# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR inspection REPORT

#### Jabalpur regional office

Mine file No : MP/KATNI/LAT-38 Mine code : 75MPR47015

(i) Name of the Inspecting : CQ04 ) ROBERT SIMON C

Officer and ID No.

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine : Shankarlal Vishwakarma (lessee) & Tiwari (Mine Geologi

Official with Designation

(iv) Date of Inspection : 20-MAR-23
(v) Prev.inspection date : 28-JUN-21

PART-I : GENERAL INFORMATION

1. (a) Mine Name : TIKARIYA (27.02 HA)

(b) Registration NO. :

(c) Category : A Other than Fully Mech.

(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : KATNI
Village : TIKARIYA
Taluka : MURWARA
Post office : JALPA DEVI

WARD PURANI BASTI KATNI

(MP)

Pin Code : 483501 FAX No. : NA E-mail : NA

Phone : 9300576487

(f) Police Station : NIWAR

2. Address for : SHRI SHANKAR LAL VISHWAKARMA

correspondance JALPA DEVI WARD, KATNI (M.P.) 483501

4. Mineral worked : LATERITE Associated

BAUXITE Main

FIRECLAY Associated

5. Name and Address of the

Lessee : SHANKAR LAL VISHWAKARMA

JALPA DEVI WARD KATNI

MADHYA PRADESH Phone: 9300576487

FAX :N. A.

Owner : SHANKAR LAL VISHWAKARMA

JALPA DEVI WARD KATNI

MADHYA PRADESH Phone: 9300576487

FAX : N. A.

6. Date of approval of Mining

Plan/Scheme of Mining

03-JUN-04
28-JUL-09
02-MAY-11
03-JUN-15
29-JUN-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

### Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for geological axis 1 or 2	10 boreholes	Nil	Violation pointed out under rule 11(1) of MCDR 2017.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	NIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not specified	G2=2.5548 ha G3=4.0302 ha	
1e	Balance reserve as on 01/04/20	Not specified	2.595 million tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			The bauxite in the lease area is in the form of irregular shaped intermix with laterite and fire clay. Proposed exploration is not achieved. Hence Violation pointed out under rule 11(1) of MCDR 2017.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	(2624420- 2624630)N to (439810- 439990)E	(2624430-2624620)N to (439820-439970)E	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	3 ORE & 1 OB	3 ORE & 1 OB	
2c	Stripping ratio or ore to OB ratio	1:0.08	1:0.08	
2d	Quantity of topsoil generation in m3	Nil	Nil	

2e	Quantity of overburden generation in m3	17130 m3	4240 m3	Violation pointed out under Rule 11(1)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Overall development is lagging. Violation pointed out under rule 11(1) of MCDR 2017.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01	01	
3b	Quantity of ROM mineral production proposed	215838 Т	53900 T	Violation pointed out under rule 11(1) of MCDR 2017.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	not proposed	NA	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
3f	Quantity of sub grade mineral generation.	NA	NA	
3g	Grade of sub grade mineral generation	NA	NA	
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.	Not proposed	Nil	

3ј	Provision of drilling and blasting in mineral benches	NA	NA	
3k	Provision of mining machineries in mineral benches	Proposed	As per proposal	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	proposed	(i) Number of Benches Mechanised 3 1 (ii) Average height (meters) Mechanised 5 1 (iii) Depth of the deepest workingfrom adjacent ground (Meters ) Mechanised 18 1	
3m	Total area covered under excavation/pits	20.99 ha	19.833 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.08	1:0.08	
30	Total area put in use under different heads at the end of year	20.66 ha	20 ha(approx.)	
3p	Production of ROM mineral during the last five year period as applicable	2017-18 307441 2018-19 219240 2019-20 216880 2020-21 203030 2021-22 215838	2018-19 69700 2019-20 84900 2020-21 87450	
3q	General remarks of inspecting officers on method of mining etc.			Only 53900 tonnes of ROM bauxite is produced against the proposal of 215838 tonnes for the year 2021-22. Violation pointed out under rule 11(1).

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks	
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)		OB dumping done		

4b	Location of topsoil, OB and mineral reject dumps	23°44'0.478"N to 80°24'31.223 E	23°44'0.478"N to 80°24'31.223"E
4c	Number of dumps within lease area and outside of lease area	01	01
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	within UPL	within UPL
4e	Number of active and alive dumps.	01	01
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.		Garland drain-120 m(approx). is constructed along the boundary
4i	Length of Retaining wall or garland drain all along dumps	Not proposed	Garland drain-120 m(approx). is constructed along the boundary
4j 	Number of settling ponds	NA	NA

### 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.	FULL EXTRACTION BEFORE BACKFILLING PROPOSED	Backfilling is carried out in the barrier zone	
5b	Area under backfilling of mined out area	NOT SPECIFIED	0.405	
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

Total area NOT SPECIFIED 0.405 ha

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	Yearly report in respect of reclamation and rehabilitative works carried out is not submitted for the year 2021-22.	Violation pointed out under rule 26(2) of MCDR 2017.
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).		PMCP report not submitted	Violation pointed out under rule 26(2) of MCDR 2017.
6d	No. of saplings planted during the year		100 nos	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NA	NA	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	
61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NA	NA	

6m	Compliance of rehabilitation of waste land within lease (i) afforestation	NA	NA	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NA	NA	
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	NA	NA	
6р	Compliance of environmental monitoring (core zone and buffer zone)	proposed	as per proposal	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP report not submitted. Violation pointed out under rule 26(2) of MCDR 2017.

### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	sorting of major and minor mineral manually proposed	sorting of major and minor mineral manually carried out	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	manual	manual	
7c	Different grade of mineral sorted out at mines.	Not specified	Cement grade AL203	
7d	Any beneficiation process at mines .	not proposed	Not done	

7e General remarks of inspecting officer on Mineral conservation and beneficiation issues

No beneficiation process carried out in the lease.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	Nil	
d8	Concurrent use or storage of topsoil	NA	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	01 OB dump proposed	01 OB dump maintained	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling proposed	backfilling is adopted	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling proposed	backfilling is adopted	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		PMCP report not submitted.	Violation pointed out under rule 26(2) of MCDR 2017.
8g	Survival rate	Not specified	40 % as per AR	

8h	Water sprinkling on roads to control airborne dust	sprinkling on	Water sprinkling on roads to control airborne dust carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			<pre>aesthetic beauty in and around mine area needs improvement</pre>

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Online submitted	Online submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engineer in charge RAMANAND Geologist in charge SHUBHAM PANDEY	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	(i) Already exploited & abandoned byopencast (O/C) mining 0.000 0.000 0.000 0.000 (ii) Covered under current (O/C) Workings 0.000 18.000 18.000 (iii) Reclaimed/Rehabilitated 0.000 0.405 0.405 (iv) Used for waste disposal 0.000 0.750 0.750 (v) Occupied by plant, buildings, residential, welfare buildings & roads 0.000 0.380 0.380 (vi) Other Purpose (GREEN BELT) 0.000 0.518 0.518 (vii) Work done under progressive mineclosure plan during the year 0.000 0.000 0.000	
9d	Scrutiny of Annual return on afforestation	Given	<ul><li>(i) Number of trees</li><li>planted during the year</li><li>100</li><li>(ii) Survival rate in</li><li>percentage 40.00</li></ul>	

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	Given	Grades (% of Al203content) Average Grade Openingstock at mine head(in tonne) Production (intonne) Dispatchesfrom minehead(in tonne) Closingstock at mine head (intonne) Ex-mineprice(in ? PerTonne) (a) Cement 45272.751 53900.000 32017.285 67155.466 658.16
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Grades (% of Al203content) Average Grade Openingstock at mine head(in tonne) Production (intonne) Dispatchesfrom minehead(in tonne) Closingstock at mine head (intonne) Ex-mineprice(in ? PerTonne) (a) Cement 45272.751 53900.000 32017.285 67155.466 658.16
9h	Scrutiny of Annual return on fixed assets	Given	Value of Fixed Assets (in Rs) 13273501

9k Scrutiny of Given Annual return on

mining machineries Type ofmachinery Capacity ofeach unit

No.ofunits Electrical/Non-Electrical(specify)

Used in

 ${\tt opencast/underground} \, ({\tt spe} \,$ 

cify)

FRONT END LOADER 1.200 CUM 2 Non Electrical

Opencast

DUMPER 16.000 TONNE 2 Non Electrical Opencast DUMPER 10.000 TONNE 1 Non Electrical Opencast WATER TANKER 4500.000 LITRE 1 Non Electrical

Opencast

# Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed				Show couse position					
Rule N	NO.	Issued on	Compliance on	n Rule	NO.	Issued	on	Compliance	on
MCDR17	Rule 11(1)	20-JUN-23							
MCDR17	Rule 26(2)	20-JUN-23							
MCDR17	Rule 31(4)	20-JUN-23							
MCDR17	Rule 33	20-JUN-23							

Date : (ROBERT SIMON C)

Indian Bureau of Mines