

**INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION**

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : M.P./STN/LST-220

Mine code : 38MPR35121

- (i) Name of the Inspecting : **G006**) **ABHISHEK RANJAN GAUTAM**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri Amit Rai, Lessee Representative & Shri Sanjeev M
Official with
Designation
- (iv) Date of Inspection : 02-SEP-21
- (v) Prev.inspection date : 19-JUN-06

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BARAHIYA (2.017 HA)**
- (b) **Registration NO.** : **IBM/6666/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : BARAHIYA
Taluka : MAIHAR
Post office : BHATIYA
Pin Code : 485771
FAX No. : 07674-232144
E-mail : raico34@yahoo.com
Phone : 07674-232032 (O), 232094 (I)
- (f) Police Station : MAIHAR
- (g) First opening date :
- (h) Weekly day of rest : SUN
2. Address for : OM PRAKASH RAI
correspondance : M/S RAI LIME CO.
P.O. MAIHAR, DIST. SATNA (M.P.) 485771
3. (a) Lease Number : MPR0628
(b) Lease area : 2.02
(c) Period of lease : 10
(d) Date of Expiry : 01-OCT-02
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : RAI LIME CO.
 PROP.OM PRKESH RAI P.O.
 MAIHAR SATNA MADHYA
 PRADESH
 Phone:07674-232032 (O), 232094 (R)
 FAX :N. A.

Owner : RAI LIME CO.
 PROP.OM PRKESH RAI P.O.
 MAIHAR SATNA MADHYA
 PRADESH
 Phone: N. A.
 FAX : N. A.

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	03-JAN-03
Plan/Scheme of Mining		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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	The RMP was approved on 20/11/2018, for the period 2018-19 to 2021-22. In which 02 boreholes upto 30 m. depth.	Not done as per proposal	The exploration work as proposed was not done for which violation of rule 11(1) pointed out.
1b	Exploration over lease area for geological axis 1 or 2	The RMP was approved on 20/11/2018, for the period 2018-19 to 2021-22. In which 04 boreholes upto 30 m. depth proposed in the year 2018-19 for exploration over lease area for geological axis 1.	Not done as per proposal	The exploration work as proposed was not done for which violation of rule 11(1) pointed out.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	Exploration not done as per proposal.	

1d	Balance area to be explored to bring Geological axis in 1 or 2	The RMP was approved on 20/11/2018, for the period 2018-19 to 2021-22. In which 04 boreholes upto 30 m. depth proposed in the year 2018-19 for exploration over lease area for geological axis 1.	Entire area covered under G2 level	The exploration work as proposed was not done for which violation of rule 11(1) pointed out.
1e	Balance reserve as on 01/04/20			Balance reserve as on 01/04/2021 - 123414 tons.
1f	General remarks of inspecting officers on geology, exploration etc			The exploration work as proposed was not done for which violation of rule 11(1) pointed out.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed to develop the pit towards West of lease with 2.5 mtrs bench height and width of bench is 3 mtr .	Development work done as per proposal.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, Separate bench for top soil, Over burden & Mineral	Yes, Separate bench for top soil, Over burden & Mineral	
2c	Stripping ratio or ore to OB ratio	1:1.14	1:1.14	

2d	Quantity of topsoil generation in m3	Top soil 2445 m3	Record not maintained. However top soil Used for plantation.
2e	Quantity of overburden generation in m3	Over Burden - 5560 m3	Record of OB/SB/IB generated during the year not maintained.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Proposed to develop the Quarry towards West of Quarry with height of bench 2.5 mtr and 3 mtr width. Top soil used for plantation.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	
3b	Quantity of ROM mineral production proposed	The production of 17600 tonnes ROM was proposed from existing pit during 2020-21.	The production of 17500 tonnes of ROM reported during 2020-21.	
3c	Recovery of sailable/usable mineral from ROM production	The recovery of limestone about 80% from ROM proposed from existing pit.	Recovery of about 80% drom ROM reported.	
3d	Quantity of mineral reject generation	The waste /reject about 20% from ROM proposed from existing pit.	Nil	
3e	Grade of mineral rejects 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 / Mechanised method adopted for segregating from ROM	The manual method proposed for segregating mineral & waste from ROM proposed	Work done as per proposal.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Not applicable.
3j	Provision of drilling and blasting in mineral benches	Jackhammer drilling & blasting proposed in minerals benches.	Jachhammer drilling with 33 MM dia.
3k	Provision of mining machineries in mineral benches	The mine working was proposed by B cat. manual means.	As per proposal.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The mine working was proposed by B cat. manual means by forming 2.5m maximum hight in mineral bench.	As per proposal
3m	Total area covered under excavation/pits	Around 1.3 ha	Around 1 ha
3n	Ore to OB ratio for the pit/mine during the year.	1:1.14	1:1.14
3o	Total area put in use under different heads at the end of year	1.69 ha	1.5 ha

3p	Production of ROM mineral during the last five year period as applicable	2016-17 - Nil 2017-18 - Nil 2018-19 - 17600 Tons 2019-20 - 17600 Tons 2020-21 - 17600 Tons	2016-17 - Nil 2017-18 - Nil 2018-19 - Nil 2019-20 - Nil 2020-21 - 17500 Tons	
3q	General remarks of inspecting officers on method of mining etc.			This is a B category manual mine & mining is carried out by manual method as proposed.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes, 5560 m3 OB/Soil generation proposed during 2020-21.	Top soil used in plantation.	
4b	Location of topsoil, OB and mineral reject dumps	Near Boundary pillar no12.	Top soil used for plantation and OB Dump is situated near pillar no 12.	
4c	Number of dumps within lease area and outside of lease area	01 Dump	01 Dump	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Near Boundary pillar no12.	Top soil used for plantation and OB Dump is situated near pillar no 12.	
4e	Number of active and alive dumps.	01 Dump	01 Dump	
4f	Number of dead dumps.	Nil	Not applicable	
4g	Number of dumps established.	01 Dump	01 Dump	
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 dumps	Not proposed	Not applicable.	
4j	Number of settling ponds	Not proposed	Not applicable.	
4k	Specific comments of inspecting officer on waste dump management			Top soil used for plantation and OB dump situated near Boundary pillar no 12.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	So far backfilling of mined out area has not been proposed. Only mined out area of statutory barrier zone was proposed to be backfilled.	Proposed backfilling of statutory barrier zone was not found backfilled.	for this diviation violation of rule 11(1) pointed out.
5b	Area under backfilling of mined out area	Backfilling proposed in eastern 7.5 meter barrier zone	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 mineral out area (Rule 32)	The generatyed top soil during mining operation was proposed to utilised in toping of proposed backfilled statutory 7.5m barrier zone.	Evidence of concorent utilisation of top soil were not seen within the lease area.	Deviation pointed out.
5d	Total area fully reclaimed and rehabilitated	Backfilling proposed in eastern 7.5 mtr Barrier zone.	Backfilling of proposed statutory barrier zone of 7.5m was not seen within the lease area during inspection.	deviation pointed out.

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Violation of rule 11(1) pointed out for proposed backfilling
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Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Proposed	Not submitted	Violation of rule 26(2) pointed out for PMCP report.
6b	Area available for rehabilitation (ha) .	Broken out area of statutory barrier zone was proposed for plantation after backfilling .	Plsntation on proposed site were not observed .However plantation on along the lease boundary was seen.	
6c	afforestation done (ha).		Around 20 numbers of tree planted during the year.	Efforts made by the lessee towards plantation appears fine.
6d	No. of saplings planted during the year		Around 20 numbers of tree planted during the year.	
6e	Cumulative no .of plants		PMCP report not submitted. As per available records around 20 nos of tree planted during the year.	
6f	Any other method of rehabilitation	Not proposed	Not applicable	
6g	Cost incurred on watch and care during the year	Not given	Not given	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Backfilling proposed in eastern 7.5 meter barrier zone	Reclamation and rehabilitation of broken out area of statutory barrier zone not observed during inspection.	defficiency in this regard point out through violation of rule 11(1) of MCDR,2017
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Backfilling proposed in eastern 7.5 meter barrier zone	Backfilling not done.	defficiency in this regard point out through violation of rule 11(1) of MCDR,2017
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not proposed	Not applicable.	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Not applicable.	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not proposed	Not applicable.	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed	Not applicable.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed	Not applicable	

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not proposed	Not applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Within prescribed limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Violation of rule 11(1) pointed out for backfilling. The damage towards environment is less.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area not proposed.	ROM produced from the mine id 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 sorted out at mines.	Not proposed	Not applicable	
7d	Any beneficiation process at mines	Not proposed	Not applicable	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No processing of limestone is proposed to be adopted to upgrade the ROM in the lease area. Quality of limestone of the mine is fine. There is no need of any beneficiation for the upgradation of limestone for the purpose of supply to the consignee.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes,	Yes, used for plantation.	
8b	Concurrent use or storage of topsoil	Both, concurrent use and storage of top soil was proposed for an yearmark place .	Both, concurent use as well as storage of top soil were not observed during inspection. However generated soil is utilised for planation purpose.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Backfilling was proposed	Backfilling not done as per proposal	Violation of rule 11(1) pointed out for backfilling
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	defficiency in this regard point out through violation of rule 11(1) of MCDR, 2017

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling proposed	Not done	defficiency in this regard point out through violation of rule 11(1) of MCDR,2017
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation proposed on backfilled portion of 7.5 mtrs statutory barrier zone.	Plantation on proposed site were not seen . However plantation along lease boundary were observed.	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Done with water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Efforts made by lessee in this regard may be considered satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		The monthly return submitted upto June 2021 & Annual return submitted upto 2020-21.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		There is a qualified person appointed as Mining Engineer.	Violation for rule 55 has been pointed out for mine Geologist.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		As pe Annual returns	Violation for rule 31(4) has been pointed out.

9d	Scrutiny of Annual return on afforestation		Around 20 numbers of tree planted during the year.	PMCP report not submitted. As per available records around 20 nos of tree planted during the year.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Not given in AR	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	The production of 17600 tonnes was proposed from existing pit during 2020-21.	The production of 17500 tonnes of limestone reported during 2020-21.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Ex mine price-Rs 327.5/- , Sale value Rs 377.5/- Tone & cost of production given Rs 266.36/- Tone.	
9h	Scrutiny of Annual return on fixed assets		Not given in AR	
9k	Scrutiny of Annual return on mining machineries		Not mentioned being manual mining.	

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	09-SEP-21			
MCDR17	Rule 26(2)	09-SEP-21			
MCDR17	Rule 31(1)	09-SEP-21			
MCDR17	Rule 55(1) (3)	09-SEP-21			

Date :

(ABHISHEK RANJAN GAUTAM)

Indian Bureau of Mines