

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/JBP/LAT-31

Mine code : 75MPR18018

- (i) Name of the Inspecting : **P014**) **JAY KUMAR PANDEY**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Sh. Nagesh Kushwaha, representative of lessee
Official with
Designation
- (iv) Date of Inspection : 08-DEC-21
- (v) Prev.inspection date : 16-MAR-16

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GANDHIGRAM (4.00 HA)**
- (b) **Registration NO.** : **IBM/4547/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : JABALPUR
Village : GANDHIGRAM
Taluka : SIHORA
Post office : BUDHAGAR
Pin Code : 483222
FAX No. : NA
E-mail : vksmine@gmail.com
Phone : 9424956635
- (f) Police Station : GOSALPUR
- (g) First opening date : 01-APR-05
- (h) Weekly day of rest : SUN
2. Address for : SHRI VINOD KUMAR SHRIVASTAVA
correspondance P.O. GANDHIGRAM (BUDAGAR),
DIST. JABALPUR (M.P.)
3. (a) Lease Number : MPR2133
- (b) Lease area : 4
- (c) Period of lease : 20
- (d) Date of Expiry : 07-NOV-24
4. Mineral worked : LATERITE Main
IRON ORE Associated
MANGANESE ORE Associated
OCHRE Associated

5. Name and Address of the

Lessee : VINOD KUMAR SHRIVASTAVA
P.O.GANDHI GRAM,
TAH.SIHORA, JABALPUR
MADHYA PRADESH
Phone:94251500837/ 07624-265026
FAX :NIL

Owner : VINOD KUMAR SHRIVASTAVA
P.O.GANDHI GRAM,
TAH.SIHORA, JABALPUR
MADHYA PRADESH
Phone: 94251500837/ 07
FAX : 07624-265026

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	20-OCT-04
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	10-JUL-08
	:	Mining Scheme rule 12 MCDR1988	07-JAN-13
	:	Mining Scheme rule 12 MCDR1988	27-JUL-15
	:	MP review under 17(1) MCR 2016	01-JUL-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not Proposed	Exploration not done.	
1b	Exploration over lease area for geological axis 1 or 2	Not Proposed in 2020-21.Exploration proposed in 2021-22 & onwards year.	Approximate 3.0 ha. area explored in G1 category by pits only.	
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	Not Proposed in 2020-21.Exploration proposed in 2021-22 & onwards year.	Approximate 3.0 ha. area explored in G1 category by pits only.Balance 1ha. to be explored for G1 category .	
1e	Balance reserve as on 01/04/20	Not proposed	Upto date reserves as on 01/04/2021 Iron ore- 1.074 million tonnes & Manganese ore- .0297million tonnes. Upto date resources as on 01/04/2021 Iron ore- 1.57 million tonnes & Manganese ore- .0416million tonnes.	
1f	General remarks of inspecting officers on geology, exploration etc	Not proposed	Not applicable.	Geological formation of the lease area falling under mahakaushal group of overlapped by recent formation of mostly laterite.The lease area having mineralisation & lease of Iron ore,Manganese ore, ochre & laterite.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Towards northern side of lease and existing pit from 323 MRL to 311MRL.	The working is carried out in proposed site of the lease area.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No separaete o/b bench proposed. Benches in laterite & ochre of 3m. & ironore 4m. hight.	The working is carried out by forming benches in mineral as proposed of 3-4m. & 4-5m. hight in mineral laterite/ochre & ironore respectively.	
2c	Stripping ratio or ore to OB ratio	1:0.06	1:0.08	
2d	Quantity of topsoil generation in m3	Not proposed	Not applicable	
2e	Quantity of overburden generation in m3	6245 cu.m.	About 6000cu.m.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Not proposed	Not applicable.	The lease area is having single pit of size 235mx130m.x20m. maximum depth. The mining operations is carried out as proposed in approved RMP.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	Iron ore-113982 tonnes & Manganese ore-3022 tonnes	Actual production reported during the year 2020-21 Iron ore-47175 tonnes & Manganese ore-0 tonnes	

3c	Recovery of sailable/usable mineral from ROM production	88% Iron ore & 2% Mn ore	Actual about 90% Iron ore.
3d	Quantity of mineral reject generation	Not proposed.	Mineral reject not generated.
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed.	Not applicable.
3f	Quantity of sub grade mineral generation.	Not proposed.	Sub grade Mineral not generated.
3g	Grade of sub grade mineral generation	Not proposed.	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.	Not proposed.	Not applicable.
3j	Provision of drilling and blasting in mineral benches	Occasional jack hammer drilling for heaving purpose only proposed. Blasting not proposed.	In actual drilling & blasting not carried out during 2020-21.
3k	Provision of mining machineries in mineral benches	One Excavator of 1.1cu.m. & 03 dumpers of 10 tonnes capacity.	Excavator & dumpers deployed as proposed.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Benches proposed only in mineral .	Hight of Benches observed as proposed.	
3m	Total area covered under excavation/pits	2300 sq. m. during 2020-21.	About .2ha. area excavated during 2020-21 & cumulative so for about 3.0ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.06	1:0.08	
3o	Total area put in use under different heads at the end of year	Pits-3.0ha.& dumps-.2254ha.	In actual Pits-3.0ha.& dumps-.2254ha.	
3p	Production of ROM mineral during the last five year period as applicable	2016-17 -: Iron Ore (92453 Tonne), Mn ore (2451 tonnes) 2017-18 -: Iron Ore (177646 Tonne), Mn ore (4710 tonnes) 2018-19 -: Iron Ore (132000Tonne), Mn ore (3500 tonnes) 2019-20 -: Iron Ore (151272T), Mn ore (4011T) 2020-21 -: Iron Ore (113982T), Mn ore (3022T)	2016-17 -: Iron Ore (1725 Tonne), Mn ore (729 tonnes) 2017-18 -: Iron Ore (0 Tonne), Mn ore (0 tonnes) 2018-19 -: Iron Ore (0 Tonne), Mn ore (0 T) 2020-21 -: Iron Ore (47175 T), Mn ore (0 T)	
3q	General remarks of inspecting officers on method of mining etc.	Not proposed.	Not applicable.	The mining operations carried out systematically as proposed in proposed site.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top soil & mineral reject not generated only o/b in the form of waste proposed to backfill & dumping..	During the year generated waste backfilled in NW corner of excavated 7.5m. lease boundary as proposed ,separately dumping not done.	
4b	Location of topsoil, OB and mineral reject dumps	Backfilling in NW side of excavated 7.5m. LB & waste dumping in southern side of lease and pit.	Only backfilling is carried out .	
4c	Number of dumps within lease area and outside of lease area	One within lease area.	One waste dump in NW of the lease area .	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Temporary OB dumps within UPL	One temporary OB dumps within UPL will be utilised for backfilling.	
4e	Number of active and alive dumps.	One	One	
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	The excavated waste utilised for backfilling in 7.5m. excavated lease boundary upto 5-7m. hight.

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 of ore not occurred in pit & no such proposal given.	The excavated waste utilised for backfilling as proposed in 7.5m. excavated lease boundary upto 5-7m. hight.	
5b	Area under backfilling of mined out area	About .08ha. in degraded 7.5 m. barrier zone .	The excavated waste utilised for backfilling for .08ha. as proposed in 7.5m. excavated lease boundary upto 5-7m. hight.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil generation 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.	The excavated waste utilised for backfilling as proposed in 7.5m. excavated lease boundary upto 5-7m. hight.

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).	The annual PMCP report for the year 2020-21 to be submitted before 1st July of every year.	Not submitted.	Violation of rule 26(2) pointed out.
6b	Area available for rehabilitation (ha) .	Not proposed	Not applicable.	
6c	afforestation done (ha) .	.06ha.	About .05ha.	

6d	No. of saplings planted during the year	100 Saplings during the year.	About 100 trees planted done during the year .
6e	Cumulative no .of plants	Not proposed.	cumulative so for about 300 trees.
6f	Any other method of rehabilitation	Not proposed	Not applicable.
6g	Cost incurred on watch and care during the year	Not proposed	About Rs. 100000/-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	In lease boundary about 80x10x5-7m.	About 80x10-12x5-7m.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	4368cum. waste	About 6000cum. waste
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Not proposed	Not applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Not applicable
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not proposed	Not applicable

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed	Not applicable	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed	Not applicable	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not proposed	Not applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environment monitoring was proposed at regular interval	Environment monitoring carried out regularly but data not provided during inspection.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Not proposed	Not applicable	The backfilling work and plantation done as proposed. Annual PMCP report not submitted for which violation of rule 26(2) pointed out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting of ore/mineral has been proposed in the approved document before dispatch.	Done as proposed.	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	Proposal has been given for grade wise sorting of ores by manual means at mines.	Done as proposed.	
7d	Any beneficiation process at mines .	Not proposed	Not applicable.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Not proposed	Not applicable.	The ROM material is sorted on experience at mine site and dispatch. There is no issue of mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil generation.	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)	Top soil & mineral reject not generated only o/b in the form of waste proposed to backfill & dumping..	During the year generated waste backfilled in NW corner of excavated 7.5m. lease boundary as proposed ,separately dumping not done.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed.	Not applicable.	
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 and additional plantation done (Rule 41)	100trees plantation proposed .	100 trees planted as proposed cumulative about 300 planted trees exists in the lease area.	
8g	Survival rate	80%	About 80%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling was proposed by water tanker	Done as proposed in haul roads.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not proposed	Not applicable.	Aesthetic beauty in and around mine area is affected due to movement of dumpers as lease area is small but some plantation done in the lease boundary & water sprinkling in haul roads arrest the dust to some extent.

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.	Monthly Return submitted upto - November, 2021 Annual Return submitted upto- F.Y. 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Appointment of Mining engineer & geologist mentioned in AR.	Required appointment notice received in office.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	By pits-3.0 & reclaimed .017ha.	The details given in AR is almost correct. Lessee has not submitted upto date plans and sections.	Violation of rule 33 pointed out for non-submission of upto date plan & section.
9d	Scrutiny of Annual return on afforestation	225 within lease and 150 outside lease	In actual more than 100 new survived trees observed within lease and about 100 outside lease area.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not given	Not applicable	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	IRON ORE-ROM stock-0 , production-47175T, Graded ore stock-16346t Manganese ore-stock-0 , production-0T, Graded ore stock-2162t	The details given in AR is found correct.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Iron ore sale value & ex mine price Rs 703/- tonnes, cost of production - Rs.469.62/- tonnes Manganese not applicable as no production & dispatch.	The details given in AR is found correct.	

9h	Scrutiny of Annual return on fixed assets	Rs. 5223629 fixed assets given	Fixed assets given is correct.
9k	Scrutiny of Annual return on mining machineries	Two no. of machinery mentioned.	Excavator & dumper combination deployed for mining as proposed in RMP.

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 26(2)	13-DEC-21			
MCDR17	Rule 27(1)	13-DEC-21			
MCDR17	Rule 33	13-DEC-21			

Date :

(JAY KUMAR PANDEY)

Indian Bureau of Mines