

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/SATNA/LST -295

Mine code : 38MPR35150

- (i) Name of the Inspecting : **KQ06**) **NARESH KUMAR KATARIYA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sh S. Kumar (Rep of Lessee), Sh Gautam Karmakar (Mini
Official with
Designation
- (iv) Date of Inspection : 08-SEP-22
- (v) Prev.inspection date : 30-NOV-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TAMORIA (42.567 HA)**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : SATNA
Village : TAMORIA
Taluka : MAIHAR
Post office : BHATIA
Pin Code : 485771
FAX No. : N. A.
E-mail : N. A.
Phone : N. A.
- (f) Police Station :
- (g) First opening date : 16-FEB-01
- (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 : MPR2225
(b) Lease area : 42.57
(c) Period of lease : 30
(d) Date of Expiry : 23-APR-31
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	:	Fresh under rule 22 MCR1960	22-MAR-00
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	31-AUG-07
		Mining Scheme rule 12 MCDR1988	04-MAY-12
		Mining Scheme rule 12 MCDR1988	20-NOV-15
		MP modif under 17(3) MCR 2016	25-OCT-17

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NA	--
1b	Exploration over lease area for geological axis 1 or 2	4 core BH proposed in 2021-22 (Total 120 mtr)	4 Core BH done (Total 120 mtr)	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	RK Drilling Works, Itarsi	RK Drilling Works, Itarsi, Expenditure Rs. 390816/-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Area to be explored as per approved document	Exploration done as per proposal. No any bore hole pending as per approved document.	
1e	Balance reserve as on 01/04/20		Balance reserved as on 31.03.2022 is 8.4253 Million Tonne	

1f General remarks
of inspecting
officers on
geology,
exploration etc

The occurrence of limestone in the applied area is stratigraphically controlled and is associated with Nagod limestone of Bhandar Group of Vindhyan Super Group. Rock of this formation comprise of shale and limestone. These rocks are structurally undisturbed having general trend in WNW-ESE with low dip or 10-20 North. Tamoriya is situated in the western extend of upper Bhandar Basin and hence water was very shallow because mud stone (reject stone) is deposited in layers.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N - 2687390 to 2687790 E - 489250 to 489990	N - 2687390 to 2687790 E - 489250 to 489990	Mine development has been carried out as per proposal.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	OB Soil - 1 bench (3m x 3m) OB Dolomitic Shaly/Reject Stone - 1 bench (4m x 7m) Limestone - 3 benches (7m x 12m)	OB Soil - 1 bench (3m x 3m) OB Dolomitic Shaly/Reject Stone - 1 bench (4m x 7m) Limestone - 3 benches (7m x 12m)	

2c	Stripping ratio or ore to OB ratio	1:1.74	1:1.75	
2d	Quantity of topsoil generation in m3	7500 cum top soil 37500 cum sub soil	7200 cum top soil 36000 cum sub soil	
2e	Quantity of overburden generation in m3	209418 m3	209000 m3	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development of pit : It was proposed to develop the quarry 2 towards North and East while quarry 3 has been advanced towards North, East & West. The advancement of quarry 2 towards East and quarry 3 towards west are in order to merge both the quarries in future and to regularize the benches. Types of deposit : The deposit is bedded, stratiform and tabular deposit of regular habit. The litho logical succession w.r.to. local litho-units being encountered in the lease area from top to bottom is

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 pits	2 pits	

3b	Quantity of ROM mineral production proposed	364731 Tonnes	360000 Tonnes
3c	Recovery of sailable/usable mineral from ROM production	100%	100%
3d	Quantity of mineral reject generation	NIL	NIL
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Nil
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	MECHANIZED	MECHANIZED
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	YES	As per apporved document.
3k	Provision of mining machineries in mineral benches	YES	As per approved document.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	YES	OB Soil - 1 bench (3m x 3m) OB Dolomitic Shaly/Reject Stone - 1 bench (4m x 7m) Limestone - 3 benches (7m x 12m)

3m	Total area covered under excavation/pits	16.900 HA.	16.900 HA.	
3n	Ore to OB ratio for the pit/mine during the year.	1:1.74	1:1.75	
3o	Total area put in use under different heads at the end of year	21.900 Ha.	21.900 Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2017-18 285335 Tonne 2018-19 275063 Tonne 2019-20 276225 Tonne 2020-21 279200 Tonne 2021-22 364731 Tonne 2017-18 285335 Tonne 2018-19 275063 Tonne 2019-20 276225 Tonne 2020-21 279200 Tonne 2021-22 364731 Tonne 2017-18 285335 Tonne 2018-19 275063 Tonne 2019-20 276225 Tonne 2020-21 279200 Tonne 2021-22 364731 Tonne 2017-18 285335 Tonne 2018-19 275063 Tonne 2019-20 276225 Tonne 2020-21 279200 Tonne 2021-22 364731 Tonne	2017-18 285335 Tonne 2018-19 275063 Tonne 2019-20 276225 Tonne 2020-21 279200 Tonne 2021-22 364731 Tonne	
3q	General remarks of inspecting officers on method of mining etc.			Opencast mechanized method of mining will be adopted in the lease area. All operation of mining such as development, winning of ore, drilling, blasting, loading and transport will be carried out by utilizing HEMM.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dump of OB proposed.	Separate dumps observed for OB during the inspection.
4b	Location of topsoil, OB and mineral reject dumps	North West portion of the lease	North West portion of the lease
4c	Number of dumps within lease area and outside of lease area	03 OB dumps & 01 soil dump (within lease area)	03 OB dumps & 01 soil dump (within lease area)
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Location of the dumps proposed within UPL as temporary dumps. Dumps are proposed to use for backfilling of the excavated area in future.	within UPL as temporary dumps
4e	Number of active and alive dumps.	01 (Reject Stone)	01 (Reject Stone)
4f	Number of dead dumps.	Not proposed	NA
4g	Number of dumps established.	Not proposed	NA
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain proposed	Garland drain constructed
4i	Length of Retaining wall or garland drain all along dumps	Garland drain proposed	Garland drain 100m x 1m x 1m
4j	Number of settling ponds	One	One

4k	Specific comments of inspecting officer on waste dump management	Reject stone is stacked in dump and OB/waste has been used in backfilling in mined out area. Soil is being spreaded on the backfilled area for plantation purpose and it is also stacked as soil dump.
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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 before backfilling	Full extraction of mineral before backfilling	
5b	Area under backfilling of mined out area	0.700 ha.	0.700 ha.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil proposed to be used in backfilling & plantation	Top soil used in backfilling & plantation	
5d	Total area fully reclaimed and rehabilitated	4.200 ha.	4.200 ha.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling has been done in 0.700 ha area for reclamation as per proposal in 2021-22. Plantation has been done on the backfilled area.

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) .	NIL	NIL	
6c	afforestation done (ha).	1.5 Hect	1.5 Hect	
6d	No. of saplings planted during the year	1800 plants	2000 plants	
6e	Cumulative no .of plants	Not specified	7055 as per record	
6f	Any other method of rehabilitation	Not proposed	NA	
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	2.500 ha.	2.500 ha.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.700 ha.	0.700 ha.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	1.500 ha.	1.500 ha.	

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	100 plants in green belt	100 plants in green belt	
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	Plantation	Plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes up to May 2022	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Yearly report of PMCP compliance submitted for 2021-22 . Backfilling & plantation has been done as per proposal.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Direct dispatch of Lime stone from ML/mine.	Direct dispatch of Lime stone from ML/mine.
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	NA
7d	Any beneficiation process at mines .	Not proposed	NA
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Direct dispatch of Lime stone from ML above 34% CaO & below 5% MgO as per records.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Utilization of Top Soil for plantation. Top soil stacked as seperated dump as per proposal.	
8b	Concurrent use or storage of topsoil	Proposed	Top soil is being used for plantation and stored as per proposal.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed	Seperate dump of OB (Reject stone) observed.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB proposed for Backfilling	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	Phased restoration by backfilling of mined out area and plantation.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed	1600 saplings planted in the ML area	
8g	Survival rate	Not specified	85%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation has been observed in the green belt and on the backfilled area for Aesthetic beauty within lease area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	Monthly Return submitted upto July 22, Annual Returns submitted for 2021-22 on 28.06.2022	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Manager - Shri Goutam Karmakar Mining Engineer - Shri Taiyab Ali Geologist- Shri Manoj Kumar Tripathi
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 = 15.400 ha. (ii) Covered under current (O/C) Workings = 1.500 ha. (iii) Reclaimed/Rehabilitated : 0.700 ha. (iv) Used for waste disposal : 0.000 ha. (v) Occupied by plant, buildings, residential, welfare buildings & roads : 0.250 ha. (vi) Other Purpose : 0.000 ha. (vii) Work done under progressive mine closure plan during the year : 0.700 ha.
9d	Scrutiny of Annual return on afforestation	Yes	(i) Number of trees planted during the year 1600 nos. (1500 plants in B/F area and 100 plants in Green Belt) (ii) 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 2713.750 Tonne (31.03.2022)

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Sale value : Rs. 143384952.50 Ex mine price Rs. 398.89 Production cost : Rs. 329.06
9h	Scrutiny of Annual return on fixed assets	Yes	Value of Fixed Assets (in Rs) 54622102
9k	Scrutiny of Annual return on mining machineries	Yes	S. No MACHINERY CAPACITY NO. OF UNITS 1 AIR COMPRESSOR 175 CUM/MN 1 2 ROCK DRILL 122 MM 2 3 BACK HOE 1 CUM 3 4 DUMPER 16 T 10 5 WHEEL LOADER 2 CUM 1 6 WATER TANKER 6000 LTR 1 7 PUMPS (ELEC.) 99999.999 L/MN 2

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

Date :

(NARESH KUMAR KATARIYA)

Indian Bureau of Mines