

**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 : **B014**) **CHANDRESH BOHRA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sh. U.B. Bhatt ,D.G.M.(Mines), Sh. A.K. Sharma ,A.G.M
Official with
Designation
- (iv) Date of Inspection : 12-JUL-23
- (v) Prev.inspection date : 07-JUN-23

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 220002**
- E-mail : **sree_k@hindustancopper.com**
- Phone : **01593-220001**
- (f) **Police Station** : **Khetri**
- (g) **First opening date** : **24-NOV-66**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **HINDUSTAN COPPER LIMITED,**
correspondance **KOLIHAN NAGAR, PO KHETRI**
DISTRICT-JHUNJHUNU (RAJASTHAN)
3. (a) **Lease Number** : **RAJ0451**
- (b) **Lease area** : **163.23**
- (c) **Period of lease** : **50**
- (d) **Date of Expiry** : **31-MAR-40**
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 : Sanjiv Kumar Singh
 Hindustan Copper Limited 1-
 Ashutosh Chowdhury Avenue
 Kolkata 700019 KOLKATA WEST
 BENGAL
 Phone: 033 22817138
 FAX : 033 22832478

Agent : Shri Sree Kumar
 Khetri Copper Complex, M/s
 Hindustan Copper Limited
 Khetri Nagar, Jhunjhunu
 JHUNJHUNU RAJASTHAN
 Phone: 08279211779
 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
		MP modif under 17(3) MCR 2016	04-MAY-23

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	(2021-22) 124 ML & 64 ML Total 1490 mts Bore Hole No- 23 BH	(2021-22) 124ML & 64 ML Total- 2210.3mts Bore Hole No- 25 BH	
1b	Exploration over lease area for geological axis 1 or 2	(2022-23) 124 ML & 64 ML ,Total 1535 mts Bore Hole No- 19 BH	(2022-23) 124ML, 64 ML & Surface Total- 5035.90mts Bore Hole No- 25 BH	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Agency Not proposed 38.37 Lakhs Excluding Taxes	Agency- M/s Asha Engg. Works & MECL 463.83 Lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	36.05 Ha	27.14 Ha	
1e	Balance reserve as on 01/04/20	During MP Period (Apr-2020 to Mar-2025) Reserve- 9.50 million T X1.31% Resource- 4.53million T X1.42% Total - 14.03million T x 1.34%	As on 01/04/2023 Reserve- 9.62 million T X1.30% Resource- 5.59million T X1.06% Total - 15.21million T x 1.21%	The reserve & resources are updated considering mine depletion and addition of reserve & resources due to re-interpretation of ore lenses after recent exploratory drilling.
1f	General remarks of inspecting officers on geology, exploration etc	NA	The overall status of Geology and exploration may be considered as satisfactory.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	306mRL- 0 m 246mRL- 0 m 169 mRL- 0 m 124 mRL- 75 m 109mRL-776 m 64mRL- 1705 m 0mRL- 444 m Total- 3000 m	306 mRL-202.10 m 246 mRL- 373.40 m 169 mRL-81.64 m 124 mRL- 122.46 m 109mRL- 520.88 m 64mRL- 636.62 m 0mRL- 24.60 m Total- 1961.70 m	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	NA	NA	U/g Mines
2c	Stripping ratio or ore to OB ratio	NA	NA	U/g Mine
2d	Quantity of topsoil generation in m3	NA	NA	U/g Mine
2e	Quantity of overburden generation in m3	20734 M3	26704 M3 (Swelling Volume)	48067 MT waste generated during 2022-23.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	The overall development of mine may be considered as satisfactory.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	124 ML- 1.RP6089 N+Cr 609 N+SL 5089N 2. St 610 N 3. RP 6011 + Cr 601 S + SL 5011 4. RP 6012 S + RP 6023 S+ Cr 602 S + SL 5012 S +SL 5023 S 64ML- 1.RP 7034 N + Cr 704 N+SL 6034 N 2. St 705 N 3. RP 7045 N+Cr 705 N+SL 6045 N 4. St 706 N 5. RP 7056 N +Cr 706 N+SL 6056 N	124 ML 1.St 610 N 2.RP 6089 N +Cr 609 N+ Sl 5089 N 3.St 601 S 4.St 602S 5.RP 6011+Cr 601S+SL 5011	Remaining 4.51% of sub-grade mineral generation and blended with ROM
3b	Quantity of ROM mineral production proposed	720000 Tonnes	400134 Tonnes	
3c	Recovery of saleable/usable mineral from ROM production	100% ROM	95.49 % ROM	
3d	Quantity of mineral reject generation	NA	NA	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
3f	Quantity of sub grade mineral generation.	NA	No sub grade generation	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	No such study conducted during the previous year.
3j	Provision of drilling and blasting in mineral benches	Underground Mining Blast hole open stoping	Underground Mining Blast hole open stoping
3k	Provision of mining machineries 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
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	NA	NA
3m	Total area covered under excavation/pits	0.675Hect	0.45Hect
3n	Ore to OB ratio for the pit/mine during the year.	NA	NA
3o	Total area put in use under different heads at the end of year	21.56 Ha	21.56 Ha
3p	Production of ROM mineral during the last five year period as applicable	2018-19 : 650000 t 2019-20: 650000t 2020-21: 720000t 2021-22: 720000t 2022-23: 720000 t	2018-19 : 571245t 2019-20: 439518t 2020-21: 453528t 2021-22: 413466t 2022-23: 400134t

3q General remarks NA At present the status of
of inspecting method of mining may be
officers on considered as
method of mining satisfactory.
etc.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	NA	Not applicable	U/g mines
4b	Location of topsoil, OB and mineral reject dumps	NA	NA	U/g Mines.
4c	Number of dumps within lease area and outside of lease area	Dump-03	Within the lease area (Total Dump-03)	Within the lease area (Total Dump-03)
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	NA	
4e	Number of active and alive dumps.	3 Nos.	3 Nos.	
4f	Number of dead dumps.	NA	NA	
4g	Number of dumps established.	NA	NA	
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES, 350mts of retaining wall and 400mts garland drain constructed in 2015-16	
4i	Length of Retaining wall or garland drain all along dumps	Yes	350mts of retaining wall and 400mts garland drain constructed in 2015-16	
4j	Number of settling ponds	NA	No proposal during 2022-23	
4k	Specific comments of inspecting officer on waste dump management	NA	The present status of waste dump management may be considered as sastisfactory.	

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.	NA	Nil	
5b	Area under backfilling of mined out area	Stope 510 N- 1784 m3 ST-1N- 13455 m3	Stope 510 N- 15090 m3	Original volume of void in St 510 N is 38210 M3. For FY 2022-23 Volume proposed to be filled in St 510 N was 1784 M3. But due to mining constraints 15090 M3 waste was filled in St 510 N
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NA	NA	
5d	Total area fully reclaimed and rehabilitated	NA	NA	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	The present status may be considered as satisfactory.	

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	Report submitted for FY 2022-23	
6b	Area available for rehabilitation (ha) .	NA	NA	U/g Mines
6c	afforestation done (ha).	NA	NA	U/g Mines

6d	No. of saplings planted during the year	200 nos. Inside Lease area 200 nos. Outside Lease area	200 nos. Inside Lease area 200 nos. Outside Lease area	
6e	Cumulative no .of plants	13055 nos. Inside Lease area 13055 nos. Outside Lease area(during mining plan period)	13055 nos. Inside Lease area 13055 nos. Outside Lease area(during mining plan period)	
6f	Any other method of rehabilitation	NA	NA	
6g	Cost incurred on watch and care during the year	Rs. 500000/-	Rs. 4625000/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	Stope 510 N- 1784 m3 ST-1N- 13455 m3	Stope 510 N- 15090 m3	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Stope 510 N- 1784 m3 ST-1N- 13455 m3	Stope 510 N- 15090 m3	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NA	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	U/g Mines

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	200 nos. Inside Lease area 200 nos. Outside Lease area	200 nos. Inside Lease area 200 nos. Outside Lease area	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	U/g Mines
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes, as per schedule.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	The current status of PMCP compliance and progressive closure operations may be considered as satisfactory.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NA	NA	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	

7c	Different grade of mineral sorted out at mines.	NA	NA
7d	Any beneficiation process at mines	NA	NA
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	May be considered as satisfactory.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NA	NA	U/g Mines
8b	Concurrent use or storage of topsoil	NA	NA	U/g Mine
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Dump No- 02	Dump No- 02	D1-Location- (X-5825, Y-3215) Area 9300 sq m Height- 10 m D2-Location- (X-6030, Y-3410) Area 830.4 sq m D3-Location- (X-5600, Y-3446) Area 830.4 sq m
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	200 nos. Inside Lease area 200 nos. Outside Lease area	200 nos. Inside Lease area 200 nos. Outside Lease area
8g	Survival rate	NA	30-40% survival rate
8h	Water sprinkling on roads to control airborne dust	NA	NA
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	The current status of aesthetic beauty in and around mines area may be considered as satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. submitted up to June-2023 A.R. Submitted for 2022-23	Yes , timely submission.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer - 01 Geologist -01 Manager - 01	Mining Engineer - 01 Geologist -01 Manager - 01	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	10.99hect	
9d	Scrutiny of Annual return on afforestation	Yes	200 no in Lease area & 200 no outside lease area.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NA	NA	U/g Mines
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	Closing Stock- 1527 MT X 0.92% as on 31-Mar-2023	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Ex mine price 3415.25/unit in 2022-23	
9h	Scrutiny of Annual return on fixed assets	Yes, information furnished in the AR	Fixed Assets- 2837856- in 2022-23	
9k	Scrutiny of Annual return on mining machineries	Yes, the information furnished in the AR	No of Machineries:- Crusher-01, LHD-7 no , Dumper- 5, Winding Engine- 3, Ventilation fan- 15, Conveyor- 4, Pumps- 9, Dozer- 1, Explosive Van- 02, Jeep- 01, Truck-01 & other electrical- 40	

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 :

(CHANDRESH BOHRA)

Indian Bureau of Mines