

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/BAR-28/SE-13

Mine code : 97RAJ04003

- (i) Name of the Inspecting : **P019**) **Parkash Chetan**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : Shri Bhom Singh, Lessee and Shri Rajesh Nawal, ME
Official with
Designation
- (iv) Date of Inspection : 18-MAR-17
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHIYAR(65/2012)**
- (b) **Registration NO.** : **IBM/15439**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : RAJASTHAN
District : BARMER
Village : BHIYAR
Taluka : BARMER
Post office :
Pin Code :
FAX No. :
E-mail : RATHOREBHOMSINGH@GMAIL.COM
Phone : 9413253109
- (f) Police Station :
- (g) First opening date : 08-NOV-13
- (h) Weekly day of rest :
2. Address for : 297, Hanuwant-A
correspondance BJS Pawata Road
Jodhpur 342001
3. (a) Lease Number :
(b) Lease area :
(c) Period of lease :
(d) Date of Expiry :
4. Mineral worked : SILICEOUS EARTH Main

5. Name and Address of the

Lessee : SHRI BHOM SINGH RAJPUT
297, HANWANT-A BJS PAOTA
JODHPUR RAJASTHAN
Phone:
FAX :

Owner : SHRI BHOM SINGH RAJPUT S/O CHANDAN SINGH RAJPUT
297, HANWANT-A BJS PAOTA
JODHPUR RAJASTHAN
Phone:
FAX :

Mining Engineer

Name : Shri Rajesh Nawal, Part Time
Qualification : BE(Mining)
Appointment/ : 10-JAN-15
Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 26-JUL-13
Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil for previous yaer.	One PBH of 10mts has been put in first year, no siliceous earth have been encounterd. One PBH put in III rd as per proposal, in this siliceous Earth has been found.	Total two PBH proposed in this approved mining plan , both are carried out.
1b	Exploration over lease area for geological axis 1 or 2	Same as above	Same as above	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Lessee himself	Lessee himself.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not specified in Mining Plan	Not applicable.	
1e	Balance reserve as on 01/04/20	As per approved mining plan the balance reserves proposed as on 1/4/2016 is 102852tonnes and as on 1/4/2018 =65202tonnes	As per record the available balance reserves as on 1/4/2016 is 120770tonnes	
1f	General remarks of inspecting officers on geology, exploration etc		The proposed BPH has been put by the lessee, the available reserves is sufficient for next five years.	Satisfactory.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Near boundary pillar A-B	As per proposal.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Seperate bench in top soil and wast and mineral	As per proposal.	

2c	Stripping ratio or ore to OB ratio	1:0.09	1:0.1	Satisfactory.
2d	Quantity of topsoil generation in m3	1595 Cum	1900Cum	Thickness of top soil much more than expected.
2e	Quantity of overburden generation in m3	1595Cum	2000CUM	Thickness of OB is much more than expected in Mining plan..
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The pit developed systematically by forming benches, separate stacking of top soil and waste before backfilling simultaneously.	Satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single Pit	Single pit	
3b	Quantity of ROM mineral production proposed	17700 tonnes.	17285 tonnes.	Includes rejects or second grade which is also marketable.
3c	Recovery of sailable/usable mineral from ROM production	90%	100%	As the second grade/reject is also marketable as reported by lessee.
3d	Quantity of mineral reject generation	1770 tonnes.	Nil	All the material/ROM is marketable.
3e	Grade of mineral rejects generation and threshold value declared.	Not specified.	Not applicable.	
3f	Quantity of sub grade mineral generation.	Not proposed.	Nil	
3g	Grade of sub grade mineral generation	Not proposed	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	Manually the ROM got dried by spreading under sunlight before marketed

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	Nil	
3j	Provision of drilling and blasting in mineral benches	not proposed	Nil as drilling and blasting is not required,	Because siliceous earth mineral is light and soft.
3k	Provision of mining machineries in mineral benches	Bacj hoe/JCB with tractor trolly		
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of benches in OB 2mts and in mineral 3mts.	One bench of 2mts in OB and two benches in Mineral of 3mts is observed	
3m	Total area covered under excavation/pits	Total degraded land upto plan period is proposed as 1.86hact	Up to the end of 31/3/2016, 1.0625 hact area is utilised under excavation.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.09	1:0.1	
3o	Total area put in use under different heads at the end of year	Total area put to use upto plan period is proposed as 1.86hact	Up to the end of 31/3/2016, 1.0625 hact area is utilised under excavation.	
3p	Production of ROM mineral during the last five year period as applicable	2013-14=15768 tonnes 2014-15=17280tonnes 2015-16=17700tonnes	2013-14=4260 tonnes 2014-15=10745tonnes 2015-16=17285tonnes	
3q	General remarks of inspecting officers on method of mining etc.		The mining is systematic by forming benches etc separate stacking of top soil before backfilling.	Satisfactory.

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 with simultaneos backfilling.	As proposed.	
4b	Location of topsoil, OB and mineral reject dumps	Near Lease boundary A-B	As per proposal	However Overburden is simultaneously backfilled. Small quantity was seen in stacked dump.
4c	Number of dumps within lease area and outside of lease area	One min lease area	As proposed.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	Out side UPL	
4e	Number of active and alive dumps.	One active Dump	As per proposal	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	None	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not specified from third year	As the OB is simultaneously backfilled and practically there is no huge dump required Retaining wall.	
4i	Length of Retaining wall or garland drain all along dumps	Not proposed	Not applicable.	
4j	Number of settling ponds	None	Not applicable	
4k	Specific comments of inspecting officer on waste dump management		Waste/Ob is being used in backfilling.	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.	Full extraction before backfilling.	As per proposal.	

5b	Area under backfilling of mined out area	No specific year wise proposal is given in Mining plan	However so far 0.775 hact area is backfilled.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	For backfilling and plantation.	As per proposal.	
5d	Total area fully reclaimed and rehabilitated	Not specified in mining plan on yearly basis.	However so far 0.775 hact area is backfilled and reclaimed	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		The backfilling is being done.	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).	Annual report for 2015-16 is due.	Not submitted by lessee.	Violation of MCDR rule has been pointed out to lessee.
6b	Area available for rehabilitation (ha) .	Not specified yearly	0.0855hact is available.	0.775hact area is backfilled.
6c	afforestation done (ha).	Not specified	About 0.280hact area is used for plantation.	
6d	No. of saplings planted during the year	80sapling	150sapling	
6e	Cumulative no .of plants	240 plants upto date of field visit.	So far 270 sapling have been planted so far as on date of field visit.	
6f	Any other method of rehabilitation	Not specified.	Not applicable.	
6g	Cost incurred on watch and care during the year	Not specified	Rs. 60 000 spent on environment management including plantation, watch and care of plantation.	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not specified	Not applicable.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not specified	Not applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Not specified	Not applicable.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Not applicable.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not specified	Not applicable.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not specified	About 270 sapling have been planted so far as on date of field visit.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not specified	Not applicable.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By plantation	As proposed.

6p	Compliance of environmental monitoring (core zone and buffer zone)	Not proposed	Not applicable.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		The mining operation is on low scale using only JCB, backfilling is started in excavated area. Plantation also done as per proposal.	Satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No such proposal	The ROM despatched after the dry. For this the ROM is spread on surface for dry in sun light and than accumulate despatched.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	The ROM despatched after the dry. For this the ROM is spread on surface for dry than accumulate and despatched.	
7c	Different grade of mineral sorted out at mines.	Not specified	Nil	
7d	Any beneficiation process at mines	Not proposed	Not applicable.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		The ROM is being despatched after demoisuring, no threat to mineral conservation is observed.	Satisfactory.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Seperate removal of top soil and to be utilized in backfilling.	As proposed.	

8b	Concurrent use or storage of topsoil	Backfilling and plantation.	Backfilling already started.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed seperate dumping with simultaneous backfilling .	Seperate stack and simultaneous backfilling started.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Simultaneous backfilling	Simultaneous Backfilling is being done.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Same as above	Same as above	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	80plantation every year	So far 270 sapling have been planted so far as on date of field visit.	
8g	Survival rate	Not specidied	About 40%	Barmer district comes under Thar Desert of Rajasthan 40% survival is satisfactory.
8h	Water sprinkling on roads to control airborne dust	Not specified	Not done.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		This is a newly opened mine, Backfilling started to restore the mined out land with plantation	Satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

9a	Status of submission of Monthly and Annual returns	Annual returns for 2015-16 is due.	Annual returns for 2015-16 and monthly returns upto Feb 2017 have been recieved.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sh. Rajesh Kumar Nawal, Mining Engineer	Present at the time of field visit.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details are given	Found in order.	
9d	Scrutiny of Annual return on afforestation	150sapling reported.	Found in order.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	1000 tonnes reject generation is mentioned.	Found in order.	However the lessee gots the market for rejects and same is markated now.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Details are given	Found in order.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Exmine price reported as Rs 556/- tonnes	Found in order	
9h	Scrutiny of Annual return on fixed assets	Details on fixed assets are given as nil	No expenditure incurred on infrastructure yet	
9k	Scrutiny of Annual return on mining machineries	One Back hoe of 0.300Cum capacity mentioned.	Found in order.	

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 :

(Parkash Chetan)

Indian Bureau of Mines