

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

**MCDR inspection REPORT
Jabalpur regional office**

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

Mine code : 38MPR35260

- (i) Name of the Inspecting : **SQ05**) **DEEPAK SHARMA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Rahul Tripathi representative of lessee
Official with
Designation
- (iv) Date of Inspection : 17-SEP-21
- (v) Prev.inspection date :

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

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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There was no exploration proposal for the year 2020-21	No exploration work carried out during the year 2020-21	
1b	Exploration over lease area for geological axis 1 or 2	As per the approved mining plan the ML area is explored upto G2 level	In the whole ML area 8.09 hect, potential mineralised area is explored upto G2 level	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Applicable	As no exploration proposed neither carried out during the year 2020-21, no details of exploration agency mentioned	
1d	Balance area to be explored to bring Geological axis in 1 or 2	ML area (8.09 hect) is explored upto G2 level	ML area is explored upto G2 level, therefore the entire ML area 8.09 hect needs to explored upto G1 level	
1e	Balance reserve as on 01/04/20	as on 01.04.2018 122-331315 222-28575 333-329184	as on 01.04.2021 122-224302 222-28575 333-329184	Units are in tonnes
1f	General remarks of inspecting officers on geology, exploration etc			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.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	in the year 2020-21 it was proposed to work in the between the baoundary pillars 11 to 10 (northern side) and baunadry pillar 3 to 4 in the (southern side)	workign was in the said location with slower rate	reason for deviation of production mentioned by lessees less demand of buyers.
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	
2c	Stripping ratio or ore to OB ratio	1:0.1	1:0.13	due to less production / development actual stripping ration can not be defined.
2d	Quantity of topsoil generation in m3	Not Proposed	working was proposed in the mineral benhces only, development was as per proposal	
2e	Quantity of overburden generation in m3	8816 cu m	8000 cu m	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development was as per the proposal, production was not reported due to no demand from buyer (as mentioned by the lessee)

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	Single Pit	Single pit workign was being done in the ML area in between the baunday pillar 11 to 10 and 3 to 4
3b	Quantity of ROM mineral production proposed	88160 tonnes	59413 tonnes
3c	Recovery of sailable/usable mineral from ROM production	80%	80-90%
3d	Quantity of mineral reject generation	Not Proposed	ROM is being dispatched to cement plants
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	Entire rom is being sold as merchant miner
3h	Manual / Mechanised method adopted for segregating from ROM	not proposed	no segragation process adopted
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	not proposed	nil
3j	Provision of drilling and blasting in mineral benches	proposed	on contract basis
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	suitable	proposed height and width of benches are suitable for mining as per approved mining plan	
3m	Total area covered under excavation/pits	3.1016 hect	2.1516 hect	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.10	1:0.13	
3o	Total area put in use under different heads at the end of year	3.3656 hect	2.6316 hect	
3p	Production of ROM mineral during the last five year period as applicable	2015-16=3240 2016-17=33150 2017-18=0 2018-19=0 2019-20=84000 2020-21=88160	2015-16=0 2016-17=33150 2017-18=0 2018-19=0 2019-20=47600 2020-21=59413	units are in tonnes 2017-18 to 2018-19 was lapse period
3q	General remarks of inspecting officers on method of mining etc.			Open cast mechanised method of mining adopted, with the used of HEMM

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	
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	
4c	Number of dumps within lease area and outside of lease area	three dumps were proposed within the lease area	three dump of OB/waste located 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 dumps	there were three active dumps located of OB/waste	
4f	Number of dead dumps.	not proposed	as the mine was started working from 2019-20 no dead dumps located in the ML area	
4g	Number of dumps established.	not proposed	no dump established yet	
4h	Whether Retaining wall or garland drain all along dumps are there.	not proposed	dumps heinght 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	not proposed	nil	
4j	Number of settling ponds	not proposed	nil not applicable	
4k	Specific comments of inspecting officer on waste dump management			there were three OB / waste dumps located within the western side of the ML area

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 the mineral proposed upto UPD	full extraction of mineral was not finihsed yet upto UPD	
5b	Area under backfilling of mined out area	not proposed	no area proposed to backfilled during the year	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	proposed	generated soil is being used in plantation	
5d	Total area fully reclaimed and rehabilitated	not proposed	not applicable, no area is fully mature enough for the activity	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			backfilling not started yet, full extrcation of the mineralization not finished yet, no area is mature enough for the activity

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	no area is mature enough for the activity as full extrcation of mineral is under progress	
6c	afforestation done (ha).	0.50 hect	1.0 hect approx over the barrier zones	
6d	No. of saplings planted during the year	50 nos	100-150 nos	
6e	Cumulative no .of plants	300 nos	350-400 nos	
6f	Any other method of rehabilitation	not proposed	nil	

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	annual pmcm report not submitted voilation issued
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch proposed	ROM si being dispatched to near by cement plants as merchant miner	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	not proposed	nil	
7c	Different grade of mineral sorted out at mines.	Not Proposed	Nil	
7d	Any beneficiation process at mines	not propsoed	nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROM is being dispatched to near by cement plants

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	proposed	generated soil is being removed separetly	

8b	Concurrent use or storage of topsoil	proposed	generated soil is being used in planttaion over the barrier zone during the year	
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	not proposed	during the year no area i smature enough for restoration	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	not proposed	during the year no area i smature enough for restoration	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	proposed	as per proposal	
8g	Survival rate	80%	60-70%	
8h	Water sprinkling on roads to control airborne dust	proposed	with the use of water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			needs improvements

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Submitted	AR submitted upto 2020-21 MR submitted upto Nov 21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Not Furnished	Geologist and ME details not furnished	voilation issued
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	furnished	<p>Already exploited & abandoned by opencast (O/C) mining 0.000 0.017 0.017</p> <p>(ii) Covered under current (O/C) Workings 0.000 2.667 2.667</p> <p>(iii) Reclaimed/Rehabilitated 0.000 0.033 0.033</p> <p>(iv) Used for waste disposal 0.000 0.782 0.782</p> <p>(v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 0.050 0.050</p> <p>(vi) Other Purpose (Green belt) 0.000 0.460 0.460</p> <p>(vii) Work done under progressive mine closure plan during the year 0.000 0.000 0.000</p>	
9d	Scrutiny of Annual return on afforestation	furnished	furnished	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	furnished	Grades Opening stock at mine head (in tonne) Production (in tonne) Despatches from mine head (in tonne) Closing stock at minehead (in tonne) Ex-mine price (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 0.000 0.000 0.000 0.000 0.00 (e) Cement 602.910 59413.000 58699.820 1316.090 282.40
9f	Scrutiny of Annual return on ROM stock and/or graded ore	furnished	Category Opening stock (in tonne) Production (in tonne) Closing stock (in tonne) (a) Open Cast Workings 0.000 59413.000 0.000 (b) Underground Workings 0.000 0.000 0.000 (c) Dump Workings 0.000 0.000 0.000
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	furnished	ex mine price 282.40 INR
9h	Scrutiny of Annual return on fixed assets	not furnished	nil-0

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 1.200 CUM 2 Non Electrical Opencast DUMPER 16.000 TONNE 2 Non Electrical Opencast DUMPER 10.000 TONNE 2 Non Electrical Opencast WATER TANKER 5000.000 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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 26(2)	29-DEC-21			
MCDR17	Rule 33	29-DEC-21			
MCDR17	Rule 55(1) (1	29-DEC-21			

Date :

(DEEPAK SHARMA)

Indian Bureau of Mines