INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Jabalpur regional office

Mine file No : MP/JABALPUR/IRON/23 Mine code : 30MPR18026

(i) Name of the Inspecting : PQ14) JAY KUMAR PANDEY

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : Sh. Nirmal singh Kurweti, representative of lessee

Official with Designation

(iv) Date of Inspection : 07-DEC-21

(v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) Mine Name : DHAMDHA IRON & MN. 22.00

(b) Registration NO. : IBM/43984/2021

(c) Category : A Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : JABALPUR
Village : DHAMDHA
Taluka : SIHORA
Post office : GOSALPUR
Pin Code : 483222

FAX No.

E-mail : sharma.nitin074@gmail.com

Phone : 09425150894

(f) Police Station : DHAMDHA
(g) First opening date : 01-AUG-20

(h) Weekly day of rest : SUN

2. Address for : Shop No 3, Bengali Club Market

correspondance Jabalpur

M.P. 482002

3. (a) Lease Number : (b) Lease area :

(c) Period of lease :

(d) Date of Expiry

4. Mineral worked : IRON ORE Main

MANGANESE ORE Associated

5. Name and Address of the

Lessee : SHRI SAI INDUSTRIES

SHOP NO.-3, BENGALI CLUB MARKET JABALPUR JABALPUR

MADHYA PRADESH

Phone: FAX :

6. Date of approval of Mining : MP review under 17(1) MCR 2016 11-DEC-20

Plan/Scheme of Mining

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not proposed .	Not applicable.	Mining operations started from 01/08/2020 & production reported from December 2020.
1b	Exploration over lease area for geological axis 1 or 2		Exploration proposed in 2021-22 & 22-23.	n
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 .	About 15ha. area under G2 category & balance 7ha.area under G3 and unexplored category. The whole 22ha. area to be explored under G1 category after exploration proposed in 21-22 & 22-23.	
1e	Balance reserve as on 01/04/20	Not proposed .	Reserves as on 01/04/2021 Iron ore622million tonnes & Manganese ore365 million tonnes. Resources as on 01/04/2021 Iron ore082million tonnes & Manganese ore048 million tonnes.	

1f of inspecting officers on geology, exploration etc

General remarks Not proposed Not applicable.

This is newly opened mine . About 15ha. area under G2 category & balance 7ha.area under G3 and unexplored category. The whole 22ha. area to be explored under G1 category after exploration proposed in 21-22 & 22-23. ML area belongs to Mahakaushal range of rocks, iron ore found with phyilites and Mn bands.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	development	pit A near Northern lease boundary betwwen pillar	In actual the working done to some extent in proposed site & mainly the developement & production done in south-west of proposed site by developing a new pit of size 90-100x40-50x20-24m where working proposals approved for 2022-23 & onwards year of current RMP period.	The violation of rule 11(1) pointed out for deviation of working in proposed site.

Remarks

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposals of 03 benches in mineral in pit A.	Actually the mine working was done in pit A by developing 2 benches of 3m. hight from this pit manganese ore recovered mostly & main working done in new pit where 5 benches of 5-6m. hight maintatined, 03 benches in waste and two benches in mineral ironore the deepest mineral ironore bench observed waterlogged as sump.	
2c	Stripping ratio or ore to OB ratio	1:0.15	1:0.75	
2d	Quantity of topsoil generation in m3	Not proposed	Not applicable.	
2e	Quantity of overburden generation in m3	5366 cubic meter	About 25000 cubic meter.	The waste generation is more than proposals for which violation of rule 11(1) pointed out.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Not proposed	Not applicable.	The mine working & waste disposal were done systematically but not as per approved proposals for which violations of rule 11(1) pointed out.

Propasals Actual work

Exploitation:

Sl.No. Item

The violation of rule 11(1) pointed out for deviation of working in proposed site.

3a	Number of pit proposed for production	One	In actual two ,actually the mine working was done in pit A by developing 2 benches of 3m. hight from this pit manganese ore recovered mostly & main working done in new pit where working proposals approved for 2022-23 & onwards year of current RMP period where 5 benches of 5-6m. hight maintatined, 03 benches in waste and two benches in mineral ironore the deepest mineral ironore bench observed waterlogged as sump.
3b	Quantity of ROM mineral production proposed	tonnes & Manganese ore-	In actual during the year 2020-21, Iron ore-22200 tonnes & Manganese ore-10700 tonnes.
3c	Recovery of sailable/usable mineral from ROM production	40%, Manganese-	About Iron-40-50%, Manganese-20-30%
3d	Quantity of mineral reject generation	Not proposed	Not applicable
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed	Not applicable
3f	Quantity of sub grade mineral generation.	Not proposed	Not applicable
3g	Grade of sub grade mineral generation	Not proposed	Not applicable
3h	Manual / Mechanised method adopted for segregating from ROM	Presently manually	Manually

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Not applicable
3ј	Provision of drilling and blasting in mineral benches	Not proposed	Drilling & blasting not proposed & also not carried out.
3k	Provision of mining machineries in mineral benches	Excavator & dumper combination proposed.	02 Excavator backhoe of 1.1cu.m. capacity & 4 dumpers of 24 tonnes capacity deployed.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Hight of mineral benches proposed from 2 to 3.5.	In actual the bench hight in ob & mineral benches varies from 3m. to 6m.
3m	Total area covered under excavation/pits	.57 ha.	During the year 2020-21 about .75ha. area occupied by pits &
			cumulative about 4.5ha. as already 15 old pits exists in the lease area.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.15	cumulative about 4.5ha. as already 15 old pits
3n 3o	Ore to OB ratio for the pit/mine	1:0.15 Pits57ha. & dumps8ha.	cumulative about 4.5ha. as already 15 old pits exists in the lease area .

3q General remarks Not proposed Not applicable of inspecting officers on method of mining etc.

The mine working & waste disposal were done systematically by deploying excavator & dumpers as proposed but not as per approved proposals site for which violations 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)	No topsoil & no mineral reject generation proposed only o/b as waste generation proposed to dump.	Waste dumped separately but not in proposed site.	Violation of rule 11(1) pointed out for deviation of dumping site.
4b	Location of topsoil, OB and mineral reject dumps	waste dump towards southern lease boundary.	In actual the waste dumping done in south east side of lease area.	
4c	Number of dumps within lease area and outside of lease area	One dump within lease area.	During the year 2020-21 & upto the date of inspection two waste dumps within lease area. There are 07 old waste dumps of diffrent sizes within lease area occuping about 2.28ha. area. The total area occupied by dumps about 3.18ha.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not proposed within Ultimate pit limit.	Waste dumped beyond UPL but not in proposed site.Old dumps situated within UPL.	

4e	Number of active and alive dumps.	One	Two adjoining waste dumps. Two waste dumps of sizes about 60-70mx40-60mx9-12m & 50-60mx40mx 8-10m .	
4 f	Number of dead dumps.	Not proposed	07 old dumps as dead dumps.	
4g	Number of dumps established.	Not proposed	07 old dumps as dead dumps naturally estabilished one dump was partially rehandled and shiftedas proposed.	
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.	
4 ј	Number of settling ponds	Not proposed	Not applicable.	
4k	Specific comments of inspecting officer on waste dump management	Not proposed	Not applicable.	Waste dumped separately but not in proposed site in non mineralised area. Hence violation of rule 11(1) pointed out for deviation of dumping site.

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.However backfilling proposed in 7.5m. earlier excavated barrier zone	

5b	Area under backfilling of mined out area	Backfilling proposed in 7.5 m barrier zone in two places of about .26ha.	Proposed backfilling done in .15ha. in 7.5m. earlier excavated barrier zone upto 2m. hight.	
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. However proposed backfilling done partially in .15ha. in 7.5m. earlier excavated barrier zone & utilised about 2000 cu.m. waste.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not proposed	Not applicable.	This is newly opened mine. However proposed backfilling done partially in .15ha. in 7.5m. earlier excavated barrier zone & utilised about 2000 cu.m. waste.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	report on PMCP submitted on	21 to be		Violation of rule 26(2) pointed out.
6b	Area available for rehabilitation (ha) .	Not proposed	Not applicable.	
6c	afforestation done (ha).	.002ha.	.005ha.	
6d	No. of saplings planted during the year	10 trees	About 50 survived trees observed.	

6e	Cumulative no .of plants	Not proposed	Cumulative about 50 survived trees observed.
6f	Any other method of rehabilitation	Not proposed	Not applicable.
6g	Cost incurred on watch and care during the year	Not proposed	About Rs. 50000/- during the year.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Backfilling proposed in 7.5 m barrier zone in two places of about .26ha.	Proposed backfilling done in .15ha. in 7.5m. earlier excavated barrier zone upto 2m. hight.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Backfilling proposed by waste.	About 2000 cu.m. waste utilised for backfilling.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on 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.
61	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.	
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed	Not applicable.	
бр	Compliance of environmental monitoring (core zone and buffer zone)	monitoring	Envirnomental monitoring carried out for ground water & ambient air quality and found within permissible limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Not proposed	Not applicable.	This is newly opened mine, lessee has done backfilling and plantation as proposed but 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	ROM mineral dispatch after sorting grade wise.	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.	Sorting proposed at mine site.	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 mineral Iron ore & Manganese ore sorted and dispatched after grading.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	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)	towards	In actual the waste dumping done in south east side of lease area.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling proposed in 7.5 m barrier zone in two places of about .26ha.	Proposed backfilling done partially in .15ha. in 7.5m. earlier excavated barrier zone & utilised about 2000 cu.m. waste.	
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)	10 treess.	No big trees exists in the lease area small bushes & trees present .Lessee planted about 60 saplings and 50 survived saplings observed during inspection.	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling observed on haul roads.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not proposed	Not applicable.	The mine working started in december 2020 ,plantation & proposed backfilling done.Due to mining i.e. pitting & waste dumping will naturally affect upt some extent to the aesthetic beauty of the around mine area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	submitted	Lessee has submitted AR for the year 2020-21 & MR upto october 2021.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer appointed & geologist not appointed.	Appointement of mining engineer mentioned in AR & Geologist appointed recently.	
9c	Annual return on land use pattern for area under	4.48ha.,dumps5ha.,reclaimed area-0,building &	The details given in AR found correct ,except dumps area i.e. about 3.18ha. for which discussed during inspection .	Violation of rule 45(5)(c) pointed out.

9d	Scrutiny of Annual return on afforestation	10 no. of trees plantation	Cumulative upto inspection about 50 survived trees observed.	
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		The stock given in AR & MR of october 2021 is found correct.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	of iron ore fines-Rs. 400/	The details given in AR i.e. cost of mining in which royalty & taxes not included for which discussed and suggested to rectify .	Violation of rule 45(5)(c) pointed out.
9h	Scrutiny of Annual return on fixed assets	In AR fixed assets given 0.	The details given in AR about fixed assets i.e. 0 is not correct for which discussed and suggested to rectify .	Violation of rule 45(5)(c) pointed out.
9k	Scrutiny of Annual return on mining machineries	Excavator 1.1c.m02 numbers & dumpers 24tonnes-04 numbers.	The details given in AR found correct.	

Details of violations observed during current inspection and compliance position of violation pointed out $\ensuremath{\mathsf{C}}$

Violation observed			Show couse position		
Rule N	NO.	Issued on	Compliance on	Rule NO.	Issued on Compliance on
MCDR17	Rule 11(1)	13-DEC-21			
MCDR17	Rule 26(2)	13-DEC-21			
MCDR17	Rule 27(1)	13-DEC-21			
MCDR17	Rule 45(5)(c 13-DEC-21			

Date :

(JAY KUMAR PANDEY)

Indian Bureau of Mines