

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

Review and updation of Mining Plan REPORT

Ranchi regional office

Mine file No : JHK/LTH/BX/251/RRO

Mine code : 07JHK19002

- (i) Name of the Inspecting : **G004**) **OM PRAKASH GOPAL**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 04/02/2020
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **CHIRO KUKUD BAUXITE MINE**
- (b) **Registration NO.** : **IBM/935/2011**
- (c) **Category** : **A Other than Fully Mech.**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **JHARKHAND**
- District : **LATEHAR**
- Village : **CHIRO AND KUKUD**
- Taluka : **MAHUADANR**
- Post office : **CHIRO AND KUKUD**
- Pin Code :
- FAX No. : **06526- 224118**
- E-mail : **bijesh.jha@adityabirla.com**
- Phone : **06526-224016, 224112**
- (f) **Police Station** : **MAHUADANR**
- (g) **First opening date** : **29/01/1985**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **VILL.-CHIRO & KUKUD**
TALUKA - MAHUADANR
DISTT.- LATEHAR (JHK)
3. (a) **Lease Number** : **BHR0229**
- (b) **Lease area** : **166.68**
- (c) **Period of lease** : **50**
- (d) **Date of Expiry** : **28/01/2035**
4. **Mineral worked** : **BAUXITE** **Main**

5. Name and Address of the

Lessee : M/S HINDALCO INDUSTRIES LTD.
 COURT ROAD, LOHARDAGA,
 LOHARDAGA JHARKHAND
 Phone:06526 - 224012 & 224118
 FAX :06526-224112, 224016 & 0651- 2330782

Owner : K.N.BHANDARI
 M/s Hindalco Industries Ltd
 P.O. Renukoot Dist.
 Sonebhadra (UP) SONBHADRA
 UTTAR PRADESH
 Phone:
 FAX :

Agent : B.K.JHA
 M/s HINDALCO INDUSTRIES
 Ltd. COURT ROAD PO& DIST -
 LOHARDAGA (JHK) LOHARDAGA
 JHARKHAND
 Phone: Mob- 941708929, 06526-224112/224015
 FAX : 06526-224118

Mining Engineer

Name : SRI R.R.P.AMBASTHA,Full Time
 Qualification : B.E(MIN)
 Appointment/ : 01/08/2006
 Termination date

Geologist

Name : SRI TAPAS GACHHAYAT,Full Time
 Qualification : M.Sc(GEOLOGY)
 Appointment/ : 01/04/2012
 Termination date

Manager

Name : Rajesh Ambashtha
 Qualification : AMIE(Mining) with FCC
 Appointment/ : 01/08/2006
 Termination date

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|-------------------------------|---|--------------------------------|------------|
| 6. Date of approval of Mining | : | Renewal under rule 24 MCR1960 | 17/05/2006 |
| Plan/Scheme of Mining | | Mining Scheme rule 12 MCDR1988 | 17/08/2012 |
| | | FMCP under 23C(1) | 20/11/2014 |
| | | MP modif under MCR 1960 | 20/05/2016 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|--------------|--|--|
| 1a | Backlog of previous year | No proposal | Exploration not done | - |
| 1b | Exploration over lease area for geological axis 1 or 2 | No proposal | Exploration not done | - |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | No proposal | Exploration not done | - |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Not proposed | Exploration not done | - |
| 1e | Balance reserve as on 01/04/20 | - | Reserves as on 1/4/2019 : 877376 tonnes (111) and 1104813 tonnes (122) | - |
| 1f | General remarks of inspecting officers on geology, exploration etc | - | - | The Plateau Region on either side along the boundary between Chhattishgarh and Jharkhand has been known to be potential tract of high grade bauxite. In this region Bauxite occurs as thin irregular and discontinuous lenses within laterite capings. The laterite occurs as blankets over basalt (Deccan trap). It has been established that the laterite/bauxite profile resulted from chemical weathering of underlying basalt parent rocks. |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
|--------|------|-----------|-------------|---------|

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|----|---|--|---|--|
| 2a | Location of development w.r.t. lease area | 805985E to 806202 E and 260022N to 260045N | Mining operations stopped since 24/4/2018. Two abandoned pits seen during inspection. | Ministry of Environment and Forest vide letter no. J-11015/240/2006-IA.II(M) dated 13/6/2018 issued show cause Notice under Section 5 of the Environment Protection Act 1986 for cancellation of EC. Ministry of Environment Forest and climate Changes vide letter no. 103-144/07/EPF/2660 dated 12/10/2018 directed the lessee to obtain necessary clearances of Standing Committee of NBWL. At the time of inspection the mine was not under operation. Form E enclosed as Annexure X with draft copy of RMP. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Formation of separate benches for top soil, OB and minerals are proposed | Mine remain closed at the time of inspection. Separate benches for top soil, OB and minerals seen | - |
| 2c | Stripping ratio or ore to OB ratio | 1:2.2 | - | - |
| 2d | Quantity of topsoil generation in m3 | 63682 cum | NA. | - |
| 2e | Quantity of overburden generation in m3 | 10809 cum | It is reported that 21071 tonnes of OB were removed during reporting period. | - |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | - | - | Mining operations stopped since 24/4/2018. Mine remain closed at the time of inspection |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|--|
| 3a | Number of pit proposed for production | one | one | Mining operations stopped since 24/4/2018 for want of fresh EC. Mine remain closed at the time of inspection |
| 3b | Quantity of ROM mineral production proposed | 99434 tonnes | 1970 tonnes | Mining operations stopped since 24/4/2018 for want of fresh EC. |
| 3c | Recovery of sailable/usable mineral from ROM production | 80% | 80% | - |
| 3d | Quantity of mineral reject generation | Reject Generation not envisaged | Production of reject not reported | - |
| 3e | Grade of mineral rejects generation and threshold value declared. | Not applicable | - | - |
| 3f | Quantity of sub grade mineral generation. | Generation of subgrade not envisaged | Generation of subgrade not reported | - |
| 3g | Grade of sub grade mineral generation | Not applicable | - | - |
| 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. | No proposal | Not done | - |
| 3j | Provision of drilling and blasting in mineral benches | Drilling and blasting in mineral benches proposed | The mine was not under operation at the time of inspection. | - |
| 3k | Provision of mining machineris in mineral benches | Deployment of mining macheneris are proposed | Mine was not under operation and no mining macheneris were available at mine site at the time of inspection | - |

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| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes | Mine remain closed at the time of inspection | - |
| 3m | Total area covered under excavation/pits | 23 Ha | 19.95 ha | - |
| 3n | Ore to OB ratio for the pit/mine during the year. | NA | - | - |
| 3o | Total area put in use under different heads at the end of year | Area put to use at the end of plan period (2019-20) are Pits: 23.462 ha , Infrastructure : 0.45, Haul Road: 0.34 | Pits:19.5 ha (approx), Infrastructure: 0.45, Haul Road: 0.34 | - |
| 3p | Production of ROM mineral during the last five year period as applicable | 2015-16 : 95056 tonnes 2016-17 : 99118 tonnes 2017-18 : 99204 tonnes 2018-19 : 99453 tonnes | 2015-16 : 94290 tonnes 2016-17 : 87570 tonnes 2017-18 : 90130 tonnes 2018-19 : 1970 tonnes | |
| 3q | General remarks of inspecting officers on method of mining etc. | A category Opencast mine. | Mine remain closed since April 2018. It is reported that mining are being done by deploying mining macheneraies. | No Mining activity since April 2018 for want of fresh EC. The lease area comes within 10 km radius of Wild life Sanctuary. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Concurrent backfillingpro posed. There is no proposal for outside dumping. | Mine remain closed from April 2018. It is reported that concurrent backfilling was in practice as per approved proposal. | - |
| 4b | Location of topsoil, OB and mineral reject dumps | No proposal for external dumping. | External dumping not done | - |

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|----|--|--|------|--|
| 4c | Number of dumps within lease area and outside of lease area | None | None | - |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Not applicable as there is no such proposal for external dumping | - | - |
| 4e | Number of active and alive dumps. | Not applicable as there is no such proposal for external dumping | - | - |
| 4f | Number of dead dumps. | None | - | - |
| 4g | Number of dumps established. | Not applicable as there is no such proposa. | - | - |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Not applicable as there is no proposal for external dumping | - | - |
| 4i | Length of Retaining wall or garland drain all along dumps | Not applicable as there is no such proposal for external dumping | - | - |
| 4j | Number of settling ponds | None | - | - |
| 4k | Specific comments of inspecting officer on waste dump management | - | - | There is no proposal for external dumping. Generated waste are being utilised for concurrent backfilling in mature area. |

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. | It is proposed to start backfilling after full extraction of mial | Concurrent backfilling done after full extraction of mial | - |
| 5b | Area under backfilling of mined out area | 2.01 ha | 0.98 ha | - |

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| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | Proposal for carpetting of top soil over backfilled area for restoration and rehabilitation of mined out area envisaged in approved plan. | Carpetting of top soil over backfilled area was in practice as proposed. | - |
| 5d | Total area fully reclaimed and rehabilitated | 1.082 ha (afforestation) | Rehabilitation could not be achieved as per proposal as mining operations were stopped from April 2018 for want of Fresh EC. | -- |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | - | - | Backfilling and Reclamation could not be achieved as mine was closed since April 2018 for want statutory clearances from Ministry of environment and forest. |

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). | -- | Annual Report of PMCP submitted | - |
| 6b | Area available for rehabilitation (ha) . | 1.082 ha | Rehabilitation could not be achieved as per proposal as mining operations were stopped from April 2018 for want of Fresh EC. | - |
| 6c | afforestation done (ha). | 1.082 ha | Rehabilitation could not be achieved as per proposal as mining operations were stopped from April 2018 for want of Fresh EC. | - |
| 6d | No. of saplings planted during the year | 2164 saplings | IT is reported that 2450 saplings were planted during reporting period. | - |

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|----|---|---------------------|----------|---|
| 6e | Cumulative no .of plants | NA5 | 14653 | - |
| 6f | Any other method of rehabilitation | None | - | - |
| 6g | Cost incurred on watch and care during the year | 6.03 lakh | NA | - |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | 2.04 ha | 0.98 ha | - |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | 2.01ha | - | - |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area | 1.082 ha | 0.98 ha | - |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No such proposal | Not done | - |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | None | - | - |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | NIL | NIL | - |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | NIL | NIL | - |

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| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | No such proposal | - | - |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Envirnmental monitoring proposals are envisaged. | Environmental monitoring are being done | - |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | - | - | At the time of inspection mine remain closed for want of EC.Fensing has been done all around the area reclaimed and rehabilitated earlier. |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | No proposal for grade wise sorting | Gradeise sorting not in practice | - |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | Gradewise sorting not proposed. There is proposal for manual sorting for segregation of ore from intercalated waste is proposed | Mine was not under operation at the time of inspection . It is reported that manual sorting of ore from intercalated waste are being in practice. | - |
| 7c | Different grade of mineral sorted out at mines. | No such proposal | Not done | - |
| 7d | Any beneficiation process at mines | None | - | - |

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| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | - | - | Mine was not under operation at the time of inspection. It is reported that blending of low grade ore with high grade material is in practice |
|----|--|---|---|---|

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|---|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | Proposal for seperate removal and utilisation of top soi for spreading over backfilled area is envisaged | It was reported that seperate removal and utilisation of top soil is in practice. | - |
| 8b | Concurrent use or storage of topsoil | Concurrent use for spreading over backfilled area | Concurrent use is in practice as per proposal | - |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | External dumping not propose | Concurrent backfilling of generated waste/OB | - |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Concurrent backfilling over mined out area | Concurrent backfilling over mined out area is in practice as per proposal | - |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Concurrent backfilling is proposed for Phased reclamation and rehabilitation of mined out area. | Concurrent backfilling was in practice as per proposal | - |

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| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | It was proposed to plant 2164 saplings over 1.08 ha area | It is reported that 2450 saplings were planted during reporting period. | - |
| 8g | Survival rate | NA | 83% | - |
| 8h | Water sprinkling on roads to control airborne dust | Yes | Mine was not in operation at the time of inspection | - |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | - | - | Aesthetic beauty is maintained in mine area has been maintained by way of restoration of mine out area by backfilling and plantation. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|--|---------|
| 9a | Status of submission of Monthly and Annual returns | Annual Returns submitted in online mode. | Annual Returns submitted in online mode | - |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Mining Engineer incharge Shri Rajesh Ambastha and Geologist shri Tapas Gachhyat | Mining Engineer incharge Shri Rajesh Ambastha and Geologist shri Tapas Gachhyat wer present at the time of insopECTION | - |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Area exploited and abondened by opencast working : 19.953 ha Area under current opencast working: 2'567 ha Reclaimed/Rehabilitated: 18.210 ha Infrastructure : 0.455 ha other purpose: 0.210 ha | Details furnished in AR seems to be correct | - |
| 9d | Scrutiny of Annual return on afforestation | 2450 saplings | Details furnished in AR seems to be correct | - |

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|----|---|---|---|---|
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | NIL | There is no mineral reject generation | - |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Production and stocks of ROM and Gradewise ore are reported. | Figures on production, dispatch and stocks are in confirmity. | - |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Ex mine price is reported at Rs 1098/ which is mining cost | Sale value reported as NIL as it is captive mine | - |
| 9h | Scrutiny of Annual return on fixed assets | Closing balance of fixed assets reported at Rs. 598030798/- | - | - |
| 9k | Scrutiny of Annual return on mining machineries | Showel 1, Compressor 1, Blast holle DRill 1, umper 3 wheel loader 1, Tanker 1 | Mine was closed and machenaries were at mine sit at the time of inspection. | - |

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 :

(OM PRAKASH GOPAL)

Indian Bureau of Mines