

**INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION**

MCDR INSPECTION REPORT

Dehradun regional office

Mine file No : UP/ALM/MAG-1

Mine code : 39UPR04001

- (i) Name of the Inspecting : **S038**) **SHAIENDRA SAKLANI**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : ANIL KUMAR, ME
Official with
Designation
- (iv) Date of Inspection : 29/10/2015
- (v) Prev.inspection date : 11/01/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JHIROLI(53.2071H)**
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) 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
- (e) Police Station : JHIROLI
- (f) First opening date : 01/08/1972
2. Address for : VILLAGE-MATELA, POST-BILLORI
correspondance : DISTRICT-BAGESHWAR,
UTTARANCHAL
3. (a) Lease Number : UPR0037
- (b) Lease area : 165.08
- (c) Period of lease : 20
- (d) Date of Expiry : 24/07/2009
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/ : 01/09/1993
 Termination date

Manager

Name : G. P. MOHAPATRA
 Qualification : B.E. (MINING) & FCC
 Appointment/ : 01/05/2009 01/01/2011
 Termination date

6. Date of approval of Mining : 25/07/2013
 Plan/Scheme of Mining

PART - II : TECHNICAL DETAILS/COMMENTS

1. Details about Average employment :

Maximum number of persons employed on any day during the year

Employment category	No. of employment	Av. yearly working days
DIRECT		
Managerial	6	300
Workers	119	143
Supervisory	18	300
CONTRACT		
Workers	33	143

2. Community Development Plan (in and around the mines) : Proposed action and expenditure towards socio-economic development.

Action during the year	Expenditure in Rs. Lakhs for				Remarks
	previous year		current year		
	Proposed	Incurred	Proposed	Incurred	
General					
Water supply		1.50			
Sanitation		0.50			
Health		5.00			
Sub total		7.00			
Infrastructure					
Sub total			7.00		
Training			0.90		
Environment management			1.50		
Recreation			0.20		
Total			9.60		

3. Status of compliance of MCDR, 1988, including therewith the rectification of the outstanding violation of rules.

no outstanding violations exists at the mine. Compliance of MCDR ,1988, including therewith the rectification of outstanding violation of rules is observed satisfactory. In the current inspection violation of rules 13(1) and 45(5) of MCDR,88 were found and communicated to the lessee for immediate rectification of the same.

4. A note on the justification in case of suspension of mining operation under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 19888, if recommended.

It is not recommended for suspension of mining operations under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 1988.

5. Scientific Mining

Items	Proposal	Actual work done	Remarks
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A. Exploration (Rule 13)

- a. Type of prospecting and exploration i.e. pitting, drilling : There was no exploration proposal for the last year 2014-15
- b. Total area covered : There was no exploration proposal for the last year 2014-15

The same has not been carried out as the area has already been explored adequately.

No exploration has been carried out during the year 2014-15.

B. Working (Rule 13)

- a. Number and size of each pit (LxWxH) : During the year 2014-15 & 2015-16 mining was proposed in Four pits Pit1, Pit1A, Pit2A & Pit2B. Length of pits varies from 200 to 350m with width 67 to 105m.
- b. Bench size (LxWxH) length can be defined as regular/irregular : It is proposed to form the Benches of 3 to 10m in height having 5 to 20m width in various pits.
- c. Ore to waste ratio pit wise if possible otherwise for mine : It is 1:8
- d. Total area covered under excavation/pits : Approximately five hectares of area is proposed to be covered under excavation

During the inspection four pits Pit1, Pit 1A, Pit 2A & Pit 2B were developed having dimension approximately 200mX103mX86m, 350mX86mX100m, 200mX89mX84m & 275X67.5X65m respectively. The mine is captive to DBM plant located 7km away from mine.

Height of benches is varying from 4m to 10m with width varies from 5 to 20 m. However, bench at 1574mRL has not been developed so far for which violation has been issued to the party. So far six benches in ore and 24 number of benches in overburden have been developed.

It was approximately 1:5

Present mining status reveal that mining operation are carried out within proposed excavation limit set for the year by covering area as per proposal excepting some minor deviation i.e. proposed bench at 1574mrl has not been developed so far during the year 2015-16. So far approximately 23 hectares of area has been covered under excavation.

C. Waste disposal (Rule 13)

a. Location of dumps	: It is proposed that dumping would be undertaken over 5 number of dump sites. All the dumping sites are chosen over waste land and on the footwall side of the ore body.	Dumping is being done as per the proposals contained in the approved scheme of mining with no major deviations. Dump D1 is on west side of pit 2B, Dump D2 on west side of pit 1 Dump D3 Valley portion due north of pit 1, D4 on southern side of pit 2A and D5 on norther side of pit 1.,
e. Yearly generation of waste quantity.	: In year 2014-15, approximately six lakh tonnes of waste was expected to be generated.	In year 2014-15 approximately 165130 tonnes of waste was generated.
b. Method of dumping whether advancing/retreat	: Retreat	Retreat
c. Total area covered under waste dump.	: At the end of SOM period about 6 ha is to be covered by waste dumps	Currently total area covered under waste dumps approximately 6.67 hectares.
d. No. and size of each waste dump with No of steps/lift/bench	: Five waste dump D1 to D5 are proposed to be used for waste dumping.	Waste disposal is being carried out on the existing five dumps.

D. Production

b. Year wise production of last five year.	: During the year 2014-15 a total of 70588 tonnes of magnesite was proposed.	Actual production during the last five years is as follows 2010-11: 46826 T, 2011-12: 49924 T 2012-13: 40183T, 2013-14: 30155 T 2014-15: 33384 T The production never exceeded than the proposed during the last five years.
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D. Reserve

a. Reserve position as per latest MP/MS and at the time of inspection.	: THE POSITION OF RESERVE AS ON 01-04-2013 AS PER APPROVED SOM ON DATED 25-07-2013 PROVED(111): 7464108 T PROBABLE(122): 2829356 T REMAINING RESOURCES: 3568194 T	THE POSITION OF RESERVE AS ON 01-04-20154 PROVED(111): 7400569.00T PROBABLE(122): 2829356 T REMAINING RESOURCES: 3568194 T THIS RESERVES INCLUDES LIMESTONE RESERVES ALSO.
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6. Conservation of Mineral - both quantitative and qualitative

Beneficiation (Rule 20 and 26)

- Efforts for improving low grade and sub grade mineral. : During the year 2014-15 about 1500 tonnes have been recovered as saleable material from the under sized.
- Efforts for improving percentage of recovery of ore. : None at present

Mineral Rule 15

- Percentage of recovery of ore pitwise w.r.t. ROM and total material : Percentage of recovery of ore pitwise w.r.t. ROM and total material is reported to be around 65 to 70%
- Number of benches in ore and waste. : 12 benches in ore & 24 benches in OB in various pits i.e. Pit1, Pit1A, Pit2A & Pit2B.

Sub/grade mineral/fines (Rule 16)

- Qty of yearly generation and total qty available during inspection with grade : During the year approximately 5000 tonnes of undersized quantity was generated during the year 2014-15.
- Number and size of each stack : Single stack of subgrade mineral exist whereas five waste dumps exist.
- Location of stacking. : The subgrade mineral is being stacked near the plant.
- Separate stacking from waste : Being friable mineral, about 5% under size (-50mm) is generated while transportation and further 6% while firing in kiln which is collected in bag filter as fines, and stacked separately from waste.
- Total area covered for stacking : About 1.5 hectare area has been covered under stacking of subgrade mineral.

7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : The area is undulating and surrounded by scanty shrubs, bushes and plants.
- b. Aesthetic environment : Aesthetic environment is pleasant. The mine is situated at higher altitude
- c. Soil and land use pattern : Thickness of soil is ranging from 0.2 to 0.3 meters. Soil is being removed separately and utilised for the plantation purposes.
- d. Agriculture : There is no agricultural activities in the mining area but it is prevailing in the surrounding villages.
- e. Forest(flora and fauna) : Part of the lease area i.e. about 148 hectares falls in forest area (Benap land) and remaining about 17 hectres in non forest area
- f. Vegetation : Local shrubs and bushes are well developed and protected. So far about 61500 saplings of different varieties have been planted within the lease area out of which 50 % to 60% have been survived. During the year 2014-15 company have developed a nursury and planted 500 saplings covering an area of 0.4 hectares.
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : No public monuments are lying within the vicinity of the leasehold. However, temples and public building are situated within the radius of five kilometers.

B Water environment.

- a. Surface water : Seasonal natural water courses exist nearby the mining site
- b. Ground water : It is around 150 m below from the ground level
- c. Quality of water : It is reported as potable with all parameters are within permissible limit.

C. Air environment

- a. Noise : The noise pollution due to mining machinery are reported within permissible limit.
- b. Air : The air pollution due to mining machinery are reported within permissible limit.
- c. Climatic condition : The temperature of the area ranges from 4 to 35 degree centigrade and average rainfall reported as 1000mm.

D. Socio economic environment

- a. Social and demographic profile. : Due to mining activities no significant socioeconomic changes taken place. The economic status of the area has improved due to employment in mines.
- b. Recommending health and safety. : Required measures have been taken for the health and safety of the workers employed in the mine.
- c. Human settlement : No human settlement relating to local persons exist in the lease area.
- d. Recreational facility. : Required recreation facilities to their employees has been provided.

8. Scrutiny of annual returns on cost of production, reserve, production, pit mouth value, stock, land use pattern and fixed assets.

The annual return for the year for questioned items has been scrutinised and found in order.

PART - III : PERFORMANCE OF MINE OWNER

(In case of lease expiring within 2 years - as per guidelines)

a. Compliance of terms and conditions of lease deed.

Not applicable as renewal case is pending with the State government.

b. Compliance of the provisions of MCDR, 88 and advise given.

Not applicable as renewal case is pending with the State government.

c. Conduct with regard to adoption of safety measures and forest wealth, ecology and environment in the mining lease area.

Not applicable as renewal case is pending with the State government.

d. Whether the mine owner has carried out exploration and exploitation on the basis on surface mapping, pitting, trenching and core drilling taking in to consideration the mode of occurrences of mineral deposit.

Not applicable as renewal case is pending with the State government.

e. Whether production from mining area is commensurate with the reserves and the long term progress of utilization of mineral.

Not applicable as renewal case is pending with the State government.

f. Whether adequate investment has been made by the lessee on the development of mine on mining machinery, operational and administrative building, residential accommodation for the employees.

Not applicable as renewal case is pending with the State government.

g. Measures taken by the lessee for protection of environment and ecology.

Not applicable as renewal case is pending with the State government.

h. In case leases where the mineralisation tends to exhaust within the present period, the status of closing operation in phases and the special issues including human issues to be addressed at the time of closing of mine.

Not applicable as renewal case is pending with the State government.

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

Indian Bureau of Mines (any issue related to CGPB, SGPB, Assistance, Consultancy, Annual Programme and studies, etc.)

None at present

State Government (Illegal mining, mining dispute, infrastructure, Mineral based industry, Mineral policy, etc.)

Boundary pillars as per CCOM circular have not been erected

The Central Government (Infrastructure, Development, Mineral policy and Legislation, Mineral based industry, etc.)

None at present

Date :

(SHAILENDRA SAKLANI)

Indian Bureau of Mines