

# MCDR INSPECTION REPORT

## 1.0 GENERAL

SN	Particulars	Details
1	Name of inspecting office & designation	S. Kartikeya, Jr. Mining Geologist, Indian Bureau of Mines, Raipur
2	Date of inspection	04/06/2018
3	Name of the Mine	Kukurdih Limestone Mine
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	Lease Area: 251.527 Ha (Non-Forest)
5	Mine Code	38CHG19002
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 "B" Wing, Ahura Centre 2nd Floor, Mahakali Caves Road, Andheri (E), Mumbai 400093 Phone No- 022-66917800 Fax No – 022-66928109 Email - ajit.ostwal@adityabirla.com
8	Village	Kukurdih
8	Taluka / Mandal / District	Tehsil: Balodabazar, District: Balodabazar
10	State	Chhattisgarh
11	Post office & PIN	Balodabazar, Pin Code: 493 332
12	Nearest police station	Balodabazar
13	Nearest Railway station	Bhatapara
14	Date of Grant of Mining Lease	04/11/2010 to 03/11/2040 (30 Years)
15	Date of Execution	04/11/2010
16	Date of opening of Mine	10/10/2016
17	Date of first Renewal, if applicable and its period & expiry	As per MMDR Amendment Act, 2015 section 8A Validity of the lease period: 04/11/2030 to 03/11/2060 (20 Years) Supplementary lease deed has not been made for extended period.
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 Phone No.: 022-66917421 Email: ajit.ostwal&adityabirla.com Date of Appointment – 18/07/2017

21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Kushal Chandra Jain Agent & Sr. Vice President (Mines) Kukurdi Limestone Mines Grasim Vihar Rawan, Tahsil – Simga, District – Baloda Bazar Bhatapara (Chhattisgarh) Phone no – 09904201127 Email – kushal.jain@adityabirla.com Date of appointment – 18/07/2017
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Girish Pandey Kukurdi Limestone Mines Grasim Vihar Rawan, Tahsil – Simga, District – Baloda Bazar Bhatapara (Chhattisgarh) Phone No- 09977600564 Email- girish.k.pandey@adityabirla.com Date of appointment- 06/05/2018
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Girish Pandey Qualification – BE (Mining) Total Experience – 11 years Address - Rawan Jhipan Limestone Mine Grasim Vihar Rawan, Tahsil – Simga, District – Baloda Bazar Bhatapara (Chhattisgarh) Phone No- 09977600564 Email- girish.k.pandey@adityabirla.com Date of appointment- 06/05/2018
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Shri Prateek Jha Qualification: MSc (Geology) Experience: 07 Years Address - Rawan Jhipan Limestone Mine Grasim Vihar Rawan, Tahsil – Simga, District – Baloda Bazar Bhatapara (Chhattisgarh) Phone No- 8889064449 Email- prateek.jha@adityabirla.com Date of appointment-30/05/2018
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	<b>Mining Plan</b> approved vide letter no. 314(3)/2008-MCCM(CZ)MP-24 Nagpur dated 18/12/2008 Proposal Period: 2010-11 to 2014-15 <b>Modified Mining Plan</b> approved vide letter no. RAP/LST/MPLN-1003/NGP/2015 Nagpur dated 07/04/2016 Proposal Period: 2015-16 to 2019-20
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Not Applicable.
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Opencast, Underground)	Opencast

29	Category (Fully Mechanised, Others or Manual)	Category 'A' Fully Mechanised
30	Captive/Non Captive	Captive
31	Existing EC Limit and validity	EC obtained from the Ministry of Environment, Forest and Climate Change, Government of India vide letter no. J-11015/274/2010-IA.II (M) New Delhi dated 24/02/2016. Production: 5.0 MTPA (ROM) Valid for 30 years.
32	Status of Financial Assurance	As per MCDR, 2017, Bank Guarantee of Rs. 2,67,02,500/- submitted. Valid Up to: 31/03/2020

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	<b>2015-16:</b> 38 nos. of core boreholes with the cumulative depth of 660 meters. <b>2016-17:</b> 20 nos. of core boreholes with the cumulative depth of 1200 meters. <b>2017-18:</b> 20 nos. of core boreholes with the cumulative depth of 1200 meters.	<b>2017-18:</b> 83 nos. of core boreholes with the cumulative depth of 4598.50 meters.	NIL
1b	Exploration over lease area for Geological axis 1 or 2.	Under G1 Category: 251.527 Ha (During 2015-16 to 2017-18)	Under G1 Category: 231.277 Ha Under G2 category: 20.250 Ha	NIL
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not mentioned in the approved document.	<b>Exploration Agency:</b> Synergy Geotech (668.5m) Rs 9,52.612/- & Central Drilling Associates <b>Expenditure:</b> 4598.50m Rs 1,19,79,092.50 /-	NIL

1d	Balance area to be explored to bring Geological axis in 1 or 2	Under G1 Category: 251.527 Ha (During 2015-16 to 2017-18)	Under G1 Category: 231.277 Ha Under G2 category: 20.250 Ha	NIL
1e	Balance reserves as on 01.04.2018 (in Million Tonnes)	Under (111): 47.73 Million Tonnes Under (121): 4.42 Million Tonnes Under (122): 76.83 Million Tonnes Under (211): 36.25 Million Tonnes Under (222): 38.34 Million Tonnes	Under (111): 52.73 Million Tonnes Under (121): 4.42 Million Tonnes Under (122): 76.83 Million Tonnes Under (211): 36.25 Million Tonnes Under (222): 38.34 Million Tonnes	NIL production from 2015-16 to 2017-18. April 2018-May 2018: NIL production.  Deviation has been pointed out for NIL production of Mineral/Ore from the mine.
1f	General remarks of inspecting officer on geology, exploration etc.	NIL production has been reported from the date of opening of the mine up to the month of May 2018.		

## **2.0 Development**

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	<b>F.Y. 2017-18:</b> in between UTM Co-ordinates Easting X=612688-613297 Northing Y=2395119-2395680	<b>F.Y. 2017-18:</b> in between UTM Co-ordinates Easting X=612674-613417 Northing Y=2395071-2395811	Excess development was done towards southern side and eastern side from the proposed coordinates. Deviation has been pointed out.
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	Topsoil/OB: 01 no. Mineral/Ore: 02 nos.	Topsoil/OB: 01 no.	Nil Production during 2015-16 to 2017-18
2c	Stripping ratio or ore to OB ratio	1:0.34	Could not be ascertained as NIL production since last three financial years.	-

2d	Quantity of topsoil generation in m3	53282 cubic meter	16129 cubic meter	-
2e	Quantity of overburden generation in m3	519913 cubic meter	311896 cubic meter	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Nil Production during 2015-16 to 2017-18. Only removal work of waste/OB/Topsoil has been observed.		

### **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	2017-18: 30,00,000 Metric Tonnes of ROM	NIL	Deviation for NIL production of ROM has been pointed out.
3c	Recovery of salable/usable mineral from ROM production	74%	NIL	--do--
3d	Quantity of mineral reject generation	60,000 Metric Tonnes	NIL	--do--
3e	Grade of mineral reject generation and threshold value declared	CaO-26.8 %	NIL	--do--
3f	Quantity of sub-grade mineral generation	Not mentioned in the approved document	Not applicable	-
3g	Grade of sub-grade mineral generation	Not mentioned in the approved document	Not applicable	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised, Dry Crushing and Screening	Could not be ascertained as NIL production since last three financial years.	-
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not mentioned in the approved document	Not applicable	-
3j	Provision of drilling & blasting in mineral benches	Dia: 152mm Burden: 3.0-5.0m Spacing: 6.5-7.0m Depth: 6.0-8.8m & Dia: 115mm Burden: 2.0-4.0m Spacing: 5.0-	Could not be ascertained as NIL production since last three financial years.	-

		5.5m Depth: 3.0-8.8m		
3k	Provision of mining machineries in mineral benches	03 nos. of Excavator: 6.0 cubic meter 08 nos. of Dumpers: 55 Tonnes Capacity	Could not be ascertained as no machinery record and logbook has been maintained.	Deviation has been pointed out.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB/Topsoil: 4.0 – 6.0 meters Mineral/Ore: 8.0-10.0 meters	OB/Topsoil: 2.0 – 3.0 meters Mineral/Ore: Not developed yet.	Deviation for NIL production has been pointed out.
3m	Total area covered under excavation/pits	27.886 Ha.	13.061 Ha.	-
3n	Ore to OB ratio for the pit/mine during the year	1:0.34	Could not be ascertained as no mineral has been excavated so far.	-
3o	Total area put in use under different heads at the end of year	Pit- 53.67 Ha. Waste/reject- 22.83 Ha. Others- 20.06 Ha	Pit- 13.06 Ha. Waste/reject- NIL Ha. Others- 5.461 Ha	-
3p	Production of ROM mineral during last five-year period, as applicable (in Metric Tonnes)	Yr- 2013-14: 5000000.00 Metric Tonnes Yr- 2014-15: 5000000.00 Metric Tonnes Yr- 2015-16: 500000.00 Metric Tonnes Yr- 2016-17: 1500000.00 Metric Tonnes Yr- 2017-18: 3000000.00 Metric Tonnes	Yr- 2013-14: NIL Metric Tonnes Yr- 2014-15: NIL Metric Tonnes Yr- 2015-16: NIL Metric Tonnes Yr- 2016-17: NIL Metric Tonnes Yr- 2017-18: NIL Metric Tonnes	Deviation for NIL production has been pointed out.
3q	General remarks of inspecting officer on method of mining etc.	NIL production has been observed during last three financial years.		

#### 4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	<b>Topsoil:</b> Along 7.5 barrier zone and shall be utilised for plantation. <b>OB/IB/Waste:</b> UTM Coordinates 2395597 to	Top Soil and the Overburden was been kept at western side and south – central part of the lease area	Deviation has been pointed out

		2395954 Northing and 614071 to 614514 Easting <b>Screen Reject:</b> UTM Co-ordinates 2394203 to 2394262 Northing and 612975 to 613143 Easting		
4b	Location of topsoil, OB & mineral reject dumps (Range in UTM/Local Coordinate/Plot No./Location)	<b>Topsoil:</b> Along 7.5 barrier zone and shall be utilised for plantation. <b>OB/IB/Waste:</b> UTM Coordinates 2395597 to 2395954 Northing and 614071 to 614514 Easting <b>Screen Reject:</b> UTM Co-ordinates 2394203 to 2394262 Northing and 612975 to 613143 Easting	Top Soil and the Overburden was been kept at western side and south – central part of the lease area	Deviation has been pointed out
4c	Number of dumps within lease area and outside lease area	01 no.	Top Soil and the Overburden was been kept at western side and south – central part of the lease area	Deviation has been pointed out
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	Beyond ultimate pit limit	Beyond ultimate pit limit	-
4e	Number of active & alive dumps	01 no.	04 nos. along lease boundary	-
4f	Number of dead dumps	Not proposed in the approved document.	Not applicable.	-
4g	Number of dumps stabilised	Not proposed in the approved document.	Not applicable.	-
4h	Whether Retaining wall or garland drain all along dumps are there	Arrangement of garland drain in and around the dump to provide draining of rain water. Parapet wall/stone wall will be provided around dump.	Garland drain has been made around the dump of waste/OB/topsoil.	NIL production since last three financial years.
4i	Length of Retaining wall or garland drain all along dump	Not mentioned in the approved document	Not applicable.	-

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	Not proposed in the approved document.	Area not matured for backfilling.	NIL production since the date of opening of mine.
5b	Area under backfilling of mined out area	Not proposed in the approved document.	Area not matured for backfilling.	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	Along 7.5 barrier zone and shall be utilised for plantation.	Generated topsoil has been utilised in plantation.	-
5d	Total area fully reclaimed & rehabilitated	Not proposed in the approved document.	Area not matured for backfilling.	NIL production since the date of opening of mine.
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 23. Details should be given in the format as given in Annexure-20.	Annual report on PMCP submitted under rule 23 of MCDR, 2017 has not been submitted.	Report not submitted	Deviation has been pointed out.
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 plants	Not proposed.  4.05 ha. up to the end of Plan period 3000 nos.  5500 nos.	Not applicable  No record maintained 5000  5000	Deviation for less plantation has been pointed out.



	v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	NIL  Rs. 75,000/-	NIL  No record maintained	
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	Area Not matured for reclamation and rehabilitation.	Not applicable.	-
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposal has been given the approved document.	Carried out as per proposal.	-
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	30,00,000.00 Metric Tonnes	NIL production since the date of opening of mine.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Dry Crushing and Screening.	NIL production since the date of opening of mine.	-
7c	Different grade of mineral sorted out at mines	(i) + 60mm size ore will be sent to crusher. (ii) -60mm size ore will be sent to 20mm screen. (iii) + 20mm material will be sent to cement. (iv) -20mm ore will be sent to reject dump.	NIL production since the date of opening of mine.	-
7d	Any beneficiation process at mines	Not proposed in the approved document	Not applicable.	-

7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	NIL
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## **8.0 Environment**

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	Proposal has been given for removal of Topsoil. Along 7.5 barrier zone and shall be utilised for plantation.	Top Soil and the Overburden was been kept at western side and south – central part of the lease area	Deviation has been pointed out.
8b	Concurrent use or storage of topsoil	Along 7.5 barrier zone and shall be utilised for plantation.	Top soil has been utilised for plantation over OB/Waste/IB dump	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Proposal has been given for separate dumping at different locations.	Top Soil and the Overburden was been kept at western side and south – central part of the lease area	Deviation has been pointed out.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed in the approved document.	Area Not matured for reclamation and rehabilitation.	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed in the approved document.	Area Not matured for reclamation and rehabilitation.	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 44)	Regular monitoring for Ambient Air, Quality, Water Quality and Noise Vibration have been proposed.	Carried out as per proposal.	-
8g	Survival rate	Not mentioned in the approved document.	Approx 80%	-
8h	Water sprinkling on roads to control airborne dust	Proposal has been for water sprinkling on road.	Carried out as per proposal.	-
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 – May 2018 A.R. submitted upto- 2017-18	NIL

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	<b>Manager:</b> Shri Mayank Saini <b>Mining engineer:</b> Shri Mayank Saini <b>Geologist:</b> Shri Prateek Jha	<b>Manager:</b> Shri Mayank Saini <b>Mining engineer:</b> Shri Mayank Saini <b>Geologist:</b> Shri Prateek Jha	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 13.061 Ha. Reclaimed area: 1.524 Ha. Waste: 3.937 Ha. Others: 2.559	Pit: 13.061 Ha. Reclaimed area: 1.524 Ha. Waste: 3.937 Ha. Others: 2.559	-
9d	Scrutiny of Annual return on afforestation	5000 nos. of plants With 80% survival rate	5000 nos. of plants With 80% survival rate	-
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NIL generation	NIL production since the date of opening of mine.	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL generation	NIL production since the date of opening of mine.	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	NIL generation	NIL production since the date of opening of mine.	-
9i	Scrutiny of Annual return on fixed assets	Rs. 654313029/-	Rs. 654313029/-	-
9k	Scrutiny of Annual return on mining machineries	01 no. of Shovel with 1.0 cubic meter bucket 03 nos. of Tippers with 18.0 cubic meter capacity	01 no. of Shovel with 1.0 cubic meter bucket 03 nos. of Tippers with 18.0 cubic meter capacity	-

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

No outstanding violations.

Date of Last Inspection, Name and Designation of the Inspecting Officer:

No previous inspection was done in this mine. As per office records, the mining operation was commenced on 10/10/2016.

Details of the Violations Pointed-out during Inspections:

नियम	उल्लंघन के प्रकार का विस्तृत ब्यौरा
<b>Rule 11 (1)</b>	<p>The following deviations have been found in the mine from the approved Modified Mining Plan vide letter no. RAP/LST/MPLN-1003/NGP Nagpur dated 07/04/2016 for the period of 2015-16 to 2019-20:</p> <p><b>Development:</b> (i) In the approved Modified Mining Plan, there was a proposal given for the development and production of mineral during the year 2017-18 within UTM Coordinates 2395119 to 2395680 northing (Y) and 612688 to 613297 easting (X) of the lease area. Whereas, excess development was done towards southern side and eastern side from the proposed coordinates.</p> <p>(ii) Proposal of ROM production was given for 2015-16: 5,00,000 Metric Tonnes; 2016-17: 15,00,000 Metric Tonnes; 2017-18: 30,00,000 Metric Tonnes; whereas NIL production has been achieved/done so far.</p> <p>(iii) There was a proposal given for stacking of Top Soil along 7.5 m barrier zone of the southern periphery of the lease boundary, where as Top Soil and the Overburden was been kept at western side and south – central part of the lease area.</p> <p><b>Afforestation:</b> There was a proposal given for plantation of 5500 nos of plants during 2015-16, to 2017-18, whereas 5000 nos of the plantations have been done.</p>
<b>Rule 19 (1), (2) &amp; (3)</b>	Log book of heavy earth moving machinery used in the mines is not been maintained and made available during inspection.
<b>Rule 26 (2)</b>	A yearly report as per the format specified by the Indian Bureau of Mines, before 1st day of July every year setting forth the extent of protective and rehabilitative works carried out has not been submitted for the year 2016-17.
<b>Rule 33</b>	Updated print copy of the surface geological plan and sections has not been submitted before 30th day of June for the year 2016-17.
<b>Rule 48 (1)</b>	Borehole records in prescribed form J have not been maintained. NABL accredited test reports of major radicals have not been mentioned.

**(Shaival Kartikeya)**  
**Jr. Mining Geologist**  
**Indian Bureau of Mines, Raipur**  
**Date of Inspection: 04/06/2018**  
 (Name of the Inspecting Officer and Designation and Date)