

**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 : 05-MAR-21
- (v) Prev.inspection date : 17-AUG-19

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 : **manish.toshniwal@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 : Ajay Kumar Saraogi
J.K. Cement Ltd Kamla
Tower, Kanpur KANPUR URBAN
UTTAR PRADESH
Phone: 0512 - 2311478
FAX : 0512 - 2364250

Agent : Manish Toshniwal
J K Cement Works Kailash
Nagar, Nimbahera
CHITTORGARH RAJASTHAN
Phone: 01477-20087,220562
FAX : 01477-20087,220

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
		MP review under 17(1) MCR 2016	06-DEC-19

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal during the previous year 2018-19.	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	No proposal during the year 2019-20.	None	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal during the year 2019-20.	None	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal for the year 2019-20.	None	Total Lease area 403.1875 Hect (G1-142.37 hect., G3-63.80 hect., Non Mineralised area-197.0175 hect.) Exploration proposal given as per norms of MEMC Rules 2015 to cover entire potential mineralised area under G1 during the year 2021-22 by way core bore holes(104 bore holes, 5595m)
1e	Balance reserve as on 01/04/20	Not specified	Balance resreve as on 01.04.2020 17.818	Nil
1f	General remarks of inspecting officers on geology, exploration etc			No exploration was proposed during the year 2019-20 and no exploration has been carried out during the year 2019-20.

Development :

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

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches only in mineral	Benches only in mineral	Nil
2c	Stripping ratio or ore to OB ratio	1 : 0.030	1:0.13	Nil
2d	Quantity of topsoil generation in m3	2019-20 4,895.10	2019-20 2,671.32	Nil
2e	Quantity of overburden generation in m3	2019-20 33566.43 cum	2019-20 71846.15 cum	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			During the inspection violation was issued vide letter dated 17.03.2021 for rule 11(1) of MCDR 2017 for following issues: (i)Mineral stacking was observed towards eastern side of Northern Pit of Murlia Block between section lines ML6 to ML7 which was not proposed in approved mining plan. (ii)Large quantity of Limestone boulders were lying all around on the benches in North Pit of Murlia Block during the inspection.

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	Nil

3b	Quantity of ROM mineral production proposed	2019-20 16,20,114.73 Tons	2019-20 7,42,609.44 Tons	Nil
3c	Recovery of sailable/usable mineral from ROM production	2019-20 11,67,689.99 Tons.	2019-20 7,40,893.44 Tons	Nil
3d	Quantity of mineral reject generation	No proposal	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No mineral reject generation proposal	Nil	Nil
3f	Quantity of sub grade mineral generation.	2019-20 4,52,324.74 Tons.	2019-20 1716.00 Tons	Nil
3g	Grade of sub grade mineral generation	CaO-41.05% & MgO-0.77%	CaO%-40.59 & MgO%-0.70	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	None	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, Drilling & blasting was proposed in mineral benches.	As per proposal.	Nil
3k	Provision of mining machineries in mineral benches	By Excavator, Drill , Dozer & Tipper etc.	By Excavator, Drill , Dozer & Tipper etc.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	Nil
3m	Total area covered under excavation/pits	100.56 Ha	96.415 Ha	Nil

3n	Ore to OB ratio for the pit/mine during the year.	2019-20 1:0.030	2019-20 1:0.13	Nil
3o	Total area put in use under different heads at the end of year	Pit area - 100.56 ha Plantation area - 45.21 ha Waste dump area-2.56 ha Cement Plant and Residential-19.21 ha Subgrade dump-1.934 ha Infrastructure -5.11 ha	Pit area - 96.415 ha Plantation area - 47.27 ha Waste dump area 1.681 ha Cement Plant and Residential 19.21 ha Subgrade dump 1.295 ha Infrastructure 2.88 ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2020-21 865973.0 T 2019-20 1620014.73 T 2018-19 1559263.06 T 2017-18 1340558.76 T 2016-17 1503758.27 T 2015-16 1166188.16 T	2020-21 5,13,974.71T(Up to Feb 2021) 2019-20 742609.44T 2018-19 954556.79 T 2017-18 1016270.25 T 2016-17 1326079.99T 2015-16 983699.23T	Nil
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	Proposals	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 & subgrade mineral have been carried out.	Nil

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 during the previous inspection. Review of Mining plan has also been approved for the for the year 2020-21 to 2024-25 vide dated 06.12.2019 incorporating location of subgrade dump.
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.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of ultimate pit limit	Outside of ultimate pit limit	Nil
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.	Nil
4f	Number of dead dumps.	No proposal	Nil	Nil
4g	Number of dumps established.	No proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal during the year 2019-20.	Gralnd drains along the dumps.	Nil
4i	Length of Retaining wall or garland drain all along dumps	No proposal during the year 2019-20.	200m Gralnd drains along the dumps.	Nil
4j	Number of settling ponds	No proposal	Nil	Nil

4k	Specific comments of inspecting officer on waste dump management	No issue was observed related to waste dump management.
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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 of backfilling during the year 2019-20.	Nil	Nil
5b	Area under backfilling of mined out area	No proposal of backfilling during the year 2019-20.	Nil	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.	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal given for the year 2019-20.	Nil	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
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	A yearly report to be submitted before 1st July of every year setting forth the extent of protective and rehabilitation works carried out as envisaged in the approved progressive mine closure plan.	Not submitted for the year 2019-20.	Violation of Rule 26(2) of MCDR 2017 issued vide letter dated 17.03.2021 for non submission of PMCP report for the year 2019-20.
6b	Area available for rehabilitation (ha) .	0.67 ha	0.67 ha	Nil
6c	afforestation done (ha).	0.67 ha	0.67 ha	Nil
6d	No. of saplings planted during the year	1000 nos.	950 nos.	Nil
6e	Cumulative no .of plants	Not specified.	146983 nos.	Nil
6f	Any other method of rehabilitation	No proposal	None	Nil
6g	Cost incurred on watch and care during the year	Rs. 6,00,000	Rs. 1,53,800	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil	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	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.67 hect. area	0.67 hect. area	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.67 hect. area	0.67 hect. area	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By plantation	By plantation	Nil
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.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Violation of Rule 26(2) of MCDR 2017 issued vide letter dated 17.03.2021 for non submission of PMCP report for the year 2019-20.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM : 16,20,114.73 Tons Dispatch : 11,67,789.99 Tons	ROM : 7,42,609.44 Tons Dispatch : 7,40,893.44 Tons	Nil

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Nil
7c	Different grade of mineral sorted out at mines.	Usable grade & subgrade	Usable grade & subgrade	Nil
7d	Any beneficiation process at mines .	No proposal	Nil	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	Nil
8b	Concurrent use or storage of topsoil	Concurrent use in plantation.	Concurrent use in plantation.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, OB/IB & subgarde dumps.	Yes, OB/IB & subgarde dumps.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal given	Nil	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.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the year 2019-20: 1000 sapling proposed over an area 0.67 ha.	During the year 2019-20: 950 sapling planted over an area 0.67 ha.	Nil
8g	Survival rate	Not specified	70%	Nil
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.	Nil
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 up to the year 2019-20 & MR submitted up to Feb. 2021.	Rugular submission of returns.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer : Naringa Ram Chaudhary Geologist : Ajey Singh Mines Manager : Sohan Das Vairagi	Found correct.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR	Seems to be correct.	Nil

9d	Scrutiny of Annual return on afforestation	950nos.	Found correct.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral reject generation- Nil	Correct.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Graded stock(Subgrade)-1366712.98 T	Seems to be correct.	However some discrepancies observed in AR 2019-20: (i) The gradewise production reported item 2 of Part VI is 742609.440 tonnes whereas ROM production reported in item 1 of Part VI is 740893.440 tonnes and opening & closing of ROM stock is 0 tonne. Hence violation of Rule 45(7) of MCDR 2017 issued vide letter dated 17.03.2021.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Captive use Ex mine price & production cost Rs.201.15	Seems correct.	Nil
9h	Scrutiny of Annual return on fixed assets	Rs.7193198319/ -	Seems correct.	Nil
9k	Scrutiny of Annual return on mining machineries	Details of machineries given	Found correct.	Nil

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
MCDR17	Rule 11(1)	17-MAR-21			
MCDR17	Rule 26(2)	17-MAR-21			
MCDR17	Rule 45(7)(a)	17-MAR-21			

Date :

(DATA RAM GURJAR)

Indian Bureau of Mines