

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

Review and updation of Mining Plan REPORT

Jabalpur regional office

Mine file No : MP/JBP/LAT-31

Mine code : 75MPR18018

- (i) Name of the Inspecting : **G005**) **SANJAY M. GIRHE**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 12-FEB-20
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GANDHIGRAM (4.00 HA)**
- (b) **Registration NO.** :
- (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 : NA
Phone : NA
- (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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the year 2016-17 & 2017-18 two (2Nos) DTH boreholes were proposed	No Exploration carried out as the mining operation were stopped from 31.03.2017 for the want of EC	
1b	Exploration over lease area for geological axis 1 or 2	During the year 2016-17 & 2017-18 two (2Nos) DTH boreholes were proposed	Approx. 3.0Ha area explored in G1 level by way of working pits. In past no exploration carried out.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration were proposed during the year 2016-17 & 2017-18	Exploration not carried out, hence details available	
1d	Balance area to be explored to bring Geological axis in 1 or 2	About 1.0 Hect area was proposed to be explored during the year 2016-17 & 2017-18	Exploration not done	Lease area is very small of 4.0 hect & about 3 hect area explored by way of working pits. Remaining area can be considered as lateral extension in view of unifrom mineralisation.

1e	Balance reserve as on 01/04/20	Reserves & Resources (In Tonnes) as on 01.04.2016 as per approved SOM Proved Reserves (111) -: Iron Ore (Nil), Mn Ore (Nil) Probable (122) -: Iron Ore (1147634), Mn Ore (30430) Pre-feasibility (222) -: Iron Ore (1572120), Mn Ore (41685) Indicated (332)-: Iron Ore (2719754), Mn Ore (72115)	Reserves & Resources (In Tonnes) as on 01.04.2019 as per approved Annual Return Proved Reserves (111) -: Iron Ore (Nil), Mn Ore (Nil) Probable (122) -: Iron Ore (1147634), Mn Ore (30430) Pre-feasibility (222) -: Iron Ore (1572120), Mn Ore (41685) Indicated (332)-: Iron Ore (2719754), Mn Ore (72115)	Geological formation of the lease area falling under Mahakoshal group formation overlapped by recent formation of mostly laterite. Lease area is granted for Iron ore, Laterite & Mn ore.
1f	General remarks of inspecting officers on geology, exploration etc	NA	NA	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Towards northern side for Iron ore from 365 to 360mRL	Not done as mining operation stopped for the want of EC.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	For OB separate bench of 3.0mts & for Iron ore bench of 5.0mts height proposed	Not done as mining operation stopped for the want of EC.	
2c	Stripping ratio or ore to OB ratio	1.0.09 CuM/Tonne	Not acheived as mining operations were stopped for the want of EC.	
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	
2e	Quantity of overburden generation in m3	6855 CuM OB/Waste generation were proposed	Not done as mining operation stopped for the want of EC.	OB waste material consists of phyllite, ocharious material mixed chert & pebbles.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	Lease area having single Pit-A with dimension of 23500M2 x 15 to 20m depth. Mining lease granted for Iron ore, Manganese & Laterite ore.	

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Further development of Pit-A towards northern side proposed from 365-360mRL	Proposed development not done as mining operations were discontinued for the want of EC	
3b	Quantity of ROM mineral production proposed	Iron Ore - 1,32,000 Tonnes Mn Ore - 3500 Tonnes	Proposed production not done as mining operations were discontinued for the want of EC	

3c	Recovery of sailable/usable mineral from ROM production	Recovery of Iron Ore - 88% of total ROM & Mn ore-2% of total ROM	Not Done	Proposed production not done as mining operations were discontinued for the want of EC
3d	Quantity of mineral reject generation	Not Proposed	Nil	No mineral reject generation in the lease area
3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	Nil	No mineral reject generation in the lease area
3f	Quantity of sub grade mineral generation.	Not Proposed	Nil	No sub-grade generation encountered in the lease area
3g	Grade of sub grade mineral generation	Not Proposed	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sorting for Mn ore is proposed	Not done	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Nil	No beneficiation or screening of ores have been observed during site inspection.
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting proposed by wagon drill 100mm dia & jack hammer of 32mm diameter	Not done	Proposed development not done as mining operations were discontinued for the want of EC
3k	Provision of mining machineries in mineral benches	Jack Hammer- 35mm, Wagon drill-100mm, Excavator- 1.10CuM, Dumpers-10 Tonner, etc	Not done as mining operations were discontinued/stopped for the want of EC	

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of 3 to 5m for overburden laterite & 5m for Iron ore/Mn ore proposed	Not done as mining operations were discontinued/stopped for the want of EC	
3m	Total area covered under excavation/pits	3.37 Hect. was proposed as approved SOM for period 2015-16 to 2019-20	2.35 Hect as draft ROMP submitted.	
3n	Ore to OB ratio for the pit/mine during the year.	Proposed 1: 0.090 CuM/Tonne	Nil	
3o	Total area put in use under different heads at the end of year	Area under mining - 2.35 Hect Waste dumps- 0.32 Hect Road - 0.087 Hect	As per draft ROMP submitted Area under mining - 3.40 Hect Waste dumps- 0.22 Hect Road - 0.087 Hect	
3p	Production of ROM mineral during the last five year period as applicable	2014-15 -: Iron Ore (2,09,616 Tonne), Mn ore (5,557 tonnes) 2015-16 -: Iron Ore (1,31,076 Tonne), Mn ore (3,476 tonnes) 2016-17 -: Iron Ore (92,453 Tonne), Mn ore (2,451 tonnes) 2017-18 -: Iron Ore (1,77,646 Tonne), Mn ore (4,710 tonnes) 2018-19 -: Iron Ore (1,32,000 Tonne), Mn ore (3,500 tonnes)	2014-15 -: Iron Ore (1,38,368 Tonne), Mn ore (3,675 tonnes) 2015-16 -: Iron Ore (2,09,616 Tonne), Mn ore (5,557 tonnes) 2016-17 -: Iron Ore (1725Tonne), Mn ore (729 tonnes) 2017-18 -: Iron Ore (Nil), Mn ore (Nil) 2018-19 -: Iron Ore (Nil), Mn ore (Nil)	Mining operations were discontinued/stopped since 2017 for the want of EC.

3q	General remarks of inspecting officers on method of mining etc.	NA	NA	Mining operations were discontinued/stopped since 2017 for the want of EC by the State Govt. Further, MPCB also issued notice on 25/04/2019.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping proposed for OB/Waste material towards Southern-West part	Not done	Mining operations were discontinued/stopped by the State Govt. for the want of EC
4b	Location of topsoil, OB and mineral reject dumps	OB dumping was proposed at E75 to E170 & S250 to S190	No mining operations carried out.	Mining operations were discontinued/stopped by the State Govt. for the want of EC
4c	Number of dumps within lease area and outside of lease area	Single OB dumps towards North-Western part	Single OB dumps towards North-Western part. No dumps outside ML area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Temporary OB dumps within UPL	Temporary OB dump observed within UPL. May be due to area constraints.	
4e	Number of active and alive dumps.	Active dump - 1 No (Towards North-West part of ML area)	Active dump - 1 No (Towards North-West part of ML area)	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Not Proposed	Nil	

4h	Whether Retaining wall or garland drain all along dumps are there.	Garland proposed along OB dump	NA	Mining operations were discontinued/ stopped by State Govt. for the want of EC
4i	Length of Retaining wall or garland drain all along dumps	NA	NA	
4j	Number of settling ponds	Not Proposed	Nil	
4k	Specific comments of inspecting officer on waste dump management	NA	NA	Not significant quantity of OB proposed during approved SOM period. Single dump was observed.

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.	Not Applicable	
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	No top soil encountered in the lease area. Mostly lateritic cappings observed.
5d	Total area fully reclaimed and rehabilitated	Not Proposed	Nil	No such area is matured for reclamation and rehabilitation.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	Iron ore not exhausted in any pit so far, hence for backfilling, reclamation area is not matured.

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).	To be submitted before 1st July of every year	Mining operations were discontinued/ stopped by State Govt. for the want of EC	
6b	Area available for rehabilitation (ha) .	Not Proposed	Nil	
6c	afforestation done (ha).	NA	NA	
6d	No. of saplings planted during the year	100 Saplings proposed to be planted	Not done	
6e	Cumulative no .of plants	NA	NA	
6f	Any other method of rehabilitation	Not Proposed	Nil	
6g	Cost incurred on watch and care during the year	NA	NA	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Proposed	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Proposed	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on 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)	Environment monitoring was proposed at regular interval	Not done	Mining operations were discontinued/ stopped by State Govt. for the want of EC
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Various proposals were given in approved SOM in respect of PMCP	Mining operations were discontinued/ stopped by State Govt. for the want of EC. Hence, PMCP proposals couldnot be executed.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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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.	Not Done	Mining operations were discontinued/ stopped by State Govt. for the want of EC.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	For optimum recovery Iron & Manganese ore above the threshold value proposed to be sorted for Plant & non plant grades.	Not Done	Mining operations were discontinued/ stopped by State Govt. for the want of EC
7c	Different grade of mineral sorted out at mines.	Proposal has been given for grade wise sorting of ores by manual means.	No Iron ore & Manganese ore production reported, hence it is not applicable.	
7d	Any beneficiation process at mines .	Not Proposed	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA	Mineral is being conserved by grade wise sorting in the lease area. Grade wise stacking is done on earmarked locations. There is no mineral rejects/subgrade generation of ore. Entire ROM utilised except 10% intercalated generation of waste.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Nil	
8b	Concurrent use or storage of topsoil	Not Proposed	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of intercalated waste material has been proposed in the approved document.	Not Done.	Mining operations were discontinued/ stopped by State Govt. for the want of EC
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	As of now non of the pit area where ore has been exhausted, hence presently scope doesnot exists.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not Proposed	Total 150 sanplings planted.	
8g	Survival rate	NA	NA	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling was proposed by water tanker	Not Done	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	NA	Aesthetic beauty in and around mine area is not much satisfactory as plantation not done up to that extent. Hence, it was instructed to propose at least 200 sapling/year & accordingly such proposals need to be incorporated in ROMP.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return submitted upto - January,2020 Annual Return submitted upto- F.Y. 2018-19	Statutory returns submitted within stipulated time.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Not Give	Mine is non operational since 2015 for the want of EC	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area already exploited & abandoned - 4.00 Ha	Mine is non operational since 2015 for the want of EC	
9d	Scrutiny of Annual return on afforestation	150 Planted in ML area & 100 outside ML	During inspection no such plantations have been observed.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not given	Nil	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Iron: Below 55% -: Opening Stock- 55600.68M.T. Production-: Nil, Despatched- :1991.12M.T. Closing Stock- M.T. : 53609.56 Mn Ore-: Below 25% (Opening Stock-2663.32 M.T.	Iron: Below 55% -: Opening Stock- 55600.68M.T. Production-: Nil, Despatched- :1991.12M.T. Closing Stock-: 53609.56 Mn Ore-: Below 25% (Opening Stock-2663.32 M.T.
		Production - Nil, Despatched - 501.166 M.T.	
		Closing Stock- 2162.16 M.T.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Iron Ore -: (Below 55% Fe content : Ex-mine reported as Rs 300/Tonne) Mn Ore -: (Below 25% Mn content : Ex-mine reported as Rs 1500/Tonne)	Ex-mine prices reported for Iron ore & Manganes ores are on very much lower side w.r.t. ASP published by IBM.
9h	Scrutiny of Annual return on fixed assets	Not Given	Nil
9k	Scrutiny of Annual return on mining machineries	Given	Nil

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

Date :

(SANJAY M. GIRHE)

Indian Bureau of Mines