

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/KTN/LST-65

Mine code : 38MPR47026

- (i) Name of the Inspecting : **SQ05**) **DEEPAK SHARMA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 04-FEB-20
- (v) Prev.inspection date : 07-FEB-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **AMEHTA**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : KATNI
Village : AMEHTA
Taluka : V.GARH
Post office : KAHANGAON
Pin Code :
FAX No. : N. A.
E-mail : N. A.
Phone : N. A.
- (f) Police Station : VIJARAHHOGARH
- (g) First opening date : 06-MAR-76
- (h) Weekly day of rest : SUN
2. Address for : SHRI RANJAN GROVER
correspondance : CIVIL LINES, KATNI (M.P.) 483501
3. (a) Lease Number : MPR1368
(b) Lease area : 18.33
(c) Period of lease : 20
(d) Date of Expiry : 05-MAR-16
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

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

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

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	05-JUL-96
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	14-FEB-03
		Modif.of approved Mining Plan	10-MAR-05
		Mining Scheme rule 12 MCDR1988	28-MAR-12
		Mining Scheme rule 12 MCDR1988	22-APR-14
		Renewal under rule 24 MCR1960	24-DEC-14

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	no exploration proposed during 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 G1 level	ML area already explored upto G1 level	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Mentioned	No exploration work carried out durign the year	
1d	Balance area to be explored to bring Geological axis in 1 or 2	ML already explored upto G1 level	ML already explored upto G1 level	
1e	Balance reserve as on 01/04/20	as on 01.04.2014 111-2329239 211-1143125	as on 01.04.2020 121-3348853 211-1472725	units are in tonnes
1f	General remarks of inspecting officers on geology, exploration etc			ML area belongs to rohtas formation of vindhyan super group, in the kymore hill region, hard and compact in nature, light grey to dark grey coloured limestone, shale patches found as interbeds

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	it was proposed to work in the central part of the ML area in the quarry-1, advancement towards the eastern direction and trimming of benches of western side	workign was as per the proposal with slight variation in maintaninig the bench widths	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	proposed	separate benches proposed in the soil of 1-2 meter and mineral benhces of 6-8 meter	
2c	Stripping ratio or ore to OB ratio	1:0.57	1:0.35	
2d	Quantity of topsoil generation in m3	6600 cu m	1000 cu m	
2e	Quantity of overburden generation in m3	16420 cu m	9500 cu m	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			working was in the said location with deviation in progress

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	two pits	two pits quarry 1 and quarry 2	
3b	Quantity of ROM mineral production proposed	100200	74360	units in tonnes

3c	Recovery of sailable/usable mineral from ROM production	80%	75-80% approx
3d	Quantity of mineral reject generation	Not Proposed	Nil no mineral reject generated only waste / OB
3e	Grade of mineral rejects generation and threshold value declared.	not proposed	nil
3f	Quantity of sub grade mineral generation.	not proposed	nil, threshld value considered as 34% CaO
3g	Grade of sub grade mineral generation	not proposed	lower limit of threshold considered to be used
3h	Manual / Mechanised method adopted for segregating from ROM	mechanical method proposed	mechanical method adopted i.e. screening furtherly sizing
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	as per approved mining plan small dia holes
3k	Provision of mining machineries in mineral benches	proposed	HEMM is being used in mineral benches for excavation and trasportation of mineral
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	suitable	as per approved mining plan height & width of benches are suitable for mining opencast
3m	Total area covered under excavation/pits	8.90	8.56 hect

3n	Ore to OB ratio for the pit/mine during the year.	1:0.57	1:0.35	
3o	Total area put in use under different heads at the end of year	13.04	12.65 hect	
3p	Production of ROM mineral during the last five year period as applicable	2015-16=104340 2016-17=1008/00 2017-18=99600 2018-19=99600 2019-20=100200	2015-16=99924 2016-17=99548 2017-18=99995 2018-19=99580 2019-20=74360	units are in tonnes
3q	General remarks of inspecting officers on method of mining etc.			opencast mechanised method mining adopted in the ML, HEMM is being used in the mineral benches for excavation and transportaio of the mineral , threshold considered as CaO 34% prescribed by IBM

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	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 southern part of the ML and Soil dump located in the northern part of the ML	
4c	Number of dumps within lease area and outside of lease area	4- dumps within the ML	4-dumps are located within the ML	

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.	4- active dumps	4-active dumps	
4f	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.	proposed	100*1*1 retaining wall prepared along the waste dump of northern part of ML area	
4i	Length of Retaining wall or garland drain all along dumps	proposed	100*1*1 retaining wall prepared along the waste dump of northern part of ML area	
4j	Number of settling ponds	not proposed	nil	
4k	Specific comments of inspecting officer on waste dump management			retaining wall prepared along the waste dump, separate dumping for soil and waste located within 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 proposed	full extraction of mineral under process	
5b	Area under backfilling of mined out area	3.36	0.5 hect	

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	3.36	0.5 hect	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			backfilling not achieved as per the proposal due to lack of waste generation.

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) .	3.36	0.5	
6c	afforestation done (ha).	3.36	0.5	
6d	No. of saplings planted during the year	10	10	
6e	Cumulative no .of plants	500	250-300	
6f	Any other method of rehabilitation	Not Proposed	nil	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch proposed	ROM is being dispatched to the Screeners and crushers installed on private land of ML holder adjacent to the ML
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical methos	mechanical method adopted for grade wise sorting with the use of screeners
7c	Different grade of mineral sorted out at mines.	proposed	Adjacent to the ML area
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)	propsoed	generated soil is being used in plantation	
8b	Concurrent use or storage of topsoil	proposed	soil is being used for plantation without storing	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	proposed	separate dumps located in the ML area for waste and OB	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	proposed	OB waste is being used in backfilling of fully extracted area	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	proposed	as per prosal in approved mining plan	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	proposed	as per approved mining plan	
8g	Survival rate	80%	60%	
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 improvemenst in terms of plantation and maintanance

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 2021	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	furnished	Mining Engineer in charge MANOJ KUMAR RAI	

9c	Scrutiny of 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 & abandoned by opencast (O/C) mining 0.000 1.400 1.400 (ii) Covered under current (O/C) Workings 0.000 7.250 7.250 (iii) Reclaimed/Rehabilitated 0.000 0.750 0.750 (iv) Used for waste disposal 0.000 2.330 2.330 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 1.710 1.710 (vi) Other Purpose (Green belt) 0.000 1.870 1.870 (vii) Work done under
9d	Scrutiny of Annual return on afforestation	furnished	Number of trees planted during the year 10 0 (ii) Survival rate in percentage 80.00 0

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	furnished	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 152.682 74360.000 72440.925 2071.757 346.50 (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 0.000 0.000 0.000 0.000 0.00
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 74360.000 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 346.50 INR cost of production 227.83
9h	Scrutiny of Annual return on fixed assets	furnished	Value of Fixed Assets (inr) 7443709 (in respect of the mine, beneficiation plant, mine work-shop, power and water installation)

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 1 Non Electrical Opencast DUMPER 10.000 TONNE 2 Non Electrical Opencast DUMPER 16.000 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

Date :

(DEEPAK SHARMA)

Indian Bureau of Mines