

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

**MCDR INSPECTION REPORT**

**Ajmer regional office**

**Mine file No :** RAJ/JHN-4/CU- 2

**Mine code :** 14RAJ17003

- (i) Name of the Inspecting : **DJ03** ) **DILIP JAIN**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri U. B. Bhatt, Mine Manager, Shri A.K. Sharma, Min  
Official with  
Designation
- (iv) Date of Inspection : 08-OCT-21
- (v) Prev.inspection date : 13-APR-21

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **KOLIHAN**
- (b) **Registration NO.** : **IBM/6381/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Underground**
- (e) **Postal address**
- State : **RAJASTHAN**
- District : **JHUNJHUNU**
- Village : **KOLIHAN NAGAR/KHETRI**
- Taluka : **KHETRI**
- Post office : **KHETRI**
- Pin Code :
- FAX No. : **01593- 20002**
- E-mail : **hclkcc@jpl.dot.net.in**
- Phone : **01593- 20001**
- (f) **Police Station** : **Khetrinagar**
- (g) **First opening date** : **24-NOV-66**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **HINDUSTAN COPPER LIMITED,**  
**correspondance** **KOLIHAN NAGAR, PO KHETRI**
3. (a) **Lease Number** : **RAJ0451**
- (b) **Lease area** : **163.23**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **23-NOV-16**
4. **Mineral worked** : **COPPER ORE** **Main**

## 5. Name and Address of the

Lessee : HINDUSTAN COPPER LIMITED  
 KHETRI COPPER COMPLEX  
 KHETRI NAGAR JHUNJHUNU  
 RAJASTHAN  
 Phone:01593-20065-20006  
 FAX :01593-20002

Owner : Shri Sanjay Panjiyar,  
 1-Ashutosh Chowdhury Avenue  
 M/s Hindustan Copper  
 Limited. KOLKATA WEST  
 BENGAL  
 Phone: 033 22817138  
 FAX : 033 22832478

Agent : S. DEY  
 M/S Hindustan Copper Ltd;  
 Khetrinagar, Jhunjhunu,  
 Rajasthan JHUNJHUNU  
 RAJASTHAN  
 Phone: 01593-220001  
 FAX : 01593-220002

## Mining Engineer

Name : Shri A K Sharma, Full Time  
 Qualification : BE Mining  
 Appointment/ : 08-FEB-19  
 Termination date

## Mining Engineer

Name : Mr. U.B. Bhatt, Full Time  
 Qualification : BE Mining  
 Appointment/ : 13-MAY-13  
 Termination date

## Geologist

Name : Dr. Gopal Rathi, Full Time  
 Qualification : M.Sc. & Ph.D. (Geology)  
 Appointment/ : 19-JUN-15  
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	06-JUN-95
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	29-NOV-02
		Mining Scheme rule 12 MCDR1988	15-JUN-07
		Modif. approved Mining Scheme	04-JAN-12
		Mining Scheme rule 12 MCDR1988	25-JUL-13
		Renewal under rule 24 MCR1960	01-APR-14
		MP modif under 17(3) MCR 2016	22-MAY-18
		MP review under 17(1) MCR 2016	23-JAN-20

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	16 BHs with 1455 mts of drilling.	19 Bhs with 1702.45 mts.	No backlog for previous year.
1b	Exploration over lease area for geological axis 1 or 2	Surface Exploration- 07 BHs with 5000 mts and Underground Exploration: 21 BHs with 1445 mts.	Surface Exploration- 08 BHs with 6298.00 mts and Underground Exploration: 16 BHs with 1470.70 mts.	Violation of MCDR, 2017 was issued vide letter dated 05/07/2021 for less number of BHs during previous inspection dated 13/04/2021.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Agency: M/s MECL, Nagpur and M/s Asha Engineering Works, Udaipur. No details about expenditure.	Agency: M/s MECL, Nagpur and M/s Asha Engineering Works, Udaipur. Expenditure: 11.73 crores including Taxes	NIL.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No surface area under G3 level.	No surface area.	NIL.
1e	Balance reserve as on 01/04/20	As per approved RMP dated 23/01/2020, the position of Reserve and resource as on 01/04/2019 was 9.49 and 4.53 million tons respectively.	The position of Reserve and resource as on 01/04/2021 was 8.60 and 4.53 million tons respectively.	Total depletion of 0.89 million tons from 2019-20 to 2020-21.
1f	General remarks of inspecting officers on geology, exploration etc	Surface Exploration- 07 BHs with 5000 mts and Underground Exploration: 21 BHs with 1445 mts.	Surface Exploration- 08 BHs with 6298.00 mts and Underground Exploration: 16 BHs with 1470.70 mts.	Geologically the nature of deposit is complex. Violation of MCDR, 2017 was issued vide letter dated 05/07/2021 for less number of BHs during previous inspection dated 13/04/2021.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	169 mRL-402 m 124 mRL- 872 m 109mRL-505 m 64mRL- 979 m 0mRL- 242 m Total- 3000 m	169 mRL- 285 m 124 mRL- 398 m 109mRL- 561.9 m 64mRL- 476.9 m 0mRL- 171.3 m Total- 1893.1 m	Less development is due to COVID-19 pandemic and restrictions.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal being an underground mine.	Not applicable.	c
2c	Stripping ratio or ore to OB ratio	No proposal being an underground mine.	Not applicable.	NIL.
2d	Quantity of topsoil generation in m3	No proposal of top soil generation.	No top soil has been generated.	NIL.
2e	Quantity of overburden generation in m3	A total of 60575.00 tonnes of waste has been proposed to generate from UG.	A total of 37283.00 tonnes of waste has been generated from UG.	Less generation due to less development.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development has been proposed through UG mining method.	The UG mechanised method has been adopted for carrying out mining operations in the lease area which is best suited to the type of deposit.	The UG mechanised method has been adopted for carrying out mining operations which is best suited to the type of deposit.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	No proposal of pit development being an underground mine.	Not applicable.	NIL.
3b	Quantity of ROM mineral production proposed	720000 Tonnes	453528 Tonnes	Less production due to less development and COVID-19 pandemic.
3c	Recovery of sailable/usable mineral from ROM production	720000 Tonnes	453528 Tonnes	Less production due to less development and COVID-19 pandemic.

3d	Quantity of mineral reject generation	No proposal of Mineral Reject generation.	31165.00 tonnes of MR/SG has been generated and blended with high grade Ore.	NIL.
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable as no proposal.	0.51 % Cu.	NIL.
3f	Quantity of sub grade mineral generation.	No proposal of Sub-grade mineral generation.	No Sub-grade has been generated.	NIL.
3g	Grade of sub grade mineral generation	Not applicable as no proposal.	Not applicable.	NIL.
3h	Manual / Mechanised method adopted for segregating from ROM	Crushing (Mechanical ) .	Crushing (Mechanical ) .	After crushing, entire ROM is being sent to the Khetri Cu Mine for further processing.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal for beneficiation studies.	No beneficiation studies has been carried out during the RY.	After crushing, ROM is being sent to Khetri Beneficiation plant of the company.
3j	Provision of drilling and blasting in mineral benches	Large Dia Drilling- 115 mm dia& 165 mm dia- Stope& Rib Pillar Drilling. Long Hole 57 mm- Crown Pillar, Sill Pillar & Trough Drilling.	Large Dia Drilling- 115 mm dia& 165 mm dia- Stope& Rib Pillar Drilling. Long Hole 57 mm- Crown Pillar, Sill Pillar & Trough Drilling.	NIL.
3k	Provision of mining machineries in mineral benches	No proposal being an underground mine.	Not applicable	NIL.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No proposal being an underground mine.	Not applicable.	NIL.
3m	Total area covered under excavation/pits	0.958Hect.	0.958Hect.	NIL.

3n	Ore to OB ratio for the pit/mine during the year.	No proposal being an underground mine.	Not applicable.	NIL.
3o	Total area put in use under different heads at the end of year	15.48Hect.	15.48Hect.	NIL.
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 600000 2017-18: 600000 2018-19 : 650000 2019-20: 650000 2020-21: 720000	2016-17: 576659 2017-18: 580160 2018-19 : 571245 2019-20: 439518 2020-21: 453528	Reason for less production: Frequent breakdowns in hoisting and crushing system, COVID-19 Restrictions etc.
3q	General remarks of inspecting officers on method of mining etc.	Underground method of mining has been proposed.	The Method of mining is suitable to the type of deposit.	No issue related mining method.

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal of top soil and Mineral reject generation. OB/waste proposed to dump separately.	No top soil generated. MR generated has been blended. Separate dumping of the waste at designated place.	NIL.
4b	Location of topsoil, OB and mineral reject dumps	Dumping of the OB/Waste proposed near Magazine. No proposal of dumping of top soil and MR.	Dumping of the waste dump has been carried out near magazine. No dumping of top soil and MR.	NIL.
4c	Number of dumps within lease area and outside of lease area	Within Lease area: 04 and outside lease area: NIL	Within Lease area: 04 and outside lease area: NIL	NIL.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not applicable being underground mine.	Not applicable.	NIL.

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4e	Number of active and alive dumps.	02 Nos.	02 Nos.	Wasting dumping during 2020-21 proposed in Dump No. 1 & 3.
4f	Number of dead dumps.	No proposal.	Not applicable.	NIL.
4g	Number of dumps established.	No proposal.	Not applicable.	Not applicable.
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal of retaining wall and garland drain.	Retaining wall and garland drain observed at necessary places.	Cumulatively 350 mts of retaining wall and 400 mts garland drain constructed.
4i	Length of Retaining wall or garland drain all along dumps	No proposal.	Not applicable.	NIL.
4j	Number of settling ponds	No proposal.	Not applicable.	NIL.
4k	Specific comments of inspecting officer on waste dump management	Dumping of the waste has been proposed over surface as well in stope out area.	Dumping of the waste has been carried out as per proposal.	No issue related to waste dumping.

#### 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.	Mine out stopes has been proposed for backfilling/in stope dumping.	Mine out stope has been backfilled or in stope dumping carried out.	Stope 510 N & Stope 606 S are fully extracted.
5b	Area under backfilling of mined out area	Stope 510 N and Stope 606 S. Total Quantity: 15901 CuM	Stope 510 N- Nil and Stope 606 S- 6278 CuM	NIL.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal of top soil generation.	No top soil generation.	No fresh area has been excavated.

5d	Total area fully reclaimed and rehabilitated	No proposal of full reclamation and rehabilitation	Not applicable as no proposal.	NIL.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Backfilling or dumping in UG voids has been proposed after full extraction of mineral.	Backfilling of stopes was carried out after full extraction of the mineral.	UG stoped out area was utilized for waste dumping/backfilling.

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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).	As per rule 26(2) of MCDR, 2017, PMCP report to be submitted for previous year by 1st July.	Report Submitted.	NIL.
6b	Area available for rehabilitation (ha) .	Area not matured for rehabilitation	Not applicable.	NIL.
6c	afforestation done (ha).	Total: 0.40 Hect. (0.2 Hect. within lease area and 0.20 Hect. outside lease area)	Total: 0.40 Hect. (0.2 Hect. within lease area and 0.20 Hect. outside lease area)	NIL.
6d	No. of saplings planted during the year	Total 400 numbers of saplings within and outside lease area.	Total of 290 numbers of saplings within and outside lease area.	Violation of MCDR, 2017 issued vide letter dated..... for shortfall in number of plantation.
6e	Cumulative no .of plants	Cumulatively 2000 number of saplings for the plan period i.e. 2020-21 to 2024-25.	Cumulatively of 290 numbers of saplings have been planted during 2020-21. Remaining plantation shall be carried out in coming years.	Violation of MCDR, 2017 issued vide letter dated..... for shortfall in number of plantation.



6f	Any other method of rehabilitation	No proposal other than plantation.	Not applicable as no proposal.	NIL.
6g	Cost incurred on watch and care during the year	2.0 lakh.	5.0 lakh.	NIL.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	15901 CuM	6278 CuM	Less backfilling due to less development and less waste generation.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	15901 CuM	6278 CuM	Less backfilling due to less development and less waste generation.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposal.	Not applicable.	NIL.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal.	Not applicable.	NIL.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal.	Not applicable.	NIL.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Total 400 numbers of saplings within and outside lease area.	Total of 400 numbers of saplings within and outside lease area.	Violation of MCDR, 2017 issued vide letter dated..... for shortfall in number of plantation.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.40 Hect. (0.2 Hect. within lease area and 0.20 Hect. outside lease area)	0.40 Hect. (0.2 Hect. within lease area and 0.20 Hect. outside lease area)	NIL.

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation.	Plantation.	NIL.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed to monitor.	Being carried out as per proposal.	Parameters within the limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	A total of 400 number sapling has been proposed to plant.	A total of 290 number of saplings has been planted.	Violation of MCDR, 2017 issued vide letter dated..... for shortfall in number of plantation.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No grade wise sorting within lease area.	No sorting within lease area.	NIL.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Crushing (Mechanical ).	Crushing (Mechanical ).	After crushing, ROM is being sent to Khetri Beneficiation plant of the company
7c	Different grade of mineral sorted out at mines.	Not applicable as no proposal.	Not applicable.	NIL.
7d	Any beneficiation process at mines	No beneficiation at mine.	ROM/Ore is being dispatched to Khetri Copper Mine of the company for beneficiation.	NIL.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No proposal of beneficiation within lease area.	After crushing, ROM/Ore is being dispatched to Khetri Copper Mine of the company for beneficiation.	No issues related to mineral conservation and beneficiation.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal of top soil generation.	No top soil has been generated during RY.	No fresh area has been degraded.
8b	Concurrent use or storage of topsoil	No proposal.	Not applicable.	NIL.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of waste/OB has been proposed. No proposal for reject and fines generation.	Waste/OB has been dumped separately. No reject and fines generation.	NIL.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal of use of waste/OB for restoring the land to its original use.	Not applicable as no proposal.	NIL.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Not applicable.	NIL.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Total 400 numbers of saplings within and outside lease area.	Total of 290 numbers of saplings within and outside lease area.	Violation of MCDR, 2017 issued vide letter dated..... for shortfall in number of plantation.
8g	Survival rate	No proposal.	45% within lease area.	NIL.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling to control airborne dust.	Water sprinkling observed.	NIL.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Separate dumping of waste/OB has been proposed.	Waste/OB has been dumped separately.	Aesthetic beauty in and around mines area is good.

#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	As per rule 45 of MCDR, 2017 monthly and annual return to be submitted to competent authority.	Monthly and annual returns for the RY has been submitted.	NIL.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Sri U.B. Bhatt, Mining Engineer:Sri A.K. Sharma and Geologist: Sri GopalRathi.	Manager, Mining Engineer and Geologist has been appointed.	Scrutiny of annual return for the year 2020-21.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Waste disposal:1.64 Hect., Infrastructure: 6.070 Hect., Other Purpose: 7.78 Hect.	The details of the land use furnished found in order.	NIL.
9d	Scrutiny of Annual return on afforestation	200 no in Lease area & 200 no outside lease area.	Only 90 plants have been planted within lease area.	Violation of rule 45(7) of MCDR, 2017 issued vide letter dated.....
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No Mineral rejects generation.	The information furnished is in order.	MR/Sub-grade material generation has been shown in ROM production.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock ROM: 17597 MT	Found in order.	NIL.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production and Ex-mine price 2386.57 per tons.	Few irregularities have been observed in the cost of production.	Violation of rule 45(7) issued vide letter dated.....
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset has been shown as '0'.	Value of fixed asset has not shown properly.	Violation of rule 45(7) issued vide letter dated.....
9k	Scrutiny of Annual return on mining machineries	Crusher, Shovel, LHD, Dumper, Winding Engine, Ventilation fan, Conveyor, Pumps, Dozer, Jeep, Truck etc.	Crusher, Shovel, LHD, Dumper, Winding Engine, Ventilation fan, Conveyor, Pumps, Dozer, Explosive Van, Jeep, Truck etc.	NIL.



**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)	21-OCT-21	22-DEC-21	MCDR17 Rule 45(7)	21-OCT-21	
MCDR17 Rule 45(7)(a)	21-OCT-21				

**Date :**

**(DILIP JAIN)**

Indian Bureau of Mines