

MCDR INSPECTION REPORT

General

S.N.	Particulars	Details
1	File No.	CHG/RPR/LST-49/38MPR28017
2	Name of the Mine	Paraswani Limestone Mine
3	Date of Inspection	06/09/2021
4	Name of Inspecting Officer	Shri Rudra N. Mishra (Senior Mining Geologist)
5	Accompanying Mine Official with Designation	1. Shri M Senthil (Agent of Mines) 2. Shri Anil Kawale, Mines Manager 3. Shri Vijesh Kushwaha, Geologist
6	Last date of Inspection & Officer	07/01/2021 & Shri R K Das (Sr. ACOM)
7	Total Lease Area (Ha) with breakup of non-forest and forest land	Non- forest - 997.355 hect. Forest Land: Nil
8	Mine code	38MPR28017
9	IBM Registration Number under rule 45 of MCDR, 2017	IBM/441/2011
10	Name of the Lease, Address, Phone, email and fax number	UltraTech Cement limited Hirmi Cement Works PO – Hirmi, Taluka- Simga Dist. BalodaBazar- Bhatapara-493195 Phone - 07726281217/18/19/20/21 Fax - 07726-281572
11	Village	Hirmi
12	Taluka/Mandal	Simga
13	District	BalodaBazar- Bhatapara
14	Pin code	493195
15	State	Chhattisgarh
16	Post Office	Hirmi
17	Nearest Police Station	Suhela
18	Nearest Railway Station	Tilda
19	Date of Grant of Mining Lease	15.12.1992
20	Date of Execution	22.02.1993
21	Date of opening of Mine	01.04.1993
22	Date of First Renewal, if applicable and its period & expiry	22.02.2013 for 30 years and valid up to 21.02.2043
23	Date of Second Renewal, if applicable and its period & expiry	Not Applicable.
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable.
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri K.C. Jhanwar M/s. Ultratech Cement Limited.,

		Ahura Centre, B Wing 2 nd Floor, Mahakali Caves Road, Andheri (E) Mumbai-400093 Email-kailash.jhanwar@adityabirla.com Date of appointment – 18.10.2018 Mobile- 9702474200
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri M Senthil UltraTech Cement Ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara Mo- 8691046042 Fax - 07726-281572 Email: m.senthil@adityabirla.com Date of appointment: 15.06.2021
27	Name of the Mine 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 Email: anil.kawale@adityabirla.com Date of appointment: 18.05.2019
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	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 Email: anil.kawale@adityabirla.com Date of appointment: 18.05.2019
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 55 & carrying out their duties as per rule 54 & 55 (MCDR 2017).	Yes, Shri Vijesh Kushwaha, Geologist
30	Date of Approval of Mine Plan/Modified Mine Plan with five-year period and specific condition in approval letter, if any.	Date of Approval of Modified Mining Plan 12.08.2015.and valid up to March 2018. Date of Approval of modification in Mining Plan 14.08.2018 and valid up to 31st March 2023. Proposal period 2018-19 to 2022-23
31	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 Review of Mining 17.11.2017
32	Mineral(s) granted in lease and approved for Mining	Limestone
33	Method of Mining (Opencast, Underground)	Opencast

34	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
35	Captive/Non-Captive	Captive
36	Environmental Clearance	4.2 million tones
37	Status of Financial Assurance as per rule 27 of MCDR, 2017	Bank guarantee of Rs 9,21,00,000/-

Exploration

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
1a	Backlog of previous year	40	Nil	Drilling is under progress. Due to Covid 19 drilling was not done.
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	Central Drilling Agency, Nagpur, MS.	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	NIL	98.63 Ha.	
1e	Balance reserves as on 01.04.21	Under (111): 210.40 million Tonnes Under (121): 32.947 million Tonnes Under (211): 77.18 million Tonnes Under (221): 156.834 million Tonnes Under (222): 23.436 million Tonnes Under (332): 10.19 million Tonnes Under (334): 30.35 million Tonnes		
1f	General remarks of Inspecting officer on geology, exploration etc.	<p>The limestone deposit of Hirmi belongs to the sediments of Chhattisgarh basin which is horizontal, thick bedded and classified as stromatolitic limestone of Raipur Group. The deposit is almost horizontal with a slight dip of almost 1° towards N 45°W. No structural disturbance like folds, faults and unconformity is observed in the area. Thin partings of Shale intercalation within limestone have degraded the quality of limestone in most of the limestone bands. Chocolate brown limestone is usually high in quality towards top and the quality decreases gradually at depth. Major parameters of the reserve estimation. Strike length- 5500meters, Width/ Thickness 3300meters and 32–40-meter avg thickness, Depth- 236Mrl.Cut off Grade- 41.71% CaO and Bulk density - 2.5. There are three different forms of limestone based on color- 1) Grey Limestone, 2) Pale Pink Limestone and 3) Chocolate Brown Limestone.</p> <p>ML area is more or less flat terrain it comes under Chandi Formation. Nepania member on constitutes chief source of Cement grade limestone.</p>		

Development

S. N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
2a	Location of Development w.r.t. lease area	<p>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</p> <p>N2383271.5915 to N 2382938.0699 E 599654.6674 to E 600227.9736 271-242</p> <p>South pit N 2381140.0085 to N 2380746.7988 E 599211.8320 to E 599698.7968 284 RL to 265 RL</p>	<p>North pit N2383137.6304 to N 2383008.6103 E 600774.2948 to E 601672.9333 & 2382075.5094 to 601575.6825 E601032.1469 to 601575.6825 286 RL to 250 RL</p> <p>N2383271.5915 to N 2382938.0699 E 599654.6674 to E 600227.9736 271-250</p> <p>South pit No work done.</p>	
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	1: 0.11	1: 0.11	
2d	Quantity of topsoil generation in m ³	21223	13981.50	
2e	Quantity of overburden generation in m ³	471624	463996.6	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development continues as per proposal.		

Exploitation

S.N .	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
3a	Number of pits proposed for production	02	02	
3b	Quantity of ROM mineral production proposed (2020-21)	7500000 MT	2865576 MT	
3c	Recovery of Salable/usable mineral from ROM production	7500000 MT	2865576 MT	

3d	Quantity of mineral reject generation	Nil	Nil
3e	Grade of mineral reject generation and threshold value declared	< 34% CaO >4% MgO	< 34% CaO >5% MgO
3f	Quantity of sub-grade mineral generation	Nil	Nil
3g	Grade of sub-grade mineral generation	34% to 41.71%CaO	34% to 41.71%CaO
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not given in Proposal	Nil
3j	Provision of drilling & blasting in mineral benches	Yes	Yes
3k	Provision of mining machineries in mineral benches	Yes	Yes
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.
3m	Total area covered under excavation /pits	201.845 Ha.	173.087 Ha.
3n	Ore to OB ratio for the pit/mine during the year	1: 0.11	1: 0.11
3o	Total area put in use under different heads at the end of year	Pit- 201.845 Ha Waste/reject- 25.346 Ha Backfilling-0 Others – 26.108	Pit- 173.087 Ha Waste/reject- 22.6868 Ha Backfilling- 0 Others- 20.648
3p	Production of ROM in Tones mineral during last Five-years period, as Applicable	2016-17 4200000T 2017-18 4200000T 2018-19 4200000T 2019-20 4200000 T 2020-21 7500000 T	3467193.00 T 2821517.00T 3538259.00T 2708457.00T 2865576.00T
3q	General remarks of inspecting officer on method of mining etc.	Method of mining is Open cast mechanised mining with shovel and dumper combination.	

Solid Waste Management-Dumping

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	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	In Pit- temp dump (O.B.) N 2382405.3494 to N 2382220.7141 E 600603.6340 to E 600930.2929 RL: 265 to 250 Bardih Dump N 2381220.3233to N 2380760.5162E 601029.8301to E 601344.7505 RL: 288 to 304	In Pit- temp dump (O.B.) N 2382401.4457 to N 2382241.0662 E 600661.4997 to E 600894.8244 RL: 265 to 250 Bardih Dump N 2382401.4457 to N 2382241.0662 E 600661.4997 to E 600894.8244 RL: 288 to 300	Subgrade material Used concurrently with improvement in plant process and reduced LSF demand.
4c	Number of Dumps within lease area and outside lease area	02 nos. OB within lease area	02 OB within lease area.	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	In Pit- temp dump (O.B.) N 2382405.3494 to N 2382220.7141 E 600603.6340 to E 600930.2929 RL: 265 to 250 Bardih Dump N 2381220.3233to N 2380760.5162E 601029.8301to E 601344.7505 RL: 288 to 304	In Pit- temp dump (O.B.) N 2382401.4457 to N 2382241.0662 E 600661.4997 to E 600894.8244 RL: 265 to 250 Bardih Dump N 2382401.4457 to N 2382241.0662 E 600661.4997 to E 600894.8244 RL: 288 to 300	
4e	Number of Active & Alive dumps	02	02	
4f	Number of deed dumps	NA	NA	
4g	Number of dumps established	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	NA	Retaining wall of 220m. is on progress at Bardih dump. Length of garland drain all along dump is 1168 mtr.	
4j	Number of settling ponds	01	01	

4k	Specific commends of inspecting officer on waste dump management	Waste is being dump at designated place as per approved documents.
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Solid Waste Management-Backfilling

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
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	
5d	Total area fully reclaimed & rehabilitated during the year	NIL	NIL	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Area is premature for back filling.		

Progressive Mine Closer Plan

S.N	Item	Proposals (2020-21)	Actual Work (2020-21)	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	0.00 1.936 4840	0.000 2.0 5000 210926	
	Area available for rehabilitation (Ha)			
	Afforestation done (ha)			
	No. of saplings planted during the year			
	Cumulative no. of plants			
	Any other specific method of rehabilitation			
	Cost incurred on watch & care during the year			429843/-

6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L*B*D) ii) Void filled by waste/tailings iii) Afforestation on the backfilling 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 rehabilitation iii) Method of rehabilitation	NA Concurrent backfilling and plantation on dump.	Concurrent backfilling and plantation on dump.	
6e	Compliance of Environment monitoring (core zone & buffer zone)	Yes	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	The PMCP work is broadly as per proposal. Area aesthetic beauty is increased due to dense plantation.		

Mineral Conservation

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	No Proposal	Nil	No sorting and any other beneficiation process adopted. Due to using pet coke and imported coal low grade of Limestone also consumed.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No Proposal	Nil	
7c	Different grade of mineral sort out at mine	No Proposal	Nil	
7d	Any beneficiation process at mines	No Proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No sorting and any other beneficiation process adopted. Due to using pet coke and imported coal low grade of Limestone also consumed. High grade limestone purchased from the nearby area.		

Environment

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	No Proposal	Nil	

8b	Concurrent use or storage of topsoil	No Proposal	Nil
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	No Proposal	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	By Backfilling	By Backfilling
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)	No Proposal	Total of 210926 nos. plantation in 62.31 hect. area up to March, 2021. 5000 splings within Lease and 550 salings outside lease area.
8g	Survival rate	No Proposal	88% within Lease and 78% outside lease area.
8h	Water sprinkling on roads to control airborne dust	Yes	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 mine area	Environment protection measures follow as per proposal and aesthetic beauty increased around the mine area.	

Compliance of Rule 45

S. N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	M.R. Submitted up to–September-2021 A.R. submitted up to- 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit-173.087 ha Reclaimed/Rehabilitated: 0.00 ha, occupied by plant, building,	

		residential, welfare building & roads: 20.904 ha. Used for Waste disposal: 19.66 ha, Other purpose: 5.74 ha																																		
9d	Scrutiny of Annual return on afforestation	Within Lease area: 5000 Nos Survival Rate -88%, Outside Lease area: 550 Nos Survival Rate -78%,																																		
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	0.0 T																																		
9f	Scrutiny of Annual return on ROM stock and/or grade ore	2865576.00 T production, Opening Stock: 0.00 T, Closing stock: 0.00 T																																		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Rs. 242.72per ton ex-mine price and cost of production: Rs. 242.72.																																		
9i	Scrutiny of Annual return on Fixed assets	Rs 391837106.00 as per annual return																																		
9k.	Scrutiny of Annual return on mining Machineries	<table border="1"> <thead> <tr> <th>Type of Machinery</th> <th>Capacity of each Unit</th> <th>No. of Unit</th> </tr> </thead> <tbody> <tr> <td>Dumper</td> <td>60 MT</td> <td>6</td> </tr> <tr> <td>Dumper</td> <td>60 MT</td> <td>7</td> </tr> <tr> <td>Excavator</td> <td>6.5 CUM</td> <td>3</td> </tr> <tr> <td>Excavator</td> <td>6.5 CUM</td> <td>1</td> </tr> <tr> <td>Drill</td> <td>150 mm</td> <td>1</td> </tr> <tr> <td>Drill</td> <td>115 mm</td> <td>1</td> </tr> <tr> <td>Loader</td> <td>3.0 CUM</td> <td>1</td> </tr> <tr> <td>Dozer</td> <td>350 HP</td> <td>1</td> </tr> <tr> <td>Explosive Van</td> <td>10 T</td> <td>1</td> </tr> <tr> <td>Water Tanker</td> <td>28 KL</td> <td>1</td> </tr> </tbody> </table>	Type of Machinery	Capacity of each Unit	No. of Unit	Dumper	60 MT	6	Dumper	60 MT	7	Excavator	6.5 CUM	3	Excavator	6.5 CUM	1	Drill	150 mm	1	Drill	115 mm	1	Loader	3.0 CUM	1	Dozer	350 HP	1	Explosive Van	10 T	1	Water Tanker	28 KL	1	
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Details of Violations observed during current inspection: -

Earlier violations pointed out have not been complied and Show cause letter issued on 03/09/2021. Party replied the show cause letter on dated 14/09/2021.

As per the Mining plan approved vide No BLD/LST/MPLN-1160/NGP dated 14/08/2018 to the extent 40 boreholes were proposed to be drilled during the year 2020-21, but these boreholes have not been drilled. But now during the inspection it observed the Lessee has been mobilised the drilling rig and manpower to the site.

Earlier Lessee were not executed drilling operation due to covid 19. Lessee has been submitted the Form-I (Notice of sinking shafts and Bore holes vide letter no UTCL: HCW: Mine:MSL:082 dated 14th Sept 2021 to this office. Due to Covid 19 and drilling is under progress so the same violation not pointed out.

Star rating of this year validated.

Date: 16/09/2021

Name: Rudra N Mishra
Designation: Senior Mining Geologist.