

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/JSL-14/LST-2

Mine code : 38RAJ14001

- (i) Name of the Inspecting : **P022**) **PANKAJ KULSHRESTHA**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Ashish Parihar, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 13/10/2023
- (v) Prev.inspection date : 03/10/2022

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SANU (998.40 HA)**
- (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. : 02992-52135
- E-mail : menaria
- Phone : 02992-51607
- (f) Police Station : Sanu
- (g) First opening date : 18/10/1993
- (h) Weekly day of rest : MON
2. Address for : P.BOX NO.56
correspondance KHANIJ BHAWAN
JAISALMER
3. (a) Lease Number : RAJ1485
- (b) Lease area : 998.4
- (c) Period of lease : 50
- (d) Date of Expiry : 31/03/2047
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 : Vikas Sitaramji Bhale
 Rajasthan State Mines &
 Mineral Ltd 4 Meera Marg,
 Udaipur, Rajasthan UDAIPUR
 RAJASTHAN
 Phone: 9414320130
 FAX :

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

Mining Engineer
 Name : Ashish Parihar, Full Time
 Qualification : BE (Mining),
 Appointment/ : 27/01/2022
 Termination date

Geologist
 Name : Shri Rajesh Samar, Geologist, Full Time
 Qualification : M.Sc. (Geology)
 Appointment/ : 22/12/2021
 Termination date

Manager
 Name : Sh. Mahipal Jugtawat
 Qualification : BE Mining
 Appointment/ : 24/09/2021
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	27/01/1993
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	17/07/1998
	:	Mining Scheme rule 12 MCDR1988	25/07/2013
	:	MP review under 17(1) MCR 2016	01/12/2017
	:	MP review under 17(1) MCR 2016	20/03/2023
	:	MP modif under 17(3) MCR 2016	09/06/2023

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NA	NA	
1b	Exploration over lease area for geological axis 1 or 2	NA	Entire 998.04 ha of area is already under G1 axis.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal	Entire 998.04 ha of area falls under G1 axis.	
1e	Balance reserve as on 01/04/20	160.65 million tonnes	160.65 million tonnes	
1f	General remarks of inspecting officers on geology, exploration etc	NA	The overall status of geology and exploration may be considered as satisfactory.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	3400-3644N, 2760-3552E North Block 1200-2057N, 2397-3360E South BZlock	3450-3640N, 2765-3552E North Block 1200-2050N. 2400-3360E South Block	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Single bench mining. SMS grade limestone mining carried out in range 3.5 mtrs to 5.0mtrs from surface	Only single bench mining. SMS grade limestone mining carried out in range 3.5 mtrs to 5.0mtrs from surface	
2c	Stripping ratio or ore to OB ratio	1:0	1:0, surface deposit	
2d	Quantity of topsoil generation in m3	No top soil,	No top soil.	

2e	Quantity of overburden generation in m3	No overburden	No overburden
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	The overall status of development of pit w.r.t type of deposit may be considered as satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two nos.	Two pits	
3b	Quantity of ROM mineral production proposed	2728000 tonnes	2335669 t	
3c	Recovery of sailable/usable mineral from ROM production	Recovery of Finished product i.e. 30mm to 80 mm size is 45% CHEMICAL COMPOSITION cAo : 54.26%, sIo2 : 1.15%	Actual Recovery of Finished product i.e. (30-80mm size is 42.33% Chemical Composition CaO: 53.75 % SiO2: = 1.39 %	
3d	Quantity of mineral reject generation	1032000 MT	587704 MT	Low grade rejects having size less than 10 mm pre crushing process,
3e	Grade of mineral rejects generation and threshold value declared.	CaO = 41.67 % SiO2: = 14.35 %	CaO = 44.25 % SiO2 : 12.49 o/o	Threshold value of SMS Gr Limestone is CaO >34% MgO <5%
3f	Quantity of sub grade mineral generation.	4,23,000 MT	7.59,188 MT	
3g	Grade of sub grade mineral generation	CaO - 52.39 % SiO2: = 1.60 %	CaO -51.87 % SiO2: = 1.62 %	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	NA	
3j	Provision of drilling and blasting in mineral benches	Drilling proposed with help of 4" dia drill machine and Blasting is done with ANFO by using controlled blasting techniques DTH & TLD.	Drilling is done with help of 4" dia drill machine and Blasting is done with ANFO by using controlled blasting techniques DTH & TLD.	
3k	Provision of mining machineries in mineral benches	HEMM	HEMM	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes the bench height is suitable for method of mining.	
3m	Total area covered under excavation/pits	37.90 Hect	35.62 Hect	This is total area put to use including crushers, infrastructure and NHAI road in mining lease area.
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	
3o	Total area put in use under different heads at the end of year	Area for Mining=37.90 h Backfilling=26.90 h Plantation=20.00 h Mineral Storage= 2.10 h Utility Services =37.63 h	Area for Mining=35.62 h Backfilling=28.87 h Plantation=20.50 h Mineral Storage= 3.68 h Utility Services =25.19 h	

3p	Production of ROM mineral during the last five year period as applicable	2018-19 : 2726000 t 2019-20 : 2714000 t 2020-21 : 2718000 t 2021-22 : 2719000 t 2022-23 : 2718000 t	2018-19 : 2633643 t 2019-20 : 2504113 t 2020-21 : 946698 t 2021-22 : 2681733 t 2022-23 : 988776 t
3q	General remarks of inspecting officers on method of mining etc.	NA	The overall status of method of mining may be considered as satisfactory.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	NA	Separate dumping of reject is being practised.	
4b	Location of topsoil, OB and mineral reject dumps	NA	As per plan	
4c	Number of dumps within lease area and outside of lease area	NA	NA	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	NA	
4e	Number of active and alive dumps.	NA	NA	
4f	Number of dead dumps.	NA	NA	
4g	Number of dumps established.	NA	None	
4h	Whether Retaining wall or garland drain all along dumps are there.	NA	NA	
4i	Length of Retaining wall or garland drain all along dumps	NA	NA	
4j	Number of settling ponds	No such proposal	Not applicable	

4k	Specific comments of inspecting officer on waste dump management	NA	The overall status of dump management may be considered as satisfactory.
----	--	----	--

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.	Yes, Full extraction of SMS Crade Mineral from mined out area before starting backfilling.	Yes, Full extraction of SMS Crade Mineral from mined out area before starting backfilling.	
5b	Area under backfilling of mined out area	26.90 h	28.87 h	Mined out area is concurrently backfilled with low grade reject in the pit.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No top soil available	Not applicable	
5d	Total area fully reclaimed and rehabilitated	Reclaimed area as on 01.04.2023 is 363.65 Ha. Rehabilitated with Plantation over backfilled= 161.10 Ha Proposed during FY 2022-23 Backfilling= 26.90 Plantation= 20.00	Actual carried out du.,11.gFY 2022-23 Backfilling=28.87 Plantation=20.50	As on 31.03.23 363.65 Ha area is reclaimed & 161.10 Ha area rehabilitated with plantation on backfilled area & on remaining area seeds were spreaded.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	The overall status of backfilling and reclamation may be considered sa satisfactory.	

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	Yes submitted.	
6b	Area available for rehabilitation (ha) .	37.90 ha	35.62 ha	
6c	afforestation done (ha).	NA	NA	
6d	No. of saplings planted during the year	5000 Nos.	5500 Nos.	
6e	Cumulative no .of plants	NA	65,054 Nos.	
6f	Any other method of rehabilitation	NA	NA	
6g	Cost incurred on watch and care during the year	10.50 lacs	11.66 lacs	Cost incurred in deploying water tanker & labour care, watch & ward though contractors
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NA	NA	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	37.90 ha	28.87 ha	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	20 ha	20.50 ha	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	NA
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)		
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes as per norms	Yes

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM generated durng the year 2022-23 : 2022-23 : 2335669.000 T Despatch : SMS Grade - 972323.620 T, Cement Grade - 720202.400 T	ROM generated durng the year 2022-23 : 2335669.000 T Despatch : SMS Grade - 972323.620 T, Cement Grade - 720202.400 T	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical sorting	
7c	Different grade of mineral sorted out at mines.	SMS Grade and Cement Grade	SMS Grade and Cement Grade	

7d	Any beneficiation process at mines .	Nil	Not applicable
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	The present status of mineral conservation and beneficiation may be considered as satisfactory.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	No top soil available in the lease area.	
8b	Concurrent use or storage of topsoil	Nil	Not applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes separate dumping proposed.	Yes separate dumping of reject is being done as per proposal.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Phased restoration , reclamation, rehabilitataion is under process. so far total 363.650 ha area has been covered .	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Used for PLANTATION : 161.100 ha Number of trees planted during the year : 5500 with survival 70% Total no. of trees at the end of the year : 65054	Used for PLANTATION : 161.100 ha Number of trees planted during the year : 5500 with survival 69.59% Total no. of trees at the end of the year : 65054
8g	Survival rate	70-80%	69.59%
8h	Water sprinkling on roads to control airborne dust	Yes	Yes ,water sprinkling on roads to control airborne dust is being practised.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	The overall status of aesthetic beauty in and around mines area may be considered as satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes, as per rule	Yes , submitted as per rule.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager : Shri Mahipal Jugtawat Mining Engineer : Shri Ashish Parihar Geologist : Shri Rajesh Samar	Mines Manager : Shri Mahipal Jugtawat Mining Engineer : Shri Ashish Parihar Geologist : Shri Rajesh Samar	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited and abandoned by opencast (O-C) mining : 537.25 ha Covered under current (O-C) Workings : 35.62 ha Reclaimed-rehabilitated : 363.65 ha Occupied by plant, buildings, residential, welfare buildings and roads : 28.87 ha Used for any other purpose (specify) - PLANTATION : 161.1. ha Work done under progressive mine closure plan during the year : 20.50 ha	Already exploited and abandoned by opencast (O-C) mining : 537.25 ha Covered under current (O-C) Workings : 35.62 ha Reclaimed-rehabilitated : 363.65 ha Occupied by plant, buildings, residential, welfare buildings and roads : 28.87 ha Used for any other purpose (specify) - PLANTATION : 161.1. ha Work done under progressive mine closure plan during the year : 20.50 ha
9d	Scrutiny of Annual return on afforestation	Number of trees planted during the year : 5500 Nos. with survival 69.59 % Toal no. of trees at the end of the year : 65054.	Number of trees planted during the year : 5500 Nos. with survival 69.59 % Toal no. of trees at the end of the year : 65054.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Generation of subgrade-mineral reject (in tones) during the year from unprocessed ore is 587704 T where as from processed ore is 759188.18 T.	Generation of subgrade-mineral reject (in tones) during the year from unprocessed ore is 587704 T where as from processed ore is 759188.18 T. Total 720202.40 T of which disposed during the year.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Production and Stocks of ROM ore at Mine-head reported as 2335669.000 T with closing stock 00.	Production and Stocks of ROM ore at Mine-head reported as 2335669.000 T with closing stock 19240.000 of SMS Grade and Cement Grade 62937.350 T.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value of SMS Grade reported as Rs. 662.28 and for Cement Grade Rs. 297.55. Deductions made from sale value for computation of Ex-mine price reported as Rs. 96.52. Cost of production reported as Rs. 456.83	Sale value of SMS Grade reported as Rs. 662.28 and for Cement Grade Rs. 297.55. Deductions made from sale value for computation of Ex-mine price reported as Rs. 96.52. Cost of production reported as Rs. 456.83. The above mentioned figures seem correct.
9h	Scrutiny of Annual return on fixed assets	Additions during the Year reported as Rs. 14925899 with total depreciation of Rs. 11010421. Estimated market value at the end reported as Rs. 90100000.	The above mentioned information seems to be correct.
9k	Scrutiny of Annual return on mining machineries	Back Hoe- 3 Nos. Blast Host Drill- 2 Nos. Air Compressor- 2 Nos. Dumper- 11 Nos. Front End Loader- 2 Nos. Explosive Van- 1 Nos. Crusher- 2 Nos. Jeep/ Tractor - 2 Nos. Water Tanker- 3 Nos.	All the above machinery is available with mine operator.

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 :

(PANKAJ KULSHRESTHA)

Indian Bureau of Mines