

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

**MCDR inspection REPORT  
Jabalpur regional office**

**Mine file No :** MP/JBP/LST-230

**Mine code :** 38MPR18135

- (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 : 17-MAR-20
- (v) Prev.inspection date : 05-DEC-16

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **SAKARI**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :  
State : MADHYA PRADESH  
District : JABALPUR  
Village : SAKARI  
Taluka : PANAGAR  
Post office : CHHATARPUR  
Pin Code :  
FAX No. : N. A.  
E-mail : N. A.  
Phone : N. A.
- (f) Police Station :
- (g) First opening date : 19-MAR-97
- (h) Weekly day of rest : SAT
2. Address for : SHRI SUBHASH AGRAWAL  
correspondance : HOUSE NO. 1396, ADHERTAL, JABALPUR (M.P.) 482004
3. (a) Lease Number : MPR2304
- (b) Lease area : 12.71
- (c) Period of lease : 50
- (d) Date of Expiry : 18-MAR-47
4. Mineral worked : LIMESTONE Main  
MANGANESE ORE Associated  
IRON ORE Associated

## 5. Name and Address of the

Lessee : SUBHASH AGRAWAL  
HOUSE NO. 1396, ADHERTAL,  
JABALPUR MADHYA PRADESH  
Phone:N. A.  
FAX :N. A.

Owner : SUBHASH AGRAWAL  
ADHARTAL JABALPUR MADHYA  
PRADESH  
Phone: N. A.  
FAX : N. A.

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	02-JAN-06
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	13-NOV-09
	:	Mining Scheme rule 12 MCDR1988	29-JAN-13
	:	MP modif under 17(3) MCR 2016	22-FEB-18

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the year 2019-20 no exploration was proposed	Nil	During the approved plan period from 2017-18 to 2021-22 total 15 BHs were proposed. Violation of non-compliance u/r 11(1) was issued.
1b	Exploration over lease area for geological axis 1 or 2	Not Proposed during the year 2019-20	Exploration was proposed during 2017-18 to 2018-19 but not carried out.	Violation of non-compliance u/r 11(1) was issued.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration not proposed in 2019-20	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed during the year 2019-20	Nil. Area under G1 considered as 12.71 Ha as per previous approved document	
1e	Balance reserve as on 01/04/20	Reserves in Tonnes- Proved (111)-16,28,641 Limestne, Iron Ore-1,80,515 & Mn ore-81585 tonnes Resources in Tonnes (Feasibility-211)-: Limestone: 4,20,239, Iron Ore-12,705 & Mn ore Inferred (333)-87385 Position as approved MMP dtd - 22.02.2018	Reserves in Tonnes- Proved (111)-15,61,078 Limestne, Iron Ore-1,80,515 & Mn ore-58,431 tonnes (Probable-122) Resources in Tonnes (Feasibility- 211)-: Limestone: 4,20,239, Iron Ore-12,705 & Mn ore Inferred (333)-87385 Position as per AR for 2019-20	

1f	General remarks of inspecting officers on geology, exploration etc	NA	NA	Exploration was proposed during approved MMP period but not carried out. Violation u/r 11(1) of MCDR, 2017 was issued.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to work towards SE to SW by formation of 3-4m bench height from 403mRL to 400mRL as earmarked in Plate-7 for the year 2019-20	Mine working was carried out as per the proposed locations.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches in Top soil - Nil, Overburden Benches -01, Limestone, Iron Ore & Mn Ore - 1 bench of 4 to 6 m height.	Bench working carried out as per the proposals.	
2c	Stripping ratio or ore to OB ratio	Proposed as 1:0.60	Acheived as 1: 0.42	
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	
2e	Quantity of overburden generation in m3	Proposed as 1781 CuM	No waste generated during the year 2019-20	

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2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA	Total 3working pits of following dimensions- Pit No-1 (123 x38 x 6-19m) Iron &Mn, Pit No-2 (110 x30 x 6-15m) Limestone, Iron & Mn, Pit No-3 (40 x25 x 09-11m) Limestone,
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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Limestone, Iron Ore & Mn production proposed from respective pits of 03 nos.	Mine working were carried out as per proposals	
3b	Quantity of ROM mineral production proposed	Limestone - 40,066 tonnes Iron Ore- 24,389 tonnes & Mn-10,044 tonnes	Limestone -28,089 tonnes Iron Ore-362 tonnes & Mn-8322 tonnes acheived in 2019-20	
3c	Recovery of sailable/usable mineral from ROM production	Limestone recovery of 95%, Iron ore- 90% & Mn ore 45% proposed	More of less acheived as per the proposals	
3d	Quantity of mineral reject generation	Proposed 263CuM	Not generated during the year	
3e	Grade of mineral rejects generation and threshold value declared.	Above the prescribed threshold value & below the cut of grade	NA	
3f	Quantity of sub grade mineral generation.	263 CuM during the year 2019-20	NA	
3g	Grade of sub grade mineral generation	Above thrshold & below the cut of proposed	NA	

3h	Manual / Mechanised method adopted for segregating from ROM	Manual sizing & sorting proposed	Manual sizing & sorting carried out
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Nil
3j	Provision of drilling and blasting in mineral benches	Drilling is done by Atlas Copco, 110mm dia	Drilling carried out as per the proposals
3k	Provision of mining machineries in mineral benches	Back Hoe Ex- 210, 0.9 Cum capacity TATA Dumper model 2515, 10 T capacity Tractor mounted Air Compressor Jack Hammer with Drill rods Water Tanker - 10 KL	Back Hoe Ex-210, 0.9 Cum capacity TATA Dumper model 2515, 10 T capacity Tractor mounted Air Compressor Jack Hammer with Drill rods Water Tanker -10 KL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB bench height as 2-3 m & Bench height in mineral proposed as 4- 6mts	At some extent bench height is not regular due to quality constraints
3m	Total area covered under excavation/pits	2.51 Ha area was proposed in approved MMP period i.e. 2017-18 to 2021-22	1.66Ha as on 01.04.2020, less excavated area due low production during the year 2019-20
3n	Ore to OB ratio for the pit/mine during the year.	Proposed as 1:0.30	Acheived as 1:0.18

3o	Total area put in use under different heads at the end of year	As per the previous approved MMP Pits-2.51Ha Mineral Storage-1.17Ha Road-0.50Ha Green Belt-1.38Ha	As per the AR 2019-20 Pits-1.667Ha Waste dump-0.715Ha Road-0.50Ha Green Belt-0.83Ha
3p	Production of ROM mineral during the last five year period as applicable	2015-16-: Limestone-21735 MT, Iron Ore-19.117 MT & Mn ore-38036MT 2016-17-: Limestone-13297 MT, Iron Ore-10080 MT & Mn ore-68580MT 2017-18-: Limestone-13297 MT, Iron Ore-10080 MT & Mn ore-68580MT 2018-19-: 97,000MT	2015-16-: Limestone-18400 MT, Iron Ore-15500 MT & Mn ore-38036MT 2016-17-: Limestone-21735 MT, Iron Ore-19.117 MT & Mn ore-35589 MT 2017-18-: 90,000 MT 2018-19-: 97,000MT
3q	General remarks of inspecting officers on method of mining etc.		

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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/stacking for IB waste & subgrade ore on earmarked locations.	Dumping/stacking carried out as per the proposals	
4b	Location of topsoil, OB and mineral reject dumps	Dumping was proposed in between N100 to N200 & W00 to W125.		

4c	Number of dumps within lease area and outside of lease area	Not Proposed	No OB dumps within & outside ML area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not Proposed	No OB dumps available in ML area	
4e	Number of active and alive dumps.	Not Proposed	No active OB dumps available in ML area	
4f	Number of dead dumps.	Not Proposed	No dead dumps are available in ML area	
4g	Number of dumps established.	Not Proposed	NA	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not Proposed	No dumps available in ML	
4i	Length of Retaining wall or garland drain all along dumps	Not Propose	No dumps available in ML	
4j	Number of settling ponds	Not Proposed	No dumps available in ML	
4k	Specific comments of inspecting officer on waste dump management	NA	NA	No dumps are available in mining lease area, hence scope of dump management doesnot exists.

#### 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	None of the pits area is partly or fully mineral exhausted.	
5b	Area under backfilling of mined out area	Not Proposed	None of the area backfilled in ML area so far	



5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	NA	
5d	Total area fully reclaimed and rehabilitated	Not Proposed	None of area fully reclaimed & rehabilitated	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	None of pits area are fully mineral exhausted so far & therefore the scope of reclamation by backfilling doesn't exist at present.

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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).	To be submitted before 1st July of every year	For year 2018-19 no submitted within time limit as per the provisions of Rule 26 of MCDR,2018	Violation u/r 26(2) of MCDR,17 pointed out & issued.
6b	Area available for rehabilitation (ha) .	Not Proposed	No area is available for rehabilitation.	
6c	afforestation done (ha).	75 saplings proposed to be planted	50 saplings planted with 70% survival rate	
6d	No. of saplings planted during the year	75 saplings proposed to be planted	50 saplings planted with 70% survival rate	
6e	Cumulative no .of plants	NA	NA	
6f	Any other method of rehabilitation	Not Proposed	NA	
6g	Cost incurred on watch and care during the year	Not Proposed	NA	

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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	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on 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	Nil
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)	Periodical Air, Water, Noise monitoring Proposed	Yes, Compliances of environmental monitoring is being carried out.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	NA	Implementation of PMCP proposals not found satisfactory. Periodic Env. monitoring is being carried out by outsourced consultant.

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes, ROM mineral dispatch, grade wise sorting within the lease area proposals made in the approved document.	Yes this being carried out in the ML area regularly after excavation from the respective benches from the proposed locations.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Proposed for manual sizing & sorting grade wise.	Yes, sizing & sorting of ore are done through manual means.	
7c	Different grade of mineral sorted out at mines.	Manual sorting for different grade of Iron & Mn ore proposed	Carried out as per the given proposals	Yes as per the proposals in the approved document, the same is being followed.
7d	Any beneficiation process at mines .	No beneficiation process proposed	Not done	Manual sizing & sorting proposed in approved document

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Proposed for systematic and scientific method of mining operations, including manual sizing & sorting.	Lessee following the system of operation with all out effort to achieve the maximum output.	Mining operations are being carried out systematically.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposals given	NA	Top soil generation not proposed in approved document.
8b	Concurrent use or storage of topsoil	Not Proposed	Nil	Top soil generation not proposed in approved document.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for IB/OB developed out of ROM earmarked.	As per the approved document Separate dump for OB/IB out of ROM ear marked.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No specific proposals given in the document as such, since there is no present scope.	No scope to undertake such restoring work in the mine in the present situations.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Presently scope doesnot exisits.	

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8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposals of 75 saplings to be planted were given	50 saplings planted during the year	No information furnished in approved document about cumulative plantation.
8g	Survival rate	Proposed as 80%	Achieved as 70%	
8h	Water sprinkling on roads to control airborne dust	Yes provisions made for sprinkling of water on the haul roads to suppress the dust.	Lessee provided with vehicle for water sprinkling in the haul roads, other areas of the movements of the vehicles to suppress the dust.	
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.

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. submitted upto- Feb-2020 A.R. submitted upto- 2018-19	Annual Return for the year 2018-19 submitted within time limit.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Gurmeet Singh Dhillon, Mining Engineer was appointed	

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Open cast workings=1.66 ha, waste disposal=0.715Ha Infrastructure=0.40 ha, Green Belt=0.830Ha	Violation pointed u/r 45(7) as lease area utilization at the end of the year not given in correct manner as the area occupied by the mineral stocks was not furnished.
9d	Scrutiny of Annual return on afforestation	Given	Nil	Very less amount of samplings proposed & actual planted during the year. Accordingly, instructed to the lessee for more plantation proposals.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Given	Not generated during the year	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Different position of opening stocks, despatches, etc are given separately for limestone, Iron ore & Manganese Ore	The given information is appropriate, and satisfactory.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	The existing ex-mine price, sale price & the cost of production are given appropriately.	
9h	Scrutiny of Annual return on fixed assets	Given	NA	
9k	Scrutiny of Annual return on mining machineries	Given	NA	

**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)	17-MAR-20		MCDR17 Rule 11 (1)	17-MAR-20	
MCDR17 Rule 26 (2)	17-MAR-20		MCDR17 Rule 26 (2)	17-MAR-20	
MCDR17 Rule 31 (4)	17-MAR-20		MCDR17 Rule 31 (4)	17-MAR-20	
MCDR17 Rule 35 (2)	17-MAR-20		MCDR17 Rule 35 (2)	17-MAR-20	
MCDR17 Rule 45 (1)	17-MAR-20		MCDR17 Rule 45 (1)	17-MAR-20	
Rule 45 (7) (i)	17-MAR-20		Rule 45 (7) (i)	17-MAR-20	

**Date :**

**(SANJAY M. GIRHE)**

Indian Bureau of Mines