

## INDIAN BUREAU OF MINES

## MINERALS DEVELOPEMMENT AND REGULATION DIVISION

## MCDR inspection Report

## Jabalpur regional office

S.N.	Particulars	Details
1	Name of the Mine	Tikariya Bauxite, Laterite & Fireclay Mine
	Date of Inspection:	27-06-2024
	Name of Inspecting Officer	Akash Arun Mittarwar, Assistant Mining Engineer
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	8.094 Hect.
3	Mine code	07MPR18024
4	IBM Registration Number under rule 45 of MCDR,1988	IBM/4336/2011
5	Last Inspection Details	16-08-2023 by Shri Abhishek Ranjan Gautam, AME
6	Mine official present during the inspection	Shri Saurabh Nayak (Mining Engineer) & Shri Umakant Soni (Geologist)
7	Name of the Lease, Address, Phone, email and fax number	Tikariya Bauxite, Laterite & Fireclay Mine (8.094 Hect.) Village – Tikariya, P.O. Niwar, District – Katni (M.P.) - 483442 Phone - 9437030625 E-mail: - savitriminerals@yahoo.in
8	Village	Tikariya
9	Taluka/Mandal	Murwara
10	District	Katni
11	Pin code	483501
12	State	Madhya Pradesh
13	Post Office	Murwara
14	Nearest Police Station	Murwara
15	Nearest Railway Station	Katni
16	Date of Grant of Mining Lease	01-03-1987
17	Date of Execution	07-05-1987
18	Lease period	07-05-1987 to 06-05-2037
19	Date of opening of Mine	07-05-1987
20	Date of First Renewal, if applicable and its period & expiry	07-05-1987 to 06-05-2007
21	Date of Second Renewal, if applicable and its period & expiry	07-05-2007 to 06-05-2027
22	Date of Third Renewal, if applicable and its period & expiry	07-05-2027 to 06-05-2037
23	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA

## MCDR-MiFLOBXT/10/2022-JBP-IBM RO JBP

24	Name of the Owner/ Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Anand Sharma (Nominated Owner), M/s Savitri Minerals, B-302, Shri Ram Heritage, Netaji Chowk, Katora Talab, Raipur (Chhattisgarh) – 492001 Phone - 9437030625 E-mail: - savitriminerals@yahoo.in
25	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	NA
26	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	NA
27	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Saurabh Nayak (Mining Engineer) Qualification – B. tech (Mining) Date of Appointment – 25/03/2022 Phone-9589555568 Email –nsourabh1989@live.in Shri Umakant Soni (Geologist) Qualification – M.Sc (Geology) Date of Appointment – 15/04/2022 Phone-6266773055 Email - savitriminerals@yahoo.in
28	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	Mining plan under rule 10 of MCDR,1988 – 12/10/2007 Scheme of Mining under Rule 12(3) of MCDR,1988 – 20/07/2015 Review of Mining plan under rule 17(3) of MCR,2016 29/05/2017 Review of Mining plan under rule 17(3) of MCR,2016 07/06/2022
29	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	NA
30	Mineral(s) granted in lease and approved for Mining	Bauxite, Laterite & Fireclay
31	Method of Mining (Opencast, Underground)	Opencast
32	Category (Fully Mechanized, Others or Manual)	A
33	Captive/Non-Captive	Non-Captive

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Exploration

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S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	5 boreholes proposed during the year 2022-23	5 boreholes drilled during the year 2023-24	Form I & J submitted; GSR not submitted. Violation pointed out under rule 12 (4B) of MCDR,2017
1b	Exploration over lease area for Geological axis 1 or 2.	No exploration proposals during year 2023-24 for G1/G2 levels	Entire lease area explored up to G2 level.	Lease area not explored up to G1 level; Violation pointed out under rule 12 (4) of MCDR,2017
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not specified.	Not specified.	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Nil	Nil	
1e	Balance reserves as on 01.04.2023	Nil	Balance reserve as on 01/04/2024 – Bauxite – 122 – 672314 tonnes & Laterite – 122 – 389455 tonnes	
1f	General remarks of Inspecting officer on geology, exploration etc.	Lease area not explored up to G1 Level. Violation pointed out under rule 12 (4) of MCDR,2017		

Development

S.N.	Item	Proposals	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	Development was proposed towards North - West of the Quarry 1.	As per proposal	
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Mineral benches were proposed. No bench proposed for top soil & OB.	Yes, benches in mineral were observed.	
2c	Stripping ratio or ore to OB ratio	1:0.09	1:0.08	
2d	Quantity of topsoil generation in m <sup>3</sup>	Not Proposed	Not Applicable	
2e	Quantity of overburden generation in cu. m	8636 tonnes of Inter burden proposed	8325 tonnes	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development was carried towards North-West of the Quarry 1 as per proposal. Bench height and width is found maintained as per proposal. Development done as per proposal.		

**Exploitation**

S.N.	Item	Proposals	Actual Work	Remarks
3a	Number of pits proposed for production	One pit	One pit	
3b	Quantity of ROM mineral production proposed (2023-24)	99998 tonnes	94260 tonnes	
3c	Recovery of Salable/usable mineral from ROM production	90%	90%	
3d	Quantity of mineral reject generation	Not proposed	Not applicable	
3e	Grade of mineral reject 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/Mechanized method adopted for segregation from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed	Not applicable	
3j	Provision of drilling & blasting in mineral benches	Proposed	Drilling & blasting carried out as proposed.	
3k	Provision of mining machineries in mineral benches	proposed	HEMM is being used in mineral benches for excavation and transportation. Excavator -1- 0.9 cu.m Excavator-1-0.4 cu.m Dumper -4-27 tonne Water Tanker -5Kl Atlas Comp- 210 CFM Jack Hammer-33m	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed	Height of mineralbenches is suitable for method of mining as proposed.	
3m	Total area covered under excavation /pits	3.31 hect.	3.31 hect.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.09	1:0.08	
3o	Total area put in use under different heads at the end of year	5.38 hect.	5.16 hect.	

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3p	Production of ROM mineral during	2019-20	79840 t	2019-20 – 171.45 t	
	last five-years period, as Applicable	2020-21	91287 t	2020-21- 253.89 t	
		2021-22	90258 t	2021-22 – 66485 t	
		2022-23	99995 t	2022-23 – 75750 t	
		2023-24	99998 t	2023-24 – 94260 t	
3q	General remarks of inspecting officer on method of mining etc	Category A mines having adopted mechanized method of mining.			

**Solid Waste Management-Dumping**

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Not proposed	Not Applicable	Interburden generated during the year 2023-24 used for making bund.
4b	Location of topsoil, OB & mineral reject dumps	Not proposed	Not Applicable	
4c	Number of Dumps within lease area and outside lease area	1 dump	1 dump	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Near BP -11, within UPL	As per proposal	
4e	Number of Active & Alive dumps	1 Active dump	As per proposal	
4f	Number of dead dumps	Not proposed	Not applicable	
4g	Number of dumps established	Not proposed	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there	Retaining wall not proposed; garland drain of 418 meter were proposed.	Garland drain were observed.	
4i	Length of Retaining wall or garland drain all along dump	Retaining wall not proposed; garland drain of 418 meter were proposed.	Garland drain were observed.	
4j	Number of settling ponds	Not proposed	Not applicable	
4k	Specific comments of inspecting officer on waste dump management	Interburden/Waste generated during the year 2023-24 used for bund making as per proposal.		

**Solid Waste Management-Backfilling**

S.N.	Item	Proposals	Actual Work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Full extraction of mineral from mined out area is proposed	Full extraction of mineral under progress up to the UPD	
5b	Area under backfilling of mined out area	Not proposed	Not applicable	

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5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not proposed	Not applicable	
5d	Total area fully reclaimed & rehabilitated	Not specified	Not applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Presently working pit area has not been matured for backfilling.		

**Progressive Mine Closer Plan**

S.N.	Item	Proposals	Actual Work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly- Rule 23E (2). Details should be given in the format as given in Annexure-20	Proposed	Not Submitted	Violation pointed out under rule 26(2) of MCDR,2017
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (Ha)	Not proposed	Not applicable	
	ii) Afforestation done (ha.)	Not Proposed	Not applicable	
	iii) No. of saplings planted during the year	Not Proposed	Not applicable	
	iv) Cumulative no. of plants	Not specified	Not applicable	
	v) Any other specific method of rehabilitation	Not proposed	Not applicable	
	vi) Cost incurred on watch & care during the year	Not Specified.	Not applicable	
6C	Compliance on reclamation and rehabilitation by backfilling	Not proposed	Not Applicable	Interburden/Waste generated during the year 2023-24 used for bund making as per proposal.
	i) Voids available for backfilling (L*B*D)			
	ii) Void filled by waste/tailings			
	iii) Afforestation on the backfilling			
	iv) Rehabilitation by making water reservoir			
v) Any other specific means				
6d	Compliance of Rehabilitation of waste land within lease	250 saplings 0.15 hect.	200 saplings were planted 0.15 hect.	Afforestation done on barrier zone of BP – 10/1 to 16.
i) Afforestation				
ii) Area rehabilitation				
	iii) Method of rehabilitation			
6e	Compliance of Environment monitoring (core zone & Buffer zone)	Proposed	Within prescribed limit.	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Presently scope of backfilling/reclamation & rehabilitation doesn't exist and no proposals were given.		

**Mineral Conservation**

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or gradewise sorting within lease area	ROM mineral dispatch proposed	ROM mineral dispatch after Manual sorting done	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual sorting proposed	Manual sorting done	
7c	Different grade of mineral sort out at mine	Not specified	Cement grade bauxite	
7d	Any beneficiation process at mines	Not Proposed	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	ROM mineral dispatch after manual sorting being done in the lease.		

**Environment**

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Not Proposed	Not applicable	
8b	Concurrent use or storage of topsoil	Not Proposed	Not applicable	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Not Proposed	Not applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Not applicable	Interburden/Waste generated during the year 2023-24 used for bund making as per proposal.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Not applicable	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Not specified	Not Applicable	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling onroads to control airborne dust carried out with the use of watertanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Plantation was done in the proposed location. Needs improvementsfor aesthetic beauty in and around mine area.		

**Compliance of Rule 45:-**

S.N.	Item	Proposals	Actual Work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted both Monthly and Annual Return	Submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer and Geologist	Shri Saurabh Nayak (Mining Engineer) & ShriUmakant Soni (Geologist)	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Covered under current (O-C) Workings – 3.310 hect. Infrastructure – 0.35 hect. Roads – 0.25 hect. Stack – 1.0 hect.	
9d	Scrutiny of Annual return on afforestation	250 number of saplings were proposed for plantation	Only 200 saplings were planted.	Violation pointed out under rule 11(1) of MCDR,2017
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	ROM closing stock as on 01/04/2024 – 5559.082 (Bauxite) & 5960.023 (Laterite)	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Ex. Mine price - 800 (Bauxite) and production cost – 738.00	
9h	Scrutiny of Annual return on fixed assets	Yes	The Value of Fixed Asset is mentioned as “Nil”	
9k	Scrutiny of Annual return on mining machineries	Yes	Excavator -1- 0.9 cu.m Excavator-1-0.4 cu.m Dumper -4-27 tonne Water Tanker -5Kl Atlas Comp- 210 CFM Jack Hammer-33m	

Details of Violations observed during current inspection and compliance position of violation pointed out:-

Rule – 11(1) of MCDR 2017  
Rule – 12 of MCDR 2017  
Rule – 26(2) of MCDR 2017  
Rule – 33 of MCDR 2017  
Rule – 45(7) of MCDR 2017

Name: Akash Arun Mittarwar  
Designation: Assistant Mining Engineer