

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

**Review and updation of Mining Plan REPORT**

**Jabalpur regional office**

**Mine file No :** MP/JBP/MANG-15

**Mine code :** 40MPR18001

- (i) Name of the Inspecting : **KQ06** ) **NARESH KUMAR KATARIYA**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Haji Mohammed Yusuf (Lessee), Sh. J. N. Patnayak (IInd  
Official with  
Designation
- (iv) Date of Inspection : 28-APR-22
- (v) Prev.inspection date : 09-AUG-17

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **JHANSI/SILUA (4.49HA)**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : MADHYA PRADESH  
District : JABALPUR  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. : NA  
E-mail : NA  
Phone : NA
- (f) Police Station :
- (g) First opening date :
- (h) Weekly day of rest :
2. Address for : M/S KHATRI MINERALS AND MINING COMPANY  
correspondance : 865, SOUTH MOTINALA,  
HANUMANTAL, JABALPUR (M.P.) 482002
3. (a) Lease Number : MPR2191
- (b) Lease area : 4.49
- (c) Period of lease : 30
- (d) Date of Expiry : 17-MAY-37
4. Mineral worked : MANGANESE ORE Main  
IRON ORE Associated  
CLAY (OTHERS) Associated  
OCHRE Associated  
LATERITE Associated

## 5. Name and Address of the

Lessee : KHATRI MINERALS AND MINING COMPANY  
865, SOUTH MOTINALA,  
HANUMANTAL, JABALPUR (M.P.)  
JABALPUR MADHYA PRADESH  
Phone:NA  
FAX :NA

Owner : KHATRI MINERALS AND MINING COMPANY  
865, SOUTH MOTINALA,  
HANUMANTAL, JABALPUR (M.P.)  
JABALPUR MADHYA PRADESH  
Phone: NA  
FAX : NA

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	25-APR-07
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	24-OCT-11
	:	Mining Scheme rule 12 MCDR1988	17-OCT-12

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	
1b	Exploration over lease area for geological axis 1 or 2	Six bore holes	Six DTH bore holes	Core bore holes was proposed but lessee has done DTH holes. Violation pointed out for the same under rule 11(1) of MCDR 2017.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Ansagr Borewell Address:- Indira Gandhi Ward,Harda 461331 (M.P.) mobile no. 9926718430	Ansagr Borewell Address:-Indira Gandhi Ward,Harda 461331 (M.P.) mobile no. 9926718430	Eleven DTH boreholes were done.
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	Eleven DTH boreholes were done for exploration.	Violation pointed out.
1e	Balance reserve as on 01/04/20		Balance reserves as on 01.04.2022 - 0.14329 Million t.	

1f	General remarks of inspecting officers on geology, exploration etc	Area is part of Mahakoshal group of rocks. Local geology of the area indicates Iron ore, in the form of Blue dust with siliceous phyllite exposed in the working pit. Existence of phyllite and iron ore exist as alternate bands. Southern part of the area is non mineralized area, Three bore holes of southern part of the area does not indicate iron ore. General trend of the area is east- west having 60-700 dip towards south.
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## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	1.9 Hect area in the north western part of the lease area	0.11105 Hect area in the north western part of the lease area	The mine development was lagging from the proposal and not as per the approved proposals of approved document. Violation pointed out under rule 11(1) of MCDR 2017

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	separate benches of prescribed height shall be proposed to maintain in the mine and bench widths at the mine shall be not less than the bench height.	The benches in the northern part and some other areas of the lease were found unsystematic and merged up resulting height of the benches found more than the proposal. And, it was also observed that at some places width of the benches found less than approval.	Violation pointed out under rule 11(1) of MCDR 2017.
2c	Stripping ratio or ore to OB ratio	1: 1.50	1: 1.20	The mine development was lagging from the proposal and not as per the approved proposals of approved document. Violation pointed out.
2d	Quantity of topsoil generation in m3	NIL	NIL	Top soil removal not proposed in the RY
2e	Quantity of overburden generation in m3	12091 m3	NIL	The mine development was lagging from the proposal and not as per the approved proposals of approved document. Violation pointed out.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	the benches in the northern part and some other areas of the lease were found unsystematic and merged up resulting height of the benches found more than the proposal. And, it was also observed that at some places width of the benches found less than approval. The mine development was lagging from the proposal and not as per the approved proposals of approved document. Violation pointed out.
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#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Pit A	Pit A	
3b	Quantity of ROM mineral production proposed	32521 Tonnes	22946 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	20430 Tonnes	15946 Tonnes	
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	

3f	Quantity of sub grade mineral generation.	NA	NA	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Not done	
3j	Provision of drilling and blasting in mineral benches	Not proposed	Not done as per records.	
3k	Provision of mining machineries in mineral benches	Yes	Open cast mining using HEMM machinery	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	separate benches of prescribed height shall be maintained in the mine and bench widths at the mine shall be not less than the bench height.	the benches in the northern part and some other areas of the lease were found unsystematic and merged up resulting height of the benches found more than the proposal. And, it was also observed that at some places width of the benches found less than approval.	Violation pointed out for the same.
3m	Total area covered under excavation/pits	1.90 Hect	1.90 Hect	
3n	Ore to OB ratio for the pit/mine during the year.	1:1.50	1:1.20	
3o	Total area put in use under different heads at the end of year	3.021 Hect	3.021 Hect	

3p	Production of ROM mineral during the last five year period as applicable	2017-18 20610 Tonnes	2018-19 20694 Tonnes	2017-18 20600 Tonnes	2018-19 20690 Tonnes	2019-20 16000 Tonnes	2020-21 6590 Tonnes	2021-22 15946 Tonnes
		2019-20 19560 Tonnes	2020-21 20014 Tonnes					2021-22 20430 Tonnes

3q General remarks of inspecting officers on method of mining etc.

Open cast mining using machinery is in practice, without use of explosive. Lessee is having one more lease area with common boundary, it's a working mine, beneficiation plant is established in this area. Plant is yet to start because of EC matter . Plantation is done over the backfill area in north eastern part of the area. Two waste dumps are placed in the area About 0.1482 Hect. Area is covered by mine roads.

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of proposed	OB dumps observed in the OB lease area.	Extension of dump was extended beyond the 7.5-meter statutory barrier zone near BP 12 & BP 15 and some other places. Violation pointed out for the same under rule 11(1) of MCDR-2017
4b	Location of topsoil, OB and mineral reject dumps	Existing Waste dumps in southern & northern part are proposed extended laterally and w.r.t. height	Waste Dump D-1 - 157x47.5x 1-12 m. in southern part Waste dump D-2 - 64x33x1-2 m.in northern part	Extension of dump was extended beyond the 7.5-meter statutory barrier zone near BP 12 & BP 15 and some other places. Violation pointed out for the same under rule 11(1) of MCDR 2017.
4c	Number of dumps within lease area and outside of lease area	Two dumps D-1 and D-2	Two dumps D-1 and D-2	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Temporary dumps within UPL and within ML area	Temporary dumps within UPL and within ML area.	Extension of dump was extended beyond the 7.5-meter statutory barrier zone near BP 12 & BP 15 and some other places. Violation pointed out for the same under rule 11(1) of MCDR 2017.
4e	Number of active and alive dumps.	Two	Two	
4f	Number of dead dumps.	NIL	NIL	
4g	Number of dumps established.	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	NIL	NIL	In proposal period no new dumps were not proposed, simultaneous mining and back filling was proposed.

4i	Length of Retaining wall or garland drain all along dumps	NIL	NIL	In proposal period no new dumps were not proposed, simultaneous mining and back filling was proposed.
4j	Number of settling ponds	NIL	NIL	
4k	Specific comments of inspecting officer on waste dump management			In proposal period no new dumps were proposed, simultaneous mining and back filling was proposed. But, mine development was lagging and area was not matured for backfilling. Extension of dump was extended beyond the 7.5-meter statutory barrier zone near BP 12 & BP 15 and some other places. Violation pointed out for the same under rule 11(1) of MCDR 2017.

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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.	full extraction of mineral was proposed from mined out area before starting backfilling	Area not matured for backfilling	
5b	Area under backfilling of mined out area	0.2525 Hect. Northern area was proposed for back filling.	Northern 0.0950 hect. area is back filled	Area not matured for backfilling

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5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NIL	Top soil removal not proposed in the RY
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			0.2525 Hect. Northern area was proposed for back filling out of which .09 Hect area was backfilled. Remaining area was not matured for backfilling due to lagging in mine development. Violation pointed out for the same.

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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).	Yes	yearly report has not been submitted for the RY	Violation pointed out for the same under rule 26(2) of MCDR 2017
6b	Area available for rehabilitation (ha) .	NIL	NIL	

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6c	afforestation done (ha).	The protective, reclamation and rehabilitation measures viz. proposed backfilling in 2525 sq metre mined out area (38061 m3 volume) & plantation have not been undertaken in accordance to approved Prograssive Mine Closure Plan (PMCP) either partially or fully	Partly done in 0.09 hect area	Violation pointed out under rule 26(1) of MCDR-2017
6d	No. of saplings planted during the year	10 Nos. of saplings are to be furnished	No plantation observed	Violation pointed out for the same.
6e	Cumulative no .of plants	Not specified	approx 50 plants observed in the lease area	Approx. 100 sapling are planted outside the lease area adjoining to northern lease boundary.
6f	Any other method of rehabilitation	Not proposed	Not done	
6g	Cost incurred on watch and care during the year	5000/ year	10000	Cost incurred on the watch & care of plants in and around the lease area.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	0.2525 Hect.	0.0950 Hect.	Violation pointed out for the same under rule 26(1) of MCDR 2017

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.2525 Hect	0.0950 Hect.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	10 plants	Nil	violation pointed out for the same.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Not done	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed	Not done	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	50 plants	50 saplings claimed to be planted but plantation not observed during inspection	Violation pointed out.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.045 Hect	NIL	Violation pointed out
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation	Plantation	

6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Plantation is done over 0.095 hect backfill area. plantation have not been undertaken in accordance to approved Prograssive Mine Closure Plan (PMCP) either partially or fully. Violation pointed out under rule 26(1) & 26(2) of MCDR 2017

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	+30% iron ore mineral separated & used for blending with high grade material. it is sold for beneficiation purpose	+30% iron ore mineral separated & used for blending with high grade material. it is sold for beneficiation purpose	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual and mechanical	Partly manual and partly mechanized	
7c	Different grade of mineral sorted out at mines.	+ 30%, , +50% Fe	+ 30%, , +50% Fe	
7d	Any beneficiation process at mines .	Not proposed	Not done	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Low to high grade +30 to +57.9% Fe mineral exist in the area , (refer annex vii page no. 168 in new mining plan approved on 07-06/2022 )it is salable in surrounding beneficiation plant .+45% Fe material is directly sold to cement plant.
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**Environment:**


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Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	Not top soil removed in the RY	Mining activities are proposed in the area which was already exploited earlier.
8b	Concurrent use or storage of topsoil	Not proposed	Not done	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate dump of OB proposed	Seperate dump of OB observed.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Backfilling was done in 0.095 Hect area.	

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8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Backfilling was done in 0.095 Hect area.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed	Approx 50 saplings planted in side the lease area & approx. 100 sapling are planted outside adjoining to northern lease boundary.	
8g	Survival rate	80%	70%	
8h	Water sprinkling on roads to control airborne dust	Yes	No	Mine was not in operation during the inspection.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Approx 50 saplings planted in side the lease area & approx. 100 sapling are planted outside adjoining to northern lease boundary.

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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 & MR to be submitted in time as prescribed under rule.	AR submitted on 31.12.2021. Monthly returns of Oct-21, Jan-22 & Feb-22 were submitted on 30/11/21, 28/02/2022 & 10/03/22 respectively.	Violation for delayed submission of MR & AR has been pointed out on 25.05..2022.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		Mining Engineer - Sh. J. N. Patnayak (IInd class manager ) Geologist - Shri Rohit Kanojiya M.sc.Geology.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Back filling area 0.0950 hect., Dump area 1.3343 hect , Pit area 2.15225 hect., area covered by mine road 0.044 hect.	
9d	Scrutiny of Annual return on afforestation	Yes	50 sapling are planted in north eastern part of the area, About 100 plants are there in outside lease area towards north eastern part the area.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	No mineral reject was reported, Approx. 60% mine waste in the form of siliceous waste is there as intercalated waste.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	ROM dispatached from mine - 31673.505 Tonnes Closing Stock - 8592.415	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Sale value - Rs 2475.20 / tonne Ex. Mine price - Rs 2475.20 / tonne production costs - Rs 1329.98 / tonne	
9h	Scrutiny of Annual return on fixed assets	Yes	3500000 /-	
9k	Scrutiny of Annual return on mining machineries	Yes	One HEMM loader, TWO DUMPERS	

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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 11(1)	12-JUL-22				
Rule 26(1)	12-JUL-22				
Rule 26(2)	12-JUL-22				
MCDR17 Rule 34(1)	12-JUL-22				

**Date :**

**(NARESH KUMAR KATARIYA)**

Indian Bureau of Mines