

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

Mining Plan Modification REPORT

Kolkata regional office

Mine file No : CAL/BH/SB/CU-3

Mine code : 14BHR27001

- (i) Name of the Inspecting : **E025**) **NAMAN EKKA**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 14/02/2020
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KENDADIH**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Underground
- (e) Postal address
State : JHARKHAND
District : SINGHBHUM (EAST)
Village : TERENCEA
Taluka : GHATSILA
Post office : SURDA
Pin Code :
FAX No. :
E-mail :
Phone :
- (f) Police Station :
- (g) First opening date : 02/05/1957
- (h) Weekly day of rest : SUN
2. Address for correspondence : TAMRA BHAVAN .
ASHUTOSH CHOUDHURY AVENUE . KOLKATA--1.
WEST BENGAL
3. (a) Lease Number : BHR0242
(b) Lease area : 1139.6
(c) Period of lease :
(d) Date of Expiry : 31/03/2030
4. Mineral worked : COPPER ORE Main

5. Name and Address of the

Lessee : HINDUSTHAN COPPER LTD.
1,ASHUTOSH CHOUDHURY AVENUE
TAMRA BHAWAN KOLKATA-700019
KOLKATA WEST BENGAL
Phone:033-2283-2832/2529
FAX :033-2283-2623

Geologist

Name : Mr. J. PRAKASHAM, Full Time
Qualification : M. Sc. (Geology)
Appointment/ : 19/07/2019
Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	02/05/2013
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	27/05/2013
	:	MP review under 17(1) MCR 2016	21/12/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration proposal for 2019-20	No exploration was taken up in 2019-20	
1b	Exploration over lease area for geological axis 1 or 2	No exploration proposal for reporting period	No exploration were taken up during reporting period	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None	None	
1d	Balance area to be explored to bring Geological axis in 1 or 2	There was no proposal for drilling during reporting period.	No exploration in reporting period.	
1e	Balance reserve as on 01/04/20	Reserves/Resources as on 1/4/2019: Total reserves 0.43 million tonnes (0.31million tonnes (111) and 0.12 million tonnes (122)) and total remaining Resources: 18.1 million tonnes	-	

1f	General remarks of inspecting officers on geology, exploration etc	-	-	Copper mineralisation is in the form of disseminations in the granular quartz quartzite schist to give fairly unoiform low grade wide ore zones persistence along strike and dip. Within this wide zones stringers and veins are found within biotite chlorite schist. Thin massive sulphide zones are confined into bracecciated quartz veins.The ore bodies in the area are primarily copper lodes with dominate chalcopyrite, pyrite and subordinate pyrrhotite and a large number of minor and trace minerals.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Horizontal development at various levels: 1895 m Vertical development between various levels: 1556 m	Horizontal development at various levels: 1595 m Vertical development between various levels: 1589 m	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	U/G Mining only and no proposal for open cast working	U/G Mining only	
2c	Stripping ratio or ore to OB ratio	U/G Mining only and no proposal for open cast working	-	-

2d	Quantity of topsoil generation in m3	U/G Mining only and no proposal for open cast working	-	-
2e	Quantity of overburden generation in m3	U/G Mining only and no proposal for open cast working	-	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		U/G Mining only and no proposal for open cast working	U/G Mining only and no proposal for open cast working

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	U/G Mining only and no proposal for open cast working	-	-
3b	Quantity of ROM mineral production proposed	1,11,077 tonnes	43,230 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	No proposal	-	
3d	Quantity of mineral reject generation	No proposal	-	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	-	
3f	Quantity of sub grade mineral generation.	No proposal	-	
3g	Grade of sub grade mineral generation	No proposal	-	-
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal	-	-

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None	None	
3j	Provision of drilling and blasting in mineral benches	There is provision for drilling and blasting for development and stoping operations.	Drilling and blasting is being done for development of drives, stopes and raises	
3k	Provision of mining machineries in mineral benches	Yes mining machineries deployed for development and stoping operations.	Yes mining machineries deployed for development of drivages and raises.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	U/G Mining only. No proposal for opencast working	-	-
3m	Total area covered under excavation/pits	U/G Mining only. No proposal for opencast working	-	
3n	Ore to OB ratio for the pit/mine during the year.	U/G Mining only. No proposal for opencast working	-	
3o	Total area put in use under different heads at the end of year	U/G Mining only. No proposal for opencast working	-	-
3p	Production of ROM mineral during the last five year period as applicable	2018-19 - 83,628 tonnes 2019-20 - 1,11,077 tonnes	2018-19 - 25,451 tonnes 2019-20 - 43,230 tonnes	

3q	General remarks of inspecting officers on method of mining etc.	As the width of the ore body is mostly 1.5 to 4.0m hence Room & Pillar method is most suitable method of mining. However, if the lode width is found to be higher during the course of mining, Horizontal cut & fill (HCF) method may be applied.	As the width of the ore body is mostly 1.5 to 4.0m hence Room & Pillar method is most suitable method of mining. However, if the lode width is found to be higher during the course of mining, Horizontal cut & fill (HCF) method may be applied.	As the width of the ore body is mostly 1.5 to 4.0m hence Room & Pillar method is most suitable method of mining. However, if the lode width is found to be higher during the course of mining, Horizontal cut & fill (HCF) method may be applied.
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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)	U/G mining. No such proposal of dumping	U/G mining only	
4b	Location of topsoil, OB and mineral reject dumps	No such proposal	-	-
4c	Number of dumps within lease area and outside of lease area	No such proposal	-	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No such proposal	-	-
4e	Number of active and alive dumps.	No such proposal	-	-
4f	Number of dead dumps.	No such proposal	-	-
4g	Number of dumps established.	No such proposal	--	-
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposal	-	-

4i	Length of Retaining wall or garland drain all along dumps	No such proposal	-	-
4j	Number of settling ponds	No such proposal	-	-
4k	Specific comments of inspecting officer on waste dump management		Extraction of ore through U/G mining only and there is no question of waste dump management.	Extraction of ore through U/G mining only and there is no question of waste dump management.

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.	Hydraulic backfilling of stopes. Once the minng is completed to the extremeties of stopes, backfilling of the excavated area is done. Generally two pannels are prepared one for production and other for backfilling and consolidation.	No Stopping during reporting period and production was reported from development.	
5b	Area under backfilling of mined out area	No such proposal	-	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal	-	
5d	Total area fully reclaimed and rehabilitated	No such proposal	-	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	-

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	-
6b	Area available for rehabilitation (ha) .	No such proposal	-	-
6c	afforestation done (ha).	NA	-	-
6d	No. of saplings planted during the year	200	200	-
6e	Cumulative no .of plants	NA	-	-
6f	Any other method of rehabilitation	NA	-	-
6g	Cost incurred on watch and care during the year	NA	-	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No such proposal	-	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposal	-	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No such proposal	-	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	-	-

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	-	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	200 saplings	200 saplings	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	-	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	-	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	NA	-	-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	-

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatched to concentrator plant at Mosaboni	ROM dispatched to concentrator plant at Mosaboni	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No such proposal	-	
7c	Different grade of mineral sorted out at mines.	No such proposal	-	

7d	Any beneficiation process at mines .	No Beneficiation at mine site. ROM dispatched to Concentrator plant situated at Mosaboni.	No Beneficiation at mine site. ROM dispatched to Concentrator plant situated at Mosaboni.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		No Beneficiation at mine site. ROM dispatched to Concentrator plant situated at Mosaboni.	No Beneficiation at mine site. ROM dispatched to Concentrator plant situated at Mosaboni.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	U/G mine and there is no such proposal	-	-
8b	Concurrent use or storage of topsoil	U/G mine and there is no such proposal	-	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	U/G mine and there is no such proposal	-	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	U/G mine and there is no such proposal	-	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	U/G mine and there is no such proposal	-	-

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Yes	Yes	
8g	Survival rate	60%	60%	
8h	Water sprinkling on roads to control airborne dust	-	-	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	All mining operations (except transportation of ore from mine to concentrator plants at Mosabani) are underground therefore bare minimum adverse impact on aesthetic buty of in and around mine area can be seen.	All mining operations (except transportation of ore from mine to concentrator plants at Mosabani) are underground therefore bare minimum adverse impact on aesthetic buty of in and around mine area can be seen.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual Returns should be submitted in prescribed time frame.	Monthly and Annual Returns are being submitted in time.	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Sh. Sampat Kumar Sangi Geologist: Sh. J. Prakasham	Mining Enginner and Geologists are in post.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	NA	U/G Mining thus not applicable	
9d	Scrutiny of Annual return on afforestation	200 saplings	200 saplings	-

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject generation :NIL	Mineral Reject generation :NIL	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stocks of ROM: 11283 tonnes	Details appear to be in order	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine price: - Rs. 3000/tonnes		-
9h	Scrutiny of Annual return on fixed assets	Value of fixed assets Rs. 781096777/-		-
9k	Scrutiny of Annual return on mining machineries	Scraper- 2, Locomotive - 1, Mine cars - 10, Shovel loader -2, Rock drill - 5	Details appear to be in order	-

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

Date :

(**NAMAN EKKA**)

Indian Bureau of Mines