

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of inspecting office & designation ,Accompanying Person	Shri Rajesh Kumar Das (Sr. Asst. Controller of Mines),Shri Anil Kawale, Manager Mine & Shri Vijesh Kushwaha, Geologist
2	Date of inspection	16.01.2020
3	Name of the Mine	Paraswani Limestone Mines
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	997.355 hect. Non- forest
5	Mine code	38MPR28017
6	IBM Registration Number under rule 45 of MCDR, 1988	IBM/441/2011
7	Name of the lessee, Address, phone, email and fax number	UltraTech Cement limited Hirmi Cement Works PO – Hirmi, Dist. BalodaBazar- Bhatapara Phone - 07726281217/18/19/20/21 Fax - 07726-281572
8	Village	Hirmi
9	Taluka/Mandal /District	Simga
10	State	Chhattisgarh
11	Post office & PIN	Hirmi, 493195
12	Nearest police station	Suhela
13	Nearest Railway station	Tilda
14	Date of Grant of Mining Lease	15.12.1992
15	Date of Execution	22.02.1993
16	Date of opening of Mine	01.04.1993
17	Date of first Renewal, if applicable and its period & expiry	22.02.2013 for 30 years and valid up to 21.02.2043
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	09.02.2012
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment.	Mr. K.C. Jhanwar Ahura Centre, B Wing, 2nd floor, Mahakali Caves Road Andheri (E) Mumbai 400093. Mobile- 9702474200 - ajit.ostwal@adityabirla.com DOA: 18.10.2018
21	Name of the Mine Agent with Address, phone, email, fax number and date of	Shri K. C. Jain UltraTechCement Ltd.

	appointment	Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara 09904201127 Phone - 07726281217/18/19/20/21 Fax - 07726-281572 Kushal.jain@adityabirla.com DOA:28.11.2017
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Anil D Kawale UltraTech cement ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara 09826300229 Phone - 07726281217/18/19/20/21 Fax - 07726-281572 anil.kawale@adityabirla.com DOA: 18.05.2019
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Anil D Kawale B.E. Mining UltraTech cement ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara 09826300229 Phone - 07726281217/18/19/20/21 Fax - 07726-281572 anil.kawale@adityabirla.com DOA: 18.05.2019
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
25	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 Review Mining Plan 14.08.2018 and valid up to March 2023.
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Date of Approval of Scheme of Mining 28.08.2008
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)	Fully mechanised
30	Captive/Non Captive	Captive mine

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

Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NA	NA	
1b	Exploration over lease area for Geological axis 1 or 2.	G1& G2	G1& G2	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Rs. 1974892	10 Holes (976m.)
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	NA	
1e	Balance reserves as on 01.04.2019 (Million.Ton)	216.0 (111) 33.0 (121, 122)		
1f	General remarks of inspecting officer on geology, exploration etc.	The deposit is almost horizontal with slight dip of 1-2 degree. In some places limestone is exposed to surface due to weathering effect. The lease area is broadly explored.		

2.0 Development

SN	Item	Proposals (18-19)	Actual work(18-19)	Remarks
2a	Location of development w.r.t. lease area	North pit N2381578 to N 2383268 E 599616 to E 601628 286 RL to 250 RL South pit N2380781 to N2381049E599287 to E599668284 RL to 265 RL	North pit N2381813 to N2383254E599603 to E 601603286 RL to 250 RL South pit No work done during the year.	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	OB bench- 1 nos. Mineral bench-5 Nos	OB bench- 1 nos. Mineral bench-5 Nos.	
2c	Stripping ratio or ore to OB ratio (MT/Cub M)	1:0.143	1:0.149	
2d	Quantity of topsoil generation in m ³	26950	13180	
2e	Quantity of overburden generation in m ³	385373	445877	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The development is broadly as per proposal but no work done in south pit. Some place bench height is more than the proposal therefore violation pointed out.		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	02	01	
3b	Quantity of ROM mineral production proposed	4200000 MT	3538259MT	

3c	Recovery of salable/usable mineral from ROM production	----	----	
3d	Quantity of mineral reject generation	105000MT	72481MT	
3e	Grade of mineral reject generation and threshold value declared	<34% CaO	<32.90 % CaO	
3f	Quantity of sub-grade mineral generation.	195886	Nil	
3g	Grade of sub-grade mineral generation.	-	34-40% CaO	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject		Regular analysis of sub-grade mineral and reject are being done.	
3j	Provision of drilling & blasting in mineral benches	For preparation of blast hole the primary drilling is done by 115/150 mm Dia crawler mounted DTH drills. Spacing-6 M. Burden- 4 M. Depth of hole 8.5 M Subgrade- 0.5 M Blasting is done in staggered pattern with SME, ANFO and NONEL.	For preparation of blast hole the drilling is done by 115& 150 mm dia crawler mounted DTH drills. Spacing: 5-7 M. Burden:3.5-4.5 M. Depth of hole 5-9 M Subgrade- 0.5 M Blasting is done in staggered pattern with SME, ANFO and NONEL.	
3k	Provision of mining machineries in mineral benches.	The details of mining machineries are as under :-		

Sr.No	Equipment Description	Nos.	Capacity	Make & model
1	Dumper	6	60 MT	Komatsu-HD 465-7
2	Dumper	7	60 MT	BEML- BH 50
3	Excavator	3	6.5 CUM	Komatsu-PC 1250
4	Excavator	1	6.5 CUM	Tata Hitachi – Ex 1200
4	Excavator	1	4.0 CUM	L & T -CK-300
5	Drill	1	150 mm	Atlas Copco-IDM-30
6	Drill	1	115 mm	DP1100i - Sandvik
7	Loader	1	3.0 CUM	Komatsu WA 380
8	Dozer	1	350 HP	Komatsu-D 155
9	Backhoe cum Rock breaker	1	324 HP	L & T CK-300(Excavator) Atlas
10	Water Tanker	1	28 KL	BEML WS28
11	Water Tanker	1	8 KL	Tata-1612
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes the height of OB bench- 2-4.5 m Ore bench 6-8 m	Top slicing of mix bench with 3.5 mtr height and OB bench- 2-4.5 mt. Ore bench 4-8 mt. height has been maintained.	
3m	Total area covered under excavation/pits	174.10Ha.	167.170 Ha.	FY 18-19
3n	Ore to OB ratio for the pit/mine during the year	1:0.143	1:0.149	FY 18-19
3o	Total area put in use under different heads at the end of year	Pit-174.10 Ha Waste/reject-17.836Ha Backfilling-0 Others – 19.251	Pit- 167.170Ha Waste/reject-17.836Ha Backfilling- 0 Others- 19.251	In-pit temporary dump.
3p	Production of ROM mineral during last five-year period, as applicable (in MT)	2013-14- 4200000 2014-15-4200000 2015-16-4200000 2016-17- 4200000 2017-18- 4200000 2018-19- 4200000	3258651 3616205 3083282 3467193 2821517 3538259	Low production is mainly due to low demand of Cement in market.
3q	General remarks of inspecting officer on method of mining etc.	The method of mining is by open cast method using HEMM and deep hole blasting.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral	Concurrent use of top soil and separate	Concurrent use of top soil is being	

	reject (Rule 32, 33)	dump for OB & mineral reject has been proposed.	done and separate dumping of OB & reject is being done.	
4b	Location of topsoil, OB & mineral reject dumps	Dump (O.B.)N2382234 to N2382429 E600636 to E600892 RL : 265 to 250 Peripheral dumping N2380783 to 2381078 E601064 to 601310 RL : 287 to 281	Dump (O.B.) N2382245 to N2382455 E600619 to E600896 RL : 265 to 250 Peripheral dumping N2380783 to 2381078 E601064 to 601310 RL : 287 to 281	OB and top soil are also dump other places i.e. near view point in working pit and North side of ML along lease boundary and accordingly violation pointedout.
4c	Number of dumps within lease area and outside lease area	02 nos. within lease area	02 within lease area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Covered in 4b	Covered in 4b	
4e	Number of active & alive dumps	02	02	
4f	Number of dead dumps	01	01	
4g	Number of dumps stabilized	01	01	
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain provided	Garland drain provided	
4i	Length of Retaining wall or garland drain all along dump	Not mentioned specifically yearwise	Length of garland drain all along dump is 1168 mtr.	
4j	Number of settling ponds	Nil	03	
4k	Specific comments of inspecting officer on waste dump management	The waste dumping is broadly as per proposal and garland drain is provided along the dump to divert the water.		

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	Backfilling has been proposed in mined out area.	Area is premature for back filling.	
5b	Area under backfilling of mined out area			
5c	Concurrent use of topsoil for restoration or	yes	yes	Being used for

	rehabilitation of mined out area (Rule 32)			carpeting of dump for plantation
5d	Total area fully reclaimed & rehabilitated	0.00	0.00	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Area is premature for back filling.		

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.	Yes	Yes	
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	0.00 1.04 2323	0.000 1.05 2440 193065 1123267/-	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	Nil Nil Nil	Nil Nil Nil	
6d	Compliance of Rehabilitation of waste land within lease . i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	NA Concurrent backfilling and plantation on dump.	 Concurrent backfilling and plantation on dump.	

6e	Compliance of Environmental monitoring (core zone & buffer zone)	Enclosed.	Enclosed.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	PMCP proposals are implemented and broadly as per proposal.		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NA	Based on software & blast hole sampling result different grade material has been marked at site/map/blend plan.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	NA	NA	
7c	Different grade of mineral sorted out at mines	Based on software different grade material has been marked in slice plan.	Based on software & blasthole sampling result different grade material has been marked at site/map/blend plan.	
7d	Any beneficiation process at mines	As such, limestone beneficiation is not required except for screening the clayey-soil in the top bench	No major beneficiation except crushing and screening.	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Screening (dry Separation) is being done to separate clayey-soil & shale in the limestone before crushing. By using pet cock the quality requirement of plant was decreases hence screen generation was also decreases during the year.		

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Separate removal and utilization of topsoil is being done	
8b	Concurrent use or storage of topsoil	Yes	concurrent utilization of topsoil is being done	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Planned	Separate dumps for overburden/waste rock and rejects.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	planned	Part of waste rock, rejects are concurrent being used for restoring the land to its original use and remaining are being at, in pit temporary dump.	
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)	Afforestation proposed	Total of 193309 nos. plantation in 59.71 hect.area up to March 2019.	
8g	Survival rate	Not mentioned specifically	80%	
8h	Water sprinkling on roads to control airborne dust	28KL and 8KL taker proposed for Water sprinkling on roads	Water sprinkling on roads is being done by 28KL and 8KL tanker to control airborne dust.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	The lessee as per proposal complied all environment protection measures i.e. plantation, water sprinkling for dust suppression, monitoring of Air, water, noise, etc therefore no such adverse impact observed on aesthetic beauty in and around mines area.		

9.0 Compliance of Rule 45

SN	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Returns Submitted upto – April 19 Annual returns submitted upto- 2018-19	

SN	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes given	Shri O.P.Khelkar, Mining Engineer & Mines Manager, Shri Vijesh Kushwaha, Geologist.	Mining Engineer and Manager changed during visit as mentioned above in 22 & 23

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes given	Covered under o/c working-167.17 ha., used for waste disposal-17.846 ha., Infrastructure-19.251 ha.			
9d	Scrutiny of Annual return on afforestation	Yes given	2440 nos saplings within ML area			
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Yes given	72481 Tons with CaO<32.9%			
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil				
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Yes given	Ex-mine price and cost of production Rs 215.17/-			
9i	Scrutiny of Annual return on fixed assets	Yes given	Rs 802452934/-			
9k	Scrutiny of Annual return on mining machineries.	Yes given	Type of machinery	Capacity	No.of units	Electric/ Non-Electric
			Shovel	6.5 cum.	04	Non-Electric
			Dumper	50 ton & 55 Ton	07 & 6	Non-Electric
			Blast hole drill	115mm	01	Non-Electric
			Water tanker	28000Lit re	01	Non-Electric
			Wheel Loader	3.0cum	01	Non-Electric
			Dozer	350 HP	01	Non-Electric
			Back Hoe	4.0 cum	01	Non-Electric

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:-The current inspection is carried out under MCDR, 2017 for Validation of Star rating and during the inspection no serious violation found and earlier violation on field base deviation are broadly complied.

Rajesh Kumar Das, Senior Assistant Controller of Mines