

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-13

Mine code : 38RAJ09013

- (i) Name of the Inspecting : **G021**) **DATA RAM GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : SH. RC VYAS, MINES MANAGER & SH. OP SHARMA, GEOLOGIS
Official with
Designation
- (iv) Date of Inspection : 05-MAR-19
- (v) Prev.inspection date : 05-AUG-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MANGROL**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : RAJASTHAN
District : CHITTORGARH
Village : MANGROL
Taluka : NIMBAHERA
Post office : MANGROL
Pin Code : 312617
FAX No. : 01477-20087,220562
E-mail : maheem.kachhwaha@jkcement.
Phone : 01477-20087,220562
- (f) Police Station : Nimbahera sadar
- (g) First opening date : 10-JUN-13
- (h) Weekly day of rest : WED
2. Address for : PO- MANGROL
correspondance : DISTT CHITTORGARH
RAJASTHAN
3. (a) Lease Number : RAJ4468
- (b) Lease area : 132
- (c) Period of lease : 50
- (d) Date of Expiry : 03-MAY-62
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : J.K.Cement Works
 Kailashnagar Nimbahera
 CHITTORGARH RAJASTHAN
 Phone:01477-220087
 FAX :01477-220027

Owner : KAILASH NATH
 50 MIG BUNGLOW W BLOCK JUHI
 KESHAV NAGAR KANPUR UP
 CHITTORGARH RAJASTHAN
 Phone: 0512-2371478-81
 FAX : 0512-2332665

Agent : MAHEEM KACHWAHA
 J.K.CEMENT WORKS NIMBAEHRA
 CHITTORGARH CHITTORGARH
 RAJASTHAN
 Phone: 01477-22087
 FAX : 01477-220027

Mining Engineer

Name : P.K. JOSHI, Full Time
 Qualification : B.E. (Mining) FCC
 Appointment/ : 11-APR-13
 Termination date

Manager

Name : R.C.Vyas
 Qualification : Diploma in mining and FCC
 Appointment/ : 11-APR-13
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 22-MAR-10

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog of previous year.	N/A	
1b	Exploration over lease area for geological axis 1 or 2	No proposal during the last year	Nil	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	N/A	
1e	Balance reserve as on 01/04/20	Balance reserves(proved and probable) as on 01.04.2018 (45.96 mill. Tons)	Balance reserves(proved and probable) as on 01.04.2018 (45.96 mill. Tons)	
1f	General remarks of inspecting officers on geology, exploration etc			No exploration proposal during the last year.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	On pit along the eastern boundary of the lease area.	Pit was developed on proposed location.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, Benches only in mineral	Benches only in mineral.	At the end of year 2017-18 mine development was proposed up to 413mRL whereas actual mine working has been carried up to 409mRL. Further developments of benches have not been carried as per approved proposal hence violation of Rule 11(1) of MCDR 2017 issued to the lessee.
2c	Stripping ratio or ore to OB ratio	1 : 0.00	1 : 0.00	
2d	Quantity of topsoil generation in m3	14000 M3 during the year 2017-18.	13776.22 M3 during the year 2017-18.	
2e	Quantity of overburden generation in m3	No OB generation proposal	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development of mine pit carried out on same location as proposed however some deviation observed in form of violation letter of rule 11(1) of MCDR 2017.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 pit	1 pit	
3b	Quantity of ROM mineral production proposed	18,99,000 Tons (2017-18)	15,02,338.48 Tons (2017-18)	
3c	Recovery of sailable/usable mineral from ROM production	1400000 Tons	1289710.48 Tons	

3d	Quantity of mineral reject generation	No proposal	N/A
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	N/A
3f	Quantity of sub grade mineral generation.	499000 Tons (2017-18)	212628 Tons (2017-18)
3g	Grade of sub grade mineral generation	LSF:67.62	LSF:68.72
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	On the basis of exploration and blast analysis basis.	On the basis of exploration and blast analysis basis.
3j	Provision of drilling and blasting in mineral benches	By drilling and blasting	By drilling and blasting
3k	Provision of mining machineries in mineral benches	Using Hyd. Excavator, Drill machine, Dozer and Tipper.	Using Hyd. Excavator, Drill machine, Dozer and Tipper.
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	Area under mining= 32.919 ha.area at the end of mining plan period i.e. 2021-22.	16.913 ha under mining up to 2017-18.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.00	1 : 0.00

3o	Total area put in use under different heads at the end of year	Total 48.993 hect area will be utilised up to end of mining plan period(2021-22).	Total 27.952 hect. area utilised at the end of 2017-18 as per annual return 2017-18.	
3p	Production of ROM mineral during the last five year period as applicable	2018-19 1899393.2 Tons 2017-18 1899000 Tons 2016-17 1491080 Tons 2015-16 996600 Tons 2014-15 799680 Tons 2013-14 200800 Tons	2018-19 1266080.50 Tons (upto Jan. 2019) 2017-18 1502338.48 Tons 2016-17 1042313.46 Tons 2015-16 1223518.55 Tons 2014-15 575579.32 Tons 2013-14 20852.43 Tons	
3q	General remarks of inspecting officers on method of mining etc.			Method of mining is suitable to the deposit.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	The proposal of separate dumping of subgrade mineral only.	Yes as per proposal.	
4b	Location of topsoil, OB and mineral reject dumps	No proposal of dumping of topsoil, OB & Mineral reject. The proposal of dumping was only proposed for subgrade mineral.	Subdgrade dumps was observed.	At the end of year 2017-18 subgrade dumping location variations observed in form of violation of rule 11(1) of MCDR 2017.
4c	Number of dumps within lease area and outside of lease area	No OB dumps only 03 subgrade dumps.	No OB dumps only 03 subgrade dumps.	
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.	03 subgrade dumps.	03 subgrade dumps.	

4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	No proposal	Not applicable.	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			No waste dump was observed only subgrade stacking is being done.

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 proposal	N/A	
5b	Area under backfilling of mined out area	No backfilling proposal	N/A	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Plantation	As per proposal	
5d	Total area fully reclaimed and rehabilitated	No proposal	N/A	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No proposal of backfilling.

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).	Submitted	Submitted	
6b	Area available for rehabilitation (ha) .	0.8 Hect.	1.02 Hect.	
6c	afforestation done (ha).	0.8 Hect.	1.02 Hect.	
6d	No. of saplings planted during the year	1000 nos.	1116 nos.	
6e	Cumulative no .of plants	3500 nos.	4060 nos.	
6f	Any other method of rehabilitation	No proposal	Not applicable	
6g	Cost incurred on watch and care during the year	Rs. 75,000.00	Rs. 1,60,213.00	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal of backfilling.	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No backfilling proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	N/A	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	N/A	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	N/A	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1000 nos.	1116 nos.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.8 ha	1.02 ha	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quatererly monitoring of Ambient Air Quality & water quality.	Quatererly monitoring of Ambient Air Quality & water quality.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance is satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	14,00,000.00 Tons usable grade will be dispatched to captive cement plant during the year 2017-18.	12,89,710.48 Tons dispatched to captive cement plant during the year 2017-18.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	

7c	Different grade of mineral sorted out at mines.	Usable grade of limestone for captive cement plan & subgrade	Usable grade of limestone for captive cement plan & subgrade	
7d	Any beneficiation process at mines .	No proposal	None	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No issue related to mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Yes as per proposal.	
8b	Concurrent use or storage of topsoil	Concurrent use for plantation.	Concurrent use for plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Only subgrade dumps.	Only subgrade dumps.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	None	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No propsal during the last year.	Nil	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1000 nos. of plantaion will be carried out over an area of 0.8 hect. during the year 2017-18.	1116 nos. of plantaion will be carried out over an area of 1.02 hect. during the year 2017-18.	
8g	Survival rate	75%	70%	
8h	Water sprinkling on roads to control airborne dust	regular sprinkling of water on roads.	regular sprinkling of water on roads is done.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty is good in and around the mines area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return Submitted upto Feb. 2019 Annual Return submitted upto 2017-2018	Monthly Return Submitted upto Feb. 2019 Annual Return submitted upto 2017-2018	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Detail given	Mining Engineer : Sh. P K Joshi Geologist : Sh. Manish Madhav Manager : Sh. R C Vyas	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Detail given	Pit area= 16.913 hect.	
9d	Scrutiny of Annual return on afforestation	Detail given	No. of trees planted : 1116	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral reject generation.	No mineral reject generation.	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	No ROM stock shown Nil in AR.	ROM mineral and dispatched quantity are same.	During the year 2017-18 total ROM Limestone production has been reported in TMIS datasheet 15,02,338.48 tonnes whereas in part VI of annual return 2017-18 ROM production as well as dispatch quantity have been shown 1289710.480 tonnes hence this discrepancies was observed in form of violation of rule 45(7) of MCDR 2017.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Detail given	Production cost : Rs. 172.40	
9h	Scrutiny of Annual return on fixed assets	Detail given	Fixed assets. Rs. 9964295856	
9k	Scrutiny of Annual return on mining machineries	Detail given	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
MCDR17	Rule 11(1)	26-MAR-19			
MCDR17	Rule 45(7)(a)	26-MAR-19			

Date :

(DATA RAM GURJAR)

Indian Bureau of Mines