

MCDR Inspection Report 2022-23

1) Name of Inspecting officer:	Shri Prem Prakash
2) Designation	Regional Controller of Mines Indian Bureau of Mines, Raipur
3) Accompanying mine official with designation	Mr. M. Senthil VP & Agent (Mines) Mr. Devendra Kumar Indora Mines Manager Mr. Ratikanta Behera (Geologist)
4) Date of Inspection	30-11-2023
5) Date of Previous Inspection	13-10-2022

I. GENERAL INFORMATION

Sl. No	Particulars	Details
1	Name of the Mine	Paraswani Limestone Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	997.355 hect. (Non- forest)
3	Mine Code	38MPR28017
4	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/441/2011
5	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
6	Village	Hirmi
7	Taluka/Mandal	Simga
8	District	Baloda Bazar-Bhatapara
9	Pin Code	493195
10	State	Chhattisgarh
11	Post office	Hirmi
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	NA
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 Email- 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 M Senthil UltraTech Cement Ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara Mob.- 8691046042 Fax - 07726-281572 m.senthil@adityabirla.com DOA: 15.06.2021
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Devendra Kumar Indora UltraTech cement ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara Mob.- 09826300229 Phone - 07726281217/18/19/20/21 Fax - 07726-281572 devendra.indora@adityabirla.com DOA: 17.09.2021
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Devendra Kumar Indora B.E. Mining UltraTech cement ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara 09826300229 Phone - 07726281217/18/19/20/21 Fax - 07726-281572 devendra.indora@adityabirla.com DOA: 17.09.2021
24	Name of the Geologist , Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Ratikanta Behera M. Sc. (Applied Geology) UltraTech cement ltd. Hirmi Cement Works, PO – Hirmi, Dist. BalodaBazar- Bhatapara Mob. - 09439317775 ratikanta.behera@adityabirla.com DOA: 19.12.2022
25	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57 of MCDR, 2017.	Yes
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Modification in Mining Plan approved on 14.08.2018 Proposal period 2018-19 to 2022-23
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Review of Mining Plan approved on 30.12.2022 Proposal period 2023-24 to 2027-28
28	Mineral(s) granted in lease and proved for mining	Limestone
29	Method of Mining (Opencast, Underground)	Opencast
30	Category (Fully Mechanized, Others or Manual)	Category-A, Fully Mechanized
31	Captive/Non Captive	Captive

II. SCIENTIFIC MINING

[Data in respect of financial year (2022-23) or cumulative, as applicable]

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
A. EXPLORATION: -				
1a	Backlog of Previous Year	Nil	Nil	
1b	Exploration Over Lease area for Geological Axis 1 or 2	No exploration has been proposed in the approved Review of Mining Plan during F.Y. 2022-23	Nil	Entire potential mineralized area has been explored under G-1
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	
1d	Balance area to be explored to bring Geological axis 1 or 2	No proposal	Not applicable	
1e	Balance reserves as on 01/04/2023	Under (111)-574.70 million tonne		As per AR submitted for the year 2022-23
1f	General remarks of inspecting officer on geology, exploration etc.	No exploration has been proposed during the financial year 2022-23. The entire potential mineralized area has been explored under the G-1 level of exploration as per the approved RMP.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
B. DEVELOPMENT: -				
2a	Location of development w.r.t. lease area	NORTH BLOCK E= 599549.3903 to 601753.5049, N= 2381157.9645 to 2383271.7136 RL (283-242) SOUTH BLOCK E= 599183.3709 to 599668.3749, N= 2380707.5829 to 2381076.769 RL (283-250)	Carried out within the proposed area	
2b	Separate benches in topsoil, overburden and mineral	Separate benches proposed in OB & mineral	Separate benches were maintained in OB & mineral	OB bench- 1 nos. Mineral bench-5 Nos.
2c	Stripping ratio or ore to OB ratio	1: 0.05	1: 0.10	Ore and OB ratio in tonne: m3
2d	Quantity of topsoil generation in m3	42264	34504	Used for carpeting of dump for plantation

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2e	Quantity of overburden generation in m3	597441	424946	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The developments have been carried out as per the proposal.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
C. EXPLOITATION: -				
3a	Number of Pit Proposed for Production	02	02	As per proposal
3b	Quantity of ROM mineral production proposed	10000000 MT	4198846 tonnes	EC is for 4200000 tonnes
3c	Recovery of Saleable/ Usable Mineral from ROM Production	----	----	
3d	Quantity of mineral reject generation	400000 MT	26296 MT	As per AR
3e	Grade of mineral reject generation and threshold value declared	-	32.90 % CaO	As per AR
3f	Quantity of sub-grade mineral generation	1168011	-	Reported blended with high-grade ore
3g	Grade of sub-grade mineral generation	34-40% CaO	34-40% CaO	
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal	Not applicable	
3j	Provision of drilling & blasting in mineral benches	Drilling and Blasting proposed in mineral benches	Drilling and blasting were carried out in mineral benches as proposed	115 & 150 mm dia crawler mounted DTH drill machine used for drilling. Spacing: 5-7 M. Burden: 3.5-4.5 M. Depth of hole 5-9 M Subgrade- 0.5 M SME, ANFO and NONEL are used for blasting
3k	Provision of mining machineries in mineral benches	Yes, HEMMs	HEMMs deployed	
3l	Whether height of benches in overburden	Yes, Height of	Bench height and width have been maintained	

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	and mineral suitable for method of mining proposed in MP/SOM	OB bench- 2-4.5 m Ore bench 6-8 m	as per proposals.	
3m	Total area covered under excavation/pits	253.92 Ha. up to end of plan period 2022-23	191.424 Ha. up to end of FY 2022-23	
3n	Ore to OB ratio for the pit/mine during the year	1: 0.05	1: 0.10	Ore and OB ratio in tonne: m3
3o	Total area put in use under different heads at the end of year	306.584 Ha. up to end of plan period 2022-23	266.77 Ha. up to end of FY 2022-23	
3p	Production of ROM mineral during last five-year period, as applicable	2018-19- 42,00,000 2019-20- 42,00,000 2020-21- 75,00,000 2021-22- 10,00,0000 2022-23- 10,00,0000	2018-19- 3465778 2019-20- 2708457 2020-21- 2865576 2021-22-3745596 2022-23-4198846	(All units in MT) As per AR submitted
3q	General remarks of inspecting officer on method of mining etc.	Open cast working is being carried out by deployment of HEMM with the help of deep hole drilling & blasting.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
D. SOLID WASTE MANAGEMENT - DUMPING:-				
4a	Separate Dumping of Topsoil, OB and Mineral Rejects	Separate dumping of Topsoil & OB proposed	Separate dumping of Topsoil & OB carried out	
4b	Location of Topsoil, OB and Mineral Rejects Dumps	OB/WASTE DUMP N 2382405.3494 to N 2382220.7141 E 600603.6340 to E 600930.2929 Bardih Dump N 2381220.3233 to N 2380760.5162 E 601029.8301 to E 601344.7505	Waste dumping was carried out as proposed	Subgrade material used concurrently for blending
4c	Number of Dumps within Lease & Outside Lease area	02 nos. OB within lease area	02 nos. OB within lease area	
4d	Location of Dumps, within Ultimate Pit Limit	-	-	
4e	Number of Active & Alive Dumps	02	02	
4f	No of Dead Dumps	-	Nil	
4g	No of dumps stabilized	01	01	
4h	Whether Retaining Wall or Garland drain along Dumps are there	Yes	Yes	
4i	Length of Retaining Wall or Garland drain along	No proposal	Nil	Retaining wall of 220m. constructed

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	Dumps			at Bardih dump. Garland drain all along dump about 1800 m maintained
4j	No. of Settling tanks	No proposal	03	
4k	Specific comments of inspecting officer on waste dump management	Environmental protection measures have been constructed/maintained around the waste dump.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
E. SOLID WASTE MANAGEMENT - BACKFILLING: -				
5a	Status of part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil	No area has been exhausted fully for carrying out backfilling
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	No proposal	Not applicable	
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	The area is not fully exhausted for backfilling, reclamation, etc.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
F. PROGRESSIVE MINE CLOSURE PLAN: -				
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2)	To be submitted before 01st July every year	PMCP report received in time.	Annual Report submitted on 28.06.2023
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	No proposal	Nil	No area is mined out fully at present

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	method of rehabilitation vi) Cost incurred on watch & care during the year			
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	No proposal	Nil	No area has matured for reclamation and rehabilitation purposes
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	9308 Nos. 3.723 Ha. By plantation	10005 Nos. About 3.7 Ha By Plantation	10005 Nos. samplings @ 80 survival
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring of air, water & noise proposed	Environmental monitoring of air, water & noise was carried out as per the proposal	All values of environment parameters were within permissible limits
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Annual PMCP report has been submitted. No area has got matured for reclamation and rehabilitation purposes. Plantation has been carried out as per the proposal.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
G. MINERAL CONSERVATION: -				
7a	ROM mineral dispatch or grade wise sorting within lease area	ROM dispatch to their captive plant after crushing	ROM is being sent to the crusher for further sizing & fed to their captive cement plant	
7b	Method of Grade-wise mineral sorting i.e. manual or mechanical	No proposal	Nil	
7c	Different grade of mineral sorted out at mines	No proposal	Nil	Only crushing is done, after which mineral is fed to the cement plant
7d	Any beneficiation process at mines	No proposal	No beneficiation is done in mines except crushing	

7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No beneficiation is warranted in the case of Limestone. The run of mine are fed to the crusher for sizing and screening for further feeding to the captive cement plant.
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Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
H. ENVIRONMENT: -				
8a	Separate removal and utilization of topsoil	Separate removal and utilization of topsoil proposed	Generated topsoil used for plantation	
8b	Concurrent use or storage of topsoil	Proposed for concurrent use	Concurrent utilized for plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines	Separate dumps for overburden, waste rock, and rejects are proposed	Separate dumps are maintained	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	No proposal	Nil	
8f	Baseline information on existence of plantation & additional plantation done	9308 Nos. of saplings within ML area covering 3.723 Ha area	Within lease area 10005 nos. saplings	
8g	Survival rate	No specified	80%	
8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling on roads through water tanker	Continuous water sprinkling done on haul roads to suppress the dust generated	Water sprinkling on roads is being done by 28 KL and 8 KL tanker to control airborne dust
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in & around the mine area was good.		

Sl. No	Item	Comments	Remarks
I. COMPLIANCE OF RULE-45: -			
9a	Status of Submission of Monthly & Annual Returns	MR being submitted regularly AR Submitted up to = FY 2022-23	

Sl. No	Item	Details Given in A.R	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager & Mining Engineer-Devendra Kumar Indora Geologist- Ratikanta Behera	Employed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	253.92 Ha.	253.92 Ha.	
9d	Scrutiny of Annual return on afforestation	Within lease area 10005 @ 80% survival rate	Within lease area 10005 @ 80% survival rate	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	No generation of mineral reject reported	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Opening stock- Nil Production- 4198846.00 Closing stock- Nil	ROM Opening stock- Nil Production- 4198846.00 Closing stock- Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex. Mine price and cost of production – Rs. 286.54 /Tonne Sale value- Nil	Captive consumption	
9i	Scrutiny of Annual return on fixed assets	Rs. 881916764 /- including land, building etc.	Rs. 881916764 /- including land, building etc.	
9k	Scrutiny of Annual return on mining machineries	Shovel Hydraulic-04, Backhoe-01, Dumper-27, Drill Machine-03, Wheel Loader-01, Water tanker-2	Observed deployed	

10- Details of violations observed during current inspection: -No serious violation was observed during inspection.

प्रेम प्रकाश / Prem Prakash
क्षेत्रीय खान नियंत्रक / Regional Controller of Mines
भारतीय खान ब्यूरो, रायपुर / Indian Bureau of Mines, Raipur