

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/KATNI/LAT.-15

Mine code : 75MPR47003

- (i) Name of the Inspecting : **P014**) **JAY KUMAR PANDEY**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri A K Shukla Lessee Representative
Official with
Designation
- (iv) Date of Inspection : 14-JUN-22
- (v) Prev.inspection date : 28-JUN-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TIKARIA (4.69HA)**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : KATNI
Village : TIKARIA
Taluka : MURWARA
Post office : NIWAR
Pin Code :
FAX No. : N. A.
E-mail : N. A.
Phone : N. A.
- (f) Police Station :
- (g) First opening date : 27-SEP-99
- (h) Weekly day of rest :
2. Address for : SHRI POORAN LAL VISHWAKARMA
correspondance JALPADEVI WARD, KATNI (M.P.) 483501
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : BAUXITE Associated
FIRECLAY Associated
LATERITE Main

5. Name and Address of the

Lessee : POORAN LAL VISHWAKARMA
JALPA DEVI WARD KATNI
MADHYA PRADESH
Phone:N. A.
FAX :N. A.

Owner : POORAN LAL VISHWAKARMA
JALPA DEVI WARD KATNI
MADHYA PRADESH
Phone: N. A.
FAX : N. A.

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	06-APR-06
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	12-AUG-11
		Mining Scheme rule 12 MCDR1988	12-MAR-14
		MP modif under 17(3) MCR 2016	05-NOV-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not proposed	No backlogs boreholes already drilled as proposed.	
1b	Exploration over lease area for geological axis 1 or 2	G2: 4.69 ha	G2: 4.69 ha	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G2: 4.69 ha to be explored in G1.	G2: 4.69 ha to be explored in G1.	
1e	Balance reserve as on 01/04/20	Not proposed	Balance reserves as on 01/04/2022- 53000 tonnes & resources 131265 tonnes.	
1f	General remarks of inspecting officers on geology, exploration etc	Not proposed	Not applicable	ML area belongs to mahakaushal group of rocks. The lessee has 14 boreholes in the lease area to convert G2 level to G1 level of reserves.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	North west side near lease boundary of mine area	The mine working was not done in proposed site. The working was done in existing pit A in depth.	Violation of rule 11(1) pointed out for deviation in proposed working site.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	02 nos of benches proposed in mineral only	Working continued in old existing pit A in depth by forming 04 benches of 3m. hight in mineral. No o/b benches proposed & observed.	

2c	Stripping ratio or ore to OB ratio	Not proposed	As no o/b present in the lease area.	
2d	Quantity of topsoil generation in m3	Not proposed	Not applicable	
2e	Quantity of overburden generation in m3	Not proposed	Not applicable	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Not proposed	Not applicable	The working place is deviated but the mining is carried out systematically by forming proper benches. The ROM mineral is dispatched as bauxite or minor mineral (laterite) to nearby cement plants.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01 pit	In actual there are two old big pits of sizes Pit A -170X70X10-15M. Pit B- 130X80X3-9M. & one small pit of size 50x25x2m. & some trial pits present in the lease area. Working presently carried out in pit A in depth wise portion.	
3b	Quantity of ROM mineral production proposed	29337 tonnes	27800 tonnes	
3c	Recovery of sailable/usable mineral from ROM production	55% Bauxite & 45% minor mineral Laterite from ROM	About 55% Bauxite & 45% minor mineral Laterite from ROM. 100% ROM is dispatched.	

3d	Quantity of mineral reject generation	Not proposed	Not applicable as not generated.
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA
3f	Quantity of sub grade mineral generation.	Not proposed	Not applicable as not generated.
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	Not done
3j	Provision of drilling and blasting in mineral benches	Not proposed	Not done as not required as deposition is soft in nature.
3k	Provision of mining machineries in mineral benches	Not proposed	Only tippers deployed for mineral transportation other all work by manual means.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	3m. hight of mineral benches proposed	Benches maintained as per proposals.
3m	Total area covered under excavation/pits	3.5 ha	About 3.0ha.
3n	Ore to OB ratio for the pit/mine during the year.	Not proposed	Not applicable as no o/b generated.

3o	Total area put in use under different heads at the end of year	Pits-3.5 & mineral storage-.4ha.	About 3.0ha. in pits & .4ha. as mineral stocks.	
3p	Production of ROM mineral during the last five year period as applicable	2017-18 48162 2018-19 15032 2019-20 51087 2020-21 51397 2021-22 29337	2017-18 - 70t 2018-19 -nil 2019-20 -43100t 2020-21- 50200t 2021-22-27800 t.	
3q	General remarks of inspecting officers on method of mining etc.	Not proposed	Not applicable	The mining is carried out systematically as proposed by manual means but deviated proposed site of excavations hence violation of rule 11(1) pointed out.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not proposed	O/b & waste generation not proposed and in actual not generated hence not applicable.	
4b	Location of topsoil, OB and mineral reject dumps	Not proposed	Not applicable.	
4c	Number of dumps within lease area and outside of lease area	Not proposed	Not applicable.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not proposed	Not applicable.	
4e	Number of active and alive dumps.	Not proposed	Not applicable.	
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.	Not proposed	Not applicable.	
4i	Length of Retaining wall or garland drain all along dumps	Not proposed	Not applicable.	
4j	Number of settling ponds	Not proposed	Not applicable.	
4k	Specific comments of inspecting officer on waste dump management	Not proposed	Not applicable.	O/b & waste generation not proposed and in actual not generated hence not applicable. The whole ROM is mineral Bauxite & minor mineral laterite.

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.	Not proposed	Not applicable as full depth of mineral not exhausted and also no o/b & waste available for backfilling in future.	
5b	Area under backfilling of mined out area	Not proposed	Not applicable.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed	Not applicable.	
5d	Total area fully reclaimed and rehabilitated	Not proposed	Not applicable.	

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not proposed	Not applicable.	Not applicable as full depth of mineral not exhausted and also no o/b & waste available for backfilling in future.
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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 under rule 26(2) to be submitted.	Not submitted	violation pointed out under rule 26(2) of MCDR 2017.
6b	Area available for rehabilitation (ha) .	Not proposed.	NA	
6c	afforestation done (ha).	.0009HA.	.0009HA.	
6d	No. of saplings planted during the year	10 trees	About 10 trees planted as proposed.	
6e	Cumulative no .of plants	Not proposed.	About 30 trees planted so for.	
6f	Any other method of rehabilitation	Not proposed.	Not applicable.	
6g	Cost incurred on watch and care during the year	Not proposed.	About Rs. 20000/- for the year.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed.	NA	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed.	NA
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not proposed.	NA
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed.	NA
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed.	NA
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not proposed.	NA
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not proposed.	NA
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed.	NA

6p	Compliance of environmental monitoring (core zone and buffer zone)	Not proposed.	This is B CAT. manual mines.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Not proposed.	Not applicable.	PMCP report not submitted for the year 2021-22. Hence 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	100% ROM mineral dispatch proposed.	About 100% ROM mineral dispatched as proposed either as mineral Bauxite or minor mineral laterite.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting proposed.	Manual sorting done as proposed.	
7c	Different grade of mineral sorted out at mines.	Not proposed	NA	
7d	Any beneficiation process at mines	Not proposed	NA	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Not proposed	NA	About 100% ROM mineral dispatched as proposed either as mineral Bauxite or minor mineral laterite.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	Not applicable as no top soil, o/b & waste present in the lease area.
8b	Concurrent use or storage of topsoil	Not proposed	NA
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not proposed	NA
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	NA
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	NA
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	10 trees plantation proposed for the year.	About 10 trees planted during the year & cumulative about 30 trees found survived in the lease area.
8g	Survival rate	80%	About 70%
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads to control airborne dust proposed	Water sprinkling on roads to control airborne dust carried out

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not proposed	NA	The lease area comprises of pits,mineral stacks & trees plantation. The working is done manually as proposed.The movement of trucks creates air pollution to some extent in the lease area which should be controlled by regular water spraying on haul roads.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR & AR to be submitted online in time.	Monthly returns submitted upto May 2022. Annual Return submitted upto year 2021-22 .	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer & Geologist appointed.	Mining Engineer & Geologist appointed in this mine.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pits-3.165ha. ,reclaimed - .2ha & green belt 0.1ha..	In actual in pits 3.0ha. & green belt 0.1ha. within lease.The informaion on land use pattern is almost correct.	Lessee has not submitted upto date plan & sections & digital aerial images as required hence violations of rule 33 & 34A pointed out. Also lessee has not submitted enhanced FA(BG) as required under rule 27 hence violation of rule 27 pointed out.

9d	Scrutiny of Annual return on afforestation	20 trees	About 10 trees survived observed with 40% survival rate.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not proposed	Not generated
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock-nil & graded ore Bauxite-21317 t.	In actual Bauxite mineral stack of about 21000 tonnes observed in the lease area.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value & ex mine price for Bauxite mineral is Rs. 658/-t .Cost of production Rs. 754.21/t	The cost of mining calculated is higher side of sale value is not found appropriate.
9h	Scrutiny of Annual return on fixed assets	Fixed assets Rs. 33423412/-	Fixed assets to be correct for dumpers,water tanker & pumps.
9k	Scrutiny of Annual return on mining machineries	Dumpers & water tanker	In actual dumpers & Water tanker deployed.

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	04-JUL-22			
MCDR17	Rule 26(2)	04-JUL-22			
MCDR17	Rule 27(2)	04-JUL-22			
MCDR17	Rule 33	04-JUL-22			
MCDR17	Rule 34(2)	04-JUL-22			

Date :

(JAY KUMAR PANDEY)

Indian Bureau of Mines