

## MCDR INSPECTION REPORT

### 1.0 GENERAL

SN	Particulars	Details
1(a)	Name of the Mine	Kovaya Limestone Mines, Survey Nos-Variou
1(b)	Name of Inspecting Officer & Designation	Sanjay M. Girhe, Sr. Mining Geologist
1(c)	Accompanying Mines Representatives	Mr. Pramod, Geologist, Mr. Vinay S. Chitale, Mining Eng.
1(d)	Type of Inspection	Star Ratings/MCDR
1(e)	Date of Inspection	03.02.2019
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	953.3253 Ha. (No forest land falls within Lease area)
3	Mine code	38GUJ02009
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/441/2011
5	Name of the lessee, Address, phone, email and fax number	M/s UltraTech Cement Limited, Unit: Gujarat Cement Works Village – Kovaya, Taluka – Rajula, Dist. – Amreli. Pin-365541 Ph No-02794-283081, Fax No-02794283087 Email:vivek.uplanchiwar@adityabirla.com
6	Village	Kovaya
7	Taluka/Mandal	Rajula
8	District	Amreli
9	Pin code	365541
10	State	Gujarat
11	Post office	Kovaya
12	Nearest police station	Marine Police Station, Pipava
13	Nearest Railway station	Rajula Jn.
14	Date of Grant of Mining Lease	07.06.1995
15	Date of Execution	01.03.1996 (As per section 8A(5) of MMDR Act,2015 lease period deemed to be extended up to 28.02.2046 i.e. for 50 years (Captive Mining Lease)
16	Date of opening of Mine	04.09.1995
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Nominated Owner – Mr. K. C. Jhanwar, Ahura Centre, A-Wing, 1 <sup>st</sup> Floor, Mahakali Caves Road, Andheri (E), Mumbai. Pin- 400093 Telephone - 022-66917421 Email- ajit.ostwal@adityabirla.com Date of Appointment – 19.10.2018
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Vivek Khosla, M/s UltraTech Cement Limited, Unit: Gujarat Cement Works, Village – Kovaya, Taluka – Rajula, Dist. – Amreli. Pin-365541 Mobile – 7622001734 Email- vivek.khosla@adityabirla.com Date of Appointment – 28.05.2015
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Vinay S. Chitale M/s UltraTech Cement Limited Unit: Gujarat Cement Works

		Village – Kovaya, Taluka – Rajula, Dist. – Amreli. Pin-365541 Mobile – 9922413048 Email- vinay.chitale@adityabirla.com Date of Appointment – 01.07.2016
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Vinay S. Chitale M/s UltraTech Cement Limited Unit: Gujarat Cement Works Village – Kovaya, Taluka – Rajula, Dist. – Amreli. Pin-365541 Mobile – 9922413048 Email- vinay.chitale@adityabirla.com Date of Appointment – 01.07.2016
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Yes Appointed, Mr. Pramodaran M, Geologist, Date of Appointment-29.12.2017
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan under rule 22(4) of MCR,1960 approved vide letter No682(23)(416)/43-MCCM(N)-UDP dt. 09.11.1994
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	a) Scheme of Mining under rule 12 of MCDR,1988 approved vide letter No682(23)(MS-123)/2000MCCM(N)-UDP dt. 11.05.2001 b) Modified Scheme of Mining under rule 10 of MCDR,1988 approved vide letter No-682(23)(217/2003MCCM(N)-UDP dt. 30.10.2003 c) Scheme of Mining under rule 12 of MCDR,1988 approved vide letter No682(23)(MS-340)/2006MCCM(N)-UDP dt. 16.06.2006 d) Scheme of Mining under rule 12 of MCDR,1988 approved vide letter No682(23)(MS-596)/2010MCCM(N)-UDP dt. 30.11.2011
27	Mineral(s) granted in lease and proved for mining	Limestone & Marl
28	Method of Mining(Opencast, Underground)	Opencast Mining
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
30	Captive/Non Captive	Captive

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

#### Exploration

S N	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
1a	Backlog of previous year	No backlog of previous year 2016-17	NA	
1b	Exploration over lease area for Geological axis 1 or 2.	32 boreholes proposed for Geological axis 1	32 core boreholes drilled with metreage of 800 mtrs on grid pattern 200m x 200m	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	-	M/s Geo-Mine Consultancy, Gandhinagar. Expenditure- Rs. 15.35 lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No further proposals	Exploration Status (G1 – 698.56 ha., G2 – 60.24 Ha. & G3 194.5253 Ha.)	
1e	Balance reserves as on	<u>Reserves (In Mill Tonne)</u>	<u>Reserves (In Mill Tonne)</u>	

	01.04.2018	Proved (111) :118.03 Probable(121&122):5.67 <u>Resources(In Mill Tonne)</u> Feasibility(211):76.37 Pre-Feasibility:17.65 Inferred(333):59.41	Proved (111) :108.18 Probable(121&122):5.67 <u>Resources(In Mill Tonne)</u> Feasibility(211):76.37 Pre-Feasibility:17.65 Inferred(333):59.41	
1f	General remarks of inspecting officer on geology, exploration etc.	Extensive exploration carried in the area in phase wise manner 1972-75: 60 BH Drilled, 1048.02 Meterage,(Agency :By CGM) Gujarat 1991-92 : 151 BH Drilled, 2937.00 Meterage,(Agency- M/s ACC) 1995-96 } 228 BH Drilled, 3237.49 Meterage, (Agency-M/s. ACC & Holtec 2003-04 } 2012-14: 43 BH Drilled, 1349.10 Meterage, (Agency-M/s. BK Diamonds)		

## **2.0 Development**

S N	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
2a	Location of development w.r.t. lease area	Working proposed at 15 locations between grid NA1600 to (-)400 & EW6500 to (-)300	Working carried out at proposed locations but deviations were observed	Violation of Rule 11(1) was pointed out for this deviation
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches in Top soil & mineral proposed	Yes, maintained as per the proposals	
2c	Stripping ratio or ore to OB ratio	1: 0.004	1: 0.016	
2d	Quantity of topsoil generation in m <sup>3</sup>	37824 M <sup>3</sup>	77677 M <sup>3</sup>	For taking land possession
2e	Quantity of overburden generation in m <sup>3</sup>	No Proposals	Nil	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Except top soil no other OB or inter burden encountered during the course of mining operations. Marl is not feasible to segregate separately.		

## **3.0 Exploitation**

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
3a	Number of pits proposed for production	Working proposed in 8 pits	Working carried out at proposed locations with some deviations	Violation of Rule 11(1) was pointed out for this deviation
3b	Quantity of ROM mineral production proposed	Proposed Production – 7.85 million Tonnes	4.79 million Tonnes	Lagging in production
3c	Recovery of saleable/usable mineral from ROM production	100% recovery of usable mineral from ROM	100% recovery of usable mineral from ROM by systematic blending with marl	
3d	Quantity of mineral reject generation	No Proposals	Nil	--
3e	Grade of mineral reject generation and threshold value declared	No Proposals	Nil	--
3f	Quantity of sub-grade mineral generation	No Proposals	Nil	--
3g	Grade of sub-grade mineral generation	No Proposals	Nil	--
3h	Manual / Mechanised method adopted for segregating from	No Proposals	Nil	--

	ROM			
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposals	Not proposed but earlier Beneficiation study was carried out by IBM for utilization of low grade limestone/Marl	
3j	Provision of drilling & blasting in mineral benches	Proposed by Drill-IBH-10 (Atlas COPCO, 152mm dia drill	Done by Drill-IBH-10 (Atlas COPCO, 152mm dia drill	--
3k	Provision of mining machineries in mineral benches	Excavator L & T300CK Surface Miner-350TPH Drill IBH-10 (Atlas Copco) Dumper-35Tonnes Loader cum backhoe	Excavator L & T300CK Surface Miner-350TPH Drill IBH-10 (Atlas Copco) Dumper-35Tonnes Loade cum backhoe	--
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of 6 to 8m proposed in mineral.	Bench height is maintained as per the proposals	--
3m	Total area covered under excavation/pits	As per the approved MP total 657.51Ha area was proposed to be excavated	656.673 Hectares as on 31.03.2018	--
3n	Ore to OB ratio for the pit/mine during the year	1:0.004	1:0.022	--
3o	Total area put in use under different heads at the end of year	Pit-578.568 OB storage-2.06 Infrastructure-3.0 Road-2.0	Pit-656.673 ha Reclaimed-87.47 ha Occupied by plant/building-5.0 ha Waste/OB Soil-2.06 ha	--
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2017-18 - 7850026 Yr-2016-17 - 7850555 Yr-2015-16 - 8730000 Yr-2014-15 - 8730000 Yr-2013-14 - 8730000	Yr-2017-18 - 4793469 Yr-2016-17 - 5061172 Yr-2015-16 - 5275865 Yr-2014-15 - 5343116 Yr-2013-14 - 5379079	All quantity in Tonnes
3q	General remarks of inspecting officer on method of mining etc.	Opencast mining by fully mechanised means by surface miner & conventional method.		

#### **4.0 Solid Waste Management-Dumping**

S N	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	37824 CuM Top soil proposed to stacked on earmarked locations	77677 M <sup>3</sup> generated & stacked as per Proposal	Separate dumping of top soil proposed
4b	Location of topsoil, OB & mineral reject dumps	Not Proposed	As per Proposal	--
4c	Number of dumps within lease area and outside lease area	Single	Single within lease area (Top Soil Stacked)	--
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	NA	--
4e	Number of active & alive dumps	NA	NA	--
4f	Number of dead dumps	Nil	Nil	--

4g	Number of dumps stabilised	Nil	Nil	--
4h	Whether Retaining wall or garland drain all along dumps are there	NA	NA	--
4i	Length of Retaining wall or garland drain all along dump	2.129 KM		--
4j	Number of settling ponds	NA	NA	--
4k	Specific comments of inspecting officer	Lease area is devoid of any OB, only thin layer of top soil encountered. Entire ROM is being utilized in cement plant & blended with outsourced high grade limestone.		

### **5.0 Solid Waste Management-Backfilling**

S N	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not Proposed	Backfilling proposed previously mined out areas	--
5b	Area under backfilling of mined out area	0.40 ha.	1.13 ha	Plantation done during 2017-18 (5000 Nos.)
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	2.0 Ha.	4.0 ha	--
5d	Total area fully reclaimed & rehabilitated	NA	87.47 ha	--
5e	General remarks of inspecting officer on backfilling, reclamation etc	Most mined out area was reclaimed & rehabilitated previously over the marl/low grade limestone horizon. But, presently, this Marl/low grade zone being mined to conserve the mineral.		

### **6.0 Progressive Mine Closure Plan**

S N	Item	Proposals (2017-18)	Actual work (2017-18)	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.	To be submitted within prescribed time limit	Submitted vide letter no. UTCL/GCW/KLM/2018-19/39 dated 30.06.2018	--
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 v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	2.0  5000 Nos  500 M Wire fencing	i) 4.0 ha  ii) 4.0 ha  iii) 7100 saplings  iv) 228632 saplings v) Nil  vi) Rs. 36.42 lakhs	--

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	NA	i) 2.03 ha ii) Soil spread and reclaimed 2.03 ha iii) Afforestation on the backfilled area – 2.03 Ha. iv) Nil v) Nil	--
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	NA	No waste land available in the ML. Afforestation done only on reclaimed area as marked on plate No-5A&5B	--
6e	Compliance of Environmental monitoring (core zone & buffer zone)		Fortnightly monitoring done in core zone and quarterly monitoring done in buffer zone	--
6f	General remarks of inspecting officer on PMCP compliance & progressive	PMCP report in prescribed form submitted on 30.06.18 and PMCP works carried out as per the proposals. Huge plantation carried out by the lessee in & around the mine.		

### **7.0 Mineral Conservation**

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	7850026MT ROM proposed to be produced	3595187MT ROM dispatched and no sorting of mineral	--
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not Proposed	NA	--
7c	Different grade of mineral sorted out at mines	Not Proposed	NA	--
7d	Any beneficiation process at mines	Not Proposed	NA	--
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Limestone is being conserved very systematically as entire ROM is consumed in cement plant. Marl is also being consumed in limestone along with some outsourced high grade limestone.		

### **8.0 Environment**

SN	Item	Proposals (2017-18)	Actual work (2017-18)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal & utilization is proposed	Soil removed and utilised for plantation	--
8b	Concurrent use or storage of topsoil	Concurrent use of top soil is proposed as area is readily available for backfilling	Top soil used for plantation	--
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposals	No OB encountered in lease area except top soil	--
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	-	No overburden to refill. Top soil is spreaded and plantation carried out	--

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	0.40Ha area proposed for reclamation	Every year reclamation and rehabilitation carried out by plantation	--
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Total 5000 Saplings proposed to be planted over 2.0 Ha area	Total 7100 saplings planted	--
8g	Survival rate	90%	87.5%	--
8h	Water sprinkling on roads to control airborne dust	Water spraying on mines haul road, loading, unloading points proposed.	Water sprinkling carried out on the haul road, unloading points regularly	--
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Aesthetic beauty in and around mine area is excellent & huge plantation carried out by the lessee in & around mining lease area.		

### 9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – 31/01/2019 A.R. submitted upto- 31/03/2018	

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	Mr. Vinay S. Chitale appointed as ME Mr. Pramodaran M appointed as Geologist	Both Mining engineer & Geologist were present during inspection	--
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit-656.67Ha Reclaimed& Reha-87.47Ha Infrastructure-5.0Ha Other-2.06Ha	Nil	--
9d	Scrutiny of Annual return on afforestation	7100 Nos saplings planted with survival rate of 87.5%	Excellent plantation work done to enhance the aesthetic beauty of the lease area	--
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No rejection	Mineral reject or sub-grade which is encountered as Marl is being blend with outsourced high grade limestone	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	<u>Limestone:</u> ROM:Production:3740152MT Despatched:3595178MT Closing Stock:144965MT <u>Marl:</u> ROM:Production:1246604MT Despatched:1198282MT Closing Stock:48322MT	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Limestone: 199.30/MT Marl:172.88/MT	Violation of Rule 45(5)(C) of MCDR,2017 pointed for deviation in ex-mine price	
9i	Scrutiny of Annual return on fixed assets	Fixed Assets given as 1013319631	Nil	
9k	Scrutiny of Annual return on mining machineries	Excavator L & T300CK Surface Miner-350TPH	Proposed machineries being	--

		Drill IBH-10 (Atlas Copco) Dumper-35Tonnes Loader cum backhoe	used in excavation	
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10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:- The last inspection of mine was carried out on dtd 10.07.2017 and no violations were pointed. Present inspection was carried out in connection with evaluation of Star Ratings Templates/MCDR and during the inspection violations of rules 11(1), 45(5)(C ) & 54(a) of MCDR,2017 were pointed out and accordingly violation letter was issued.

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