

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of inspecting office & designation	S. Kartikeya, Jr. Mining Geologist
2	Date of inspection	23/08/2017
3	Name of the Mine	Rawan Jhipan Limestone Mine
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	Lease area – 722.834 Ha, Non Forest area – 722.834 Ha, Forest Area – 0 Ha.
5	Mine Code	38MPR28018
6	IBM Registration Number under rule 45 of MCDR, 1988	IBM/441/2011
7	Name of the lessee, Address, phone, email and fax number	M/s UltraTech Cement Limited Address - 'B" Wing, Ahura Centre 2nd floor, Mahakali caves Road, Andheri (E), Mumbai 400093 Fax No. - 02266928109 Phone No. - 02266917800 Email - ajit.ostwal@adityabirla.com
8	Village	Rawan
8	Taluka / Mandal / District	Simga, BalodaBazar Bhatapara
10	State	Chhattisgarh
11	Post office & PIN	Simga, Pin Code: 493196
12	Nearest police station	Suhela
13	Nearest Railway station	Bhatapara
14	Date of Grant of Mining Lease	01/11/1993
15	Date of Execution	04/12/1993
16	Date of opening of Mine	05/02/1994
17	Date of first Renewal, if applicable and its period & expiry	As per MMDR Amendment Act, 2015 section 8A Validity of the lease period: 01/11/1993 to 31/10/2043 (Fifty years)
18	Date of second Renewal, if applicable and its period & expiry	Not applicable
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not applicable
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri O.P. Puranmalka UltraTech Cement Limited Aditya Birla Centre, S.K. Ahire Marg, Worli, Mumbai– 400 030 Email: ajit.ostwal&adityabirla.com Phone No.: 022-66917421 Date of Appointment – 18/07/2017
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri V. D. Mali Agent & Sr. Vice President (Mines) Rawan Jhipan Limestone Mine Grasim Vihar Rawan, Tahsil – Simga, District – Baloda Bazar Bhatapara (Chhattisgarh) Email – vijaykumar.mali@adityabirla.com

		Phone no – 07726288666 Date of appointment – 20/01/2006
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri P K Upadhyay Rawan Jhipan Limestone Mine Grasim Vihar Rawan, Tahsil – Simga, District – Baloda Bazar Bhatapara (Chhattisgarh) Email – pratyendra.upadhyay@adityabirla.com Phone no – 07726288217 ext- 2212 Date of Appointment – 25/07/2014
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Mukesh Kumar Thawait Qualification – BE (Mining) Total Experience – 12 years Address - Rawan Jhipan Limestone Mine Grasim Vihar Rawan, Tahsil – Simga, District – Baloda Bazar Bhatapara (Chhattisgarh) Email – mukesh.thawait@adityabirla.com Phone no - Phone no – 07726288217 ext- 2224 Date of Appointment – 27/06/2012
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes Shri Prateek Jha Qualification: M. Sc (geology) Total Experience: 07 Years Address: Rawan Jhipan Limestone Mine Grasim Vihar Rawan, Tahsil – Simga, District – Baloda Bazar Bhatapara (Chhattisgarh) Phone: 09617686420 Email: prateek.jha@adityabirla.com Date of Appointment: 27/06/2012
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan approved vide letter no. RAP/LST/MPLN-283/NGP Nagpur dated 22/06/1993 Period: 1993-1994 to 1997-98 Modified Mining Plan approved vide letter no. 314(3)95-MCCM(C)/MP-11 Nagpur dated 02/12/1996 Period: 1996-97 to 1997-98 Mining Plan approved vide letter no. 314(3)/2012/MCCM(CZ)MP/33 Nagpur dated 14/10/2013 Period: 2013-14 to 2017-18
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	1st Scheme of Mining approved vide letter no. 314(3)/96-MCCM(C)/MP/Scheme-15 Nagpur dated 18/08/1999 Period: 1999-2000 to 2003-04 Modified Scheme of Mining approved vide letter no. 314(3)/2003-MCCM(C)/S-10 Nagpur dated 10/11/2003 Period: 2003-04 2nd Scheme of Mining approved vide letter no. 314(3)/2004-MCCM(C)/S-3 Nagpur dated 04/11/2004 Period: 2004-05 to 2008-09

		<p>Modified Scheme of Mining approved vide letter no. 314(3)/2006-MCCM(CZ)/S-22 Nagpur dated 24/05/2007 Period: 2007-08 to 2008-09</p> <p>3rd Scheme of Mining approved vide letter no. 314(3)/2006-MCCM(CZ)/S-30 Nagpur dated 21/05/2009 Period: 2009-10 to 2013-14</p> <p>Modified Scheme of Mining approved vide letter no. 314(3)/2009-MCCM(CZ)/MP/MS/PMCP-16 Nagpur dated 04/12/2009 Period: 2009-10 to 2013-14</p> <p>Modified Scheme of Mining approved vide letter no. 314(3)/2009-MCCM(CZ)/MP/MS/PMCP-31 Nagpur dated 06/01/2012 Period: 2011-12 to 2013-14</p>
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	Category A Fully Mechanised
30	Captive/Non Captive	Captive

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

1.0 Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During Mining Plan period, it has been proposed to carry out 08 nos. of Core Boreholes up to a cumulative depth of 400 meters	04 nos. of DTH boreholes with a cumulative depth of 120 meters have been drilled so far.	Deviation has been pointed out.
1b	Exploration over lease area for Geological axis 1 or 2.	Under G1 Category: 570.954 Ha Under G2 category: 7.5 Ha Under G3 Category: 144.38 Ha Under G4 category: NIL Non Mineralised: NIL	Under G1 Category: 570.954 Ha Under G2 category: 7.5 Ha Under G3 Category: 144.38 Ha Under G4 category: NIL Non Mineralised: NIL	-
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not given in the approved document	Not applicable	Outsourcing has been done for exploration purpose.

1d	Balance area to be explored to bring Geological axis in 1 or 2	Under G2 category: 7.5 Ha Under G3 Category: 144.38 Ha	Under G2 category: 7.5 Ha Under G3 Category: 144.38 Ha	-
1e	Balance reserves as on 01.04.2017	Under (111) Category: 150 Million Tonnes Under (122) Category: 10.9 Million Tonnes Under (211) Category: 40.62 Million Tonnes Under (332) Category: 4.5 Million Tonnes Under (333) Category: 26.0 Million Tonnes	Under (111) Category: 154.08 Million Tonnes Under (122) Category: 10.9 Million Tonnes Under (211) Category: 40.62 Million Tonnes Under (332) Category: 4.5 Million Tonnes Under (333) Category: 26.0 Million Tonnes	-
1f	General remarks of inspecting officer on geology, exploration etc.	NIL		

2.0 Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	N2384500 – N2385905 to E601830 - E603236 North, South and West direction wrt. Lease/pit	N2384500 – N2385905 to E601830 - E603236 North, South and West direction wrt. Lease/pit	-
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Ore/ Mineral: 04 no. Waste: 01 no.	Ore/ Mineral: 04 no. Waste: 01 no.	-
2c	Stripping ratio or ore to OB ratio	1:0.28	1:0.18	-
2d	Quantity of topsoil generation in m3	17775	61700	-
2e	Quantity of overburden generation in m3	777778	646929	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	NIL		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	01 no.	01 no.	-
3b	Quantity of ROM mineral production proposed	7500000 Metric Tonne	6298723 Metric Tonne	-
3c	Recovery of salable/usable mineral from ROM production	94%	100%	-
3d	Quantity of mineral reject generation	450000 Metric Tonnes	0.0 Metric Tonnes	-
3e	Grade of mineral reject generation and threshold value declared	Limestone (Screen Reject) CaO (in reject) - 26.8 %	Limestone CaO 25%	-
3f	Quantity of sub-grade mineral generation	100000 Metric Tonnes	NIL	-
3g	Grade of sub-grade mineral generation	CaO- 36.17 %	Sub Grade mineral generation FY 2016-17- Nil	-
3h	Manual / Mechanised method adopted for segregating from ROM	Dry crushing and Screening	Dry crushing and Screening	-
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed in the approved document	Not applicable	-
3j	Provision of drilling & blasting in mineral benches	Provision has been given Dia: 152 mm Spacing: 7.5 m Burden: 4.0 m	Carried out as per proposal. Dia: 152 mm Spacing: 7.5 m Burden: 4.0 m	-
3k	Provision of mining machineries in mineral benches	Provision has been given	Carried out as per proposal.	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Ore: 8 meter Waste: 3 meter	Ore: 8 meter Waste: 3 meter	-
3m	Total area covered under excavation/pits	200.31 Ha	174.36 Ha	-
3n	Ore to OB ratio for the pit/mine during the year	1:0.28	1:0.18	-
3o	Total area put in use under different heads at the end of year	Pit- 207.66 Ha Waste/reject- 43.66 Ha Others- 110.83 Ha (at the end of SOM)	Pit- 174.362 Ha Waste/reject- 27.020 Ha Others- 12.08 Ha	-
3p	Production of ROM mineral during last five-year period,	Yr-2012-13: 7500000 Metric	Yr-2012-13: 2405490 Metric	-

	as applicable	Tonnes Yr-2013-14: 7500000 Metric Tonnes Yr-2014-15: 7500000 Metric Tonnes Yr-2015-16: 7500000 Metric Tonnes Yr-2016-17: 7500000 Metric Tonnes	Tonnes Yr-2013-14: 3720613 Metric Tonnes Yr-2014-15: 5132648 Metric Tonnes Yr-2015-16: 5773563 Metric Tonnes Yr-2016-17: 6298723 Metric Tonnes	
3q	General remarks of inspecting officer on method of mining etc.	NIL		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Proposal has been given for separate dumping of top soil, OB and Mineral reject.	Carried out as per proposal.	-
4b	Location of topsoil, OB & mineral reject dumps	Topsoil: N2386303 - N2386132 and E602767 – E602897 OB/Waste: N238478 – N2384131 and E603003 – 603604 Screen Reject: N2384232 – N2383939 and E602575 - E602912	Topsoil: N2386303 - N2386132 and E602767 – E602897 OB/Waste: N238478 – N2384131 and E603003 – 603604 Screen Reject: N2384232 – N2383939 and E602575 - E602912	-
4c	Number of dumps within lease area and outside lease area	Within Lease area: 06 nos.	Within Lease area: 06 nos.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Beyond ultimate pit limit	Beyond ultimate pit limit	-
4e	Number of active & alive dumps	03	03	
4f	Number of dead dumps	03	03	
4g	Number of dumps stabilised	01	01	(Stabilized in earlier year)
4h	Whether Retaining wall or garland drain all along dumps are there	(i) Proposal given for garland drains around the toe of	(i) Constructed garland drains around the toe of	Deviation has been pointed

		dump. (ii) Proposal given for construction of parapet wall/stone wall around the toe of dump	dump. (ii) Parapet wall/stone wall around the toe of dump has not been constructed.	out.
4i	Length of Retaining wall or garland drain all along dump	Not mentioned in the approved document.	Constructed garland drains around the toe of dump	-
4j	Number of settling ponds	Not mentioned in the approved document.	Not applicable	-
4k	Specific comments of inspecting officer	NIL		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Proposal has been given in the approved document as the area is not matured for backfilling.	Not applicable.	
5b	Area under backfilling of mined out area	Area not matured for backfilling	Not applicable.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Based on the availability – used for spreading for Plantation	Spread at lease boundary for plantation	
5d	Total area fully reclaimed & rehabilitated	Area not matured for reclamation and rehabilitation.	Not applicable.	
5e	General remarks of inspecting officer on backfilling, reclamation etc	NIL		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	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.	Submitted	NIL	
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of	Area not matured for reclamation and rehabilitation.	Not applicable.	

	plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year			
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	Area not matured for reclamation and rehabilitation.	Not applicable.	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	2500 nos. 1.0 Ha Plantation	8200 nos. 3.28 Ha Plantation	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Monitoring of ambient air, water, noise level, Ground vibration	Monitoring has been done as per MoEF norms	
6f	General remarks of inspecting officer on PMCP compliance & progressive	NIL		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	7500000 Metric Tonnes	ROM dispatched: 6298723 Metric Tonnes	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Dry crushing and screening	Dry crushing and screening	-
7c	Different grade of mineral sorted out at mines	Dry crushing and screening	Dry crushing and screening	-
7d	Any beneficiation process at mines	Screening Proposed	Screening available but not done due to lower LSF requirement	-
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	NIL		

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and utilization of topsoil proposed	Complied – top soil utilized for plantation	-
8b	Concurrent use or storage of topsoil	Concurrent use (based on the available area) proposed	Top soil used concurrently	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden, waste rock, rejects is proposed	Complied	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Area not matured for reclamation and rehabilitation.	Not applicable.	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Area not matured for reclamation and rehabilitation.	Not applicable.	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Not mentioned in the approved document	Plantation has been done as per approved species by DFO.	-
8g	Survival rate	Not mentioned in the approved document	78%	-
8h	Water sprinkling on roads to control airborne dust	Water sprinkling by Water Tanker	Water sprinkling has been done with the Water Tanker	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	NIL		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – Aug 2017 A.R. submitted upto- F.Y. 2016-17	-

S. N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri Mukesh Kumar Thawait Geologist: Shri Prateek Jha Manager: Shri P K	NIL	

		Upadhyay		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 174.362 Ha Reclaimed/Rehabilitated: 2.680 Ha Dump: 27.020 Ha Others: 9.40 Ha.	NIL	
9d	Scrutiny of Annual return on afforestation	8200 nos. of saplings have been planted.	NIL	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Over Burden/ Screen Reject: CaO: 25%	NIL	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock: NIL	NIL	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-Mine Price: Rs. 220.81 Production Cost: Rs. 220.81	NIL	
9i	Scrutiny of Annual return on fixed assets	Rs. 25.59 Crores	NIL	
9k	Scrutiny of Annual return on mining machineries	Given	NIL	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

Last inspection: Shri R. K. Das Sr. ACOM, IBM Raipur dated 24/06/2016

No outstanding violations.

Violations pointed out during inspections: Rule 11(1), 35 and 48 of MCDR, 2017.

नियम	उल्लंघन के प्रकार का विस्तृत ब्योरा
Rule 11(1)	The following deviations have been found in the mine from the approved Mining Plan vide 314(3)/2012/MCCM(CZ)/MPLN-33 Nagpur dated 14/10/2013 for the period of 2013-14 to 2017-18: <u>Borehole:</u> During Mining Plan period, it has been proposed to carry out 08 nos of Core Boreholes up to a cumulative depth of 400 meters; whereas, 04 nos. of DTH boreholes with a cumulative depth of 120 meters have been drilled so far. <u>Protective Measures:</u> There was a proposal given for construction of parapet wall/stone wall around the toe of dump, the same has not been constructed.
Rule 35	Soft copy of the high resolution satellite image obtained from CARTOSAT-2 satellite LISS-IV sensor on the scale of cadastral map, as on the 31st day of March for the Financial year 2016-17, covering the mining lease and an area of two kilometres have not been submitted.

Rule 48	Reference Chip samples of 04 nos. of DTH boreholes, drilled during plan period have not been preserved.
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Shri S. Kartikeya
Jr. Mining geologist
Date of inspection 23/08/2017
(Name of inspecting officer with designation and date)