

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

**MCDR inspection REPORT  
Ranchi regional office**

**Mine file No :** BIH/GLA/BX/211/RRO

**Mine code :** 07BHR32006

- (i) Name of the Inspecting : **K001** ) **B.L. KISKU**  
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Pradeep Kumar, Geologist & Shri K.K. Kamal, Minin  
Official with  
Designation
- (iv) Date of Inspection : 13/10/2023
- (v) Prev.inspection date : 14/09/2022

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **CHIRODIH (31.42)**
- (b) **Registration NO.** : **IBM/1266/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address  
State : JHARKHAND  
District : GUMLA  
Village : CHIRODIH  
Taluka : BISHUNPUR  
Post office : JOBHIPAT  
Pin Code :  
FAX No. : NA  
E-mail : mmppsingh\_bauxite@yahoo.co.:  
Phone : 06526-24017
- (f) Police Station : BISHUNPUR
- (g) First opening date : 10/04/1984
- (h) Weekly day of rest : SAT
2. Address for : AT-CHIRODIH  
correspondance : VILLAGE- JAWADIH, P.O- JOBHIPAT  
DIST.- GUMLA, JHARKHAND
3. (a) Lease Number : BHR0253
- (b) Lease area : 31.42
- (c) Period of lease : 50
- (d) Date of Expiry : 23/03/2034
4. Mineral worked : BAUXITE Main

## 5. Name and Address of the

Lessee : M.M.P. SINGH  
 AT/P.O.- LOHARDAGA DIST.  
 LOHARDAGA LOHARDAGA  
 JHARKHAND  
 Phone:06526-24017  
 FAX :

Owner : M.M.P.SINGH  
 AT-LOHARDAGA PO/DIST-  
 LOHARDAGA JHARKHAND  
 LOHARDAGA JHARKHAND  
 Phone:  
 FAX :

## Mining Engineer

Name : KRISHNA KANT KAMAL,Full Time  
 Qualification : B Tech (Mining)  
 Appointment/ : 01/02/2017  
 Termination date

## Geologist

Name : PRADEEP KUMAR,Full Time  
 Qualification : M Sc (Geology)  
 Appointment/ : 01/02/2017  
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	10/07/1998
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	18/07/2008
		Mining Scheme rule 12 MCDR1988	13/11/2014
		MP review under 17(1) MCR 2016	20/12/2018

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	15 DTH/Coring at Grid interval 100mx100m	Not done due to mine under Temporary Discontinuance since 01/04/2019 due to Common Cause decision and no challan being issued.	Mine was under Temporary Discontinuance since 01/04/2019 due to Common Cause decision and no challan being issued.
1b	Exploration over lease area for geological axis 1 or 2	G1 - 10.69 ha. G2 - 3.43 ha.	G1: 10.69ha. G2: 3.43ha.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed the name of Exploration Agency.	N.A.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	N.A.	17.297 ha.	Nil
1e	Balance reserve as on 01/04/20	Not available.	(i) Proved mineral reserve (111) = 925853 MT (Lump Medium Grade) (ii) Probable mineral reserve(122) = 366283 MT (Lump Medium Grade).	Nil
1f	General remarks of inspecting officers on geology, exploration etc	N.A.	The Bauxite deposits are mostly associated with high level Laterite, occurred as thin, irregular and discontinuous lenses or tabular bodies within the laterite capping. The ore is Gibbsite (Al <sub>2</sub> O <sub>3</sub> , 3H <sub>2</sub> O). 15 boreholes (DTH/coring type) were proposed during the year 2019-20 were not given as the mine was temporarily discontinued since 01/04/2019.	Mine is temporarily discontinued from 01/04/2019.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Eastern side of the lease.	Eastern side of the lease.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top Soil =1 Bench, OB = 1 Bench, Ore = 1 Bench	Top Soil =1 Bench, OB = 1 Bench, Ore = 1 Bench.	As per approved MP.
2c	Stripping ratio or ore to OB ratio	1:0.38	1:0.39	Nil
2d	Quantity of topsoil generation in m3	During last five year plan period 30527cum top soil were proposed to handled.	During last five year plan period 30527cum top soil were to handled, but mine was stopped due to statutory clearance.	Nil
2e	Quantity of overburden generation in m3	During last five years plan period 122897 cum OB/Waste were proposed to be generated.	During last year O.B. generated - Nil, Waste - 3597 cum.	Nil, as mine was stopped due to statutory clearance.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	N.A.	N.A.	Mine was closed due to statutory clearance.

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 (One)	1 (One)	as per approved mining plan.
3b	Quantity of ROM mineral production proposed	65203 MT	During 2021-22 = 9064.710 MT	Nil
3c	Recovery of sailable/usable mineral from ROM production	65203 MT	9065 MT	Nil
3d	Quantity of mineral reject generation	18594 cum	1597 cum	Nil

3e	Grade of mineral rejects generation and threshold value declared.	N.A.	N.A.	Nil
3f	Quantity of sub grade mineral generation.	N.A.	N.A.	Nil
3g	Grade of sub grade mineral generation	N.A.	N.A.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	N.A.	N.A.	Nil
3j	Provision of drilling and blasting in mineral benches	Yes	Drilling & Blasting is done with Jack Hammer.	Nil
3k	Provision of mining machineries in mineral benches	Yes	Only Compressor is deployed.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	In OB = 2.50 m to 3.50 m in Ore = 3.00 m to 5.00 m	Height =3.00m and Width = 6.00 m is maintained.	Nil
3m	Total area covered under excavation/pits	0.157 hectcs.	0.157 hectcs.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.38	1:0.39	Nil
3o	Total area put in use under different heads at the end of year	Open Pit = 0.157 ha. Roads/Office = 0.48 ha. PMCP = 10.91 ha.	Open Pit = 0.157 ha. Road/Office = 0.48 ha. PMCP=10.91 ha.	Nil

3p	Production of ROM mineral during the last five year period as applicable	2019-20=54870 MT 2020-21=66010 MT 2021-22=65203 MT	2019-20=NIL 2020-21=NIL 2021-22= 9065 MT	Mine re-opened on 28.12.2021.
3q	General remarks of inspecting officers on method of mining etc.	N.A.	N.A.	Nil

### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	N.A.	No dump available. Concurrent backfilling is done.	Concurrent backfilling is done.
4b	Location of topsoil, OB and mineral reject dumps	N.A.	N.A.	Nil
4c	Number of dumps within lease area and outside of lease area	N.A.	Nil	Concurrent backfilling is in progress.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	N.A.	N.A.	Nil
4e	Number of active and alive dumps.	N.A.	N.A.	Nil
4f	Number of dead dumps.	N.A.	N.A.	Nil
4g	Number of dumps established.	N.A.	N.A.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	N.A.	N.A.	Nil
4i	Length of Retaining wall or garland drain all along dumps	N.A.	N.A.	Nil
4j	Number of settling ponds	N.A.	N.A.	Nil

4k	Specific comments of inspecting officer on waste dump management	N.A.	N.A.	Nil
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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.	Yes	Mineral is fully excavated from area before starting backfilling.	Nil
5b	Area under backfilling of mined out area	1.36 ha.	1.36 ha.	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Topsoil is spread over in reclaimed area for plantation.	Nil
5d	Total area fully reclaimed and rehabilitated	N.A.	0.75 ha.	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	N.A.	N.A.	Nil

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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	Submitted on time.	Nil
6b	Area available for rehabilitation (ha) .	1.36 hectas.	1.36 hectas.	Nil
6c	afforestation done (ha).	0.75 hectas.	0.75 hectas.	Nil

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6d	No. of saplings planted during the year	400 nos.	Within lease area - 400 nos. Out side lease area - 50 nos.	Nil
6e	Cumulative no .of plants	N.A.	1050 nos.	Nil
6f	Any other method of rehabilitation	N.A.	N.A.	Nil
6g	Cost incurred on watch and care during the year	Not available	Rs. 25000/-	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	0.49 ha	0.83 ha.	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Yes	Concurrent reclamation is in progress.	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Yes	400 nos. sapling planted.	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	N.A.	N.A.	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	N.A.	N.A.	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No waste land available.	N.A.	Nil



6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	N.A.	N.A.	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	N.A.	N.A.	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Environmental monitoring is done Quarterly and Annually.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	N.A.	N.A.	Nil

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No grade wise sorting.	Ore grade of this mine is 45% to 50% Al <sub>2</sub> O <sub>3</sub> , hence no sorting is done.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	Nil
7c	Different grade of mineral sorted out at mines.	N.A.	N.A.	Nil
7d	Any beneficiation process at mines .	N.A.	N.A.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	N.A.	N.A.	Nil

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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)	topsoil removed and utilized for plantation	topsoil removed and utilized for plantation.	Nil
8b	Concurrent use or storage of topsoil	Concurrent use of top soil.	Top soil is spread over in the reclaimed areas concurrently.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	N.A.	N.A.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	OB/Waste rock is used for backfilling and reclamation of the mined out voids.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	N.A.	Mined out area is backfilled with Waste/O.B. followed by plantation.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	400 saplings.	400 saplings.	Nil
8g	Survival rate	50%	50%	Nil
8h	Water sprinkling on roads to control airborne dust	N.A.	N.A.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	N.A.	N.A.	Survival of trees is low. Proper care is to be given. Aesthetic beauty in and around is good.

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## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual return for the year 2021-22 submitted.	Submitted Monthly and Annual return duly filledup for the year 2021-22 .	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri Krishna Kant Kamal, Mining Engineer in charge and Shri Pradeep Kumar, Geologist in charge	At the time of inspection both are present.	Nil
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) Under forest Outside forest Total (i) Already exploited & abandoned by opencast (O/C) mining 0.830 6.180 7.010 (ii) Covered under current (O/C) Workings 0.000 0.157 0.157 (iii) Reclaimed/Rehabilitated 0.000 0.152 0.152 (iv) Used for waste disposal 0.870 0.490 1.360 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.330 0.150 0.480 (vi) Other Purpose (NONE) 0.000 0.000 0.000 (vii) Work done under progre		

9d	Scrutiny of Annual return on afforestation	(i)(a) No. of trees planted during the year - 400 (Within lease) (b) No. of trees planted during the year - 40 nos. (Outside lease) (ii) Survival rate - (a) 50% & (b) 90%.	Survival rate is low, it should be increased by giving due care.	Survival rate is low, it should be increased by giving due care.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	N.A.	Nil	No reject is observed.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock - 175.90 tonnes, (45% to below 50% Al2O3) Production - 9064.71 tonnes (45% to below 50% Al2O3) Dispatches - 4095.30 tonnes (45% to below 50% Al2O3) Closing stock - 5145.310 tonnes (45% to below 50% Al2O3) Ex-mine price - Rs. 500/-per tonne.	As per Annual Return (2021-22) ROM furnished is as follows: - (i) Opening Stock - 175.90 tonnes, (45% to below 50% Al2O3) (ii) Production - 9064.71 tonnes (45% to below 50% Al2O3) (iii) Dispatches - 4095.30 tonnes (45% to below 50% Al2O3) (iv) Closing stock - 5145.310 tonnes (45% to below 50% Al2O3) (v) Ex-mine price - Rs. 500/-per tonne.	Seems to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price - Rs. 500/-per tonne.	Ex-mine price - Rs. 500/-per tonne.	Appears to be correct.
9h	Scrutiny of Annual return on fixed assets	Furnished as nil.	Only land is purchased in long back. Machine (compressor) used is on hire.	Nil
9k	Scrutiny of Annual return on mining machineries	Only land was purchased long back. machine (compressor) used is on hire.	Machine (compressor) used is on hire.	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

Date :

(B.L. KISKU)

Indian Bureau of Mines