

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of inspecting office & designation	Shree Rajesh Kumar Das (Senior Assistant Controller of Mines)
2	Date of inspection & Accompanying person	07.01.2021, Shri Anil Kawale, Mine Manager & Shri Vishwesh Kuswaha, Geologist
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
8	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 appointment	Shri Abhishek Sharma UltraTech Cement Ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara Mo- 9494097260 Fax - 07726-281572 abhishek.osharma@adityabirla.com DOA:28.06.2019
22	Name of the Mines Manager with Address,	Shri Anil D Kawale

	phone, email, fax number and date of appointment in mines	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 modification in Mining Plan 14.08.2018 and valid up to March 2023(2018-19 to 2022-23).
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
31	Valid EC capacity	4.2 million tons
32	Validity of bank guarantee	Rs 92100000/- upto 31.03.2023

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

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	36	27	
1b	Exploration over lease area for Geological axis 1 or 2.	129.65 ha. area is to be converted in G1 from existing G2 in 2019-20 & 2020-21	In 2019-20 less than 50% area covered	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Rs. 5523565.75	24 Holes (2738m.)
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NA	
1e	Balance reserves as on 01.04.2020 (Million.Ton)		213.0 (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 in G1 & G2.
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2.0 Development

SN	Item	Proposals (19-20)	Actual work(19-20)	Remarks
2a	Location of development w.r.t. lease area	North pit N2383137.6304 to N 2383026.0552 E 600774.2948 to E 601672.9333 &2382075.5094 to 601575.6825 E601032.1469 to 601575.6825 286 RL to 242 RL N2383271.5915 to N2382938.0699E5996 54.6674 to E 600227.9736 271-242 South pit N2381140.0085 to N2380746.7988E5992 11.8320 to E599698.7968284 RL to 265 RL	North pit Broadly in proposed area. South pit No work done.	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	OB bench- 1 nos. Mineral bench-5 Nos	OB bench- 1 nos. Mineral bench-3 Nos.	
2c	Stripping ratio or ore to OB ratio (MT/Cub M)	1:0.14	1:0.10	
2d	Quantity of topsoil generation in m ³	21223	7025	
2e	Quantity of overburden generation in m ³	471624	281338	
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. The development is broadly done in top benches.		

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	2708457MT	
3c	Recovery of salable/usable mineral from ROM production	90%	Approx 97%	
3d	Quantity of mineral reject generation	187500MT	77164 MT	
3e	Grade of mineral reject generation and threshold value declared	<34% CaO	<32.90 % CaO	
3f	Quantity of sub-grade mineral	204952	Nil	

	generation.			
3g	Grade of sub-grade mineral generation.	34-40% CaO	NA	
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.	Shovel 6.5 cum, Dumper 60 tons, drill m/c 115 mm & 152mm, loader, Dozer	Broadly as per proposal	
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 7-8 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	190.643 Ha.	169.98 Ha.	FY 19-20
3n	Ore to OB ratio for the pit/mine during the year	1: 0.115	1:0.18	FY 19-20
3o	Total area put in use under different heads at the end of year	Pit-190.643 Ha Waste/reject- 22.323Ha Others – 26.108	Pit- 169.98 Ha Waste/reject- 18.756Ha Others- 20.648	In-pit temporary dump.
3p	Production of ROM mineral during last five-year period, as applicable (in MT)	2015-16-4200000 2016-17- 4200000 2017-18- 4200000 2018-19- 4200000 2019-20 - 4200000	3083282 3467193 2821517 3538259 2708457	
3q	General remarks of inspecting officer	The method of mining is by open cast method using		

on method of mining etc.	HEMM and deephole blasting. The production and development is in lower side.
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4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Concurrent use of top soil and separate dump for OB & mineral reject has been proposed.	Concurrent use of top soil is being done and separate dumping of OB & reject is being done.	
4b	Location of topsoil, OB & mineral reject dumps	<p>In Pit- temp dump (O.B.)N2382405.3494 to N2382220.7141 E600603.6340 to E600930.2929 RL : 265 to 250</p> <p>Bardih Dump N2381220.3233to N2380760.5162E60102 9.8301to E601344.7505 RL : 288 to 304</p> <p>Subgrade dump N2382940.5970 to N 2382864.9510</p> <p>E600500.4790 to 600758.2562 250 to 258mRL</p>	<p>In Pit- temp dump (O.B.) Broadly as per proposal</p> <p>Bardih Dump N2382401.4457 to N2382241.0662 E600661.4997 to E600894.8244 RL : 288 to 300</p> <p>Subgrade dump Dumping not started. And screen reject dumping is not as per proposal</p>	
4c	Number of dumps within lease area and outside lease area	02 nos.OB within lease area and 1 mineral reject dump	02OB within lease area & 2 mineral reject dump.	
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	03	
4f	Number of dead dumps	NA	NA	
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	--	Length of garland drain all along dump is 1168 mtr.	
4j	Number of settling ponds		03	
4k	Specific comments of inspecting officer on waste dump management	The waste dumping is broadly as per proposal except the mineral reject dump near view point and garland drain is provided along the dump to divert the water.		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
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5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Area is premature for back filling.	Area is premature for back filling.	
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)	yes	yes	Being used for carpeting of dump for plantation
5d	Total area fully reclaimed & rehabilitated	NIL	NIL	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Area is premature for back filling but temporary dumping is done in working pit.		

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 1.796 4490	0.000 5.105 12500 205962 300000/-	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	NA	NA.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	As per mining plan.	Being done.	

8f	Baseline information on existence of plantation & additional plantation done (Rule 41)		Total of 205926 nos. plantation in 64.81 hect. area up to March, 2020.	
8g	Survival rate		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 – Dec., 2020 Annual returns submitted upto- 2019-20	

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 Anil D Kawale, Mining Engineer & Manager, Shri Vijesh Kushwaha, Geologist	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes given	Area under O/C working 169.98 ha., waste disposal 18.756 ha. , Infrastructure & roads 20.904 ha.	
9d	Scrutiny of Annual return on afforestation		12500 nos	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)		77164 tons & 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		Captive, Ex. Mine price & production cost Rs241.43/-	
9i	Scrutiny of Annual return on fixed assets	Rs 857121245/-		
9k	Scrutiny of Annual return on mining machineries.	Yes given		

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: - The earlier violation taken compliance. During present inspection Rule 11(1), 31(4), 37(1) & 48 found violated.

(Rajesh Kumar Das, Senior Assistant Controller of Mines)