

**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 : **G007** ) **RAGHUBIR SHARAN GARG**  
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri Manoj Kumar Roy, Mining Engineer & Manager ( Mine  
Official with  
Designation
- (iv) Date of Inspection : 12-JUL-22
- (v) Prev.inspection date : 20-MAR-21

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **AMEHTA**
- (b) **Registration NO.** : **IBM/747/2011**
- (c) Category : A Mechanised
- (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. : 07622404992  
E-mail : ranjan\_grover4@yahoo.com  
Phone : 07622405474, M.No. 9893355:
- (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 : 50  
(d) Date of Expiry : 05-MAR-46
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
		MP modif under 17(3) MCR 2016	29-JUN-20

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Two bore holes each of 50m deep proposed.	Borehole logs received in the office.	No deviation.
1b	Exploration over lease area for geological axis 1 or 2	2 Boreholes	Three Borehole logs received in the office.	Violation followed by show causenotice for the 2boreholes against 2021-22, were issued based on previous inspection and lessee has submitted the borehole logs of three boreholes, Compliance on rule considered based on reply received in the office.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	Not furnished	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	5.33hect	5.33hect	No deviation, As per rule 12(4B) copy of the Geological Study Report (GSR) has not been submitted to this office even lapsing of about a year after completion of boreholes, so violation of rule 12(4B) pointed out..

1e	Balance reserve as on 01/04/20	As on 01/04/2022 Reserves in Tonnes Proved(111) - 29,55,590 Resources in tonnes Feasibility(21): 14,72,725 Reserves/reso urces position as per approved MP dtd 29/06/2020	Reserves as on 01/04/2022 Reserves in Tonnes Proved(111) - 30,52,412.29 Resources in tonnes Feasibility(221): 14,72,725 Reserves/Resources position as on 01.04.2022 based on valid approved document and production figur from annual return	There are huge increase in reserves comperatively with respect to given in earlier MCD report. Reason for the same is reassesment of reserves in present valid document - Modification of MPLN taken into consideration.
1f	General remarks of inspecting officers on geology, exploration etc			With additional borehole drilling entire mineralised lase area has been explored under G1 axis as per UNFC/MEMC Guidelines by the lessee but copy of Geological study Report has not been submitted by the lessee.Violation of rule 12(4B) pointed out

---

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	South West portion of the lease area upto statutory barrier zone between BP. No. 19 to BP.No.31. marked on approved mining plan.	Pit found extended to the proposed pit limit with respect to BP. No. 19 to BP.No.31. except at some locations like BP.No. 23 to 24 & 28 to 29 marked on approved mining plan.	More or less mining is ristricted within proposed pit limits. Boundary Pillars were not found as per thier coordintes marked on Surface Plan. Violation of rule 11(1) pointed out.

---

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed 4.5m in OB Soil, 5.0m in shale and 6-7.0m in limestone.	Benches as per proposal maintained.	no substantial deviation.
2c	Stripping ratio or ore to OB ratio	1:0.47	During the year acheived as 1:0.20 T/CuM	Less development
2d	Quantity of topsoil generation in m3	9000cum	Data not maintained separately.	separate record is not furnished.
2e	Quantity of overburden generation in m3	34109cum	107770 tonne or 40,000cum	OB removal is as per proposal
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Entire proposal for development and in actual carried out in Pit no. 1 . Looking the type of deposit - Stratified compact deposit development may be considered safe.

---

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	There are another two pits also but development and production were carried out from the pit proposed.
3b	Quantity of ROM mineral production proposed	200215tone	199900tone	99% achievement of proposed production
3c	Recovery of sailable/usable mineral from ROM production	80%	Acheived about 80% recovery as proposed	Limestone recovery 80% & rest 20% proposed as inter-burden waste
3d	Quantity of mineral reject generation	Not proposed	Nil (Entire recovered limestone is utilised & saleable )	There is no generation of reject.

---

3e	Grade of mineral rejects generation and threshold value declared.	Not applicable as there is no envisagement for generation of reject.	Not Applicable as there is no generation of reject	No deviation.
3f	Quantity of sub grade mineral generation.	Not proposed	Nil (Entire recovered limestone is utilised & saleable no sub grade mineral produced)	No deviation.
3g	Grade of sub grade mineral generation	Not applicable as there is no envisagement for generation of sub grade mineral.	Not Applicable as there is no generation of sub grade mineral.	No deviation
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical by crusher	For segregation from ROM mechanical method adopted	No deviation
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Crusher of 100 TPH installed for crushing & screening purpose	Input size for crusher is 300mm and output size will be -60 to +40mm
3j	Provision of drilling and blasting in mineral benches	Small dia 32mm and 1.0 deep with Jackhammer alongwith drilling of 80mm dia & 2.8 to 2.9m deep with Wagon drill Blasting pattern 2-2.2mX2.4 to 2.5mX2.8 to 2.9m in case of Wagon drill and 0.8mX1.0mX1.5m	As per approved proposal	No deviation.

3k	Provision of mining machineries in mineral benches	Hyd. Excavator 1.2cum 3Nos Dumper 16 tonners 3Nos Dumper 40tonner 4 Nos. Wagon Drill 40-80mm 1 No	Hyd. Excavator 1Nos Dumper tonners 2Nos Dumper 10tonner 1 Nos. Wagon Drill 80mm 1	1.2cum 16 40- 40-	Actual machineries reported is on lower side. However looking the quantum of work and lead from the mine i.e. within 250m from the pit it is acceptable.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	4.5m to 7.0m	As per proposal		There is no issue related with height of benches and boom height of excavator under use.
3m	Total area covered under excavation/pits	9.45hect	9.45hect		
3n	Ore to OB ratio for the pit/mine during the year.	1:0.47tone/cum	1:0.2tonne/cum		
3o	Total area put in use under different heads at the end of year	As per the previous approved MP dtd 29/06/2020 land use at the end of 31/03/2025 Pits excavated area- 10.55Ha Storage of top soil/ dump- 2.0Ha Mine haul Road-0.25Ha Green Belt- 1.03Ha	As per the Annual return as on 01.04.2022 Pits excavated area- 8.2Ha Reclaimed/Rehabilitated- 1.46Ha OB dumps-2.264Ha Mine haul Road-0.25Ha Green Belt-1.70Ha		

3p	Production of ROM mineral during the last five year period as applicable	2017-18-: 99600MT 2018-19-: 99600MT 2019-20 99580MT 2020-21 193048MT 2021-22 200215MT	2017-18-: 99995MT 2018-19-: 99580MT 2019-20-: 74360MT 2020-21-: 96540MT 2021-22 : 199900MT	There is no much more deviation
3q	General remarks of inspecting officers on method of mining etc.			Opencast fully Mechanised mine working proposed by using Excavator /JCB & dumper combination with shallow drilling & blasting using wagon drill as well as 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)	Not proposed.	Nil	No deviation
4b	Location of topsoil, OB and mineral reject dumps	Not proposed	nil	No deviation

4c	Number of dumps within lease area and outside of lease area	There is no proposal for external dumping	External dumping is not carried out.	Entire OB waste generated are utilised for backfilling of mined out area. There are four old dumps lies within lease area. As per proposal entire dump material of old dumps are to be rehandled and utilised for backfilling of mined out area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	External dumping is not Proposed	External dumping is not in practice	No deviation.
4e	Number of active and alive dumps.	External dumping is not proposed.	External dumping is not in practice. However There are four old dumps lies within lease area. Rehandling of old dumps are also on progress.	Simultaneous backfilling are in practice as per approved proposals.
4f	Number of dead dumps.	Not Proposed	No dead dumps existing in the lease area	
4g	Number of dumps established.	Not Proposed	No OB dumps have been established so far. However rehandling overburden waste are being carried out as per approved proposal for backfilling of mined out area.	No deviation
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain and settling pit was proposed	Garland drain and settling pit provided along OB dump	
4i	Length of Retaining wall or garland drain all along dumps	Not Proposed	Garland drain of 85m provided along OB dump	
4j	Number of settling ponds	One settling sump was proposed	One settling pond provided	

4k	Specific comments of inspecting officer on waste dump management	External dumping neither proposed nor carried out. Only backfilling of mined out area in practice as per proposal. Top soil generated during mining operation are also utilised for preparation of bunds.
----	--	---

---

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.	As per proposal southern part of Quarry No.1 was supposed to be upto ultimate pit limit s well as ultimate pit depth and as per proposal simultaneous backfilling of this section was to be carried out.	Workings are progressing as per proposal except a small patch covering area surrounded by BP No. 27,28,29 & 30. These area was supposed to be covered. Backfilling is in progress at the proposed site.	
5b	Area under backfilling of mined out area	Backfilling over 8100 Sq.M was proposed during the year.	Actual backfilling is less than the proposal one as mine development through which mine waste material generated during mining operation were less than the proposed one and also quantity of old waste rock supposed to be rehandled were also less in quantity.	-

---

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed as entire top soil generated from the mining was proposed for construction of bunds.	As per proposal top soil generated during mining operation utilised for construction of bundhs.	-
5d	Total area fully reclaimed and rehabilitated	1.0hect	0.81hect reclaimed area..	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling of mined out area in practice as per proposal. Top soil generated during minig operation are also utilised for preparation of bunds.

---

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	Report was submitted within stipulated time	
6b	Area available for rehabilitation (ha) .	Limestone exhausted in limited part of working pits. Hence, present scope of rehabilitation exist on lesser than the proposed one.	Rehabilitation of backfilled area not done during the year	

---

6c	afforestation done (ha).	Plantation was proposed by 200 numbers of saplings over an area of 2000sq.marea	Plantation carried out by 220 numbers of saplings in green belt area.	Current year plantation day was observed on the date of inspection and near about 150 saplings were planted on the date of inspection.
6d	No. of saplings planted during the year	200	220 saplings	No deviation.
6e	Cumulative no .of plants	400 nos during the first two year period of current MPLN period.	Reportdly 420 saplings.	
6f	Any other method of rehabilitation	Not Proposed	not adopted.	
6g	Cost incurred on watch and care during the year	NA	NA	Health of Plantion of previous year were observed not bad.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	0.1hect	0.1hect	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.1hect	0.1hect	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	0.1hect	0.2hect	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	not Proposed	not Adopted	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Proposed	Not adopted	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.2hect	0.2hect	Cummulative
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.2hect	0.2hect	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not Proposed	Not Adopted	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical Air, Water, Noise monitoring Proposed	Carried out as per the proposals	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			In some part of pit area scope of backfilling/reclamation & rehabilitation is there as mineral exhausted. 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	200215tone	199900tone	Almost as per proposal.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Sorting by mechanical crusher & screening proposed	Sorting by mechanical crusher & screening carried out	
7c	Different grade of mineral sorted out at mines.	SMS, BF and cement grade limestone proposed	Cement and SMS grade limestone despatched during the year	
7d	Any beneficiation process at mines .	Not Proposed	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral is being conserved by grade wise sorting in the lease area. Limestone above threshold value of 34% CaO being coserved for cement grade use. SMS grade limestone also generated.

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal & utiization of top soil proposed	Separate removal & utiization of top soil carried out	
8b	Concurrent use or storage of topsoil	Proposed for consttuction of bunds	As per proposaL utilised	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not proposed, simultaneous backfilling of overburden proposed	As per proposal overburden is utilised for backfilling of mined out area.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed, as per proposal 0.1hect area was supposed to be restoring the land	As per prooposal restoration of land carried out.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed	Phase wise reclamation implemented
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	200 nos of saplings were proposed to be planted	220 nos saplings planted within lease area
8g	Survival rate	80% proposed	Survival rate of 80% acheived during the year
8h	Water sprinkling on roads to control airborne dust	Proposed	Regular water sprinkling is being practised by water tanker

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mine area needs improvement as in a large scale mining activities are going on in and surrounding of mining lease area since long back. Almost statutory barrier zones are available for plantation where dumps of OB waste rock can be seen. Attempts of lessee towards plantation over reclaimed area as well as premises of mine office seen nice. & healthy. Plantation programme was also arranged on the date of inspection.
----	--	---

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. submitted upto- June- 2022 A.R. submitted upto- 2021-22	Monthly as well as Annual Return were submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information of Mining Engineer given where as there is no deatialsof Geologist appointment.	Shri Manoj Kumar Roy is working in the mine as a Mining Engineer whereas There is no Geologist appointed in the mine.	For not appointment of geologist in the mine violation of rule 55 pointed out.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Lease area (surface area) utilisation as at the end of year (hectares) given as - (i) Lease area under Pit	Dump area reduced in comprision to the last year data is acceptable as rehandling of waste material have been carried out during the year. similarly lease area under pit also reduced as certain part of the pit have been reclaimed and rehabilitated.	OK
		7.03hect (ii) Reclaimed area		
		0.81hect (iii) Used for dump 2.264hect		
9d	Scrutiny of Annual return on afforestation	Given	Number of trees planted during the year within lease area 220 nos.	Survival rate of plantation is 80% which is acceptable.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Mieral reject generation Nil supported by approved mining plan of the mine.	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	Opening stock , production of ROM and closing stock at Pit head mismatch with grade wise opening stock, production , dispatch and closing stock. Part VI, item No. 1 & 2 Production and stock of ROM ore at mine- head and Grade wise production and dispatches----- Opening stock of Lst at mine head is 20.727tonne , production from mine and Grade wise production during the year both are 199900tonne thus available balance of Lst at mine head cannot be 0tonne it will remains 20.727tonne	There are mismatching figures with regards to opening and closing stock. Violation of rule 45(7) pointed out.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given Sale Vallue Rs. 315/- Ex Mine Price 315/- Cost of production Rs. 200/53	OK	-
9h	Scrutiny of Annual return on fixed assets	Given Rs. 6433605/-	On lower side	
9k	Scrutiny of Annual return on mining machineries	Given	OK	

---

**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
Rule 11(1)	05-AUG-22				
MCDR17 Rule 12(6)	05-AUG-22				
Rule 27(2)	05-AUG-22				
MCDR17 Rule 33	05-AUG-22				
MCDR17 Rule 34(1)	05-AUG-22				
MCDR17 Rule 55(1) (1)	05-AUG-22				

**Date :**

**(RAGHUBIR SHARAN GARG)**

Indian Bureau of Mines