

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-2

Mine code : 38RAJ09005

- (i) Name of the Inspecting : **G021**) **DATA RAM GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Sohan Das Vairagi, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 17-AUG-19
- (v) Prev.inspection date : 19-JUL-18

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NIMBAHERA**
- (b) **Registration NO.** : **IBM/418/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **RAJASTHAN**
- District : **CHITTORGARH**
- Village : **NIMBAHERA**
- Taluka : **NIMBAHERA**
- Post office : **KAILASH NAGAR**
- Pin Code : **312617**
- FAX No. : **(01477)-220562**
- E-mail : **maheem.kachhwaha@jkcement.co**
- Phone : **01477-220087**
- (f) **Police Station** : **NIMBAHERA**
- (g) **First opening date** : **24-JUN-71**
- (h) **Weekly day of rest** : **WED**
2. **Address for** : **VILLAGE-NIMBHERA & AHIRPURA**
correspondance : **POST-NIMBAHERA, 312617**
: **DISTT-CHITTORGARH**
3. (a) **Lease Number** : **RAJ0008**
- (b) **Lease area** : **403.19**
- (c) **Period of lease** : **:**
- (d) **Date of Expiry** : **31-MAR-30**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : J.K. Cement Works
 P.O. KAILASH NAGAR
 NIMBAHERA CHITTORGARH
 RAJASTHAN
 Phone:01477-220027
 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 : L.S.Pokharan,Full Time
 Qualification : B.E.mining
 Appointment/ : 28-MAY-15 01-MAR-19
 Termination date

Mining Engineer
 Name : Sh Naringa Ram Choudhary,Full Time
 Qualification : B Tech Mining
 Appointment/ : 01-MAR-19
 Termination date

Mining Engineer
 Name : P.K. JOSHI,Full Time
 Qualification : B.E. (Mining) FCC
 Appointment/ : 10-JAN-10 28-MAY-15
 Termination date

Geologist
 Name : AJEY SINGH,Full Time
 Qualification : M.Sc. (Tech.)applied geo.
 Appointment/ : 01-JUL-15
 Termination date

Manager
 Name : L.S.POKHARNA
 Qualification : BE MINING
 Appointment/ : 28-MAY-15 01-MAR-19
 Termination date

Manager
 Name : Sohan Das Vairagi
 Qualification : Diploma Mining and (FCC)
 Appointment/ : 01-MAR-19
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	23-APR-03
		Modif.approved Mining Scheme	01-OCT-04
		FMCP under 23C(1)	24-JAN-07
		Renewal under rule 22 MCR1960	04-APR-08
		Mining Scheme rule 12 MCDR1988	26-JUL-13

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal during the last year.	Nil	
1b	Exploration over lease area for geological axis 1 or 2	No proposal for the year 2018-19 for G1 or G2 level.	Nil	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal during the last year 2018-19.	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal given in approved mining plan for the year 2018-19.	Nil	
1e	Balance reserve as on 01/04/20	Balance reserves as on 01.04.2019 Proved Mineral Reserves 12.85 mill. tons. Probable mineral Reserves 7.94 mill. tons.	Balance reserves as on 01.04.2019 Proved Mineral Reserves 12.85 mill. tons. Probable mineral Reserves 7.94 mill. tons.	
1f	General remarks of inspecting officers on geology, exploration etc			No exploration was proposed during the last year and no exploration has been carried out during the last year.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Ahirpura Block & Murlia Block	Ahirpura Block & Murlia Block	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches only in mineral	Benches only in mineral	
2c	Stripping ratio or ore to OB ratio	1 : 0.026	1 : 0.042	Due to deviation in ore to OB ratio, violation of Rule 11(1) of MCDR 2017 issued to the lessee.
2d	Quantity of topsoil generation in m3	4895.1 cum	4755.24 cum	
2e	Quantity of overburden generation in m3	28671.32 cum	27830.76 cum	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine development is going on proposed location however Orientations of proposed benches have not been maintained as per approved proposals in North & South Pit of Murlia Block hence violation of Rule 11(1) of MCDR 2017 issued to the lessee.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Ahirpura block-1 pit Murlia block-2 pit	Ahirpura block -1 pit Murlia block -2 pit	
3b	Quantity of ROM mineral production proposed	2018-19: 15,59,263.06 Tons	2018-19: 9,54,556.79 Tons	
3c	Recovery of sailable/usable mineral from ROM production	1168777.88 Tons	9,14,758.79 Tons	
3d	Quantity of mineral reject generation	No proposal	Nil	

3e	Grade of mineral rejects generation and threshold value declared.	No mineral reject generation proposal	Not applicable.	
3f	Quantity of sub grade mineral generation.	3,90,485.18 Tons	39,798.00 Tons	
3g	Grade of sub grade mineral generation	CaO%-41.05 & MgO%-0.77	CaO%-40.59 & MgO%-0.70	
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.	No proposal	None	
3j	Provision of drilling and blasting in mineral benches	Yes, Drilling & blasting was proposed in mineral benches.	As per proposal.	
3k	Provision of mining machineries in mineral benches	By Excavator, Drill , Dozer & Tipper etc.	By Excavator, Drill , Dozer & Tipper etc.	
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	97.33 ha	94.557 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.026	1 : 0.042	Due to deviation in ore to OB ratio, violation of Rule 11(1) of MCDR 2017 issued to the lessee.

3o	Total area put in use under different heads at the end of year	Pit area - 97.33 ha Plantation area - 45.21 ha OB/ Top soil dump area-2.56 ha.	Pit area -94.557 ha Plantation area - 45.89 ha OB/ Top soil dump area 1.681 ha.
3p	Production of ROM mineral during the last five year period as applicable	2018-19 1559263.06 T 2017-18 1340558.76 T 2016-17 1503758.27 T 2015-16 1166188.16 T 2014-15 1048508.01 T	2018-19 954556.79 T 2017-18 1016270.25 T 2016-17 1326079.99T 2015-16 983699.23T 2014-15 695967.60T
3q	General remarks of inspecting officers on method of mining etc.		The mine has been developed by mechanised opencast method by 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)	Top soil: No dumping proposal given, OB/IB & Subgrade mineral dumping proposal given;	No dumping of top soil and separate dumping of OB/IB & subgarde mineral have been carried out.	
4b	Location of topsoil, OB and mineral reject dumps	Top soil: No dumping proposal OB/IB: Between section line ML9 to ML11, Subgarde dumping: Between section line ML4to ML8.	Top soil: No dumping proposal, concurrent using in plantation. OB/IB: Between section line ML7 to ML10, Subgarde dumping: Between section line ML5to ML8.	OB/Interburden dump was proposed between section lines ML9 to ML11 but actual dumping has been carried out between section lines ML7 to ML10 hence violation of rule 11(1) of MCDR 2017 issued to the lessee.

4c	Number of dumps within lease area and outside of lease area	OB/IB dump - 1 Subgrade dump -1 Both dumps are within lease area.	OB/IB dump - 1 Subgrade dump -1 Both dumps are within lease area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of ultimate pit limit	Outside of ultimate pit limit	
4e	Number of active and alive dumps.	OB/IB dump - 1 Subgrade dump -1 Both dumps are within lease area.	OB/IB dump - 1 Subgrade dump -1 Both dumps are within lease area.	
4f	Number of dead dumps.	No proposal	Nil	
4g	Number of dumps established.	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal during the year 2018-19.	Gralnd drains along the dumps.	
4i	Length of Retaining wall or garland drain all along dumps	No proposal during the year 2018-19.	Gralnd drains along the dumps.	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			No issue was observed related to waste dump management.

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 proposal during the year 2018-19.	Nil	
5b	Area under backfilling of mined out area	No proposal during the year 2018-19.	Nil	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Concurrent use of top soil for plantation.	Concurrent use of top soil for plantation.	
5d	Total area fully reclaimed and rehabilitated	No proposal given for the year 2018-19.	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Area is not fully matured 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 submitted on time.	Yes submitted on time.	
6b	Area available for rehabilitation (ha) .	During the year 2018-19 0.65 Ha.	During the year 2018-19 0.71 Ha.	
6c	afforestation done (ha).	0.65 ha	0.71 ha (Murlia block)	
6d	No. of saplings planted during the year	1000 nos.	1110 nos.	
6e	Cumulative no .of plants	Not specifed	144533 nos.	
6f	Any other method of rehabilitation	No proposal	None	
6g	Cost incurred on watch and care during the year	Rs. 1.80 lacks	Rs. 2.15 lacks	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	Nil	Rainwater accumulated in Pit Bottom.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.65 hect. area	0.71 hect. area.	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.65 hect. by plantation	0.71 hect. by plantation.	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	By plantation	By plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Regular monitoring will be carried out as EC conditions.	Regular monitoring is being carried out as EC conditions.	

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	PMCP compliance is satisfactory.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM : 15,59,263.06 Tons Dispatch : 11,68,777.88 Tons	ROM : 9,54,556.79 Tons Dispatched : 9,14,758.79 Tons	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	mechanical	
7c	Different grade of mineral sorted out at mines.	Subgarde mineral CaO%-41.05 & MgO%-0.77	Subgarde mineral CaO%-40.59 & MgO%-0.7	
7d	Any beneficiation process at mines	No proposal	Nil	
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	As per proposal	
8b	Concurrent use or storage of topsoil	Concurrent use in plantation.	Concurrent use in plantation.	

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, OB/IB & subgarde dumps.	Yes, OB/IB & subgarde dumps.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal given	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal of reclamation, only plantation proposal given.	Plantation has been carried out as per proposal.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the year 2018-19: 1000 sapling proposed over an area 0.65 ha.	During the year 2018-19: 1110 sapling planted over an area 0.65 ha. and cumulative plantation- 144533 nos. up to year 2018-19.	
8g	Survival rate	70%	70%	
8h	Water sprinkling on roads to control airborne dust	Regular sprinkling of water on haul roads was proposed.	Regular sprinkling of water on haul roads is being carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The general aesthetic beauty in and around mines area is satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR submitted for the year 2018-19 & MR submitted up to Aug. 2019	Rugular submission of returns.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details given.	Mining Engineer : Naringa Ram Chaudhary Geologist :Ajey Singh Mines Manager :Sohan Das Vairagi
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR	Found ok
9d	Scrutiny of Annual return on afforestation	Details given	Found ok
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Detail given	Mineral reject generation- Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Detail given	Total closing stock of subgrade mineral: 408581.710 tonnes
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Detail given	Cost of production per tonne : Rs. 191.72
9h	Scrutiny of Annual return on fixed assets	Detail given	Fixed assets. Rs. 5739159687
9k	Scrutiny of Annual return on mining machineries	Detail given	The reported mine mine machineries is being using.

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)	05-SEP-19			

Date :

(DATA RAM GURJAR)

Indian Bureau of Mines