

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/STN/OCH-98

Mine code : 32MPR35043

- (i) Name of the Inspecting : **G006**) **ABHISHEK RANJAN GAUTAM**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri Pradeep Kumar Gupta, Mining Engineer
Official with
Designation
- (iv) Date of Inspection : 16-AUG-22
- (v) Prev.inspection date : 20-MAR-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BARUI (8.178 HA)**
- (b) **Registration NO.** : **IBM/6677/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : BARUI
Taluka : MAJHGAMA
Post office : DEORA
Pin Code :
FAX No. : N. A.
E-mail : kunjilalishwariprsad@gmail
Phone : 09425172715
- (f) Police Station : Sabhapur
- (g) First opening date : 13-MAR-81
- (h) Weekly day of rest : MON
2. Address for : M/S KUNJILAL ISHWARI PRASAD AGRAWAL
correspondance P.O. JAITWARA, DIST. SATNA (M.P.) 485221
3. (a) Lease Number : MPR2002
- (b) Lease area : 20
- (c) Period of lease : 20
- (d) Date of Expiry : 26-DEC-00
4. Mineral worked : BAUXITE Associated
KAOLIN Associated
LATERITE Associated
OCHRE Main
CLAY (OTHERS) Associated

5. Name and Address of the

Lessee : KUNJILAL ISHWARI PRASAD AGRAWAL
 AT & P.O. JAITWARA
 DIST.SATNA M.P SATNA MADHYA
 PRADESH
 Phone:09425172715
 FAX :N. A.

Owner : KUNJILAL ISHWARI PRASAD AGRAWAL
 AT & P.O. JAITWARA DIST.
 SATNA M.P SATNA MADHYA
 PRADESH
 Phone: 09425172715
 FAX : N. A.

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	05-JUN-97
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	28-APR-06
		Renewal under rule 24 MCR1960	15-FEB-12
		Mining Scheme rule 12 MCDR1988	10-NOV-15
		MP modif under 17(3) MCR 2016	30-SEP-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the year 2021-22 exploration was proposed by 02 Core, 02 DTH Boreholes	During the year 2021-22, 02 Core, 02 DTH Boreholes have been done.	
1b	Exploration over lease area for geological axis 1 or 2	During the year 2021-22 exploration was proposed by 02 Core, 02 DTH Boreholes	During the year 2021-22, 02 Core, 02 DTH Boreholes have been done. hence lease area explored upto G1 Level.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year			
1d	Balance area to be explored to bring Geological axis in 1 or 2	G2 level area of 8.094 Ha was proposed to be converted in to G-1	Lease area explored upto G1 Level.	
1e	Balance reserve as on 01/04/20		Reserves in Tonnes Probable (122)-95150 MT Resources Pre-Feasibility(222) : 9082 MT	
1f	General remarks of inspecting officers on geology, exploration etc		Entire Lease area explored upto G1 Level.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	During the year excavation was proposed in Quarry-3 in between N2750540 to N2750680 & E494270 to E494390 and in Quarry-1 in between N2750630 to N2750740 & E494490 to E494610 by formation of three benches (1 Bauxite bench & 2 ochre+ white clay bench)	Overall mine working was carried out as per the proposed locations.	Deposit is of very complex in nature as the bauxite ore, Ochre mineralisation & white clay mineralisation get mixed to each other and becomes difficult to segregate the individual ore/mineral. But, due skilled manpower separation of these ore by manual soring was being done.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches were proposed for exacation of Yellow Ochare & white clay.	The benches were found unsystematically developed and not as per approved document.	Violation pointed out for the same.
2c	Stripping ratio or ore to OB ratio	Stripping ration of 1:0.48 was proposed during the year 2021-22	1:0.40	
2d	Quantity of topsoil generation in m3	No Proposals	NIL	No top soil occured in the mining lease area.
2e	Quantity of overburden generation in m3	During the year 2021-22 total 7926 CuM OB generation was proposed	Nil reported	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The benches were found unsystematically developed and not as per approved document. Violation pointed out for the same.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Excavation were proposed in Pit-1 and Pit-3.	As per Proposal	
3b	Quantity of ROM mineral production proposed	During the year 2021-22 total 12705 tonnes of bauxite ore production was proposed	7900 tone achieved	
3c	Recovery of sailable/usable mineral from ROM production	Not proposed	Not applicable	
3d	Quantity of mineral reject generation	Not proposed	Not applicable	
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed	Not applicable	
3f	Quantity of sub grade mineral generation.	Not proposed	Not applicable	
3g	Grade of sub grade mineral generation	Not proposed	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sizing & sorting proposed	As per proposal	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Not applicable	
3j	Provision of drilling and blasting in mineral benches	Not proposed	Not applicable	

3k	Provision of mining machineries in mineral benches	Hyd. Excavator-L&T PC-200-(0.9 CuM, 210 H.P.) TATA Dumper, 10 Tonner capacity - 04 Nos	Hyd. Excavator-L&T PC-200-(0.9 CuM, 210 H.P.) TATA Dumper, 10 Tonner capacity - 04 Nos Water Tanker-5KL, 90 HP - 01 Nos	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	The benches were found unsystematically developed and not as per approved document.	Violation pointed out for the same.
3m	Total area covered under excavation/pits	4.69 ha	3.0 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.48	1.040	
3o	Total area put in use under different heads at the end of year		Pits-3.0 Ha Waste dumps-0.00 Ha Infrastructure-0.640 Ha Road-0.40 Ha	
3p	Production of ROM mineral during the last five year period as applicable	2017-18-: 3,928 MT 2018-19-: 3,915 MT 2019-20-: 7,477 MT 2020-21-: 5,166 MT 2021-22 -: 127058 MT	2017-18-: 269.0 MT 2018-19-: 2292 MT 2019-20-: 490 MT 2020-21-: Nil MT 2021-22-: 7900 MT	
3q	General remarks of inspecting officers on method of mining etc.			Semi-Mechanised open cast working proposed by using Excavator & dumper combination without drilling & blasting proposed. Deposit is soft in nature comprising of white clay, Ochre & laterite along with bauxite ore.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Yes	
4b	Location of topsoil, OB and mineral reject dumps	East side of quarry-3	East side of quarry-3	
4c	Number of dumps within lease area and outside of lease area	One dumps within lease area	One dumps within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL	
4e	Number of active and alive dumps.	One	One	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not Proposed	Not done	
4i	Length of Retaining wall or garland drain all along dumps	Not applicable	Not applicable	
4j	Number of settling ponds	One	One	
4k	Specific comments of inspecting officer on waste dump management			Garland drain and retaining wall around the dump was prepared up to maximum extent

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not Proposed	None of part of lease area has been fully mineral exhausted	
5b	Area under backfilling of mined out area	Not Proposed	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Nil	
5d	Total area fully reclaimed and rehabilitated	Not Proposed	None of area reclaimed and rehabilitated so far	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Not applicable.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Submitted	
6b	Area available for rehabilitation (ha) .	Not Proposed	Nil	
6c	afforestation done (ha) .	Not applicable	Not applicable	
6d	No. of saplings planted during the year	Not applicable	Not applicable	
6e	Cumulative no .of plants	Not applicable	Not applicable	

6f	Any other method of rehabilitation	Not applicable	Not applicable
6g	Cost incurred on watch and care during the year	Not applicable	Not applicable
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	2300 SqM area proposed for backfilling	1000 SqM area backfilled
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings		2100 CuM waste backfilled
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not Proposed	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Proposed	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not Proposed	Nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not Proposed	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not Proposed	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical Air, Water, Noise monitoring Proposed	Yes, Compliances of environmental monitoring is being carried out.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Recalimation & rehabilitation carried out as per the proposals.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	12705 MT proposed as total ROM production for despatch. Grade wise sorting proposed within lease area for cement & chemical grade of bauxite proposed	ROM production reported 7900 MT	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual sorting being practised	

7c	Different grade of mineral sorted out at mines.	Bauxite having Al ₂ O ₃ + 52%, SiO ₂ -: -5% and Fe ₂ O ₃ -: 3 to 5% proposed for chemical grade use. Bauxite having Al ₂ O ₃ -42%, SiO ₂ -: 10 to 12% and Fe ₂ O ₃ - : 18 to 22% proposed for cement grade use	As per proposal
7d	Any beneficiation process at mines .	Not Proposed	Not applicable
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Mineral is being conserved by grade wise sorting in the lease area. Bauxite having Al ₂ O ₃ + 52%, SiO ₂ -5% and Fe ₂ O ₃ - 3 to 5% used for chemical grade use. Bauxite having Al ₂ O ₃ - 42%, SiO ₂ 10 to 12% and Fe ₂ O ₃ 18 to 22% used for cement grade use.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	No top soil is available in the area	
8b	Concurrent use or storage of topsoil	Not Proposed	Nil	

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Dumping was proposed towards eastern side of quarry-3	As per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Reclamation, rehabilitation and plantation were proposed	Plantation not done as per proposal	Violation pointed out.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the year 300 nos of saplings covering 0.2 Ha was proposed	As per annual return of 2021-22 plantations of 300 trees reported. But during inspection no new plantation observed	Violation pointed out for same
8g	Survival rate	80%	As per annual return of 2021-22 plantations of 300 trees reported. But during inspection no new plantation observed	Violation pointed out for same
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed by water tanker	Regular water sprinkling is being practised by water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around mine area is not much satisfactory as plantation not done up to that extent. Hence, it was instructed to plant minimum 300 sapling/year.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R. submitted upto- Jul- 2022 A.R. submitted upto- 2021-22	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		Mining Engineer - Shri Pradeep Kumar Gupta Geologist - Shri Dharmendra Thakur	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		Area under O/c working- 3.00 Ha Reclaimed/Rehabilitated- 0.380Ha Infrastructures-0.75 Ha	
9d	Scrutiny of Annual return on afforestation		As per annual return of 2021-22 plantations of 300 trees reported. But during inspection no new plantation observed	Violation pointed out for same.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)		No mineral rejects generated from mine.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore		ROM closing stocks - 7300 MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Rs-786.12/ tonne for chemical grade Rs - 725/Tonne for cement grade	
9h	Scrutiny of Annual return on fixed assets		Value of fixed assets Rs 100000/-	
9k	Scrutiny of Annual return on mining machineries		Back Hoe - 0.90cum - 1 Dumper - 4.0 cum -1 Water Tanker - 8000 Ltr - 1 Nos.	

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
MCDR17	Rule 11(1)	09-SEP-22			
MCDR17	Rule 34(1)	09-SEP-22			

Date :

(ABHISHEK RANJAN GAUTAM)

Indian Bureau of Mines