

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

Mining Plan Modification REPORT

Jabalpur regional office

Mine file No : MP/STN/LST-184

Mine code : 38MPR35119

- (i) Name of the Inspecting : **K006**) **NARESH KUMAR KATARIYA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri Shyamal Kishor, Shri Shashi Kant Patel (Mine manag
Official with
Designation
- (iv) Date of Inspection : 26-APR-22
- (v) Prev. inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHATOORA (4.047HT)**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : BHATOORA
Taluka : MAIHAR
Post office : AJWAIN
Pin Code : 485771
FAX No. : N. A.
E-mail : N. A.
Phone : N. A.
- (f) Police Station : BADERA
- (g) First opening date : 01-JAN-85
- (h) Weekly day of rest : SUN
2. Address for : M/S S.N.S. (MINERALS) LTD.
correspondance : P.O. MAIHAR,
DIST. SATNA (M.P.) 485771
3. (a) Lease Number : MPR0465
(b) Lease area : 4.05
(c) Period of lease : 30
(d) Date of Expiry : 21-DEC-21
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : S.N.S.(MINERALS) LTD.
P.O. KACHANGAON, VIA
KYMORE, JUKEHI (C.RLY),
KATNI MADHYA PRADESH
Phone:07674-232042
FAX :07674-232042

Owner : S.N.S.(MINERALS) LTD.
P.O. KACHANGAON, VIA
KYMORE, JUKEHI (C.RLY),
KATNI MADHYA PRADESH
Phone: 07674-233648
FAX : N. A.

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	09-JUN-99
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	22-DEC-04
		Mining Scheme rule 12 MCDR1988	15-NOV-11
		Mining Scheme rule 12 MCDR1988	17-JUN-13
		MP review under 17(1) MCR 2016	10-OCT-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not proposed	NOT DONE	
1b	Exploration over lease area for geological axis 1 or 2	Not proposed	G2 : 4.047 HA.	Proposal of exploration under G1 category is proposed in the latest approved document in the year 2022-23.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified in the approved document	Exploration not done in the RY	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G2 : 4.047 HA.	G2 : 4.047 HA.	
1e	Balance reserve as on 01/04/20		Balance reserve as on 01.04.2022 under 122 category - 0.047 Million Tonne	Proposal of exploration under G1 category is proposed in the latest approved document in the year 2022-23.
1f	General remarks of inspecting officers on geology, exploration etc			Proposal of exploration under G1 category is proposed in the latest approved document in the year 2022-23. The general succession of rock in the lease area is OB Soil 3m to 5m, Limestone Shale 0.5m to 2m, Limestone interbedded with shale 30m.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	N - 2664440 to 2664550 E - 466990 to 467145	N - 2664440 to 2664550 E - 466990 to 467145	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	OB - 02 benches Limestone - 01 bench	Separate benches of 7.5m height in limestone & OB shall be maintained in the mine and bench widths at the mine shall be 7.5m to 10m for limestone & OB respectively. But, during inspection it was observed that the benches in the eastern part, western part and some other areas of the Quarry-2 were found merged up and high wall has been created resulting height of the benches found more than the proposal. And, it was also observed that at some places width of the benches found less than approval.	Violation pointed out for the same under rule 11(1) of MCDR-2017.
2c	Stripping ratio or ore to OB ratio	1:0.11	1:0.11	
2d	Quantity of topsoil generation in m3	Not Proposed	NIL	
2e	Quantity of overburden generation in m3	438 m3	No records.	Violation pointed out for the same under rule 11(1) of MCDR-2017.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	during inspection it was observed that the benches in the eastern part, western part and some other areas of the Quarry-2 were found merged up and high wall has been created resulting height of the benches found more than the proposal. And, it was also observed that at some places width of the benches found less than approval. The mine development was lagging from the proposal and not as per the approved proposals of approved document. Violation pointed out for the same.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one pit	one pit	
3b	Quantity of ROM mineral production proposed	9850 Tonnes	9850 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100% recovery is proposed	100% recovery as per records.	
3d	Quantity of mineral reject generation	NIL	NIL	

3e	Grade of mineral rejects generation and threshold value declared.	No mineral reject is proposed.	No mineral reject as per records.
3f	Quantity of sub grade mineral generation.	NIL	NIL
3g	Grade of sub grade mineral generation	NA	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Not proposed	Not done
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Not done
3j	Provision of drilling and blasting in mineral benches	Drilling and blasting proposed	Drilling and blasting done in the mine as per AR. Small dia. (upto 32mm) holes drilled and 985 Kg NitroCompound and Detonators & Safety fuses are used in the mine.
3k	Provision of mining machineries in mineral benches	Use of mining machinery proposed	AIR COMPRESSOR 175 CUM/MN - 1 no ROCK DRILL (NONELEC.) 122 MM - 1 no BACK HOE 1.0 CUM - 1 no DUMPER 16 TONNE - 2 nos WHEEL LOADER 2 CUM - 1 no WATER TANKER 6000 LITRE - 1 no PUMPS (ELEC.) - 1 no

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	separate benches of 7.5m height in limestone & OB shall be maintained in the mine and bench widths at the mine shall be 7.5m to 10m for limestone & OB respectively.	The benches in the eastern part, western part and some other areas of the Quarry-2 were found merged up and high wall has been created resulting height of the benches found more than the proposal. And, it was also observed that at some places width of the benches found less than approval.	Violation pointed out for the same under rule 11(1) of MCDR-2017.
3m	Total area covered under excavation/pits	3.400 HA.	3.400 HA.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.11	1:0.11	
3o	Total area put in use under different heads at the end of year	3.508 HA.	3.508 HA.	
3p	Production of ROM mineral during the last five year period as applicable	2017-18 42187 MT 2018-19 57865 MT 2019-20 73492 MT 2020-21 34478 MT 2021-22 9850 MT	2017-18 NIL (Lapse period) 2018-19 57800 MT 2019-20 70500 MT 2020-21 34000 MT 2021-22 9850 MT	

3q	General remarks of inspecting officers on method of mining etc.	The benches in the eastern part, western part and some other areas of the Quarry-2 were found merged up and high wall has been created resulting height of the benches found more than the proposal. And, it was also observed that at some places width of the benches found less than approval. Violation pointed out for the same.
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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 of OB was proposed in the approved document.	OB dump was observed in the lease area as per proposal.	
4b	Location of topsoil, OB and mineral reject dumps	Western portion of the lease	Western portion of the lease	
4c	Number of dumps within lease area and outside of lease area	One dump within lease area	One dump within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside ultimate pit limit Between pillar no. 02 & 03	outside ultimate pit limit Between pillar no. 02 & 03	
4e	Number of active and alive dumps.	One dump	One dump	
4f	Number of dead dumps.	NIL	NIL	

4g	Number of dumps established.	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain not proposed	Garland drain constructed around the dump	
4i	Length of Retaining wall or garland drain all along dumps	Not specified in the document.	Garland drain 200m x 1.5m x 1m	
4j	Number of settling ponds	Not proposed	Not constructed	
4k	Specific comments of inspecting officer on waste dump management			Waste dump management was carried out in line with the approved mining plan. No any dump is established in the RY.

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 mineral is proposed before commencement of backfilling	Full extraction of mineral is being done as per records.	
5b	Area under backfilling of mined out area	0.9 Ha	606 Tonnes O/B filled in .0.9 Ha area as per records.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil proposed to be used in plantation which is stored in the lease area.	Top soil is being used for plantation	
5d	Total area fully reclaimed and rehabilitated	1.05 ha	1.05 ha	1.05 ha area reclaimed by Back flling and plantation is in progress.

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Plantation has been done on the backfilled area. 1.05 ha area reclaimed by Backfilling.
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Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	The yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted for the year 2021-22.	Violation pointed out for the same under rule 26(2) of MCDR-2017.
6b	Area available for rehabilitation (ha) .	Not proposed	Fully rehabilitation has not been done.	Backfilling was done in 1.05 ha area & plantation is in progress.
6c	afforestation done (ha).	Not proposed	500 saplings in 1 ha area as per AR and records	approx 400 plants observed in the area.
6d	No. of saplings planted during the year	500 nos	approx 400 plants/saplings were observed in the area.	
6e	Cumulative no .of plants	Not specified in the document	approx 500 plants observed in the lease area.	
6f	Any other method of rehabilitation	Not proposed	Not done.	
6g	Cost incurred on watch and care during the year	Not specified	No record	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	34000 sqm	34000 sqm	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	10500 sqm	10500 sqm
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	10500 sqm	10500 sqm
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	Not done
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not proposed	Not done
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not proposed	Not done
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation in conceptual stage	Not started.

6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Records found for environmental monitoring	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted for the year 2021-22. Plantation was observed on the backfilled area and near office area.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral dispatched is proposed with Grading, Sorting & Sizing proposed within ML.	ROM is being dispatched from the lease area as per records.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Not proposed. ROM dispatch is proposed.	Grade wise minereal stacks not observed during inspection.	Direct dispatch of Limestone from ML/mine.
7d	Any beneficiation process at mines .	Not proposed	Not done	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROM is being dispatched from the lease area as per records. Mineral above threshold limit is being dispatched directly from the ML area.

 Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Utilization of Top Soil for plantation in the backfilled area and barrier zone.	
8b	Concurrent use or storage of topsoil	Proposed	Top soil used for plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed	OB dump observed in the ML	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	OB is being used for backfilling of mined out area	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed	Backfilling is being done. Plantation is on progress on the backfilled area.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No records	Approx 500 plants observed in the lease area.	
8g	Survival rate	85%	80%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Mine was not in operation during the inspection due to unavailability of approved document.

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Mine was not in operation during the inspection due to unavailability of approved document. Plantation was observed in the ML area.
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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 returns from April 2021 to March 2022 submitted. Annual Return for the year 2021-22 submitted on 28.06.2022.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Manager & Mining Engineer - Shri Shashi Kant Patel Geologist - Shri Satish Kumar Soni	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	(i) Already exploited & abandoned by opencast (O/C) mining 3.4 Hect (ii) Covered under current (O/C) workings 0.100 (iii) Work done under progressive mine closure plan during the year_ 1.05 Hect	
9d	Scrutiny of Annual return on afforestation	Yes	Trees planted during the year : 500 nos. Survival rate in percentage 85%	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	NIL	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	Cement Grade Closing Stock 159.640 Tonne (31.03.2022)
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Sale value 350.62/- per tonne Ex mine price Rs. 350.62/-per tonne Production costs Rs. 257/-per tonne
9h	Scrutiny of Annual return on fixed assets	Yes	Fixed assets value - Rs. 25540290/-
9k	Scrutiny of Annual return on mining machineries	Yes	1. AIR COMPRESSOR 175 CUM/MN 1- one 2. ROCK DRILL (NON ELECC.) 122 MM 1- one 3. BACK HOE 1 CUM - two 4. DUMPER 16 Tonnes - four 5. WHEEL LOADER 2 CUM- one 6. WATER TANKER 6000 LTR- one 7. PUMPS (ELEC.) 99999.999 L/MN 1- one

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)	11-JUL-22			
MCDR17	Rule 26(2)	11-JUL-22			
MCDR17	Rule 34(1)	11-JUL-22			

Date :

(NARESH KUMAR KATARIYA)

Indian Bureau of Mines