

MCDR-MiFLOLST/116/2023-JBP-IBM_RO_JBP
INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION

I/28177/2024

MCDR inspection REPORT
Jabalpur regional office

Mine code : 38MPR35121

- (i) Name of the Inspecting Officer and ID No. : **AKASH ARUN MITTARWAR**
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine Official with Designation : Shri Amit Rai (Legal Heir & Mining Engineer) & Shri Brijesh Prasad Dwivedi (Geologists)
- (iv) Date of Inspection : 28-DEC-23
- (v) Prev.inspection date : 07-SEP-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BARAHIYA LIMSTONE MINE (2.017 HECT.)**
- (b) **Registration NO.** : IBM/6666/2011
- (c) **Category** : A
- (d) **Type of Working** : Mechanised Opencast
- (e) **Postal address**
- State : MADHYA PRADESH
- District : SATNA
- Village : BARAHIYA
- Taluka : MAIHAR
- Post office : NADAN
- Pin Code : 485771
- FAX No. : 07674-232144
- E-mail : raico34@yahoo.com
- Phone : 07674-232032
- (f) **Police Station** : MAIHAR
- (g) **Date of Execution** : 02-OCT-92
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : Shri Amit Kumar Rai & Shri Anshuman Rai (Legal heirs), Rai Bhvan, Katni Road, Vpo & District - Maihar, (M.P.) - 485771
Email - raico34@yahoo.com, raicomaihar@gmail.com
3. (a) **Lease Number:** MPR0628
- (b) **Lease area:** 2.017
- (c) **Period of lease:** 50 Years (02/10/1992 to 01/10/2042)
- (d) **Date of Expiry:** 01-OCT-42
4. **Mineral worked** : LIMESTONE Main

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5. Name and Address of the

Lessee : Shri Amit Kumar Rai & Shri Anshuman Rai (Legal heirs),
Rai Bhvan, Katni Road, Vpo & District - Maihar, (M.P.) -
485771
Email - raico34@yahoo.com, raicomaihar@gmail.com RAI LIME CO.

Owner : Shri Amit Kumar Rai & Shri Anshuman Rai (Legal heirs)

6. Date of approval of Mining
Plan/Scheme of Mining

: Renewal under rule 22 MCR1960
03-JAN-03
Mining Scheme rule 12 MCDR1988
30-MAY-08
Mining Scheme rule 12 MCDR1988
02-JAN-14
MP review under 17(1) MCR 2016
20-NOV-18
MP review under 17(2) MCR 2016
20-JUN-22

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Exploration

S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	Lease area exploration under G1 level	Lease area explored up to G1 level	
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not specified.	Not specified.	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Nil	Nil	
1e	Balance reserves as on 01.04.2023	Nil	Balance reserve as on 01/04/2023 – 214322 tonnes	
1f	General remarks of Inspecting officer on geology, exploration etc.	2 no. of Core boreholes drilled in the year 2021-22 up to depth of 30 m having grid interval of 100 – 200 m. Form I & J submitted.		

Development

S.N.	Item	Proposals	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	Proposed to develop the pit towards west of lease having OB bench height of 3 m & min. width of 3 m; two benches of mineral of height up to 5 m & width 10 m.	As per proposal development of pit towards West of lease was observed.	
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Separate bench for top soil, Over burden & mineral proposed	Yes, Separate bench for top soil, Over burden & Mineral were found.	Details of top soil generated not maintained at mine site; violation pointed out for the same under rule 11(1) of MCDR,2017
2c	Stripping ratio or ore to OB ratio	1:0.649	1:0.615	
2d	Quantity of topsoil generation in m ³	3000 cu.m	No record maintained at mine site. However top soil used for plantation & bund.	violation pointed out for the same under rule 11(1) of MCDR,2017
2e	Quantity of overburden generation in m ³	3850 cu.m	4500 cu.m	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Developed the Quarry towards West of lease with two benches of mineral of height up to 5 m & width 10 m. Top soil used for plantation & bund. Details of top soil generated not maintained at mine site; violation pointed out for the same under rule 11(1) of MCDR,2017		

Exploitation

S.N.	Item	Proposals		Actual Work	Remarks
3a	Number of pits proposed for production	One pit		One pit	
3b	Quantity of ROM mineral production proposed (2022-23)	The production of 21998 tonnes ROM was proposed from existing pit during 2022-23.		The production of 17550 tonnes of ROM reported.	
3c	Recovery of Salable/usable mineral from ROM production	The recovery of limestone about 80% from ROM proposed from existing pit.		Recovery of about 80% from ROM reported.	
3d	Quantity of mineral reject generation	The waste /reject about 20% from ROM proposed from existing pit.		Nil	
3e	Grade of mineral reject generation and threshold value declared	Not proposed		Not applicable	
3f	Quantity of sub-grade mineral generation	Not proposed		Not applicable	
3g	Grade of sub-grade mineral generation	Not proposed		Not applicable	
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 proposed		Not applicable	
3j	Provision of drilling & blasting in mineral benches	Jackhammer drilling & blasting proposed in Minerals benches.		Jackhammer drilling with 33 mm dia.	
3k	Provision of mining machineries in mineral benches	Yes		Excavator Cum Loader – 1.20 cu.m 2 Nos - Dumper – 25 t. 1 No. of Jack hammer of diameter of hole 33 mm. 1 No. of Wtaer tankar – 5000 litre capacity	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed		Benches height found in order as visible.	
3m	Total area covered under excavation /pits	0.99 hect.		1.04 hect.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.649		1:0.615	
3o	Total area put in use under different heads at the end of year	1.30 hect.		1.25 hect.	
3p	Production of ROM mineral during	2018-19	17600 t	2018 -19 – Nil	

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last five-years period, as Applicable	2019-20	17600 t	2019 – 20 – Nil
	2020-21	17600 t	2020-21 – 17500 t
	2021-22	17600 t	2021-22 – 17600 t
	2022-23	17599 t	2022-23 – 17550 t
3q	General remarks of inspecting officer on method of mining etc	Category A mines having adopted mechanized method of mining.	

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Top soil used for Plantation and for bund while OB used for backfilling.	Top soil used for Plantation and for bund.	violation pointed out for the incomplete backfilling under rule 11(1) of MCDR,2017
4b	Location of topsoil, OB & mineral reject dumps	Top soil used for Plantation and for bund along the barrier zone from BP-6 to BP-18; while OB used for backfilling near BP-4 to BP- 5	As per proposal	violation pointed out for the incomplete backfilling under rule 11(1) of MCDR,2017
4c	Number of Dumps within lease area and outside lease area	02 Inactive dumps	02 Inactive dumps	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Dump 1 - Between boundary pillar No 7 to 8 & Dump 2 - Between boundary pillar No. 10 to 18.	As per proposal	
4e	Number of Active & Alive dumps	0	0	
4f	Number of dead dumps	02	02	
4g	Number of dumps established	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Not proposed	not applicable	
4i	Length of Retaining wall or garland drain all along dump	Not proposed	not applicable	
4j	Number of settling ponds	Not proposed	not applicable	
4k	Specific commends of inspecting officer on waste dump management	Top soil used for Plantation and for bund while OB used for backfilling.		

Solid Waste Management-Backfilling

S.N.	Item	Proposals	Actual Work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Backfilling was proposed in 700 sq. metre area between boundary pillar no. 4 to 5	Backfilling was not carried out as per proposal.	Violation of rule 11(1) pointed out for proposed backfilling.
5b	Area under backfilling of mined out area	700 sq. metre	As per proposal backfilling was not done.	Violation of rule 11(1) pointed out for proposed backfilling.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	The generated top soil during mining operation was proposed to utilise for plantation & protective bund.	As per proposal	Details of top soil generated not maintained at mine site; violation pointed out for the same under rule 11(1) of MCDR,2017
5d	Total area fully reclaimed & rehabilitated	Backfilling was proposed in 700 sq. metre area between boundary pillar no. 4 to 5	Not done.	Backfilling of proposed area was not seen during inspection. Violation pointed out.
5e	General remarks of inspecting officer on backfilling, reclamation etc	Violation of rule 11(1) pointed out for proposed backfilling.		

Progressive Mine Closer Plan

S.N.	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	Proposed	Submitted	
6b	i) Area available for rehabilitation (Ha)	Not proposed.	Not applicable.	
	ii) Afforestation done (ha.)	0.07 hect.	0.07 hect.	
	iii) No. of saplings planted during the year	70	65	
	iv) Cumulative no. of plants	Not proposed	175	
	v) Any other specific method of rehabilitation	Not proposed	Not applicable.	

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	vi) Cost incurred on watch & care during the year	Not Specified.	Not given.	
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	700 sq. m 700 sq. m Not Proposed Not proposed Not proposed	Not done Not done Not Applicable Not Applicable Not Applicable	Violation of rule 11(1) pointed out for proposed backfilling.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitation iii) Method of rehabilitation	Not proposed	Not Applicable	
6e	Compliance of Environment monitoring (core zone & buffer zone)	Proposed	Within prescribed limit.	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Violation of rule 11(1) pointed out for backfilling. Progressive closure activities were not seen during inspection.		

Mineral Conservation

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	Not Proposed	ROM produced from the mine is directly supplied to nearby cement plant.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not proposed	Not applicable.	
7c	Different grade of mineral sort out at mine	Not Proposed	Cement grade	
7d	Any beneficiation process at mines	Not Proposed	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No beneficiation was proposed to be adopted to upgrade the ROM in the lease area. ROM produced from the mine is directly supplied to nearby cement plant.		

Environment

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Yes	Details not maintained at mine site.	Violation pointed out for the same under rule 11(1) of MCDR 2017.
8b	Concurrent use or storage of topsoil	Proposed.	Storage of top soil was not observed during inspection. However, generated soil is utilized for planation & protective bund purpose.	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Not Proposed.	Not applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling was proposed	Backfilling not done as per proposal	Violation of rule 11(1) pointed out for proposed backfilling.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling was proposed	Backfilling not done as per proposal	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Plantation proposed on 7.5 m barrier zone between BP- 14 to BP- 18	Plantation along Barrier Zone were observed.	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Evidences of water sprinklings were observed.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Efforts made by lessee in this regard may not be considered satisfactory. Violation pointed out for the same.		

Compliance of Rule 45:-

S.N.	Item	Proposals	Actual Work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted both Monthly and Annual Return	Submitted both Monthly and Annual Return	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer and Geologist	Mining Engineer -Amit Kumar Rai & Geologist – Brijesh Prasad Dwiwedi	

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Already exploited by opencast (O/C) mining – 0.80 Hect. Covered under current (O/C) Workings 1.00 Hect. Reclaimed/Rehabilitated - 0 Hect (Infrastructure (Workshop, Administrative Building etc.)- 0.110 hect. Green belt – 0.1 hect.	
9d	Scrutiny of Annual return on afforestation	Yes	As per available records around 65 no's of trees planted during the year.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	ROM closing stock as on 31.03.2023 - 3921.580 tonnes of cement grade	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Ex mine price - 403.04 /- Sale price - 454 /- Cost of production – 338.88/-	
9h	Scrutiny of Annual return on fixed assets	Yes	10071824/-	
9k	Scrutiny of Annual return on mining machineries	Yes	1 Front end Loader – 1.20 cu.m 2 Dumper – 16 t. 1 Water Tanker – 5000 lit.	

Details of Violations observed during current inspection and compliance position of violation pointed out:-

Rule – 11(1) of MCDR 2017 dated 26/02/2024

Rule – 33 of MCDR 2017 dated 26/02/2024

Name: Akash Arun Mittarwar
Designation: Assistant Mining Engineer