INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Jabalpur regional office

Mine file No : MP/STN/LST-128 Mine code : 38MPR35053

(i) Name of the Inspecting : SQ05) DEEPAK SHARMA

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine :

Official with Designation

(iv) Date of Inspection : 11-FEB-20
(v) Prev.inspection date : 08-MAR-18

PART-I : GENERAL INFORMATION

(a) Mine Name : NADAN (1)

(b) Registration NO. : IBM/6666/2011

(c) Category : A Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : SATNA
Village : NADAN
Taluka : MAIHAR
Post office : NADAN
Pin Code : 485771

FAX No. : 07674-232144

E-mail : raico34@yahoo.com

Phone : 07674-232032 (0), 232094 (1

(f) Police Station : MAIHAR

(g) First opening date :

(h) Weekly day of rest : SAT

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 : MPR0381
(b) Lease area : 8.09
(c) Period of lease : 20

(d) Date of Expiry : 08-NOV-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 : Existing rule 11 MCDR1988
Plan/Scheme of Mining Renewal under rule 24 MCR19

Existing rule 11 MCDR1988 06-OCT-99
Renewal under rule 24 MCR1960 25-MAY-07
Mining Scheme rule 12 MCDR1988 04-JUL-14
MP modif under 17(3) MCR 2016 05-NOV-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration proosed in the reporting year 2019-20	no exploration work carried out in the reporting year 2019-20	
1b	Exploration over lease area for geological axis 1 or 2	ML area explored upto G2 level	ML area explored upto G2 level	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	not mentioned	nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	8.09 hect whole lease area needs to explored upto g1	8.09 hect needs to explore upto g1 level	
1e	Balance reserve as on 01/04/20	as on 01.04.2018 122-862838 222-570865	as on 01.04.2019 122-751038 222-570865	units are in tonnes
1f	General remarks of inspecting officers on geology, exploration etc			exporation over g2 level, ml area belongs to rohtas formation

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	working was proposed in the central part of the ML area in the single pit	workign was in the single pit	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	proposed	separate benches maintained in soil and in 1st mineral	

2c	Stripping ratio or ore to OB ratio	1:0.64	1:0.50	
2d	Quantity of topsoil generation in m3		542 cu m	
2e	Quantity of overburden generation in m3		9650 cu m	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development in the said location with slower rate

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	workign was proposed in the sinlge pit	single pit workign is being done	
3b	Quantity of ROM mineral production proposed	63091 tonnes	47200 tonnes	
3с	Recovery of sailable/usable mineral from ROM production	80%	75-80%	
3d	Quantity of mineral reject generation	not proposed	nil	
3e	Grade of mineral rejects generation and threshold value declared.	not proposed	nil	
3f	Quantity of sub grade mineral generation.	not proposed	nil	
3g	Grade of sub grade mineral generation	not proposed	nil	

3h	Manual / Mechanised method adopted for segregating from ROM	mechanised methdo proposed	screeners are being used for segragation	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	not proposed	nil	
3ј	Provision of drilling and blasting in mineral benches	proposed	small dia as per aproved mining plan	
3k	Provision of mining machineries in mineral benches	proposed	HEMM is being used in mineral benches	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	proposed height and width suitable	as per approved mining plan proposed heigjht and width suitable for opencast mining	
3m	Total area covered under excavation/pits	2.40	1.55	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.64	1:0.50	
3p	Production of ROM mineral during the last five year period as applicable	2014-15=13268 2015-16=35883 2016-17=43376 2017-18=53785 2018-19=64645 2019-20=63091	2014-15=0 2015-16=1313 2016-17=540 2017-18=250 2018-19=64600 2019-20=47200	units are in tonnes
3q	General remarks of inspecting officers on method of mining etc.			HEMM is being used in the mineral benches

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks	

4 a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposed	Seperate dumps of waste and soil located in the ML	
4b	Location of topsoil, OB and mineral reject dumps	Proposed	waste dumps are located in the western part of the ML	
4 C	Number of dumps within lease area and outside of lease area	one	one	
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.		one active dump	
4 f	Number of dead dumps.	not proposed	nil	
4g	Number of dumps established.	not proposed	nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	not proposed	nil	
4i	Length of Retaining wall or garland drain all along dumps	not proposed	nil	
4 ј	Number of settling ponds	not proposed	nil	
4k	Specific comments of inspecting officer on waste dump management			only one waste dump located in the ML area which is in the western part of the ML

Solid Waste Management - Backfilling:

Sl.No. Item Propasals Actual work Remarks	
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	full extraction proposed	full extraction of mineral under process	
5b	Area under backfilling of mined out area	not proposed	no area is fully mature enough for the backfilling	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	proposed	soil is used in planttaion over backfilled are and barrier zone	
5d	Total area fully reclaimed and rehabilitated	not proposed	no area is fully mature enough for the backfilling	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			area not fully mature enough for backfilling

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	submitted	
6b	Area available for rehabilitation (ha) .	3.36	0.50	
6c	afforestation done (ha).	2.5	1.0	
6d	No. of saplings planted during the year	50 nos	50 nos	
6e	Cumulative no .of plants	500 nos	200-250 nos	

6f Any other method not proposed nil of rehabilitation

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area		grad wise is being done on the crrushed installed in the near by ML	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	mechanical method	mechanical method adopted for sorting and sizing	
7c	Different grade of mineral sorted out at mines.	proposed	ROM is being sorted in the adjacent ML of same ML holder	
7d	Any beneficiation process at mines	not proposed	nil	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	proposed	generates soil is being used in planttaion	
8b	Concurrent use or storage of topsoil	-	top soil is being used in plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	proposed	separate waste dupm located in the ML area	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	not proposed	no area is fully mature enough for the backfilling	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	proposed	as per approved mining plan	
8g	Survival rate	80%	70%	
8h	Water sprinkling on roads to control airborne dust	proposed	withthe use of water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			needs more improvements and planttaion

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	AR submitted upto 2020- 21 MR submitted upto Oct 21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	furnished	Mining Engineer in charge Amit Kumar Rai	

9c Scrutiny of f
Annual return on
land use pattern
for area under
pits, reclaimed
area, dumps etc.

furnished

Lease area (surface area)
utilisation as at the end of year (hectares)
Under forest
Outside forest Total
(i) Already exploited &

(i) Already exploited 8 abandoned by opencast (O/C) mining 0.000 0.430 0.430 (ii) Covered under current (O/C) Workings 0.000 1.040

1.040 (iii)

Reclaimed/Rehabilitated 0.000 0.100 0.100 (iv) Used for waste disposal 0.000 0.362 0.362

(v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 0.050 0.050

(vi) Other Purpose (GREEN BELT) 0.000 0.320 0.320

(vii) Work done under

Scrutiny of furnished Annual return on afforestation

 $50\ \mathrm{nos}$ of plants were planted during the year

9d

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Grade-wise production,
       Annual return on
                                        Despatches, Stocks and
       mineral reject
                                        Ex-mine prices of
       generation
                                        Processed ore ( LIMESTONE
       (Grade and
       quantity)
                                        Grades Opening stock
                                        at mine head
                                        (in tonne)
                                        Production (in
                                        tonne)
                                        Dispatches
                                        from mine
                                        head
                                        (in tonne)
                                        Closing
                                        stock at
                                        mine head (in
                                        tonne)
                                        Ex-mine
                                        price
                                        (in . Per
                                        Tonne)
                                        (a) LD 0.000 0.000 0.000
                                        0.000 0.00
                                        (b) SMS 0.000 0.000
                                        0.000 0.000 0.00
                                         (c) Chemical 0.000 0.000
                                        0.000 0.000 0.00
                                         (d) BF 1685.550 0.000
                                        0.000 1685.550 0.00
                                        (e) Cement 28862.132
                                        47200.000 59825.672
                                        16236.460 279.80
                                        Production and Stocks of
9f
       Scrutiny of
                       furnished
                                        ROM ore at Mine-head (
       Annual return on
       {\tt ROM} stock and/or
                                        LIMESTONE )
       graded ore
                                        Category Opening stock
                                        (in tonne)
                                        Production
                                        (in tonne)
                                        Closing stock
                                         (in tonne)
                                         (a) Open Cast Workings
                                        0.000 47200.000 0.000
                                        (b) Underground Workings
                                        0.000 0.000 0.000
                                        (c) Dump Workings 0.000
                                        0.000 0.000
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furnished

Scrutiny of

9e

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	furnished	ex mine price 279.98 INR cost of production 232.41 INR
9h	Scrutiny of Annual return on fixed assets	not furnished	nil
9k	Scrutiny of Annual return on mining machineries	furnished	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) FRONT END LOADER 0.000 CUM 1 Non Electrical Opencast DUMPER 10.000 TONNE 2 Non Electrical Opencast DUMPER 16.000 TONNE 1 Non Electrical Opencast WATER TANKER 20000.000 LITRE 1 Non Electrical Opencast PUMPS (NON-ELEC.) 0.000 L/MN 1 Non Electrical Opencast

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Details of violations observed during current inspection and compliance position of violation pointed out					
Viola	tion observed	Show couse position			
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on		

Date : (DEEPAK SHARMA)

Indian Bureau of Mines