

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

Review and updation of Mining Plan REPORT

Jabalpur regional office

Mine file No : MP/STN/LST-124

Mine code : 38MPR35058

- (i) Name of the Inspecting : **SQ05**) **DEEPAK SHARMA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Amit Kumar Rai Lessee
Official with
Designation
- (iv) Date of Inspection : 05-FEB-21
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PAHARI-III**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : PAHARI
Taluka : MAIHAR
Post office : PAHARI
Pin Code : 485771
FAX No. : N. A.
E-mail : N. A.
Phone : 07674-232032 (O), 232094 (R)
- (f) Police Station :
- (g) First opening date :
- (h) Weekly day of rest : TUE
2. Address for : SHRI OM PRAKASH RAI
correspondance PROP. M/S RAI LIME CO.
P.O. MAIHAR, DIST. SATNA (M.P.) 485771
3. (a) Lease Number : MPR0383
(b) Lease area : 6.54
(c) Period of lease : 20
(d) Date of Expiry : 29-DEC-01
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.

Mining Engineer

Name : AMIT KUMAR RAI,Part Time
 Qualification : B.E.(MINING)
 Appointment/ : 14-JAN-02
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	06-JUN-98
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	31-AUG-07
	:	Mining Scheme rule 12 MCDR1988	27-AUG-14
	:	Mining Scheme rule 12 MCDR1988	10-JUN-16

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration was proposed	No work related to exploration carried out	
1b	Exploration over lease area for geological axis 1 or 2	Up to G2 Level	Up to G2 Level area explored	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Furnished	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Up to G1 Level 6.543 hect	Potential minearlisd area explored up to G2 Level 4.56 hect	
1e	Balance reserve as on 01/04/20	as on 01.04.2016 122-441102 t 222-304296 t	as on 01.04.2020 122-348582 t 222-304296 t	
1f	General remarks of inspecting officers on geology, exploration etc			lease area is part of bahnder group of rocks of vindhyan super group, medium to hard limestone in nature, fine grained, compact

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	it was proposed to do developmnet work towards northern side of the ML area	develpment work carried out in the northern side of the ML as per proposal	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	it was proposed to develop and maintained 1 soil bench of 2-3 m, limestone-5-6 m	1 soil bench of 3 meter, liemstone / mineral bench of 6 meters
2c	Stripping ratio or ore to OB ratio	1:0.75	1:0.89
2d	Quantity of topsoil generation in m3	4038 cubic meter	4020 cubic meter
2e	Quantity of overburden generation in m3	11885 cubic meter	10500 cubic meter
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		development as per proposal

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	two pits	two pits	
3b	Quantity of ROM mineral production proposed	21239 cubic meter / 53097 t	21024 cubic meter / 52560 t	
3c	Recovery of sailable/usable mineral from ROM production	80 %	75-80%	
3d	Quantity of mineral reject generation	Nil-0	Nil-0	
3e	Grade of mineral rejects generation and threshold value declared.	above threshold value 34%	avg grade 46 %	

3f	Quantity of sub grade mineral generation.	Nil-0	Nil-0
3g	Grade of sub grade mineral generation	Nil-0	Nil-0
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised Method proposed for segregation	Mechanised method adopted for segregation (screening)
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	NA
3j	Provision of drilling and blasting in mineral benches	Proposed	Drilling and blasting on contractual basis
3k	Provision of mining machineries in mineral benches	Proposed	HEMM is being used in mineral benches for excavation and transportaion
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Suitable	bench height and width are suitable for proposed mining method
3m	Total area covered under excavation/pits	2.64 hect	2.44 hect
3n	Ore to OB ratio for the pit/mine during the year.	1:0.75	1:0.80
3o	Total area put in use under different heads at the end of year	4.66 hect	3.54 hect

3p	Production of ROM mineral during the last five year period as applicable	2016-17=19780 t 2017-18= 65100 t 2018-19=40103 t 2019-20 = 53097 t	2016-17=1000 t 2017-18=150 t 2018-19=39810 t 2019-20=52560 t	
3q	General remarks of inspecting officers on method of mining etc.			HEMM is being used in mineral benches for excavation and transportaion of ROM, Drilling and blasting is being used as and when required on contractual basis

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	proposed	eparate dumping of OB and mineral reject is being done	
4b	Location of topsoil, OB and mineral reject dumps	proposed in the north west portion of the ML	OB and waste is being dumpes in the north west portion of the ML	
4c	Number of dumps within lease area and outside of lease area	two dumps within the lease area	two dumps are present within the lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	OUtside the UPL	
4e	Number of active and alive dumps.	Two active dupms	Two active dumps	
4f	Number of dead dumps.	None-0	None-0	
4g	Number of dumps established.	Not proposed	None-0	

4h	Whether Retaining wall or garland drain all along dumps are there.	Proposal of retaining wall	retaining wall prepared	
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall of 250 meter	around 300 to 350 meters retaining wall prepared	
4j	Number of settling ponds	Not Proposed	Nil-0	
4k	Specific comments of inspecting officer on waste dump management			waste and mineral are being stacked separately, retaining wall prepared around the dumps for protective measures

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.	Full extraction of mineral proposed	Full extraction of mineral in process	
5b	Area under backfilling of mined out area	Not Proposed	Area not fully extracted	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed	Top Soil is being used in planttaion	
5d	Total area fully reclaimed and rehabilitated	Nil-0	Nil-0	

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Full extraction of mineral is proposed. No area fully extracted, no backfilling done
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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	
6b	Area available for rehabilitation (ha) .	Not Proposed	Nil-0	
6c	afforestation done (ha).	0.20 hect	0.50 hect	
6d	No. of saplings planted during the year	Not Proposed	Nil	
6e	Cumulative no .of plants	Not Proposed	Nil	
6f	Any other method of rehabilitation	Not Proposed	NIL	
6g	Cost incurred on watch and care during the year	Not Furnished	NA	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Proposed	Nil	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Proposed	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not Proposed	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Proposed	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not Proposed	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.20 hect	0.50 hect
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Proposed	plantation over the area

6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	As per approved mining plan	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Top Soil being used for planttaion

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Dispatch proposed after screening at mine site	ROM is being dispatched after screening at site	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical method	screening method is being used for segregation	
7c	Different grade of mineral sorted out at mines.	not proposed	NA	
7d	Any beneficiation process at mines .	Not Proposed	NA	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROm is being screened at mine site before dispatch

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	as per proposal top soil is being used in plantation
8b	Concurrent use or storage of topsoil	plantation proposed	top soil is being used in plantation
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed	as per proposal separate dumping is being done
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	proposed	as per proposal depending upon the fully extracted area and waste generation
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	proposed	as per proposal
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	proposed	as per proposal
8g	Survival rate	80%	70%
8h	Water sprinkling on roads to control airborne dust	proposed	water sprinkling by water tanker
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		needs to improve

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Furnished	Mining Engineer Amit Kumar Rai	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Furnished	Furnished	
9d	Scrutiny of Annual return on afforestation	Not Furnished	NA	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Furnished	Furnished	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Furnished	Furnished	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Furnished	INR 268 ex mine price INR 209.56 cost of production	
9h	Scrutiny of Annual return on fixed assets	Not Furnished	Not Furnished	
9k	Scrutiny of Annual return on mining machineries	Furnished	Furnished	

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

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :

(DEEPAK SHARMA)

Indian Bureau of Mines