

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/KTN/LST-109

Mine code : 38MPR47023

- (i) Name of the Inspecting : **G005**) **SANJAY M. GIRHE**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 12-MAR-20
- (v) Prev.inspection date : 17-DEC-03

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JAMWANI KHURD (4.420)**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : KATNI
Village : JAMWANI KHURD
Taluka : V.GARH
Post office : JAMWANI KHURD
Pin Code :
FAX No. : N. A.
E-mail : N. A.
Phone : 07622-52352
- (f) Police Station :
- (g) First opening date : 20-MAY-84
- (h) Weekly day of rest : THU
2. Address for : SHRI MADAN LAL GROVER
correspondance : CIVIL LINES, KATNI (M.P.) 483501
3. (a) Lease Number : MPR0229
(b) Lease area : 8.59
(c) Period of lease : 10
(d) Date of Expiry : 13-SEP-02
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : MADAN LAL GROVER
CIVIL LINES KATNI MADHYA
PRADESH
Phone:N. A.
FAX :N. A.

Owner : MADAN LAL GROVER
CIVIL LINES KATNI MADHYA
PRADESH
Phone: N. A.
FAX : N. A.

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	11-NOV-08
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	23-SEP-14
		MP modif under 17(3) MCR 2016	15-JAN-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration proposals during year 2018-19 & 2019-20.	No exploration carried out during the year 2018-19 & 2019-20	Lessee needs to be proposed exploration during the years.
1b	Exploration over lease area for geological axis 1 or 2	No exploration proposals during year 2018-19 & 2019-20 for G1/G2 levels	No exploration carried out during the approved plan period.	Mineralisation proved up to 3m to 4m only by working pits.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No exploration proposals during year 2018-19 & 2019-20.	No exploration carried out	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not Proposed	Area explored under G1 level only 0.50 Ha Ha by way of working pits. Rest area of 3.92 Ha falls under G3 level	0.50 hact area is proven up to depth of 3m to 4m and further depth to be proven by core bore hole.
1e	Balance reserve as on 01/04/20	Reserves in Tonnes Probable (122) -985135 Resources in tonnes Pre-Feasibility (222): 1039225 The reserves/reso urces as on 1/4/2017 as per approved ROMP dtd 15.01.2018	Reserves in Tonnes Probable (122) -866235 Resources Pre-Feasibility (222): 1039225 The balance reserves as on 1/4/2020 as Annual return.	No additional reserves estimation done.

1f	General remarks of inspecting officers on geology, exploration etc	NA	NA	No detailed exploration carried out in mining lease area previously. Based on the mineralisation established in working pits reserves/resources have been estimated. Only proved mineralised area by working pits to be considered.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to work in Pit-1 in between N266300 to N2666200 & E470500 to E470590 by 03 production 459mRL to 451.35mRL	Mine working was carried out as per the proposed locations.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	One separate top soil & shale bench and separate three benches of 6mts heights were proposed in limestone	Separate bench observed for top soil. Bench height of 6 to 7m maintained in limestone for systematic mining.	
2c	Stripping ratio or ore to OB ratio	Proposed as 1:1.51	Achieved as 1:0.84	Due less generation OB/shale during the year
2d	Quantity of topsoil generation in m3	During the year 2019-20 total 10938 CuM & 16855 CuM in 2018-19	During the year 2019-20 only 7556 CuM top soil generated.	

2e	Quantity of overburden generation in m3	During the year 2019-20 25915 CuM OB shale proposed to be generated	During the year 2019-20 total 50000 CuM generated	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA	There is single working pits and its dimensions are- Pit-1 (1000 SqM x 2-5m depth). Lease area not worked out significantly in past and nil production was reported from 2014-15 to 2017-18

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Working was proposed in single pits from 464mRL to 451mRL	Mine working was carried out in given single pit as per the proposals	Limestone mineralisation very well established in working pits
3b	Quantity of ROM mineral production proposed	60900 tonnes limestone proposed in 2018-19	Limestone production of 60100 MT achieved in 2018-19.	
3c	Recovery of sailable/usable mineral from ROM production	80% recovery of limestone from ROM	Achieved as per the proposals	About 20% of ROM generated as inter-burden waste.
3d	Quantity of mineral reject generation	Not Proposed	Nil	No mineral reject generation
3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	Nil	
3f	Quantity of sub grade mineral generation.	Not Proposed	Nil	Neither any proposals were given for subgrade limestone nor any generated during the year.

3g	Grade of sub grade mineral generation	Not Proposed	Nil	Not Proposed during the year
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sizing & sorting proposed	Manual sizing & sorting carried out	Sorting & sizing being carried out for SMS & cement grade limestone
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Nil	Lessee is not having any plan for beneficiation study.
3j	Provision of drilling and blasting in mineral benches	Dia of 32mm shallow depth drilling & blasting is proposed	Drilling & blasting using wagon drill of 32mm dia carried out.	Jack hammer & Atlas Copco compressor LM-100-D75 was deployed
3k	Provision of mining machineries in mineral benches	L&T PC 200Excavator-1.20CuM, TATA Dumper, 10 T capacity-03 Nos Wagon Drill rods -32mm Water Tanker-5KL	L L&T PC 200Excavator-1.20CuM, TATA Dumper, 10 T capacity-03 Nos Wagon Drill rods -32mm Water Tanker-5KL	HEMM deployment proposed as per the capacity & targeted production.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No bench in OB, bench height of 6m proposed in limestone	At some extent bench height is not regular due to quality constraints	Proposed bench height is suitable as per the deposit
3m	Total area covered under excavation/pits	2.53 Ha area was proposed in approved ROMP period i.e. 2018-19 to 2022-23	0.75Ha as per Annual Return,2019-20 as on 01.04.20	
3n	Ore to OB ratio for the pit/mine during the year.	Proposed as 1:1.51	Achieved as 1:0.84	Total 50000 CuM inter-burden waste generated during the year

3o	Total area put in use under different heads at the end of year	As per the previous approved SOM dtd 01.04.2017 Pits-2.53Ha Top soil storage-0.515Ha Waste dumps-0.985Ha Infrastructure -0.01Ha Road -0 0.05Ha As on 01.04.2017.	As per the AR for the year 2019-20 Pits-0.50 Ha Top soil storage-0.515Ha Waste dumps-0.120Ha As on 01.04.2020	No lateral excavation, production was carried out in already working pit.
3p	Production of ROM mineral during the last five year period as applicable	2015-16-:57750 MT 2016-17-: 91950 MT 2017-18-: 78750 MT 2018-19-: 58863 MT 2019-20-: 60900 MT	2015-16-: Nil 2016-17-: Nil 2017-18-: Nil 2018-19-: 58800 MT 2019-20-: 60100 MT	Production details as per annual return 2015-16 & 2019-20
3q	General remarks of inspecting officers on method of mining etc.	NA	NA	Open cast mechanised working proposed by using Excavator & dumper combination with drilling & blasting using wagon drill. Single working pit is developed & mineralisation proved up to depth of 3 to 5mts .

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate top soil, mine waste dumping proposed	top soil, mine waste generated dumped at proposed locations.	Mine waste in the form of inter-burden shale.

4b	Location of topsoil, OB and mineral reject dumps	Top soil dump & mine waste proposed for backfilling as well as dumping towards South-West part of ML	Top soil dump & mine waste is dumped at earmarked locations	
4c	Number of dumps within lease area and outside of lease area	Only one dump towards south-eastern is located within lease area	Only one dump towards south-eastern is located within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Top soil & mine waste generated proposed to be dumped at South-Eastern part of lease area beyond UPL	Dumping carried out at earmarked locations	At present only one waste dumps are existing towards southern & eastern part of ML area.
4e	Number of active and alive dumps.	Only one dump towards south-eastern is located within lease area	Only one dump towards south-eastern is located within lease area. No dead dumps in the lease area.	
4f	Number of dead dumps.	Not Proposed	No dead dumps in the lease area	
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	
4j	Number of settling ponds	Not Proposed	Nil	

4k	Specific comments of inspecting officer on waste dump management	NA	NA	Except top soil, mining lease area is devoid of any overburden. Mine waste is in the from of intercalated shale.
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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.	Presently none of the pit is mineral exhausted for backfilling	Scope of backfilling doesn't exist as no pit is mineral exhausted	
5b	Area under backfilling of mined out area	Not Proposed	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Nil	Top soil proposed to be dumped adjacent to 7.5m barrier zone
5d	Total area fully reclaimed and rehabilitated	Not Proposed	Nil	Presently none of the pit is mineral exhausted for backfilling.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	Top soil & waste/inter-burden encountered in the lease area proposed to be stacked at earmarked location for future backfilling and plantation purpose. During the year 2019-20 scope of backfilling doesn't exists.

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).	To be submitted before 1st July of every year	Submitted within time limit as per the provisions of Rule 26 of MCDR,2017	
6b	Area available for rehabilitation (ha) .	Not Proposed	Nil	Presently scope of this doesn't exists
6c	afforestation done (ha).	Not Proposed	Nil	
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 Proposed	Nil	Presently scope of this doesn't exists
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	During the year 2019-20 not proposed & during the year 2018-19 total 700 SqM area proposed for backfilling	Not carried out	Presently none of pits have been fully mineral exhausted
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	During the year 2019-20 not proposed & during the year 2018-19 total 700 SqM area proposed for backfilling	Not done	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on 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)	Not Proposed	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not Proposed	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical Air, Water, Noise monitoring Proposed	Carried out as per the proposals	Analysis reports were provided during the inspection
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	NA	Scope of PMCP work doesn't exist in the lease area presently because none of pits are mineral exhausted. Very limited PMCP proposals were given in approved document.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	60900 MT proposed as total ROM production for despatch. Grade wise sorting proposed within lease area for SMS & rest cement grade limestone	60100 MT dispatched as Cement grade limestone	No SMS grade limestone despatch during the year
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Proposed as Manual	Manual sorting is done	Entire ROM is sorted grade wise for SMS & Cement grades dispatches
7c	Different grade of mineral sorted out at mines.	Sorting is being carried out for BF grade limestone (CaO-48% (Min), SiO ₂ -3%(Max), Size-+10mm & -40mm Cement grade (CaO-40% Min, MgO-Up to 3% & SiO ₂ -10% Max	Sorting carried out as per the proposals	
7d	Any beneficiation process at mines	Not Proposed	No beneficiation process at mine	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA	Mineral is being conserved by grade wise sorting in the lease area. BF grade limestone (CaO-48% (Min), SiO ₂ -3%(Max) proposed to be sell to the steel plants. Rest Cement grade (CaO-40% Min., MgO-Up to 3% for cement manufacturing industries

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate stacking at E470370 to E470500 & N2666100 to N2666155 proposed & utilization for plantation purpose proposed	Top soil stacked & utilized as proposed	
8b	Concurrent use or storage of topsoil	No concurrent use & storage proposed	Top soil stacked at earmarked locations	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping opf OB at N266150 to N2666235 & E470350 to E470480 proposed	OB dumping carried out as per the proposals	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB proposed to be dumped towards South-West	OB dumped at earmarked locations as proposed.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed during the year	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation not proposed during the year	No plantation carried out	
8g	Survival rate	Not Proposed	Nil	

8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed by water tanker	Regular water sprinkling is done by water tanker	Water tanker of 5KL capacity is provided for the purpose
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	NA	Aesthetic beauty in and around mine area is not much satisfactory as plantation not done up to that extent. Hence, it was instructed to propose at least 300 to 400 sapling/year in next approval of document.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. not submitted upto- Feb-2020 A.R. submitted upto- 2018-19	Annual Return for the year 2018-19 was submitted within time limit.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Shri Raj Narayan Dhruva appointed as Mining Eng. & Shri Manoj Kumar Tripathi as Geologist	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Opencast working- 0.25 Ha Waste dumping- 0.024 Ha Infrastructure -0.87Ha	
9d	Scrutiny of Annual return on afforestation	Not Give	Nil	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Given	Nil	No mineral reject generation proposed

9f	Scrutiny of Annual return on ROM stock and/or graded ore		BF Grade Limestone: O/S-1500 MT Production-Nil MT Despatch-1500 MT C/S-Nil Cement Grade O/S-Nil Production-58800 MT Despatch-57887 MT C/S-912.50
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Ex-mine price: BF Grade -Rs 360 /MT Cement Grade- Rs 332/MT
9h	Scrutiny of Annual return on fixed assets	Given	No comments
9k	Scrutiny of Annual return on mining machineries	Given	Nil

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 :

(SANJAY M. GIRHE)

Indian Bureau of Mines