

MINERALS DEVELOPMENT AND REGULATION DIVISION

1/8207/2023

Review and updation of Mining Plan REPORT

Jabalpur regional office

Mine file No : MP/SATNA/LST.-159

Mine code : 38MPR35260

- (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 : 25-JUL-22
- (v) Prev.inspection date : 19-MAR-19

PART-I : GENERAL INFORMATION

1. (a) Mine Name : TIHAI
- (b) Registration NO. :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : SATNA
Village : TIHAI
Taluka : RAMPUR
Post office :
Pin Code :
FAX No. :
E-mail :
Phone :
- (f) Police Station :
- (g) First opening date : 22-NOV-75
- (h) Weekly day of rest : SUN
2. Address for :
correspondance
3. (a) Lease Number : MPR2247
- (b) Lease area : 8.09
- (c) Period of lease : 50
- (d) Date of Expiry : 21-NOV-25
4. Mineral worked : LIMESTONE Main

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5. Name and Address of the

Lessee : URMILA TRIPATHI
CHANDMARI ROAD, DHAWARI
SATNA MADHYA PRADESH
Phone:
FAX :

Owner : URMILA TRIPATHI
CHANDMARI ROAD, DHAWARI,
SANTA (M.P SATNA MADHYA
PRADESH
Phone:
FAX :

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	16-JUL-07
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	03-JUN-15
	:	MP review under 17(1) MCR 2016	10-MAY-19

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the year 2021-22 there was no proposals of exploration	During the year 2021-22 there was no proposals of exploration	Violation of Rule 11(1) of MCDR, 2017 was pointed out & issued for not carrying out the exploration as proposed in 2019-20 as per approved ROMP dtd 10.05.2018
1b	Exploration over lease area for geological axis 1 or 2	During the year 2021-22 there was no proposals of exploration	Nil	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	During the year 2021-22 there was no proposals of exploration	During the year 2021-22 there was no proposals of exploration	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	During the year 2021-22 there was no proposals of exploration	ML area explored under G2 level-4.03Ha, G3-4.06Ha	
1e	Balance reserve as on 01/04/20	Reserves in Tonnes Probable (122)-331315 MT Resources in Tonnes Pre-Feasibility(22): 28575 MT Inferred(333): 329184 MT Resources/Reserves position as per ROMP approved on 10.02.2018	Reserves in Tonnes Probable (122)-244192 MT Resources in Tonnes Pre-Feasibility(22): 41835 MT Inferred(333): 329184 MT Resources/Reserves position as per Annual	No additional reserves/resources have been estimated

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1f	General remarks of inspecting officers on geology, exploration etc	NA	NA	ML area belongs to Vindhyan Super Group of rocks, Limestone of the ML area found with laterite patches. Dark grey to Light grey in colour fine to medium grained limestone.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	During the year 2021-22, it was proposed to work in the between the S200 to S170 & E30 to E145 from 410mRL to 390mRL	Working was carried out as per the proposed locations	During the year excess production was carried against the EC limit for which violation under Rule 11(1) of MCDR, 2017 was ponted out & issued to the lessee
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed	Separate benches in the soil and in teh mineral benches are formed and maintained top soil bench height is about 1-1.5 meter and in mineral benches 5-6 meter height as per the proposal	Benches appears as per the proposed specifications in approved plan
2c	Stripping ratio or ore to OB ratio	Proposed as 1:0.1 Tonne/CuM	Acheived as 1:0.08 Tonne/CuM	During the year 2021-22 total 9332 CuM OB generated
2d	Quantity of topsoil generation in m3	No Proposals	Nil	working was proposed in the mineral benhces only, development was as per proposal
2e	Quantity of overburden generation in m3	Proposed as 12420 CuM	Acheived as 9332 CuM	Less OB generated due to less development

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2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA	During the year excess production was carried against the EC limit for which violation under Rule 11(1) of MCDR, 2017 was pointed out & issued to the lessee
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Working was proposed in single pit	Working carried out in single pit as per the proposals	Nil
3b	Quantity of ROM mineral production proposed	Total 124200 Tonnes of limestone production was proposed	Total 115404 MT production acheived during the year 2021-22	Excess production carried out for which violation under Rule 11(1) of MCDR,2017 pointed out & issued to the lessee.
3c	Recovery of sailable/usable mineral from ROM production	Proposed as 80%	Acheived about 80%	20% of limestone zone is unrecovered because of recovery loss
3d	Quantity of mineral reject generation	No Proposals	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No Proposals	Nil	No mineral rejects generation proposed in 2021-22
3f	Quantity of sub grade mineral generation.	No Proposals	Nil	Nil
3g	Grade of sub grade mineral generation	No Proposals	Nil	Nil

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3h	Manual / Mechanised method adopted for segregating from ROM	No Proposals	Nil	NO segregation of limestone is being practised in ML area
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposals	Nil	
3j	Provision of drilling and blasting in mineral benches	Small dia 32mm shallow depth drilling & blasting is proposed by Jack hammer	Drilling & blasting using jack hammer carried out Small dia 32mm shallow depth.	Nil
3k	Provision of mining machineries in mineral benches	Proposed	HEMM is being used in mineral benches for excavation and trasportaion of ROM / minerals	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed	Proposed height and width of benches are suitable for mining as per approved mining plan	
3m	Total area covered under excavation/pits	Proposed as 3.1016 hect as per ROMP approved dtd 10.05.2018	305 Ha as per annual return for the year 2021-22	
3n	Ore to OB ratio for the pit/mine during the year.	Proposed as 1:0.1 Tonne/CuM	Acheived as 1:0.08 Tonnes/Cum	
3o	Total area put in use under different heads at the end of year	As per the previous approved ROMP Pits-3.10Ha Waste Dumps- 0.404Ha Infrastructure -0.01Ha Road-0.02Ha Other-0.05Ha	As per the Annual Return for the year 2021-22 Pits-3.05Ha Waste Dumps-1.173Ha Infrastructure-0.050Ha Road-0.02Ha Green Belt-0.690 Ha	

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3p	Production of ROM mineral during the last five year period as applicable	2016-17 -: 33150 MT 2017-18-: Nil 2018-19-: Nil 2019-20-: 84000MT 2020-21-: 88160MT 2021-22-: 124200MT	2016-17-: 3150MT 2017-18-: Nil 2018-19-: Nil 2019-20-: 47600MT 2020-21-: 59413MT 2021-22-: 115404MT	Production details as per Annual returns
3q	General remarks of inspecting officers on method of mining etc.	NA	NA	Open cast mechanised mine working proposed by using Excavator /JCB & dumper combination with shallow drilling & blasting using jack hammer.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of soil, waste and mineral proposed	separate dumping of soil and mineral stack located in the lease area	Nil
4b	Location of topsoil, OB and mineral reject dumps	OB/waste dumps are proposed in the western side of the lease area	OB/waste were dumped in the western side of the ML area	Nil
4c	Number of dumps within lease area and outside of lease area	Three OB dumps were proposed within the lease area	Three OB dumps were proposed within the lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Dump are located outside the UPL	
4e	Number of active and alive dumps.	Three active OB dumps in ML area	Three active OB dumps in ML area	
4f	Number of dead dumps.	No Proposals	As the mine was started working from 2019-20 no dead dumps located in the ML area	

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4g	Number of dumps established.	No Proposals	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposals	Dumps height are less than 3 meters no retaining wall or garland drain proposed neither prepared	
4i	Length of Retaining wall or garland drain all along dumps	No Proposals	Nil	Nil
4j	Number of settling ponds	No Proposals	Nil	
4k	Specific comments of inspecting officer on waste dump management	NA	NA	There were three OB / waste dumps located within the western side of the ML area

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Presently no area is matured/mineral exhausted. Full extraction of the mineral proposed upto UPD	Full extraction of mineral was not finished yet upto UPD	
5b	Area under backfilling of mined out area	No Proposals	Very small area of 0.050Ha backfilled in 7.5m barrier zone	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposals	Nil	No top soil generation proposed in 2021-22
5d	Total area fully reclaimed and rehabilitated	No Proposals	Meager area of 0.050Ha reclaimed by backfilling in 7.5m barrier zone	

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5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	Backfilling not started yet, full extrcation of the mineralization not finished yet, no area is mature enough for the activity
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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).	To be submitted before 1st July of every year	Yes, submitted within time limit as per the provisions of Rule 26 of MCDR,2018	
6b	Area available for rehabilitation (ha) .	No Proposals	Nil	No area is availbale for rehabilitation
6c	afforestation done (ha).	0.50 hect	1.0 hect approx over the barrier zones	
6d	No. of saplings planted during the year	50 saplings proposed for plantation	20 saplings planted in ML area & 200 saplings outside ML area	Survival rate is between 80-90%
6e	Cumulative no .of plants	NA	NA	No information is available/furnishe d in approved document
6f	Any other method of rehabilitation	No Propsals	Nil	Nil
6g	Cost incurred on watch and care during the year	No Proposals	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No Proposals	Nil	Nil

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6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposals	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposals	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposals	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposals	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No Proposals	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Proposals	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposals	Nil

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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
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	NA	Presently scope of backfilling/reclamation & rehabilitation doesn't exist and no proposals are given. Periodic monitoring is being carried out by outsourced consultant.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	124200 MT proposed as total ROM production for despatch.	115404 MT limestone/ROM production carried out for further dispatches	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No Proposal	Nil	NO segregation of ROM is required as entire ROM is being dispatched.
7c	Different grade of mineral sorted out at mines.	No Proposal	Nil	No segregation of ROM is required as entire ROM is being dispatched.
7d	Any beneficiation process at mines .	No Proposals	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA	There is no mineral rejects/subgrade generation. Entire ROM is being saled to the nearby cement plants

Environment:

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Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Nil	No topsoil generation is proposed during the year 2021-22
8b	Concurrent use or storage of topsoil	No Proposals	Nil	No topsoil generation is proposed during the year 2021-22
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed	OB/waste stacked separetly	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposals	During the year, no area is smature enough for restoration	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposals	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	50 Saplings proposed during the year 2021-22	Total 20 saplings planted in ML area & 200 saplings outside the ML area	Survival rate is about 70-80%
8g	Survival rate	Proposed as 80%	Acheived as about 70-80%	
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

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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 200 sapling/year in further approval of documents.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR submitted upto 2021-22 MR submitted upto June-22	Annual Return for the year 2021-22 and monthly returns were submitted within time limit as per prevailing rules provisions.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Shri Vikram Singh as Mining Eng. and Shri Devanath Pathak as Geologist were appointed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Pits-3.05Ha Waste Dumps-1.173Ha Infrastructure-0.050Ha Road-0.02Ha Green Belt-0.690 Ha	
9d	Scrutiny of Annual return on afforestation	Given	20 saplings planted in ML area and 200 saplings outside ML area.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Given	Nil	No mineral reject generation was proposed in approved ROMP

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9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	Cement Grade: O/S-1316.09 MT Production-115404MT Despatch-70205 MT C/S-46514MT	No other grades of limestone production reported
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Ex-mine price: Cement Grade -Rs 328.97/MT	
9h	Scrutiny of Annual return on fixed assets	Given	Nil	
9k	Scrutiny of Annual return on mining machineries	Given	Nil	Nil

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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

Date :**(SANJAY M. GIRHE)**

Indian Bureau of Mines