

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MP/BGT/MN-42/NGP

Mine code : 40MPR01030

- (i) Name of the Inspecting : **G004**) **RAGHUBIR SHARAN GARG**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Pradyuman Kumar, Partner & Nominated Owner and S
Official with
Designation
- (iv) Date of Inspection : 15-SEP-23
- (v) Prev.inspection date : 06-MAR-20

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KATANGJHARI**
- (b) **Registration NO.** : **IBM/4371/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : BALAGHAT
Village : KATANGJHARI
Taluka : WARASEONI
Post office : KATANGJHARI
Pin Code : 481332
FAX No. : 07632-240516
E-mail : pradyuman@hotmail.com
Phone : 8435002150
- (f) Police Station : WARASEONI
- (g) First opening date : 03-DEC-99
- (h) Weekly day of rest : SAT
2. Address for : M/S J. K. MINERALS,
correspondance : POST BOX NO.1 MAIN ROAD,
BALAGHAT (MP) 481 001
3. (a) Lease Number : MPR1924
- (b) Lease area : 3.38
- (c) Period of lease : 30
- (d) Date of Expiry : 29-OCT-49
4. Mineral worked : MANGANESE ORE Main

I/18400/2023

5. Name and Address of the

Lessee : M/S J. K. MINERALS
 POST BOX NO. 1 MAIN
 ROAD, BALAGHAT DISTT.
 BALAGHAT (MP) BALAGHAT
 MADHYA PRADESH
 Phone:942582278
 Email. Add.: pradyuman@hotmail.com

Owner : M/s J.K.Minerals
 Main Road ,Balaghat Distt.
 Balaghat (MP) BALAGHAT
 MADHYA PRADESH
 Phone:9425822778
 FAX :

Manager Name : Dilesh Kumar Turkar,
 Qualification : Diploma In Mining
 Appointment/ : 01/08/2023 (Full time) Contact No.8435002156
 Termination date

6. Mining Engineer Name: Shri Mahtab Singh Anuragi

Qualification : B.Tech
 Date of appointment : 08/04/2022(Part Time)
 Phone No. : 8223907311
 Email.ID : msanuragi038@gmail.com

7. Geologist : Shri Venktesh Gedam

Qualification : M.Sc. Geology
 Date of appointment : 16/06/2022(Part Time)
 Phone No. : 9685331520
 Email.ID : venkteshgedam011@gmail.com

8. Date of approval of Mining : Fresh under rule 22 MCR1960 08-OCT-02
 Plan/Scheme of Mining Mining Scheme rule 12 MCDR1988 12-JAN-05
 Mining Scheme rule 12 MCDR1988 05-AUG-09
 Modif.approved Mining Scheme 20-JUN-13
 Mining Scheme rule 12 MCDR1988 22-JAN-15
 Modif.appr.Mining Plan Rule 24/07/2019
 17(3) of MCR,2016

I/18400/2023

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not proposed. However 4 core boreholes each of 130m deep were proposed against year 2019-20.	Nil. Against 4 core boreholes number of non core boreholes have been carried out by the lessee but coreboreholes had not been carried out so far.	Deviation pointed out through violation of rule 11(1) vide letter dated 25-09-2023
1b	Exploration over lease area for geological axis 1 or 2	G2: 1.86 Ha No proposal, unexplored area 1.52hect proposed 4 coreboreholes each of 130m deep against 2019-20	G2: 1.86 Ha No additional coreboreholes drilled. However number of noncoreboreholes drilled and reportedly result was not promising. , unexplored area 1.52hect proposed 4 coreboreholes each of 130m deep against 2019-20 still not carried out..	Deviation pointed out through violation of rule 11(1) vide letter dated 25-09-2023
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	1.52hect	Not explored so far.	In the light of rule 12(4) of MCDR,2017 violation letter issued on 25-09-2023 as entire lease area had not been explored under G1 level.
1e	Balance reserve as on 01/04/20	Reserves as on 01/04/2023 122-26445MT 222-3807MT	122-31386MT 222-3807MT	Due to less just half production than the envisaged one over the period from 2019-20 to 2022-23 actual reserves as on 01/04/2023 is much more than the envisaged one.

I/18400/2023

1f	General remarks of inspecting officers on geology, exploration etc	About 1.52hect area of the lease is still to be proven for mineralisation. Although there were proposal for the exploration but same was not completed in a span of last four years. There is a need of exploration. Violation of rule 11(1) & 12(4) for the deviation regarding exploration has been pointed out through violation letter dated 25-09-2023.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	1.Insitue mining- western part of the lease area extended upto northern and southern lease boundary lines. 2. Dump Mining-Old dump spread over from central portion of the lease to eastern lease boundary line from BP.No. 4 to BP.No.5	As per proposal but not On to the extent as proposed.	Deviation pointed out through violation of rule 11(1)vide letter dated 25-09-2023
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed in insitue mining	Reportedly as per proposal, as the pit was found waterlogged during site inspection.	

I/18400/2023

2c	Stripping ratio or ore to OB ratio	1:7.77	1:1.315	Less development , deviation pointed out through violation of rule 11(1)
2d	Quantity of topsoil generation in m3	Nil	Not generated.	No deviation
2e	Quantity of overburden generation in m3	4519cum	1719cum	less development, violation of rule 11(1) pointed out.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development is definitely less considering type of deposit. There is a need of further development. In this regard violation of rule 11(1) has been pointed out vide letter dated 25-09-2023.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	2907MT	1348.5MT	for less production violation of rule 11(1) pointed out.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	No deviation.
3d	Quantity of mineral reject generation	Not proposed	Not proposed	There is no mineral reject generation.
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed	Not proposed	There is no mineral reject generation.
3f	Quantity of sub grade mineral generation.	Not proposed	Not applicable	There is no sub grade mineral generation

I/18400/2023

3g	Grade of sub grade mineral generation	Not proposed	Not applicable	There is no sub grade mineral generation
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	No deviation
3j	Provision of drilling and blasting in mineral benches	Proposed with Jack Hammer with Small Dia Hole	Jack Hammer with Small Dia Hole	No deviation.
3k	Provision of mining machineries in mineral benches	Not proposed	Not applicable. Only manual mining are in practice.	No deviation.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	No deviation.
3m	Total area covered under excavation/pits	proposed for five years peruiod 1.38hect and with this additional area total area 2.28hect	With 0.6hect additional area total area 1.5hect.	less area advancement.
3n	Ore to OB ratio for the pit/mine during the year.	1:7.77	1.3151:	Less development, violation pointed out.
3o	Total area put in use under different heads at the end of year	3.19hect	about 2.12hect	On lower side. Enough FA with IBM in compression to lease area utilized under different mining and allied activities.

I/18400/2023

3p	Production of ROM mineral during the last five year period as applicable	2018-19 = 2985T 2019-20=2993T 2020-21=2993T 2021-22=2907T 2022-23=2907T and	2018-19 = 1095T 2019-20=875.833T 2020-21=1642.5T 2021-22=1896.875T 2022-23=1348.5T and	Overall only 58% of envisaged one.
3q	General remarks of inspecting officers on method of mining etc.			Adopted method of mining is the only best way of mining for the deposit. Additional Exploration is required and accordingly considering fact violation of rule 12(4) of MCDR,2017 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)	Yes	Yes	
4b	Location of topsoil, OB and mineral reject dumps	Yes, as there is only OB generation envisaged against the year so location of OB dump proposed.	Yes, as per proposal	
4c	Number of dumps within lease area and outside of lease area	Two dumps with in lease area	One dump within lease area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside the UPL except a small part of both the dumps within UPL	Outside of the UPL	
4e	Number of active and alive dumps.	Two	One	

I/18400/2023

4f	Number of dead dumps.	Not proposed	There was one old dump in which fragments of manganese ore were established and accordingly extraction of manganese ore from the said old dumps were proposed against all the five year proposal period. Accordingly lessee are extracting mineral from the said dump from 2019-20 onward.
4g	Number of dumps established.	Not proposed	Not applicable.
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed.	Garland drain are provided along the boundary
4i	Length of Retaining wall or garland drain all along dumps	Not proposed	NA
4j	Number of settling ponds	Not proposed	Two
4k	Specific comments of inspecting officer on waste dump management		There was one old dump in which fragments of manganese ore were established and accordingly extraction of manganese ore from the said old dumps were proposed against all the five-year proposal period. Accordingly, lessee is extracting mineral from the said dump from 2019-20 onward. Considering level of mining waste dump management are appears acceptable.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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I/18400/2023

5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not proposed	NA	
5b	Area under backfilling of mined out area	Not proposed	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil generation during the year under review not proposed.	Reportedly concurrently utilised in plantation .	
5d	Total area fully reclaimed and rehabilitated	Not proposed.	Not applicable at present.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Pit is not reached on backfilling and reclamation stage. External dumping is the way to go head for extraction of mineral at present.

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).	yes	Submitted	
6b	Area available for rehabilitation (ha) .	Not proposed	NA	
6c	afforestation done (ha) .	Nil	Nil	
6d	No. of saplings planted during the year	Not proposed	76	
6e	Cumulative no .of plants	Not proposed	1516	lease Area along with surrounding is with full greenery.

I/18400/2023

6f	Any other method of rehabilitation	Not proposed	NA
6g	Cost incurred on watch and care during the year	Not proposed	Not available.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed	No area matured for backfilling.
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 backfilled area	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Not done
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	50 Nos	76
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Nil	Nil

I/18400/2023

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)	Yes	Yes	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			There is no proposal w.r.t.PMCP are pending at this stage. Mine is not reached at the level of backfilling, reclamation and rehabilitation of mined out area. Only rehabilitation of waste land can be carried out which is in progress.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Dispatch 2907T Grade wise quantity sorting details not proposed	ROM dispatched quantity Nil Grade wise dispatch quantity during the yeare :- (a)Below 25% Mn 544.2T (b) 25% to below 35% Mn 810.97T (c) 35% to below 46% Mn 104.95 (d)46% and above Mn Nil (e) Dioxide ore Nil	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	

I/18400/2023

7c	Different grade of mineral sorted out at mines.	Below 25% 25% to Below 35% 35% to Below 46%	Below 25% 25% to Below 35% 35% to Below 46%	
7d	Any beneficiation process at mines .	Not proposed	NA	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			In mine there is no issues related with conservation of mineral. Whatever ROM is generated reportedly have a market . Lowest grade of mineral having Mn upto 25% have also a market.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Not done	top soil already removed from the working area.
8b	Concurrent use or storage of topsoil	NA	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	separate dumps for OB and fines	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	No area matured for backfilling.	

I/18400/2023

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	area not matured.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation	Plantation done in the barrier zone.	
8g	Survival rate	Not proposed	About 50-to 60%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Presently this is only working mine in the area . Mining operation in the mine is also not carried out upto full capacity. There is only one pit of about 140mx80m and two dumps spread over an area of 90mX80m with 1-1.5m height and 50mX50m with height of 10-11m partly within lease area. There is agriculture land almost around the lease area. There are no. of big trees within as well as out side of the lease area. So general beauty of the area is still not bad.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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I/18400/2023

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Name of Mining Engineer and Geologist given in the AR.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	(i) Already exploited & abandoned by opencast (O/C) mining 0.0 (ii) Covered under current (O/C) Workings 1.095 (iii) Reclaimed/Rehabilitated 0 (iv) Used for waste disposal 0.41 (v) Occupied by plant, buildings, residential, welfare buildings and roads 0.805 (vi) Used for any other purpose (specify) Plantation 0.076 (vii) Work done under progressive mine closure plan during the year 0.076
9d	Scrutiny of Annual return on afforestation	Given	76 saplings
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	Mineral reject generation Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	Clos.Balace as on 31/03/23:- Less than 25%-29.285MT 25 to 35% 1.844MT & Plus 35%-7.72MT

I/18400/2023

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Grade wise Ex Mine Price and Sale Value(MnO2 content) Upto 25%-4292/- 25 to 35%-8256/- and 35 to 46%-13001 Cost of Production -Rs. 6043/-	1. Cost of explosive consumption indicated as nil is not acceptable.2. Beneficiation cost has been considered as Nil 3. There are different figures w.r.t. Overhead expenses at different part ofthe AR.
9h	Scrutiny of Annual return on fixed assets	Given	o which is not acceptable	There are number of machineries insisted in the AR. In spite of value of fixed assets is indicated as 0 is not acceptable.
9k	Scrutiny of Annual return on mining machineries	Given	Type of machinery Capacity of each type of machinery Unit (in which capacity is reported) No. of machinery PUMPS (ELEC.) 480.000 L/MN 2 TIPPER 12.000 CUM 1 PUMPS (ELEC.) 150.600 L/MN 1 AIR COMPRESSOR 10.000 CUM/MN 1 ROCK DRILL (NON-ELEC.) 32.000 mm 2	

I/18400/2023

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
Rule 11(1)	25-SEP-23				
Rule 12(4)	25-SEP-23				
Rule 33(1)	25-SEP-23				
Rule 45(7)	25-SEP-23				

Date :
11/10/23

(RAGHUBIR SHARAN GARG)

Indian Bureau of Mines