

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

MCDR INSPECTION REPORT

Dehradun regional office

Mine file No : U.P./PGR/Mag - 6

Mine code : 39UPR45003

- (i) Name of the Inspecting : **S038**) **SHAILENDRA SAKLANI**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : H.S.PRASAD,MANAGER MINES
Official with
Designation
- (iv) Date of Inspection : 20/10/2016
- (v) Prev.inspection date : 30/10/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **DUNDU(5.558H)**
- (b) **Registration NO.** :
- (c) **Category** : A Other than Fully Mech.
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : **UTTARAKHAND**
- District : **PITHORAGARH**
- Village : **DUNDU &TALLI SANGRI**
- Taluka : **DIDIHAT**
- Post office : **CHHARANDEO**
- Pin Code :
- FAX No. : **N.A**
- E-mail : **N.A**
- Phone : **05964-282638**
- (f) **Police Station** :
- (g) **First opening date** : **09/07/1980**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **N.B. MINERALS**
6/575 , BHATT COLONY<NAWABI ROAD
HALDWANI, DISTRICT - NAINITAL (UK)
3. (a) **Lease Number** : **UPR0040**
- (b) **Lease area** : **46.9**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **08/07/2000**
4. **Mineral worked** : **MAGNESITE** **Main**

5. Name and Address of the

Lessee : N. B. MINERALS CORPN.
 NAINITAL UTTARAKHAND
 Phone:
 FAX :

Owner : H.K.Nainwal
 House NO.- 6/418 Shijwali
 Complex,Nawabi R Road,
 Haldwani NAINITAL
 UTTARAKHAND
 Phone: (05946) 21114
 FAX :

Mining Engineer

Name : H.S. PRASAD,Full Time
 Qualification : B.A. , FOREMAN CERTIFICATE
 Appointment/ : 18/01/2000
 Termination date

Manager

Name : H.S.Prasad
 Qualification : Foreman Certificate Holder
 Appointment/ : 01/04/1996
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	07/12/1992
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	02/06/1999
		Renewal under rule 24 MCR1960	10/02/2006
		Mining Scheme rule 12 MCDR1988	14/10/2011

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	As per previously approved scheme of mining approved on 14.10.2011, one trial pit was proposed to be dug between the local coordinates N1253 to 1258N & 1330E to 1335E. The new scheme of mining was approved on 05.02.2016	The same has been carried out at earmarked place.	
1b	Exploration over lease area for geological axis 1 or 2	The mining operation are being carried out at this mine since more than 20 years.	Exploration is proved over the lease area for geological axis 1.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Lessee is the exploration agency. Rs. 1200 is incurred as per new scheme of mining.	Same expenditure has been incurred.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	As per new scheme of mining two vertical DTH having a dimension of 20m each are proposed for the year 2016-17	The mine was inspected on 20.10.2016. As on date of inspection same could not be carried out.	

1e	Balance reserve as on 01/04/20	As per new scheme of mining approved on 05.02.2016, the reserves under 111 category is to the tune of 0.766185 million tonnes.	During the year 2015-16 the production obtained is 13579 tonnes of magnesite. Thus balance reserves comes out to 0.7426 million tonnes.
1f	General remarks of inspecting officers on geology, exploration etc	The mining operations are being carried out since long back i.e. more than twenty years.	Adequacy of reserves has been proved.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	As per scheme of mining during the year mining shall be carried out by formation of benches between 1270-1264mrl for winning magnesite mineral in a single pit.	As on date of inspection the bench at 1264mrl has not been fully developed for which violation has been pointed out to lessee for immediate rectification.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	As per proposals contained in the scheme of mining it is envisaged that waste to be generated shall be spread over the haul roads for their maintenance and waste to be generated shall be dumped within the lease area.	No separate benches have been formed for overburden as the overburden is generated incidental to magnesite mining comprising of low grade magnesite boulders.
2c	Stripping ratio or ore to OB ratio	It is envisaged as 1:0.10	Approximately it is more or less same.
2d	Quantity of topsoil generation in m3	No top soil is generated incidental to mining as envisaged	No top soil is generated incidental to mining as observed during the inspection.
2e	Quantity of overburden generation in m3	As per proposals contained in the scheme of mining approximately 1689 cum of waste shall be generated.	Approximately 2000 cum of waste has been generated.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	As per proposals benches at 1270-1264 were to be developed during the year 2016-17.	benches at 1270-1264 has not been fully developed. The width and height of the benches has not been kept as per proposals.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	As per previous scheme of mining during the year 2015-16 only one pit was proposed for production of Magneste mineral	It is observed that workings were confined to single pit only for winning magnesite mineral.
3b	Quantity of ROM mineral production proposed	As per proposals during the year a total of 16000 tonnes of magnesite was proposed to be excavated	During the year 2015-16, production of magnesite was 13579 tonnes which was slightly less compare to proposed production.
3c	Recovery of sailable/usable mineral from ROM production	As per proposals recovery is envisaged as 90%.	Recovery of magnesite is around 85%.
3d	Quantity of mineral reject generation	During the year 2015-16, approximately 2742 cum of waste was anticipated to be generated.	Approximately 3000 cum of waste was generated during the year 2015-16.
3e	Grade of mineral rejects generation and threshold value declared.	No such proposals are incorporated.	The same could not be determined.
3f	Quantity of sub grade mineral generation.	As per proposals during the year approximately 361 tonnes of sub grade mineral was anticipated during the year 2015-16	Approximately 300 tonnes of low grade magnesite has been generated.
3g	Grade of sub grade mineral generation	The same has not been indicated.	This could not be ascertained.
3h	Manual / Mechanised method adopted for segregating from ROM	Manual method is adopted for segregating from ROM	Manual method is adopted for segrgating from ROM

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals are incorporated in the scheme of mining.	No such proposals are incorporated in the scheme of mining.
3j	Provision of drilling and blasting in mineral benches	provision has been made for drilling and blasting.	As observed, the mining operations are carried out with the help of drilling and blasting.
3k	Provision of mining machineries in mineral benches	Provision has been made for the deployment of mining machineries	As observed, mining has been carried out by deploying one JCB.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	As per proposals mining shall be carried out by maintaining the height of 6 mtrs benches	As observed height of the benches has not been maintained at places for which violation letter has been issued to party.
3m	Total area covered under excavation/pits	Approximately 0.90 hectares of area is proposed to be covered under excavation during the plan period i.e. upto 2019-20	As observed approximately two hectares of area has been degraded so far.
3n	Ore to OB ratio for the pit/mine during the year.	During the year it is proposed to be kept as 1:0.10	This has been maintained more or less same.
3o	Total area put in use under different heads at the end of year	It is proposed as 2.73 hectares.	Approximately two hectares of area has been degraded under different heads.
3p	Production of ROM mineral during the last five year period as applicable	Proposed production the last five years is as follows- 2011-12-14210 tonnes, 2012-13-14737 tonnes, 2013-14- 15263 tonnes, 2014-15-15789 tonnes, 2015-16-16842 tonnes	2011-12-8354 tonnes 2012-13- 12127 tonnes 2013-14-14074 tonnes 2014-15- 16691 tonnes 2015-16-13579 tonnes

3q	General remarks of inspecting officers on method of mining etc.	Proposed production during the last five year more or less achieved	Proposed production during the last five year more or less achieved
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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)	Seperate dumping is proposed in the south west portion of the lease area.	The same is being dumped at the earmarked place. Previously it was dumped out side the lease. The lessee has been advised to stick the dumping prposals within the lease at earmarked place.	
4b	Location of topsoil, OB and mineral reject dumps	Seperate dumping is proposed in the south west portion of the lease area.	It is being dumped at earmarked place now.	
4c	Number of dumps within lease area and outside of lease area	During the year 2016-17 one dump is prposed.	Only one active dump has been observed.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	It is per rule 16 i.e away from working pit.	This is being complied with.	
4e	Number of active and alive dumps.	One live dump during the year 2016-17	Only one active dump is seen.	
4f	Number of dead dumps.	NIL	One of low grade dolomite.	
4g	Number of dumps established.	None	None	
4h	Whether Retaining wall or garland drain all along dumps are there.	As per prposals during the year 2016-17 toe wall is proposed at the base of dump	This is under construction.	

4i	Length of Retaining wall or garland drain all along dumps	As per proposals toe wall having a dimension of 18m x 30m x 4m shall be provided.	It is under construction.
4j	Number of settling ponds	None	None
4k	Specific comments of inspecting officer on waste dump management	Adequate proposals are incorporated for dump management.	Still toe wall at the base of dump is to be constructed.

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.	Not applicable as the area is not matured for backfilling	Not applicable as the area is not matured for backfilling	
5b	Area under backfilling of mined out area	Not applicable as the area is not matured for backfilling	Not applicable as the area is not matured for backfilling	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable as the area is not matured for backfilling	Not applicable as the area is not matured for backfilling	
5d	Total area fully reclaimed and rehabilitated	Not applicable as the area is not matured for backfilling	Not applicable as the area is not matured for backfilling	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not applicable as the area is not matured for backfilling	Not applicable as the area is not matured for backfilling	

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	The annual report on PMCP has not been submitted in time	violation of rule 23E(2) was pointed out to lessee for immediate rectification.
6b	Area available for rehabilitation (ha) .	The area is yet not matured for rehabilitation .	The area is yet not matured for rehabilitation. However, as per PMCP, it was proposed to erect 24m long retaining wall along the interburden dump which has been completed.
6c	afforestation done (ha).	As per proposals 50 saplings were proposed to be planted	Against the proposals, lessee has planted 150 saplings.
6d	No. of saplings planted during the year	During the year 2016-17 50 saplings were proposed to be planted	As on date of inspection lessee has planted about 60 saplings.
6e	Cumulative no .of plants	As per proposals 250 saplings were proposed to be planted during the plan period upto 2015-16.	Approximately 300 plants have been planted by the lessee so far.
6f	Any other method of rehabilitation	None	None
6g	Cost incurred on watch and care during the year	As per proposals approximately Rs. 11250 have been estimated under care and maintenance during the plan period.	Approximately Rs 8000 have been incurred under this head.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	None	None except erecting retaining walls and plantation

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	None	None except erecting retaining walls and plantation
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	None	None
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None	None
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	None	None
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	None	None
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	None	None
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	None	None except erecting retaining walls and plantation
6p	Compliance of environmental monitoring (core zone and buffer zone)	None	None

6q General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. retaining walls and plantation proposals were incorporated. The same has been complied with.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	As per proposals sorting, sizing and dressing is proposed manually.	This is being carried out manually within the lease area.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	manual method is adopted	
7c	Different grade of mineral sorted out at mines.	Grade wise sorting is proposed	Grade wise sorting is carried out.	
7d	Any beneficiation process at mines	None at present	None at present	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Grade wise sorting is proposed	Grade wise sorting is carried out	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposals are incorporated	Insignificant quantity of soil is generated.	
8b	Concurrent use or storage of topsoil	None	None	

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate prposals are incorporated	The same is being complied with.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposals for stabilisation of dumps are incorporated	Stabilisation of dumps are carried out by erecting toe walls.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	None at present	None at present
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Prposals for maintenece of afforestation carried out are incorporated.	Post plantation care is being done. In addition to this additional plantation has been carried out.
8g	Survival rate	Not proposed	Survival rate is around 60%.
8h	Water sprinkling on roads to control airborne dust	Not proposed.	Not being done.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Proposals for maintaing aesthetic beauty are incorporated	Found satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and annual returns are being submitted	Lessee is submitting the monthly returns on line.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	details are given in the returns	Mining engineer is deployed at the mine.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Partially given	Partially given
9d	Scrutiny of Annual return on afforestation	The same are not given	The same are not given

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
Rule 13(1)	30/11/2016	03/01/2017			
Rule 23E(2)	30/11/2016	03/01/2017			

Date :

(SHAIENDRA SAKLANI)

Indian Bureau of Mines