

INDIAN BUREAU OF MINES

MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection Report

Jabalpur regional office

S.N.	Particulars	Details
1	Name of the Mine	Tilaura Limestone Mine
	Date of Inspection:	14-12-2024
	Name of Inspecting Officer	Akash Arun Mittarwar, Assistant Mining Engineer
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	3.774 Hect.
3	Mine code	38MPR35230
4	IBM Registration Number under rule 45 of MCDR,1988	IBM/1171/2011
5	Last Inspection Details	28/02/2024 by Shri Kathroju Naveen, SR. ACOM
6	Mine official present during the inspection	Shri Vineet Singh (Mining Engineer) & Shri Satish Kumar Soni (Geologists)
7	Name of the Lessee, Address, Phone, email and faxnumber	Shri Shatrughan Prasad Tiwari (Nominated Owner), M/s S.N.S. Minerals Pvt. Limited, NH 7 Rewa Road, PO Maihar, District Satna (M.P.) – 485771 Phone - 8435801461 E-mail: - snsahr@gmail.com
8	Village	Tilaura
9	Taluka/Mandal	Maihar
10	District	Satna
11	Pin code	485771
12	State	Madhya Pradesh
13	Post Office	Maihar
14	Nearest Police Station	Maihar
15	Nearest Railway Station	Maihar
16	Date of Grant of Mining Lease	22/09/1995
17	Date of Execution	11/12/1995
18	Lease period	11/12/1995 to 10/12/2045
19	Date of opening of Mine	29/12/1994
20	Initial Grant	11/12/1995 to 10/12/2015
21	Date of First Renewal, if applicable and its period & expiry	11/12/2015 to 10/12/2045
22	Date of Second Renewal, if applicable and its period & expiry	NA
23	Date of Third Renewal, if applicable and its period & expiry	NA
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA

25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Shatrughan Prasad Tiwari (Nominated Owner), M/s S.N.S. Minerals Pvt. Limited, NH 7 Rewa Road, PO Maihar, District Satna (M.P.) – 485771 Phone - 8435801461 E-mail: - snsahr@gmail.com
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	NA
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	NA
28	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Vineet Singh (Mining Engineer) Qualification – B. E. (Mining) Date of Appointment – 04/07/2023 Mobile, Email – 8085124304, snsahr@gmail.com Shri Satish Kumar Soni (Geologist) Qualification - M.Sc. (Geology), Date of Appointment – 08/03/2024 Mobile, Email - 8435801461, snsahr@gmail.com
29	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	Mining plan under rule 11 of MCDR,1988 – 29-DEC-94 Scheme of Mining under Rule 12(3) of MCDR1988 – 06-DEC-07 Scheme of Mining under Rule 12(3) of MCDR1988 – 15-NOV-21 Scheme of Mining under Rule 12(3) of MCDR1988 – 16-APR-15 Modification of Mining plan under rule 17(3) of MCDR,2017 – 26-JUN-15 Review of Mining plan under rule 17(2) of MCDR,2017 – 30-JUN-20 Modification of Mining plan under rule 17(3) of MCDR,2017 – 11-OCT-24
30	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	NA
31	Mineral(s) granted in lease and approved for Mining	Limestone
32	Method of Mining (Opencast, Underground)	Opencast
33	Category (Fully Mechanized, Others or Manual)	A
34	Captive/Non-Captive	Non-Captive

Exploration

S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	Not proposed	Not applicable	
1b	Exploration over lease area for Geological axis 1 or 2.	Not proposed	Not applicable	
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not specified	Not specified	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Not proposed	Not applicable	
1e	Balance reserves as on 01.04.2023	Nil	Balance reserve as on 01/04/2024 – 111-361524.25 tonnes (Limestone)	
1f	General remarks of Inspecting officer on geology, exploration etc.	Entire lease area has already been explored up to G1 Level of exploration. The mineral reserve has been classified under G1 stage of confidence level based on the structural disposition, lithological exposures, local geology and results of Exploration done. The area is fully explored. Influence of 100-200m has been taken of quarry and bore holes given at 200m spacing for G1 level. The limestone of lease area has cement grade occurrence.		

Development

S.N.	Item	Proposals	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	Towards East of quarry.	As per proposal	
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Benches in Topsoil - 1, Overburden bench - 1, Mineral – 1 bench of 6 m height is proposed.	As per proposal	
2c	Stripping ratio or ore to OB ratio	1:1.54	1:1.54	
2d	Quantity of topsoil generation in m ³	1375 cu.m	900 cu.m	Less Top soil & OB was achieved due to the temporary discontinuance of mine from 01/04/2023 to 08/03/2024
2e	Quantity of overburden generation in cu.m	9832 cu.m	6500 cu.m	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development was carried out in quarry towards East direction as per proposal during the month of March, 2024 only as the said mine was temporary discontinuance from 01/04/2023 to 08/03/2024. Nagod Limestone is stromatolitic limestone and comprises grey-bluish grey, well bedded limestone bands. Light colored clayey limestone inter beds are present, generally near the upper contact. Limestones occur as intercalated with mud stone / Reject stone. The whole Lease area is mineralized. Total length of Limestone deposit in the lease area 250m. Width of Limestone deposit in the lease area 150 m. Bedded stratiform and tabular deposits of regular habit.		

Exploitation

S.N.	Item	Proposals		Actual Work	Remarks
3a	Number of pits proposed for production	One pit		One pit	
3b	Quantity of ROM mineral production proposed (2023-24)	18170 tonnes		12000 tonnes	Less production was achieved due to the temporary discontinuance of mine from 01/04/2023 to 08/03/2024
3c	Recovery of Salable/usable mineral from ROM production	100 %		100 %	
3d	Quantity of mineral reject generation	Not proposed		Not applicable	
3e	Grade of mineral reject 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/Mechanized method adopted for segregation from ROM	Mechanized		Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed		Not applicable	
3j	Provision of drilling & blasting in mineral benches	Proposed		Drilling & blasting carried out as proposed.	
3k	Provision of mining machineries in mineral benches	Proposed		Drilling & blasting using electrical drill machine are in practice as mechanised method of mining was adopted. Air compressor – 1 – 175 cu.m/min Back hoe -1 – 1 cu.m Dumper – 2 -15 tonnes Rock drill – 1 – 120 mm.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed		Height of o/b & mineral benches is suitable for method of mining as proposed.	
3m	Total area covered under excavation /pits	2.53 hect.		1.260 hect.	
3n	Ore to OB ratio for the pit/mine during the year	1:1.54		1:1.54	
3o	Total area put in use under different heads at the end of year	2.59 hect.		1.5 hect.	
3p	Production of ROM mineral during	2019-20	24975 t	2019-20 – 24900 t	
	last five-years period, as Applicable	2020-21	20700 t	2020-21- 20700 t	

		2021-22	24993 t	2021-22 – 24800 t	
		2022-23	15187 t	2022-23 – 5000 t	
		2023-24	18170 t	2023-24 – 12000 t	
3q	General remarks of inspecting officer on method of mining etc	Category A mines have adopted mechanized method of mining. The excavation of mineral done by with shovel-dumper combination & transportation through hired trucks & tippers.			

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Topsoil & OB generated during the year proposed for backfilling in excavated area in 7.5m barrier zone in West of quarry.	As per proposal	
4b	Location of topsoil, OB & mineral reject dumps	OB proposed for backfilling of barrier zone from BP – 1 to 4 & BP – 15 to 19/1. Top soil used for spreading for plantation.	Backfilling already done	
4c	Number of Dumps within lease area and outside lease area	Not proposed	Not applicable	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Not proposed	Not applicable	
4e	Number of Active & Alive dumps	Not proposed	Not applicable	
4f	Number of dead dumps	Not proposed	Not applicable	
4g	Number of dumps established	Not proposed	Not applicable	
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 dump	Not proposed	Not applicable	
4j	Number of settling ponds	Not proposed	Not applicable	
4k	Specific comments of inspecting officer on waste dump management	OB generated during the year used for backfilling in excavated area in 7.5m barrier zone & top soil generated during the year utilized for spreading over backfilled area for plantation.		

Solid Waste Management-Backfilling

S.N.	Item	Proposals	Actual Work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Full extraction of mineral from mined out area is proposed	Full extraction of mineral under progress up to the UPD	
5b	Area under backfilling of mined out area	Not Proposed	Not Applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not Proposed	Not Applicable	

5d	Total area fully reclaimed & rehabilitated	Not Proposed	Not Applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc	No proposal of backfilling of mined out area, reclamation & rehabilitation during the year.		

Progressive Mine Closer Plan

S.N.	Item	Proposals	Actual Work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly- Rule 23E (2). Details should be given in the format as given in Annexure-20	Proposed	Submitted	
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (Ha)	Not proposed	Not applicable	
	ii) Afforestation done (ha.)	Not proposed	Not applicable	
	iii) No. of saplings planted during the year	Not proposed	Not applicable	
	iv) Cumulative no. of plants	Not proposed	Not applicable	
	v) Any other specific method of rehabilitation	Not proposed	Not applicable	
	vi) Cost incurred on watch & care during the year	Not Specified	Not applicable	
6C	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L*B*D) ii) Void filled by waste/tailings iii) Afforestation on the backfilling iv) Rehabilitation by making water reservoir v) Any other specific means	5000 sq. m 4844 cu. m Not Proposed Not Proposed Not Proposed	As per proposal As per proposal 284 saplings planted Not applicable Not Applicable	Backfilling work of barrier zone from BP – 1 to 4 & BP – 15 to 19/1.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitation iii) Method of rehabilitation	Not Proposed	Not applicable	
6e	Compliance of Environment monitoring (core zone & Buffer zone)	Proposed	Within prescribed limit	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Backfilling of barrier zone & plantation over backfilled area has been observed.		

Mineral Conservation

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or gradewise sorting within lease area	ROM mineral dispatch to cement & Refractory industries	As per proposal	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	
7c	Different grade of mineral sort out at mine	Cement & Refractory grade	As per proposal	
7d	Any beneficiation process at mines	Not Proposed	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Minerals produced from this mine used only for manufacturing cement & Refractory industries		

Environment

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Proposed for topping over backfilled area.	As per proposal	
8b	Concurrent use or storage of topsoil	For plantation over backfilled area.	As per proposal	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Not proposed	Not Applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	For backfilling in excavated area in 7.5m barrier zone from BP – 1 to 4 & BP – 15 to 19/1.	As per proposal	
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 & additional plantation done (Rule 41)	NA	284 saplings were planted.	
8g	Survival rate	90%	90%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling on roads to control airborne dust carried out with the use of water tanker	

8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Plantation was done in the proposed location. Needs improvement for aesthetic beauty in and around mine area.
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Compliance of Rule 45:-

S.N.	Item	Proposals	Actual Work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted both Monthly & Annual Returns	Submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer and Geologist	Shri Vineet Singh (Mining Engineer) & Shri Satish Kumar Soni (Geologists)	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Covered under current (O-C) Workings – 1.260 hect. Infrastructure – 0.050 hect. Others to specify – 0.753 hect. Reclaimed-rehabilitated – 0.140 hect. Others (bund) – 0.050 hect.	
9d	Scrutiny of Annual return on afforestation	Yes	284 number of saplings were planted.	
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	ROM closing stock as on 01/04/2024 – Limestone – 2000.00 (Cement)	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Ex. Mine price - Limestone – 509.00	
9h	Scrutiny of Annual return on fixed assets	Yes	Value of Fixed Assets* (₹516266)	
9k	Scrutiny of Annual return on mining machineries	Yes	Drilling & blasting using electrical drill machine are in practice as mechanised method of mining was adopted. Air compressor – 1 – 175 cu.m/min Back hoe -1 – 1 cu.m Dumper – 2 -15 tonnes Rock drill – 1 – 120 mm.	

Details of Violations observed during current inspection and compliance position of violation pointed out:- Nil

Name: Akash Arun Mittarwar
Designation: Assistant Mining Engineer