

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/PALI-36/WOL-CAL-01

Mine code : 63RAJ26001

- (i) Name of the Inspecting : **S012**) **Sharma H.C.**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. U P Pahadia & Sh R L Tak, QP
Official with
Designation
- (iv) Date of Inspection : 15/06/2021
- (v) Prev.inspection date : 28/10/2020

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KHERATARLA**
- (b) **Registration NO.** : **IBM/462/2011**
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : RAJASTHAN
- District : UDAIPUR
- Village : KHERA
- Taluka : KOTRA
- Post office : TEJAWAS
- Pin Code :
- FAX No. : 0294-2494200
- E-mail : info@wolkem.com
- Phone : 0294-2494200
- (f) **Police Station** : Kotra
- (g) **First opening date** : 19/03/1976
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : Khertala Wollastonite Mine,
Uparla Khera and Nichla Khera, Tehsil: Bali kotr
District: PAlI and Udaipur (Rajasthan)
3. (a) **Lease Number** :
- (b) **Lease area** :
- (c) **Period of lease** :
- (d) **Date of Expiry** :
4. **Mineral worked** : WOLLASTONITE Main

5. Name and Address of the

Lessee : WOLKEM INDUSTRIES LTD
 SALUMBER HOUSE AMBAVGARH
 UDAIPUR UDAIPUR RAJASTHAN
 Phone:0297-222313
 FAX :0297-222097

Owner : Sri U.P. Pahadiya
 Wolkem Industries Ltd.,
 Post Box 21, E-101, Mewar
 Industrial area, Madri,
 UDAIPUR RAJASTHAN
 Phone: 7340064511
 FAX : 02942494608

Agent : Sri U.P. Pahadiya
 Wolkem Industries Ltd.,
 Post Box 21, E-101, Mewar
 Industrial area, Madri,
 UDAIPUR RAJASTHAN
 Phone: 7340064511
 FAX : 02942494608

Mining Engineer
 Name : Sri M.K. Pitaliya, Full Time
 Qualification : BE Mining
 Appointment/ Termination date : 18/06/2019

Geologist
 Name : Sri Ganpat Singh, Full Time
 Qualification : M.Sc-Tech(AppliedGeology)
 Appointment/ Termination date : 11/05/2016

Manager
 Name : Sri Amresh Kumar
 Qualification : BE Mining
 Appointment/ Termination date : 30/11/2019

6. Date of approval of Mining Plan/Scheme of Mining	:	Existing rule 11 MCDR1988	08/04/1993
		Mining Scheme rule 12 MCDR1988	04/02/2003
		Mining Scheme rule 12 MCDR1988	24/07/2013
		MP modif under MCR 1960	14/06/2016
		MP review under 17(1) MCR 2016	08/12/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Not applicable	
1b	Exploration over lease area for geological axis 1 or 2	No proposal	Not applicable	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Will be taken up in 2021-22 as per Review of Mining Plan	Will be taken up in 2021-22 as per Review of Mining Plan	
1e	Balance reserve as on 01/04/20	Woll. - 870184	Woll. - 870184	
1f	General remarks of inspecting officers on geology, exploration etc	Not applicable	The mine is proposed to be worked by U/G method & proposed exploration will enhance reserves in Proved 111 category.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	East Deposit- E 315304 to 314850 N- 2740145 to 2739745 RL 668	East Deposit- E 315304 to 314850 N- 2740145 to 2739745 RL 668	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	
2c	Stripping ratio or ore to OB ratio	1:2.3	1:4.58	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	178446	189904	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Not applicable	The mine is worked by opencast highly mechanised mine, which is suitable to the type of deposit.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	East Deposit 530mX430m	East Deposit 530mX430m	
3b	Quantity of ROM mineral production proposed	Woll. - 200241	Woll.-103590	Low demand due to COVID- 19.
3c	Recovery of sailable/usable mineral from ROM production	Woll. - 200241	Woll.-103590	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	None	All the produced mineral wollastonite has been sorted mechanically & manually to saleable grades i.e. Grade-1 & Grade-2 which containing +30% wollastonite, The threshold value of wollastonite mineral as fixed by IBM i.e. 35%
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual & mechanized method adopted for segregating /sorting from ROM	Manual & mechanized method adopted for segregating /sorting from ROM	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	The so produced Grade -1 & -2 wollastonite is further processed/refined at Plant by using crushers, screenings, Optical sorter, Magnetic Separation, Gravitational separation methods & other related conventional method. The company has engaged IBM (Ore Dressing Cell) for wet process beneficiation study to recover the requisite saleable wollastonite mineral. It is also on completion stage & start the process to obtain necessary permissions for the construction of Beneficiation Plant at Amliya.	Being done
3j	Provision of drilling and blasting in mineral benches	Yes	Yes
3k	Provision of mining machineries in mineral benches	Yes	Yes

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes
3m	Total area covered under excavation/pits	24.700 Ha	24.300 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1:2.3	1:4.58
3o	Total area put in use under different heads at the end of year	Pit- 24.7 Ha Waste/reject/Dump - 6.70 Others- Storing ore - 3.3350 Infrastructure - 0.37 Roads - 0.60 Mineral Separation Plant - 0.8484 Total- 36.5534 ha	Pit- 24.3 Ha Waste/reject/Dump - 4.02 Others- Storing ore - 3.195 Infrastructure - 0.37 Roads - 0.50 Top Soil - 0.09 Mineral Separation Plant - 0.8484 Total- 33.3234 ha
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 182865 2017-18: 185291 2018-19: 193612 2019-20: 201512 2020-21: 200241	2016-17: 139555 2017-18: 140829 2018-19: 179323 2019-20: 121642 2020-21: 103590
3q	General remarks of inspecting officers on method of mining etc.	Not applicable	The mine is worked by opencast highly mechanised mine using HEMM, which is suitable to the type of deposit.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Yes	

4b	Location of topsoil, OB and mineral reject dumps	Top soil - Within lease area Sub grade - Near dump E&F OB- Dump E	Top soil - Within lease area Sub grade - Near dump E&F OB- Dump E
4c	Number of dumps within lease area and outside of lease area	Within lease area - 3 (D, E, & F)	Within lease area - 3 (D, E, & F)
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside ultimate pit limit.	Outside ultimate pit limit.
4e	Number of active and alive dumps.	Two	Two
4f	Number of dead dumps.	One	One
4g	Number of dumps established.	Three	Partly stabilized
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall & garland drains are to be constructed at all the dumps.	Being done
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall- NIL m Garland drains - NIL m	Retaining wall- 236 m Garland drains - 0 m
4j	Number of settling ponds	No proposal	None
4k	Specific comments of inspecting officer on waste dump management	Not applicable	The waste dump management is as per proposals.

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 backfilling proposed	Not done	
5b	Area under backfilling of mined out area	No proposal	Not applicable	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Not applicable
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not applicable	No matured area available for backfilling & reclamation.

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 as per rule	Not submitted so far	It is proposed to issue VL for same.
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	3300 nos	3410 nos	
6f	Any other method of rehabilitation	No proposal	Not applicable	
6g	Cost incurred on watch and care during the year	Not specified	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 backfilled area	Not applicable	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	720 plants	750 plants
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.36 Ha.	In existing plantation area
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	By Plantation & regrassing.	By Plantation & regrassing.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Provisions made for regular monitoring.	Being Done

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Not applicable	The proposals of PMCP implemented satisfactorily.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	All the produced mineral wollastonite has been sorted mechanically & manually to saleable grades i.e. Grade-1 & Grade-2 which containing +30% wollastonite & dispatched to Amliya Plant for further refinement.	Being done	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Both system adopted for mineral sorting Mechanical process - Breaking & screening Manual process - sorting by labors	Being done	
7c	Different grade of mineral sorted out at mines.	Grade-1 & Grade-2 which containing +30% wollastonite	Grade-1 & Grade-2 which containing +30% wollastonite	
7d	Any beneficiation process at mines	No proposal	Not applicable	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Not applicable	There is no issue of conservation of mineral in the mine.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There will be no fresh degradation of land and no top solid will be generated. However same soil will be generated from bands of minerals and fractures/joints of overburden; suitable as subsoil which will be utilized simultaneously during plantation.	Minor quantity of sub-soil recovered & used for plantation.	
8b	Concurrent use or storage of topsoil	Yes for plantation and same is brought from banks of nearby nallas/dam areas etc.	Being done	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Mainly waste /OB has to be dumped at earmarked site but some has to be used for construction work within the lease.	Overburden, waste rock and Rejects are presently stacked at earmarked location& partially waste used for construction of parapet /retaining walls along the dumps.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	It was proposed to plant 720 nos of Plants.	750 Planted
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	An area of 0.36 ha proposed to be covered under plantation.	Being done
8g	Survival rate	Not specified	About 85%
8h	Water sprinkling on roads to control airborne dust	Regular Water sprinkling by Water Tanker on roads & mining faces.	Being done
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not applicable	The general aesthetic beauty in & around mine was satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Not applicable	M.R Submitted up to June.2021 A.R. Submitted upto 2020-21.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer - Mr. Mohan Kumar Pitaliya. Geologist - Mr. Ganpat Singh. Manager - Mr. Amresh Kumar.	Found in order	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	The details of Land use furnished.	Found OK	

9d	Scrutiny of Annual return on afforestation	Plantation within lease area - (i) Number of trees planted during the year - 750 (ii) Survival rate in percentage - 80%	Found in order
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Wollastonite - no any sub grade generated at mine., reject- Nil.	Found in order
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Wollastonite Grade 1 & 2- 116274.760 MT at mine.	Found O K
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value - 0 Ex- Mine price - 1178.00 Production cost: 1178.00	Found O K
9h	Scrutiny of Annual return on fixed assets	Fixed assets at the begining of the year- Rs. 12513857.00	Found in order
9k	Scrutiny of Annual return on mining machineries	The list of M/C's used has been given.	Found O K

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 :

(Sharma H.C.)

Indian Bureau of Mines