

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

**MCDR inspection REPORT  
Ranchi regional office**

**Mine file No :** JHK/LTH/BX/250/RRO

**Mine code :** 07JHK19001

- (i) Name of the Inspecting : **G004** ) **OM PRAKASH GOPAL**  
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Shri Y K Lilhare Mines Manager  
Official with  
Designation
- (iv) Date of Inspection : 03/02/2020
- (v) Prev.inspection date : 16/11/2018

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **ORSA (309.19HC.)**
- (b) **Registration NO.** : **IBM/935/2001**
- (c) Category : A Manual
- (d) Type of Working : Opencast
- (e) Postal address  
State : JHARKHAND  
District : LATEHAR  
Village : ORSA  
Taluka : MAHUADANR  
Post office : ORSA  
Pin Code :  
FAX No. : 0652-6224118  
E-mail : bijesh.jha@adityabirla.com  
Phone : 0652-6224016
- (f) Police Station :
- (g) First opening date :
- (h) Weekly day of rest :
2. Address for : VILLAGE- ORSA,  
correspondance : DISTT.- LATEHAR  
JHARKHAND
3. (a) Lease Number : BHR0230  
(b) Lease area : 309.36  
(c) Period of lease : 50  
(d) Date of Expiry : 16/06/2036
4. Mineral worked : BAUXITE Main

## 5. Name and Address of the

Lessee : HINDALCO  
AT & PO - COURT ROAD,  
LOHARDAGA, LOHARDAGA  
JHARKHAND  
Phone:06526-24016,24112  
FAX :06526-24118

Owner : HINDALCO INDUSTRIES LTD.  
HIDALCO INDUSTRIES LTD.  
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LOHARDAGA JHARKHAND  
Phone: (06526)- 224016  
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Agent : B.K.JHA  
M/s HINDALCO INDUSTRIES  
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Phone: Mob- 941708929, 06526-224112/224015  
FAX : 06526-224118

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	11/05/2005
Plan/Scheme of Mining	:	MP modif under 17(3) MCR 2016	17/08/2017

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration proposal was envisaged in 2017-18	There is no backlog of previous year as no exploration proposal was envisaged in 2017-18	-
1b	Exploration over lease area for geological axis 1 or 2	As per approved document it was proposed to drill 46 boreholes in 2018-19 and 82 boreholes in 2019-20	Exploration could not be taken up as per approved proposal. Mining operations discontinued from 20/4/2018 for want of statutory clearance from NBWL.	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	-	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	NA	-
1e	Balance reserve as on 01/04/20	Reserves as on 31/9/2017: 291765 tonnes (111) and 775255 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 States has been known to be potential tract of high grade bauxite. Bauxite occur as thin irregular and discontinuous lenses within laterite cappings. The laterite occur as blankets over basalt (deccan trap). It has been established that the laterite / bauxite profile resulted from chemical weathering of underlying basalt parent rocks.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Quarry no 2 and 3	For want of statutory clearances the mining operations stopped since 20/4/2018. The mine was not under operation at the time of inspection.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It was proposed to develop seperate benches in top soil, OB and minerals	Mining operations stopped since 20/4/2018	-
2c	Stripping ratio or ore to OB ratio	1:1.97	NA	-
2d	Quantity of topsoil generation in m3	218060 cum	NA	-
2e	Quantity of overburden generation in m3	26209 cum	3496 tonnes	-

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	It was proposed two develop quarry 2 and 3 but development could not be done as per approved proposal because Mining operations stopped since 20/4/2018 for want of statutory clearances.
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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	two	one	--
3b	Quantity of ROM mineral production proposed	199601 tonnes	1470 tonnes	Mining operations stopped since 20/4/2018
3d	Quantity of mineral reject generation	No such proposal	NIL	-
3e	Grade of mineral rejects generation and threshold value declared.	No such proposal	NA	-
3f	Quantity of sub grade mineral generation.	NIL	NIL	-
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	Mine was not under opeartion at the time of inspection	-

3k	Provision of mining machineries in mineral benches	DEployment of mining machenaries envisaged	Mine was not under opeartion at the time of inspection and no mining machenaries were avilable at site at the time of inspection.	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Mine was not under operation at the time of inspection.	-
3m	Total area covered under excavation/pits	NA	NA	-
3n	Ore to OB ratio for the pit/mine during the year.	1:1.97	NA	-
3o	Total area put in use under different heads at the end of year	NA	NA	-
3p	Production of ROM mineral during the last five year period as applicable	2017 -18- 155333 tonne 2018-19- 199601 tonnes	2017 -18- 6620 tonne 2018-19- 1470 tonnes	
3q	General remarks of inspecting officers on method of mining etc.	A category opencast mine	It is reported that mining operations were done by deploying mining machenaries. Mine remain closed at the time of inspection. There is no sign of recent workings.	

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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)	Proposal for concurrent backfilling is envisaged and there is no proposal for external dumping.	The mine was not under operation at the time of insection. It is reported that concurrent backfilling one as per proposal.	-
4b	Location of topsoil, OB and mineral reject dumps	No proposal for external dumping.	No external dumping.	-

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)	No external dumps	No external dumps	-
4e	Number of active and alive dumps.	None	None	-
4f	Number of dead dumps.	None	None	-
4g	Number of dumps established.	None	None	-
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposal	Not applicable as there is no external dumps	-
4i	Length of Retaining wall or garland drain all along dumps	No such proposal	Not applicable	-
4j	Number of settling ponds	None	None	-
4k	Specific comments of inspecting officer on waste dump management	-	-	There is no proposal for external dumping. Concurrent backfilling are being in practice as proposed in approved document.

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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.	Backfilling proposed after full extraction o minerals	Mine was not under operation at the time of inspection. It is reported that concurrent backfilling done after full extraction of minerals.	-
5b	Area under backfilling of mined out area	3.80 ha	NA	-

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	It is proposed to spread top soil over backfilled area.	Mine was not under operation at the time of inspection. It is reported that generated top soil were spread over backfilled area.	-
5d	Total area fully reclaimed and rehabilitated	3.30 ha	NA	-
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).	PMCP Report submitted	-	A copy of PMCP report was collected at the time of inspection.
6b	Area available for rehabilitation (ha) .	3.30 ha	NIL	-
6c	afforestation done (ha).	3.30 ha	It is reported that plantation was done over 0.13 ha area	-
6d	No. of saplings planted during the year	5280 saplings	It is reported that 320 saplings were planted during 2018-19	-
6e	Cumulative no .of plants	NA	NA	-
6f	Any other method of rehabilitation	None	-	-
6g	Cost incurred on watch and care during the year	43.2 lakh	NA	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	3.80 ha	NA	-



6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	3.80 ha	NA	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	3.3 ha	NIL	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	-
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	-
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No such proposal	Not done	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposal for establishment of Environmental monitoring stations envisaged.	Environmental monitoring stations not verified as area is not affected and mining operations were stopped since last two years.	-

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Mine was not under operation since 20/4/2018 for want of statutory clearances. At the time of inspection mine remain closed as a result PMCP proposals could not be verified.
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### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch and no proposal for grade wise sorting	It was reported that gradewise sorting not done	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No such proposal for gradewise sorting	Gradewise sorting not practiced	
7c	Different grade of mineral sorted out at mines.	No such proposal	NA	-
7d	Any beneficiation process at mines	None	NA	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	-

### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposal for spreading of top soil over backfilled area	Top soil spreading over backfilled area	-
8b	Concurrent use or storage of topsoil	Concurrent use	Concurrent use	

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No such proposal for external dumping	Concurrent backfilling done	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent backfilling of generated OB waste	Concurrent backfilling as proposed	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Concurrent backfilling of generated OB waste in mined out area for phased reclamation and rehabilitation	Concurrent backfilling as per proposal	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation of 5280 saplings	It is reported that 320 saplings were planted.	-
8g	Survival rate	NA	NA	-
8h	Water sprinkling on roads to control airborne dust	Yes	Mine was not under operation at the time of inspection	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	-

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#### Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	-	Annual Returns submitted in online mode	-

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	MIining Engineer Incharge Sh Yogendra Kumar Lilhare	MIining Engineer Incharge Sh Yogendra Kumar Lilharewas present at the time of inspection	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Pit: 0.893 ha Waste disposal 0.4 ha Infrastructure :1.77ha	Details furnished in AR seems to be correct	-
9d	Scrutiny of Annual return on afforestation	320 saplings	Details furnished in AR seems to be correct	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Generation of mineral reject: NIL	There is no reject generation	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Graded ore stocks are reported	Figures on stocks, production and dispatch furnished in AR 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/tonnes and sale valu as NIL	It is captive mine therefore sale value is reported as NIL and exmine price is mining cost.	-
9h	Scrutiny of Annual return on fixed assets	Closing balance of fixed assets are reorted as Rs. 59.8 crore	-	-
9k	Scrutiny of Annual return on mining machineries	Showel 1 Compressor 1 Blast hole drill 1 wheel loder 1 Tanker 1	MIne was closed and no machenes were at mine site at the time of inspection.	-

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**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