

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/JSL-13/LST-1

Mine code : 38RAJ14002

- (i) Name of the Inspecting : **S012**) **Sharma H.C.**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Rajendra Menaria, DGM (Mining)
Official with
Designation
- (iv) Date of Inspection : 26/10/2017
- (v) Prev.inspection date : 11/02/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SANU (1000HECT.)**
- (b) **Registration NO.** : **IBM/5158/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **RAJASTHAN**
- District : **JAISALMER**
- Village : **JOGA**
- Taluka : **JAISALMER**
- Post office : **SANU**
- Pin Code : **345001**
- FAX No. : **02992-251394**
- E-mail : **sanumines@yahoo.co.in**
- Phone : **02992-270283**
- (f) **Police Station** :
- (g) **First opening date** : **19/03/1987**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **P.BOX NO.56,**
correspondance **KHANIJ BHAWAN**
JAISALMER
3. (a) **Lease Number** : **RAJ1485**
- (b) **Lease area** : **999.93**
- (c) **Period of lease** : **50**
- (d) **Date of Expiry** : **30/03/2067**
4. **Mineral worked** : **LIMESHELL** **Associated**
LIMESTONE **Main**

5. Name and Address of the

Lessee : RAJASTHAN STATE MINES & MINERALS LTD.
 RSMM LTD., GYPSUM DIVN.
 SADUL CLUB BUILDING,
 BIKANER BIKANER RAJASTHAN
 Phone:0151-2523295, 2544178, 2542291, 2542133
 FAX :0151-2523519

Owner : B. P. Yetru, IAS
 M/S RSMM Ltd. 4- Meera
 Marg, Udaipur UDAIPUR
 RAJASTHAN
 Phone:
 FAX :

Agent : Rajendra Manaria
 Khaniz Bhawan, Near B P
 Tank Jaiselmer JAISALMER
 RAJASTHAN
 Phone: 02992251607
 FAX :

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	14/06/1991
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	20/08/1997
		Mining Scheme rule 12 MCDR1988	04/02/2002
		Mining Scheme rule 12 MCDR1988	17/06/2003
		Mining Scheme rule 12 MCDR1988	04/09/2006
		Mining Scheme rule 12 MCDR1988	27/05/2008
		Mining Scheme rule 12 MCDR1988	13/09/2012
		MP review under 17(1) MCR 2016	13/12/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	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	Not proposed	Not applicable	
1e	Balance reserve as on 01/04/20	22.71 MT - as on 1/4/2017	22.525MT	Additional reserves established without doing exploration, which is proposed as VL
1f	General remarks of inspecting officers on geology, exploration etc	Not applicable	Additional reserves established without doing exploration, which is proposed as VL.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	4200-5100N, 7200-7520E North Block, 3240-4000N, 6600-6760E South Block	4200-5100N, 7200-7520E North Block, 3240-4000N, 6600-6760E South Block	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There is no top soil / OB waste, mineral is outcropping.	Not applicable	
2c	Stripping ratio or ore to OB ratio	Not applicable	Not applicable	
2d	Quantity of topsoil generation in m3	Not applicable	Not applicable	

2e	Quantity of overburden generation in m3	Not applicable	Not applicable
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Not applicable	There is no top soil / OB waste, mineral is outcropping. The development of mine was satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	Two	
3b	Quantity of ROM mineral production proposed	2700000 T	1460530 T	
3c	Recovery of sailable/usable mineral from ROM production	45 - 46%	45.80%	
3d	Quantity of mineral reject generation	1048000 T	586656T	
3e	Grade of mineral rejects generation and threshold value declared.	High grade reject - 10-30mm (Sinter/ Chemical grade Low grade -(-10mm) High silica low grade limestone-cement grade.	Being done Threshold value SMS Grade limestone CaO- 52%, SiO2-1.8%: Threshold value Cement grade limestone CaO- 30%, SiO2-14.8%:	
3f	Quantity of sub grade mineral generation.	3400000 T	204818T	
3g	Grade of sub grade mineral generation	High grade reject - 10-30mm (Sinter/ Chemical grade Low grade -(-10mm) High silica low grade limestone-cement grade.	Being done	

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Being done
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Not applicable
3j	Provision of drilling and blasting in mineral benches	Yes, 4inch dia holes drilled with DTH drills & blasted with Slurry and ANFO explosives in conjunction with cord relay electric detonators.	Being done
3k	Provision of mining machineries in mineral benches	HEMM Shoval dumper combination.	Being done
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of mineral bench varies from 3.5 to 5.5 m.	Being done
3m	Total area covered under excavation/pits	502 ha	498 ha at the end of 2016-17.
3n	Ore to OB ratio for the pit/mine during the year.	Not applicable	Not applicable
3o	Total area put in use under different heads at the end of year	Under excavation 28.8 ha & others total 502ha	Under excavation 21.41 ha & others total 498 ha
3p	Production of ROM mineral during the last five year period as applicable	13942800 T	9994188 T
3q	General remarks of inspecting officers on method of mining etc.	Not applicable	The method of mining 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)	Not applicable as there is no top soil/ OB Waste, Mineral is out cropping.	Not applicable	
4b	Location of topsoil, OB and mineral reject dumps	Mineral reject low/ high grade stored & levelled in mined out pit concurrently backfilling method.	Being done	
4c	Number of dumps within lease area and outside of lease area	Not applicable	Not applicable	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	7800 to 8270E 4400- 4600N , 6900 to 8000E 3400 to 3500N	7750-8000E 4000- 4550N 6600 to 7250E 2820 to 3450N	
4e	Number of active and alive dumps.	Not applicable	Not applicable	
4f	Number of dead dumps.	Not applicable	Not applicable	
4g	Number of dumps established.	Not applicable	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not applicable	Not applicable	
4i	Length of Retaining wall or garland drain all along dumps	Not applicable	Not applicable	
4j	Number of settling ponds	Not applicable	Not applicable	
4k	Specific comments of inspecting officer on waste dump management	Not applicable	Concurrent backfilling method adopted as proposed to store the low grade & high grade reject separately for future use.	

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.	Full extraction of mineral before starting backfilling.	Being done	
5b	Area under backfilling of mined out area	21.80 ha	6.02ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Not applicable as there is no top soil.	
5d	Total area fully reclaimed and rehabilitated	223 ha mined out reclaimed & 135 ha Plantation inmined out backfilled & levelled area.	219 ha mined out reclaimed & 135 ha with plantation in mined out backfilled & levelled area.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not applicable	The lessee's conduct towards backfilling & reclamation was satisfactory.	

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).	Submit in time.	Not submitted so far.	
6b	Area available for rehabilitation (ha) .	22 ha	16ha	
6c	afforestation done (ha).	20ha	6.5 ha	
6d	No. of saplings planted during the year	5000 nos	5000 nos	
6e	Cumulative no .of plants	Not reported	68523 nos	
6f	Any other method of rehabilitation	No proposal	Not applicable	

6g	Cost incurred on watch and care during the year	5.0 lacs Ruppees	6.35 Lacs Ruppees
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	28.8 ha	21.41 ha
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	22 ha	16 ha
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	20 ha	6.5 ha
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	Not applicable	Not applicable
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not applicable	Not applicable

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not applicable	Not applicable
6p	Compliance of environmental monitoring (core zone and buffer zone)	As per approved review of mining Plan	As per EC & Consent Condition from MOEF & SPCB.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Not applicable	The compliance of PMCP was satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	669055 (30-80mm), 204818 (10-30mm)	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical by screening	
7c	Different grade of mineral sorted out at mines.	During process of SMS grade limestone by crushing & screening plant under size high grade & low grade rejects separated & stored in mined out pit separately & levelled.	Being done	
7d	Any beneficiation process at mines .	Dry processing by sizing & screening plant	Being done	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Not applicable	The party's conduct towards mineral conservation was satisfactory.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not applicable	Not applicable	
8b	Concurrent use or storage of topsoil	Not applicable	Not applicable as there is no top soil.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes There are separate dumps for rejects & Fines.	Being done	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Mineral reject & fines are dumped in mined out area by backfilling & levelling.	Being done	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Area used for plantaion (Fire Wood plant), for natural water reservoir & back filled by interburden clayey soil of low grade fines.	Being done	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	5000 No per annum Planted.	Being done	
8g	Survival rate	70%	73.9%	

8h	Water sprinkling on roads to control airborne dust	Yes	Being done by water tanker with sprinkler.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not applicable	The aesthetic beauty in & around the 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 Dec 2017, A/R submitted for 2016-17.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes details given	Found in order	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes details given	Found in order	
9d	Scrutiny of Annual return on afforestation	Yes details given	Found in order	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes details given	Found in order	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes details given	Found in order	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes details given	Found in order	
9h	Scrutiny of Annual return on fixed assets	Yes details given	Found in order	

9k	Scrutiny of Annual return on mining machineries	Yes details given	Found in order
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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