

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

MCDR inspection REPORT

Nagpur regional office

Mine file No : MP/CHW/MN-36/NGP

Mine code : 40MPR08003

- (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 : 09-AUG-21
- (v) Prev.inspection date : 28-AUG-18

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GWARI BADONA (8.776H)**
- (b) **Registration NO.** : **IBM/11435/2012**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : CHHINDWARA
Village :
Taluka :
Post office :
Pin Code :
FAX No. : NA
E-mail : chhindwaramines@gmail.com
Phone : 9810491848
- (f) Police Station : Lodhikheda
- (g) First opening date : 08-APR-08
- (h) Weekly day of rest : SUN
2. Address for : Village- Gowari-Bodona, P.O.Khairitaigaon
correspondance Taluk- Sausar, Dist. Chhindwara,
Madhya Pradesh - 480108
3. (a) Lease Number : MPR2204
- (b) Lease area : 8.78
- (c) Period of lease : 20
- (d) Date of Expiry : 15-MAY-27
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S CHHINDWARA MINES PVT. LTD.
L-1/9 HAUZ KHAS ENCLAVE,
NEW DELHI PIN - 110016
CHHINDWARA MADHYA PRADESH
Phone:09810079291, 09303186884
FAX :

6. Date of approval of Mining
Plan/Scheme of Mining

: Fresh under rule 22 MCR1960

15-MAR-07

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 to 2020-21 total 05 boreholes were proposed	Exploration not carried out as proposed	Violation under Rule 11(1) of MCDR,2017 was issued. However, the fresh proposal has been given in ROMP which is under process.
1b	Exploration over lease area for geological axis 1 or 2	Total 10 boreholes were proposed during plan period 2019-20 to 2022-23 for G1 axis	Exploration during the year 2020-21 not carried out	Violation under Rule 11(1) of MCDR,2017 was issued
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	No exploration carried out during the year 2020-21
1d	Balance area to be explored to bring Geological axis in 1 or 2	Total 10 boreholes were proposed during plan period 2019-20 to 2022-23 for G1 axis	No exploration carried out as proposed. G2 area-1.80Ha, G3 area-0.98Ha, Unexplored area-5.99Ha	Violation under Rule 11(1) of MCDR,2017 was issued
1e	Balance reserve as on 01/04/20	Reserves in Tonnes Probable (122)-11840 MT Resources in tonnes Pre-Feasibility(222): 17200 MT Inferred(333): 22680 MT The reserve/resources position as per ROMP approved 28.02.2020	Reserves in Tonnes Probable (122)- 8850 MT Resources in tonnes Pre-Feasibility(222): 17200 MT Inferred(333): 22680 MT The reserve/resources position as per annual return 2020-21	No additional resources/reserves have been estimated

1f	General remarks of inspecting officers on geology, exploration etc	Exploration proposed were given as per approved ROMP	No exploration carried out. Violation under Rule 11(1) of MCDR,2017 was issued	Manganese ore deposit along with host rock mica schist & meta sedimentary beds of Dolomit belong to Sausar group.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In exisiting Pit-1, Development was proposed in 07 benches (from 450mRL to 307mRL) & Manganese ore from from (319mRL to 305mRL)	Working carried out almost as per the approved proposals	There is single working pit with worked out area of 4.62Ha with 360mRL to 305mRL
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Total 07 benches in Overburden/int erburden and 02 benches working for Mn ore proposed	Working almost carried out as per the proposals	There is single working pit with worked out area of 4.62Ha with 360mRL to 305mRL
2c	Stripping ratio or ore to OB ratio	1:11.73 Tonne/CuM	Acheived as 1:14.73 Tonne/CuM	Total OB generated during the year 2020-21 as 26600 CuM
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	Top soil mostly lateritic soil mixed with top overburden material. Working was proposed in almost working pit.
2e	Quantity of overburden generation in m3	26607 CuM during the year 2020-21	Acheived as 26600 CuM during the year	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Working proposals were given in working Pit-1	Working carried out as per the approved proposals	There is single working pit of following dimensions (320m x 125m x 50-55mRL). Working being carried out in single pit by opencast method of mining.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit i.e. Pit-1	Working carried out in Pit-1	There is single working pit of following dimensions (320m x 125m x 50-55mRL)
3b	Quantity of ROM mineral production proposed	2268 Tonne Manganese ore production during the year 2020-21	1800 Tonne Manganese ore production acheived during the year	Production slightly on lower side
3c	Recovery of sailable/usable mineral from ROM production	90% Recovery	Acheived about 90% as proposed	Mn ore above threshold being recovered fully
3d	Quantity of mineral reject generation	Not Proposed	Nil	No mineral rejects generated during the year
3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	Nil	No mineral rejects generated during the year
3f	Quantity of sub grade mineral generation.	Not Proposed	Nil	No sub-grade ore production proposed during the year
3g	Grade of sub grade mineral generation	Not Proposed	Nil	No sub-grade ore production proposed during the year

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method by suitable screening proposed	Ore segregation by mechanical/screening method being practised.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	NA	
3j	Provision of drilling and blasting in mineral benches	Drilling & blasting proposed by Jack hammer/Wagon drill of 110mm dia	Drilling blasting carried out as proposed	
3k	Provision of mining machineries in mineral benches	Hydraulic Shovel- 1CuM capacity TATA Dumper model 2515, 24 T capacity Tractor mounted Air Compressor Jack Hammer with Drill rods Mahindra Tractor with Water Tank on trolley Water pump with Diesel engine	Hydraulic Shovel- 1CuM capacity TATA Dumper model 2515, 24 T capacity Tractor mounted Air Compressor Jack Hammer with Drill rods Mahindra Tractor with Water Tank on trolley Water pump with Diesel engine	Machineries proposed as per the category of mine
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB bench height of 3mts & bench height of 6m proposed in mineral	Working carried out as per the proposals	

3m	Total area covered under excavation/pits	4.62 Ha area was proposed in approved Review of Mining Plan period i.e. 2019-20 to 2022-23	4.32 Ha as on 01.04.2021, minor variation due less excavated area due low production during the year 2020-21	Position of excavated pit area as per annual return for 2020-21
3n	Ore to OB ratio for the pit/mine during the year.	1:7.92 Tonne/CuM	Acheived as 1:14.73 Tonne/CuM	Total OB generated during the year 2020-21 as 26600 CuM
3o	Total area put in use under different heads at the end of year	As per the previous approved Review of Mining Plan period 2019-20 to 2022-23 Pits-4.62Ha Waste Dumps-2.72 Ha Mineral Storage-0.50 Ha Infrastructure -0.01Ha Road-0.06Ha	As per the Annuual Return for the year 2020-21 Pits-4.32Ha Reclaimed/Rehabilitated-0.30 Ha Waste Dumps-2.72 Ha Other purpose-0.68 Ha	Minor variation in excavated area due to production during the year
3p	Production of ROM mineral during the last five year period as applicable	2016-17-: 8883 MT 2017-18-: 7182 MT 2018-19-: Lapsed 2019-20-: 2380 MT 2020-21-: 2268 MT	2016-17-: 3870 MT 2017-18-: 3870.09 MT 2018-19-: 6265.77 MT 2019-20-: 830 MT 2020-21-: 1800 MT	Furnished production details as per online submitted annual returns
3q	General remarks of inspecting officers on method of mining etc.	NA	NA	Mining operations were proposed by mechanised opencast method with excavator/shovel & dumpur combination. Thers is single working pit in lease area.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	OB utilization proposed for concurrent backfilling	Working carried out as per the proposals	Total 26600 CuM overburden generated during the year-2020-21
4b	Location of topsoil, OB and mineral reject dumps	Existing 02 nos of OB dumps	Overburden dumps located towards north-eastern & western part of ML area	
4c	Number of dumps within lease area and outside of lease area	Existing 02 nos of OB dumps within ML area	Existing 02 nos of OB dumps within ML area	No overburden dumps outside ML area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump No-1 located in between E0 to E210 & S270 to S0	Dump No-1 located in between E0 to E210 & S270 to S0	Dumps locations duly marked on surface plan Plat No-IV
4e	Number of active and alive dumps.	Existing 02 nos of OB active dumps within ML area	Existing 02 nos of OB active dumps within ML area	
4f	Number of dead dumps.	No dead OB/Waste dumps in ML area	No dead OB/Waste dumps in ML area hhh	No dead OB/Waste dumps in ML area
4g	Number of dumps established.	Not Proposed	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not Proposed	Nil	No proposals as per approved ROMP 2019-20 to 2022-23
4i	Length of Retaining wall or garland drain all along dumps	Not Proposed	Nil	
4j	Number of settling ponds	Not Proposed	Nil	
4k	Specific comments of inspecting officer on waste dump management	NA	NA	Significant amount of overburden encountered in ML area. None of dump is stabilized as off now. Scope of backfilling/reclamation very well 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.	In southern-eastern part of the ML area ore is exhausted & proposed for backfilling	Backfilling carried out as per the proposals	
5b	Area under backfilling of mined out area	Cumulative backfilled area 0.30 Ha	Cumulative backfilled area 0.30 Ha	800 SqM area proposed for backfilling in 2020-21
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No top soil generation proposed in 2020-21	NA	Working proposed in already excavated pit by further advancement of benches
5d	Total area fully reclaimed and rehabilitated	800 SqM area proposed in 2020-21	Total cumulative area backfilled 0.30 Ha	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	Significant amount of overburden encountered in ML area. Hence, scope of banckfilling very well exists.

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	Not submitted for the year 2020-21	Violation under Rule 26(2) of MCDR, 2017 was observed & issued subsequently
6b	Area available for rehabilitation (ha) .	Total 0.30 Ha	Total 0.30 Ha reclaimed area	Reclaimed area not rehabilitated so far
6c	afforestation done (ha) .	Not Proposed	Total 160 saplings planted during the year	Plantation with ML area
6d	No. of saplings planted during the year	Not Proposed	Total 160 saplings planted during the year	Survival rate about 80%

6e	Cumulative no .of plants	NA	NA	No information is available
6f	Any other method of rehabilitation	Not Proposed	NA	Nil
6g	Cost incurred on watch and care during the year	No Proposals	NA	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	800 SqM area proposed for backfilling	Backfilling carried out as per the proposals	Total 26600 CuM overburden generated during the year-2020-21 which is backfilled
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	800 SqM area proposed for backfilling	Backfilling carried out as per the proposals	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No Proposals	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposals	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposals	NA	Reclamation proposed by backfilling only
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No Proposals	Nil	

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Proposals	Nil	On proposals on waste land
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposals	Nil	Nil
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	In ML area encountered significant amount of OB , hence scope of backfilling/reclamation & rehabilitation very well exist and accordingly proposals were given. Periodic monitoring is being carried out by outsourced consultant.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	2268 MT proposed as total ROM production for despatch. Grade wise sorting proposed within lease area for grade wise separation of Mn ore	1803.28 MT dispatched as below 25%Mn, 25% to below 35% Mn & 35% to below 46% Mn	Grade wise sorting being carried out for aforementioned grades of Mn ore
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual & mechanical	Manual & mechanical	Grade wise sorting being carried out for below 25%Mn, 25% to below 35% Mn & 35% to below 46% Mn
7c	Different grade of mineral sorted out at mines.	below 25%Mn, 25% to below 35% Mn & 35% to below 46% Mn	below 25%Mn, 25% to below 35% Mn & 35% to below 46% Mn	Grade wise sorting being carried out for below 25%Mn, 25% to below 35% Mn & 35% to below 46% Mn
7d	Any beneficiation process at mines .	No Proposals	Nil	No beneficiation at mine, only screening of ore noticed during inspection
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA	Ore is being conserved by grade wise sorting in the lease area. Manganese ore below 25%Mn, 25% to below 35% Mn & 35% to below 46% Mn proposed to be sorted for selling purpose. Grade wise stacking is done on earmarked locations.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Nil	No top soil generation proposed during the year
8b	Concurrent use or storage of topsoil	No Proposals	Nil	No top soil generation proposed during the year
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Concurrent use of overburden for reclamation proposed	Working carried out as per the proposals	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposals	Nil	Use of overburden for reclamation purpose proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	800 SqM excavated area proposed for reclamation	Reclamation carried out as proposed	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No Proposals	160 Saplings planted within ML area	
8g	Survival rate	No Proposals	About 80% survival achieved	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed by water tanker	Regular water sprinkling is done by water tanker	Water tanker of 2KL capacity is provided for the purpose

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 proposals were given in ROMP for the year 2019-20 to 2022-23
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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- July- 2021 A.R. submitted upto- 2020-21	Annual Return for the year 2020-21 and monthly returns submitted within time limit	Annual return & monthly returns copies were produced during mine inspection.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Mr. Ghanshyam Kawale as Mining Eng. and Mr. Ankush Sarangi, appointed as Geologist	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Pits-4.32Ha Reclaimed/Rehabilitated- 0.30 Ha Waste Dumps-2.72 Ha Other purpose-0.68 Ha	
9d	Scrutiny of Annual return on afforestation	Given	160 saplings planted within the mining lease area during the year 2020-21	Plantation were observed during the inspection
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Given	Nil	No mineral rejects generation reported during the year 2020-21

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	<p>Below 25% Mn Grade:</p> <p>O/S-74.130 MT Despatch-727.240 MT C/S-314.890 MT 25% to below 35% Mn grade:</p> <p>O/S-22.170 MT Despatch-114.010 MT C/S-3.160 MT 35% to below 46% Mn</p> <p>O/S-24.474MT Despatch-962.030 MT C/S-316.444MT</p>	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	<p>Ex-mine price:</p> <p>Below 25% Mn -: Rs 2952.60/MT 25% to below 35% Mn- Rs 6052.36/MT 35% to below 46% Mn-: Rs 13386.00/MT</p>	
9h	Scrutiny of Annual return on fixed assets	Given	<p>Value of Fixed Assets Rs- 22356889</p>	
9k	Scrutiny of Annual return on mining machineries	Given	Nil	Nil

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	27-AUG-21			
MCDR17	Rule 26(2)	27-AUG-21			
MCDR17	Rule 47(a)	27-AUG-21			

Date :

(SANJAY M. GIRHE)

Indian Bureau of Mines