

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

MCDR INSPECTION REPORT

Dehradun regional office

Mine file No : UP/ALM/MAG-1

Mine code : 39UPR04001

- (i) Name of the Inspecting : 003) Manish Maindiratta
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 14-MAR-23
- (v) Prev.inspection date : 09-MAR-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : JHIROLI(53.2071H)
- (b) **Registration NO.** :
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : UTTARAKHAND
- District : BAGESHWAR
- Village : JHIROLI
- Taluka : BAGESHWAR
- Post office : BILLORI
- Pin Code : 263630
- FAX No. : 05962-234161
- E-mail : INFO@ALMORAMAGNESITE.COM
- Phone : 05962-255026
- (f) **Police Station** : JHIROLI
- (g) **First opening date** : 01-AUG-72
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : VILLAGE-MATELA, POST-BILLORI
DISTRICT-BAGESHWAR,
UTTARANCHAL
3. (a) **Lease Number** : UPR0037
- (b) **Lease area** : 165.08
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 31-MAR-30
4. **Mineral worked** : MAGNESITE Main
LIMESTONE Associated

5. Name and Address of the

Lessee : ALMORA MAGNESITE LTD.
 RANIDHARA ROAD ALMORAH
 ALMODA UTTARAKHAND
 Phone:
 FAX :

Owner : YOGESH SHARMA
 M/S ALMORA MAGNESITE LTD
 RANIDHARA ROAD, ALMORA, UK
 BAGESHWAR UTTARAKHAND
 Phone:
 FAX :

Agent : YOGESH SHARMA
 M/S ALMORA MAGNESITE LTD
 RANIDHARA ROAD, ALMORA, UK
 BAGESHWAR UTTARAKHAND
 Phone:
 FAX :

Mining Engineer

Name : Anil Kumar, Full Time
 Qualification : B. Sc. (Mining Engineering)
 Appointment/ : 01-SEP-93
 Termination date

Manager

Name : G. P. MOHAPATRA
 Qualification : B.E. (MINING) & FCC
 Appointment/ : 01-MAY-09 01-JAN-11
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	14-FEB-94
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	24-OCT-00
		Renewal under rule 22 MCR1960	10-AUG-06
		Mining Scheme rule 12 MCDR1988	25-JUL-13

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	20 Bore holes-2000m drilling proposed	Nil	violation of rule 11(1) pending
1b	Exploration over lease area for geological axis 1 or 2	G1-35.6913 ha G-2-34.4194 ha G3-94.9753 ha	No new exploration has been added to enhance the level of exploration	The unexplored area largely area consists of Dolomite rock as per surface geology
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	As per minng plan 94.9753 ha needs to be upgraded to G1 or G2. 34.4194 needs to be upgraded from G3 to G2	No new exploration has been added to inhance the level of exploration	
1e	Balance reserve as on 01/04/20	Reserves as on 01.03.2021 Magnesite Reserves- 8.782 mT Rrsources- 5.371 mT Limestone: Reserves- 0.8205 mT Resources- 4.4521 mT	Magnesite Depletion in March 2021-0.00341 mT 2021-22-0.025427 mT Balance reserves as on 01.04.2022 Magnesite Reserves(111/121/122)- 8.753 mT Limestone: Reserves-0.8205 mT Resources-4.4521 mT	
1f	General remarks of inspecting officers on geology, exploration etc			Nil

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

2a	Location of development w.r.t. lease area	Proposed at 3 locations Pit-1A, 1B, and Pit 2	Development has been found to be comparatively less as compared to production. The fact is reflected in the low ore: OB ratio.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed	Benches developed
2c	Stripping ratio or ore to OB ratio	1:6.6	25427:74903 i.e, 1:2:9
2d	Quantity of topsoil generation in m3	No proposal are incorporated	Nil
2e	Quantity of overburden generation in m3	142857 cu.m (400000T)	74903T
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The Development is lesser than proposed, which need to be undertaken the the interest of systematic mining of magnesite further.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	As per proposal 3pits	Broadly as per proposal	
3b	Quantity of ROM mineral production proposed	Magnesite RoM proposed during 2021-22 was 60000 T. Limestone ROM proposed during 2021-22 wa nil	Magnesite ROM production during 2021-22 is 25427.39 T Limestone ROM production during 2021-22 was nil Dolomitic rock(O/B) despatched 26726.98 T	
3c	Recovery of sailable/usable mineral from ROM production	90% recovery from ROM (Magnesite)	Only few small subgrade dumps have been seen.	
3d	Quantity of mineral reject generation	No Proposal are incorporated	208T mineral reject generated	

3e	Grade of mineral rejects generation and threshold value declared.	Not applicable	Reject grade Mgo less than 30%
3f	Quantity of sub grade mineral generation.	No Proposal are incorporated	Not applicable
3g	Grade of sub grade mineral generation	Not applicable	Not applicable
3h	Manual / Mechanised method adopted for segregating from ROM	No Proposal are incorporated	Not applicable
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not applicable	Not done
3j	Provision of drilling and blasting in mineral benches	Proposal given	OB is removed by large diameter blasting along with jack hammer is being used in the excavation with mechanised loading and transporation, Blasting operation was was proposed by safety fuse and ordinary detonator.
3k	Provision of mining machineries in mineral benches	Hydrolic excavator, loaders, tippers proposed	Provided for the purpose at sites
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, Average Height of benches proposed are 8 m	Brodly as per Proposal
3m	Total area covered under excavation/pits	337.6647 ha at the end of 2025-26	36 ha approx
3n	Ore to OB ratio for the pit/mine during the year.	1:6.6	25427:74903 i.e1:2:9

3o	Total area put in use under different heads at the end of year	-	-	
3p	Production of ROM mineral during the last five year period as applicable	2017-18-59776 Tonnes 2018-19-59990 Tonnes 2019-20-59996 Tonnes 2020-21-60000 Tonnes 2021-22-60000 Tonnes	2017-18- 36602 Tonnes 2018-19- 34420 Tonnes 2019-20-32758 Tonnes 2020-21-24437 Tonnes 2021-22-25427 Tonnes	
3q	General remarks of inspecting officers on method of mining etc.			OB i.e dolomitic rock is being despatched by the lessee after permission from the State Government.

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 was proposed	Separate dumping was undertaken.	5 reclaimed dumpes are there
4b	Location of topsoil, OB and mineral reject dumps	Old Subgrade dump.OB dumps are there along the foot wall	All dumps are on the non mineralised land and except for 1 all are on the footwall side.	
4c	Number of dumps within lease area and outside of lease area	-	-	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Old subgrade dump, OB dumps are there along the foot wall	as per proposal	
4e	Number of active and alive dumps.	4	4	
4f	Number of dead dumps.	5	5	
4g	Number of dumps established.	5	5	

4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed all along the dump	Not applicable
4i	Length of Retaining wall or garland drain all along dumps	55 m	60 m
4j	Number of settling ponds	Not propose	Not Applicable
4k	Specific comments of inspecting officer on waste dump management	-	-

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.	No Proposal for backfilling in year 2021-22	Area has yet mature for backfilling	
5b	Area under backfilling of mined out area	No Proposal are incorporated	Not applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Meagre quantity generated	Used for plantation on the reclaimed dumps.	
5d	Total area fully reclaimed and rehabilitated	No proposal are incorporated	No proposal are incorporated	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Area yet not matured for back filling

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).	Submitted	Submitted
6b	Area available for rehabilitation (ha) .	No Proposal	Not applicable
6c	afforestation done (ha).	No Proposal	Not applicable
6d	No. of saplings planted during the year	No Proposal	Not applicable
6e	Cumulative no .of plants	-	Not applicable
6f	Any other method of rehabilitation	No Proposal	Not applicable
6g	Cost incurred on watch and care during the year	No Proposal	Not applicable
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No Proposal	Not applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	Not applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposal	Not applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Not applicable

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	Not applicable	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	3500 sapling proposed during 2021-22	2794 sapling in 2021-22	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	3500 sapling proposed during 2021-22	2794 sapling in 2021-22	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	3500 sapling proposed during 2021-22	2794 sapling in 2021-22	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring Proposed	Monitoring is done	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP report under 26(2) of MCDR 2017 has been submitted within the stipulated time.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual sorting and sizing proposed	Entire magnesite ROM is despatched after manual sorting Dead burnt magnesite in the captive plant.	However in the year 2022-23, lessee has sold the material to private party as well.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting and sizing proposed	Being carried out accordingly.	

7c	Different grade of mineral sorted out at mines.	-	-	
7d	Any beneficiation process at mines	Not applicable	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	-

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Meagre quantity	
8b	Concurrent use or storage of topsoil	-	Generated is utilised simultaneously if any generated	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposal incorporated	Being done accordingly	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	-	5 Dumps are reclaimed and rehabilitated. No new dump at present is proposed for the purpose.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	-	-	
8g	Survival rate	-		It is around 60%
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on haul road for dust suppression in mine		Water Sprinkling on haul road for dust suppression is done occasionally.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Aesthetic beauty is maintained more or less except degradation of land due to mining

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Proposal given	All Monthly and Annual Return Submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	-	Mining Engineer and Geologist are appointed.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Information given	Area considered as reclaimed is part of reclaimed dump area	
9d	Scrutiny of Annual return on afforestation	2794 sampling with 60% survival	Broadly as per submission	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Information given	Sub grade dump is there	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	o/b-2508.800, 25427 T Magnesite ROM prduced, c/B- Nil	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price 1684.28 Rs. PMT	-
9h	Scrutiny of Annual return on fixed assets	-	-
9k	Scrutiny of Annual return on mining machineries	As per proposal	As per proposal

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed		Show couse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :

(Manish Maindiratta)

Indian Bureau of Mines