPORT 2021-22

GENERAL:

	PARTICULARS	DETAILS
1	File No.	CHG/RAP/Lst-50/NGP
2	Name & Designation of the inspecting officer	Shri D. Upadhyay, Senior Assistant Controller of Mines, Indian Bureau of Mines, Raipur
3	Date of Inspection	12.10.2022
4	Date of Last Inspection & Officer	01.09.2022, Shri Arun Kumar, Regional Controller of Mines Shri D. Dash, Senior Mining Geologist, Indian Bureau of Mines, Raipur
5	Accompanying mine personnel	Mr. Mayank Saini- GM (Mines Operation), Mr. Kamlesh Chandrakar- Sr. Manager (Planning & Geology)
6	Name of the Mine	Rawan Jhipan Limestone Mine
7	Total Lease Area (Ha) with breakup of Non-forest and forest land	Lease area – 722.834 hect, Non Forest area – 722.834 hect, Forest Area – Nil
8	Mine code	38MPR28018
9	IBM Registration Number under rule 45 of MCDR, 1988	IBM/441/2011
10	Name of the lessee, Address, phone, email and fax number	Name - M/s UltraTech Cement Limited Address - 'B" Wing, Ahura Centre 2nd floor, caves Road, Andheri (E), Mumbai 400093 Fax No - 02266928109 Phone No- 02266917800 Email - ajit.ostwal@adityabirla.com
	Village	Rawan, Jhipan, Pendri, Kadhidi and Phunserdih
	Taluka/Mandal	Simga
	District	BalodaBazar - Bhatapara
	Pincode	493196
	State	Chhattisgarh
	Post office	Grasim Vihar, Rawan
11	Nearest police station	Suhela
12	Nearest Railway station	Bhatapara
13	Date of Grant of Mining Lease	04.12.1993 (04.12.1993 to 03.12.2043)
14	Date of Execution	04.12.1993
15	Date of opening of Mine	05.02.1994
16	Weekly day of rest	Sunday
17	Date of first Renewal, if applicable and its period & expiry	Not applicable

18	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. K.C. Jhanwar UltraTech Cement Limited Ahura Centre, A Wing, First Floor, Mahakali Caves Road, Andheri East, Mumbai 400093 Email: ajit.ostwal@adityabirla.com Phone No.: 022-66917421 Date of Appointment – 19/10/2018
19	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Vinay Sharad Chitale M/S UltraTech Cement Limited, Unit : Rawan Cement Works Address- Village Rawan, Post office: Grasim Vihar, distt. Baloda Bazar –Bhatapara (C.G.) 493196 Phone No- 9922413048 Fax - 07726-281572 Email: vinay.chitale@adityabirla.com Date of appointment: 12.11.2021
20	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Mayank Saini Rawan Jhipan Limestone Mine, Grasim Vihar Rawan, District: Baloda Bazar-Bhatapara (Chhattisgarh) Phone no: 9669074604 Email: mayank.saini@adityabirla.com Date of Appointment: 06/05/2018
21	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Mayank Saini Qualification: BE (Mining) Total Experience: 15 years Rawan Jhipan Limestone Mine, Grasim Vihar Rawan, District: Baloda Bazar-Bhatapara (Chhattisgarh) Email: mayank.saini@adityabirla.com Phone no: 9669074604 Date of Appointment: 06/05/2018
22	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Both Geologist and mining engineer appointed under Rule 42 has met the required qualification and experience criteria. Shri Kamlesh Kumar Chandrakar M. Tech.-Applied Geology Total Experience 21 years
23	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Date of Approval of Modified Mining Plan: 17.11.2017 and valid up to March 2023.

24	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	
25	Mineral(s) granted in lease and proved for mining	Limestone
26	Method of Mining (Opencast, Underground)	Open cast
27	Category (Fully Mechanized, Others or Manual)	Fully mechanized
28	Captive/Non-Captive	Captive
29	EC for ROM Prod: Date of Issue:	7.5 Million Tonnes 29.06.2011
30	FA amount Rs Valid up to:	Rs-9,39,00,000/- and Rs.6, 26, 00,000/- Valid up to 31 st March 2023

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

1.0 EXPLORATION

SN	ITEM	PROPOSALS (2021-22)	ACTUAL WORK (2021-22)	REMARKS
1a	Backlog of previous year	Not proposed	Nil	Entire lease area has been explored in G1 level of exploration.
1b	Exploration over lease area for Geological axis 1 or 2.	Not proposed	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not proposed	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed	Nil	
1e	Balance reserves as 01.04. 2022 (million tonnes)	As per approved Modified mining Plan: Under (111): 150.81 Million Tonnes Under (122): 11 Million Tonnes	Balance reserves as 01.04. 2022: Under (111): 120 Million Tonnes Under (122): 11 Million Tonnes	
1f	General remarks of inspecting officer on geology, exploration etc.	Entire lease area has been explored in G1 level of exploration.		

2.0 DEVELOPMENT

SN	ITEM	PROPOSALS (2021-22)	ACTUAL WORK (2021-22)	REMARKS
2a	Location of development w.r.t. lease area	X=601709-603305 Y=2384065- 2386441	X=601714-603303 Y=2384113- 2386249	Developmental is carried out within approved proposal.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	In topsoil and Overburden-01 Mineral-05	In topsoil and Overburden-01 Mineral-05	As per the plan
2c	Stripping ratio or ore to OB ratio	1:0.13 (T/cu.m)	1:0.21 (T/cu.m)	Due to high contamination of Clay in top benches SR varies.
2d	Quantity of topsoil generation in Tonnes	74793	75194	
2e	Quantity of overburden generation in MT	1590402	1482486	Due to less limestone production.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Developmental is carried out within approved proposal.		

3.0 EXPLOITATION

S.N.	ITEM	PROPOSAL (2021-22)	ACTUAL WORK (2021-22)	REMARK
3a	Number of pits proposed for production	01	01	
3b	Quantity of mineral production proposed	7500000	6804149	Production is carried out as per plant demand.
3c	Recovery of saleable/usable mineral from production	99%	96.29%	Generation of Screen reject quantity is more due to high contamination of Clay in top benches

3d	Quantity of mineral reject generation	60000MT	261892MT(screen Reject)	Generation of Screen reject quantity is more due to high contamination of Clay in top benches
3e	Grade of mineral reject generation and threshold value declared	CaO grade in Mineral reject - 26.8% Threshold – 34%	CaO grade in Mineral reject -29.31% Threshold – 34%	
3f	Quantity of sub-grade mineral generation	15000MT	15142MT	(Mineral Reject)
3g	Grade of sub-grade mineral generation	CaO- 36.17 %	CaO-36.52%	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Wobbler with screening system installed in crusher for segregation of clay and limestone.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Nil	Nil	
3j	Provision of drilling & blasting in mineral benches	Drilling & Blasting Dia of Hole -152 & 112 mm Drilling Pattern (Spacing*Burden* Depth) OB-(3*3*2.5) Ore-(6.5*4*8)	Drilling & Blasting Dia of Hole -152 & 112 mm Drilling Pattern (Spacing*Burden* Depth) Dev -(3*3*2.5) Ore-(6.5*4*8)	Drilling and blasting is carried out as per proposal.

3k	Provision of mining machineries in mineral benches	Shovel Tata EX1200-3Nos L&T CK300-3 Nos Back Hoe L&T CK300-2 Nos Dumper 60T-11 Nos Dumper 35T- 5 Nos	Equipments	Capacity	Nos.	Excavator, Loader and Dumper are equipped to winning out the mineral.
			Excavator	6.5 CUM	4	
			Excavator	4 CUM	2	
			Back Hoe	3.2 CUM	2	
			Loader	5 CUM	1	
			Dumper	60 T	12	
			Dumper	35 T	2	
			Blast Host Drill	152 MM dia	1	
			Blast Host Drill	115 MM dia	2	
			Dozer	350 HP	2	
			Water Tanker	12 KL	2	
			Water Tanker	28 KL	1	
			Explosive Van	8 T	1	
			Explosive Van	7.3T	1	
			Motor Grader	145HP	1	
Road roller	10T	1				
Other HEMM	1	1				
Crusher	1600TPH	1				
Crusher	850TPH	1				
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height OB – up to 4 Meters Ore – 8 to 10 Meters	Bench height OB – up to 4 Meters Ore – 8 to 9 Meters			
3m	Total area covered under excavation/pits	265Hect.	229.05 Hect.		Due to less production then the plan quantity in last four years.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.13 (T/cu.m)	1:0.21 (T/cu.m)		Due to high contamination of Clay in top benches SR varies.	
3o	Total area put in use under different heads at the end of year	312.804	292.81 Hect.		Due to less production then the plan quantity in last four years.	
3p	Production of mineral during last Three -year period, as applicable (tones)	2017-18: 7500000	6386548		Production is carried out as per the plant demand.	
		2018-19: 7500000	6899169			
		2019-20:7500000	7016800			
		2020-21: 7500000	6167014			
		2021-22:7500000	6804149			
3q	General remarks of inspecting officer on method of mining etc.	The ROM production has been carried out from single pit as per proposal.				

4.0 SOLID WASTE MANAGEMENT-DUMPING

SN	ITEM	PROPOSALS (2021-22)	ACTUAL WORK (2021-22)	REMARKS
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of Topsoil, OB & mineral reject is proposed	Separate dumping for topsoil, OB and limestone are being maintained.	Separate dumping for topsoil, OB and limestone are being maintained.
b	Location of topsoil, OB & mineral reject dumps	Top soil along the MLB South OB- 2384142-238446 N & 602985-603579 E North OB 2385323- 2385523N & 602093 -602563 E Screen Reject- 602438-602773E, 2383966- 2384188N	Top soil staking along the lease boundary. South OB- 2384467 -2384142 N & 603042 - 603560 E North OB- 2385326-2385519 N & 602171 -602465 E Screen Reject- 602550-602770E, 2383984-2384180N	Garland drain and Retaining wall provided at the edge of the dump.
4c	Number of dumps within lease area and outside lease area	06	06	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	North OB- 2385323- 2385523N, 602093 – 602563E Temporary in nature	North OB- 2385326-2385519 N & 602171 -602465E Temporary in nature	
4e	Number of active & alive dumps	04	04	
4f	Number of dead dumps	02	02	
4g	Number of dumps stabilized	01	01	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dump	Not proposed	200mtr	
4j	Number of settling ponds	Not proposed	Nil	
4k	Specific comments of inspecting officer	Separate dumping of OB is maintained as per proposal. Garland drain and Retaining wall provided at the edge of the		

		dump.
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5.0 SOLID WASTE MANAGEMENT-BACKFILLING

SN	ITEM	PROPOSALS (2021-22)	ACTUAL WORK (2021-22)	REMARKS
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Nil	Nil	
5b	Area under backfilling of mined out area	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Based on the availability – used for spreading for Plantation	Top soil stored along the lease boundary and it is being used for plantation.	Concurrent use of top soil. During 2021-22 total 75194 MT quantity is being used.
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	2.68 hect fully reclaimed and rehabilitated in 2010-15 . out of which 1.65 ha sump rehabilitation & 1.03 bench reclamation.
5e	General remarks of inspecting officer on backfilling, reclamation etc	At present area is not matured for reclamation and rehabilitation.		

6.0 PROGRESSIVE MINE CLOSURE PLAN

SN	ITEM	PROPOSALS (2021-22)	ACTUAL WORK (2021-22)	REMARKS
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.	Yes	Yes	Annual return submitted on dated 29.06.2022.
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha)	Not Proposed	Nil	Nil
	ii) Afforestation done (ha)	Not Proposed	Nil	Nil

	iii) No. of saplings planted during the year	Not Proposed	Nil	Nil
	iv) Cumulative no. of plants	Not Proposed	Nil	Nil
	v) Any other specific method of rehabilitation	Not Proposed	Nil	Nil
	vi) Cost incurred on watch & care during the year	Not Proposed	Nil	Nil
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Not Proposed	Nil	Nil
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) 2500Nos of Saplings ii) 1(ha) iii) Plantation	i) 3300 Nos of Saplings ii) 1.23 (ha) iii) Plantation	Replantation done in the year 2021-22
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Monitoring of ambient air, water, noise level, Ground vibration	Air Quality monitoring in 04 locations in Core and buffer zone. Mines sump water and drinking water analysis on quarterly basis. Noise monitoring in quarterly basis. Ground vibration is being done in regular basis.	Air Quality monitoring in 04 locations in Core and buffer zone. Mines sump water and drinking water analysis on quarterly basis. Noise monitoring in quarterly basis. Ground vibration is being done in regular basis.
6f	General remarks of inspecting officer on PMCP compliance & progressive	Area is not matured for reclamation and rehabilitation. Plantation is carried out as per proposal.		

7.0 MINERAL CONSERVATION

SN	ITEM	PROPOSALS (2021-22)	ACTUAL WORK (2021-22)	REMARKS
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch after Dry crushing and screening.	ROM dispatch after Dry crushing and screening.	ROM dispatch after Dry crushing and screening.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	Mechanized
7c	Different grade of mineral sorted out at mines	-40% CaO and +40% CaO	-40% CaO and +40% CaO	-40% CaO and +40% CaO
7d	Any beneficiation process at mines	Nil	Nil	Dry crushing and screening.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Dry crushing and screening is practiced.		

8.0 ENVIRONMENT

SN	ITEM	PROPOSALS (2021-22)	ACTUAL WORK (2021-22)	REMARKS
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and utilization of topsoil proposed	Top soil stored along the lease boundary and it is being used for plantation	Concurrent use of top soil. During 2021-22 total 75194 MT quantity is being used.
8b	Concurrent use or storage of topsoil	Separate stacking and utilisation during plantation	Top soil generate is being used .	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden, waste rock, rejects is proposed	Separate dump for all type of waste is being maintained .03 nos dump OB, 2 nos screen reject dump are maintained.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Proposed 3087 nos. of plantation	In 2021-22, total 3300 no. of tree planted by lessee..	
8g	Survival rate	Not specified.	79%	
8h	Water sprinkling on roads to control airborne dust	28KL and 12KL taker proposed for Water sprinkling on roads	28KL and 12KL taker water tanker are being deployed for suppression air born dust on road.	Dedicated tanker for water sprinkling.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Aesthetic beauty in and around mines area is maintained by plantation.		

9.0 COMPLIANCE OF RULE 45

S.N.	Item	Details Given in A.R.	Observation of I/Officer	Remarks
9 a	Status of submission of monthly and Annual returns	AR & MR submitted regularly.	AR & MR submitted regularly.	AR & MR submitted regularly.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining engineer, Geologist employment is furnished	Mining engineer, Geologist are employed in the mine.	Mining engineer, Geologist are employed in the mine.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	As per annual return 1. Area covered in OC mining- 229.05 ha. 2. Reclaimed & rehabilitated- 2.68- ha. 3. Used for waste disposal- 34.33 ha.	Deviation pointed by violation letter.	Deviation pointed by violation letter.

		<p>4. Occupied by plant, buildings etc- 8.0 Ha.</p> <p>5. Other purpose (mineral reject/subgrade stock)-0.4 Ha.</p> <p>6. Work done under PMCP- 1.3 Ha.</p>																																																											
9d	Scrutiny of Annual return on afforestation	Total nos of sapling planted 3300 nos in 1.3 ha	Total nos of sapling planted 3300 nos in 1.3 ha	Total nos of sapling planted 3300 nos in 1.3 ha																																																									
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Total mineral reject (screen reject) generated is 261892 MT	Total mineral reject (screen reject) generated is 261892 MT	Total mineral reject (screen reject) generated is 261892 MT																																																									
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock- Nil	ROM closing stock- Nil	ROM closing stock- Nil																																																									
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex mine price is Rs 237.17 /- per MT	Ex mine price is Rs 237.17 /- per MT	Ex mine price is Rs 237.17 /- per MT																																																									
9i	Scrutiny of Annual return on fixed assets	fixed asset is Rs 243790251/-	fixed asset is Rs 243790251/-	fixed asset is Rs 243790251/-																																																									
9k	Scrutiny of Annual return on mining machineries	<table border="1"> <thead> <tr> <th>Equipments</th> <th>Capacity</th> <th>Nos.</th> </tr> </thead> <tbody> <tr> <td>Excavator</td> <td>6.5 CUM</td> <td>4</td> </tr> <tr> <td>Excavator</td> <td>4 CUM</td> <td>2</td> </tr> <tr> <td>Back Hoe</td> <td>3.2 CUM</td> <td>2</td> </tr> <tr> <td>Loader</td> <td>5 CUM</td> <td>1</td> </tr> <tr> <td>Dumper</td> <td>60 T</td> <td>12</td> </tr> <tr> <td>Dumper</td> <td>35 T</td> <td>2</td> </tr> <tr> <td>Blast Host Drill</td> <td>152 MM dia</td> <td>1</td> </tr> <tr> <td>Blast Host Drill</td> <td>115 MM dia</td> <td>2</td> </tr> <tr> <td>Dozer</td> <td>350 HP</td> <td>2</td> </tr> <tr> <td>Water Tanker</td> <td>12 KL</td> <td>2</td> </tr> <tr> <td>Water Tanker</td> <td>28 KL</td> <td>1</td> </tr> <tr> <td>Explosive Van</td> <td>8 T</td> <td>1</td> </tr> <tr> <td>Explosive Van</td> <td>7.3T</td> <td>1</td> </tr> <tr> <td>Motor Grader</td> <td>145HP</td> <td>1</td> </tr> <tr> <td>Road Roller</td> <td>10T</td> <td>1</td> </tr> <tr> <td>Other HEMM</td> <td>1</td> <td>1</td> </tr> <tr> <td>Crusher</td> <td>1600TPH</td> <td>1</td> </tr> <tr> <td>Crusher</td> <td>850TPH</td> <td>1</td> </tr> </tbody> </table>	Equipments	Capacity	Nos.	Excavator	6.5 CUM	4	Excavator	4 CUM	2	Back Hoe	3.2 CUM	2	Loader	5 CUM	1	Dumper	60 T	12	Dumper	35 T	2	Blast Host Drill	152 MM dia	1	Blast Host Drill	115 MM dia	2	Dozer	350 HP	2	Water Tanker	12 KL	2	Water Tanker	28 KL	1	Explosive Van	8 T	1	Explosive Van	7.3T	1	Motor Grader	145HP	1	Road Roller	10T	1	Other HEMM	1	1	Crusher	1600TPH	1	Crusher	850TPH	1		
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10- Details of violations observed during inspection and the compliance status.

During inspection dated 01/09/2022, the Violation of Rule 11(1) and 45(5)(c) have been issued to lessee on 20/09/2022.

Date: 23/12/2022

Signature:

Name: D. Upadhyay

Designation: Sr. ACOM