

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-2

Mine code : 38RAJ09005

- (i) Name of the Inspecting : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sri Lal Singh Pokharna, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 17-AUG-23
- (v) Prev.inspection date : 31-OCT-22

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 : RAJ00008
- (b) Lease area : 403.19
- (c) Period of lease : 50
- (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 : Pradeep Kumar Dewar, Full Time
 Qualification : BE Mining
 Appointment/ : 01-JUN-23
 Termination date

Mining Engineer

Name : Ramesh, Full Time
 Qualification : BE Mining
 Appointment/ : 23-SEP-21 04-MAR-23
 Termination date

Mining Engineer

Name : Shubham Kulmi, Full Time
 Qualification : BE Mining
 Appointment/ : 04-MAR-23 31-MAY-23
 Termination date

Geologist

Name : Prashant Tiwari, Full Time
 Qualification : Msc (Geology)
 Appointment/ : 02-AUG-21
 Termination date

Manager

Name : L.S.POKHARNA
 Qualification : BE MINING
 Appointment/ : 19-AUG-21
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	23-APR-03
Plan/Scheme of Mining	:	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	104 nos of boreholes with 5595 m of drilling during previous year 2021-22.	Drilled 104 nos of boreholes with 8249.05m of drilling during previous year 2021-22.	No backlog.
1b	Exploration over lease area for geological axis 1 or 2	No proposal of exploration during reporting year (RY) 2022-23.	No exploration during reporting year (RY) 2022-23.	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable as no proposal of exploration.	Not applicable. .	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal.	Not applicable. .	NIL
1e	Balance reserve as on 01/04/20	Reserve and Resource: 18.09 and 32.05 million tons respectively. (as on 30/09/2019)	Reserve and Resource: 15.84 and 32.05 million tons respectively. (as on 01/04/2023)	NIL
1f	General remarks of inspecting officers on geology, exploration etc	No proposal of exploration.	Not applicable.	Geologically the lease area is uniform and the litho beds are generally sub-horizontal with gentle rolling dips.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	Ahirpura and Murlia blocks.	Development was carried out in Murlia block and no work in Ahirpura Block during RY.	Development has been observed outside of the proposed limit in Murlia block. Violation of rule 11(1) of MCDR, 2017 issued.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate removal of top soil and Mineral.	Top soil and mineral removed separately.	NIL
2c	Stripping ratio or ore to OB ratio	1 : 0.02 t/t	1 : 0.04 t/t	Violation of rule 11(1) of MCDR, 2017 issued for deviation in stripping ratio.
2d	Quantity of topsoil generation in m3	4,895.10 CuM.	4867.13 CuM.	NIL
2e	Quantity of overburden generation in m3	15438.74 CuM or 22077.40 tons.	15382.62 CuM or 22000.00 tons.	NIL
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Opencast method of development has been proposed.	Opencast method of development is being practiced.	Development method proposed is suitable for the type of deposit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Ahirpura block-1 pit and Murlia block-1 pit (existing pit)	Production has been carried out form Murlia block.	Total three pits exists in lease area. Murlia block- two pits and Ahirpura block-one pit.
3b	Quantity of ROM mineral production proposed	856638.30 tons	502516.84 tons	Less production due to low demand.
3c	Recovery of sailable/usable mineral from ROM production	801097.50 tons	497566.84 tons	Less production due to low ROM production and low demand.
3d	Quantity of mineral reject generation	5000.00 tons	4950.00 tons	NIL

3e	Grade of mineral rejects generation and threshold value declared.	Between 34% to CaO- 39.64% 42% CaO.		NIL
3f	Quantity of sub grade mineral generation.	No proposal.	Not applicable.	NIL
3g	Grade of sub grade mineral generation	No proposal.	Not applicable.	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized (crusher and screen plant).	Mechanized through crusher and screen plant located outside of the lease area.	NIL
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal.	Not applicable.	NIL
3j	Provision of drilling and blasting in mineral benches	Drilling by 115 mm dia DTH drill machine. For blasting slurry cap sensitive explosives, ANFO and SME to be used.	Drilling and blasting are done as per the proposal. Slurry cap sensitive explosives & ANFO is used for blasting.	NIL
3k	Provision of mining machineries in mineral benches	Excavator, drill machine, dozer & Tipper etc.	Excavator, drill machine, dozer & Tipper etc.	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of the benches has been proposed 8 and 7 meter in Ahirpura and Murlia block respectively.	Height of Benches has been maintained as per proposal.	NIL
3m	Total area covered under excavation/pits	102.66 hectare at the end of the plan period i.e. 2024-25.	100.88 hectare at the end of the RY i.e.2022-23.	NIL
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.02 t/t	1:0.04 t/t	Violation of rule 11(1) of MCDR, 2017 issued.

3o	Total area put in use under different heads at the end of year	An area of 135.08 hectare at the end of 2024-25.	An area of 133.18 hectare by the end of 2021-22.	NIL
3p	Production of ROM mineral during the last five year period as applicable	2018-19:1559263 2019-20:1620014 2020-21:865973 2021-22:860420 2022-23:856638	2018-19:954556 2019-20:742609 2020-21:697329 2021-22:774236 2022-23:502516	Figures in tones.
3q	General remarks of inspecting officers on method of mining etc.	Opencast method of Mining has been proposed.	Opencast method of mining is being practiced.	Method of mining proposed is suitable for 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)	Concurrent use of top soil and separate staking/dumpin g of Sub-grade and waste.	Top soil generated used for plantation purpose and separate staking/dumping of Sub-grade and waste.	NIL
4b	Location of topsoil, OB and mineral reject dumps	Concurrent use of top soil. Dumping of the waste and Sub-grade has been proposed in southern extension of the existing waste dump and sub-grade dump.	Top soil generated used for plantation purpose. Dumping of waste has been observed in Eastern side of the existing dump and also near boundary pillar P.	Violation of rule 11(1) of MCDR, 2017 issued for deviation in location of waste dumping.
4c	Number of dumps within lease area and outside of lease area	Within lease : Waste dump-1 and MR/Sub-grdae dump -1. No proposal of dumping beyond lease area.	Within lease : Waste dump-1 and MR/Sub-grdae dump -1. No waste dumping outside lease area.	NIL
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside ultimate pit limit.	Outside ultimate pit limit.	NIL

4e	Number of active and alive dumps. MR: 1	Waste dump: 1 MR: 1	Waste dump: 1 MR/Sub-grade: 1	Few heaps of the waste material near boundary pillar P has been observed, violation of rule 11(1) of MCDR issued.
4f	Number of dead dumps.	No proposals	Not applicable.	NIL
4g	Number of dumps established.	No proposals	Not applicable.	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall: Yes Garland drain : Yes	Retaining wall and garland drain observed along waste dump.	NIL
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall: NIL Garland drain: 50m.	Retaining wall: 60m Garland drain: 50m.	NIL
4j	Number of settling ponds	No proposal	Not applicable	NIL
4k	Specific comments of inspecting officer on waste dump management	Separate dumping of IB and MR.	Dumping of waste has also observed over non-approved area near boundary pillar P and Eastern side of the existing dump.	Violation of rule 11(1) of MCDR, 2017 issued for deviation in waste dumping.

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 part or full extraction of mineral.	Not applicable as no proposal.	NIL
5b	Area under backfilling of mined out area	No proposal.	No backfilling during reporting year. However, an area of 2.82 hectare of Ahirpura block has already been backfilled.	NIL
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Concurrent use of top soil for plantation.	Top soil generated used for plantation purpose.	NIL

5d	Total area fully reclaimed and rehabilitated	No proposal.	Not Applicable	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposal of backfilling.	Not applicable as no proposal.	None of the area matured for 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).	As per rule 26 of MCDR, 2017 holder of mining lease shall submit PMCP report before 1st day of July every year.	PMCP report for the year 2022-23 has been submitted.	NIL
6b	Area available for rehabilitation (ha) .	No proposal.	Not Applicable	NIL
6c	afforestation done (ha).	0.75 hectare.	4.54 hectare.	NIL
6d	No. of saplings planted during the year	1500 nos.	10761 nos.	NIL
6e	Cumulative no .of plants	Not Specified.	162199 nos.	NIL
6f	Any other method of rehabilitation	No proposal.	Not Applicable	NIL
6g	Cost incurred on watch and care during the year	Rs. 375000/-	Rs. 632760/-	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal.	Not Applicable.	NIL

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal.	Not Applicable.	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal.	Not Applicable.	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal.	Not Applicable.	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal.	Not Applicable.	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	1500 nos.	10761 nos.	NIL
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.75 ha	4.54 ha	NIL
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation.	Plantation.	NIL
6p	Compliance of environmental monitoring (core zone and buffer zone)	Regular monitoring of environment parameters.	Monitoring is being carried out.	NIL

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	An area of 0.75 hectare with 1500 nos of saplings has been proposed to plant.	An area of 4.54 hectare with 10761 nos of saplings has been planted.	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 processing through Crushing and Screening.	ROM processing through Crushing and Screening.	Crusher located at Mangrol.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized (Crushing and screening).	Mechanized (Crushing and screening).	NIL
7c	Different grade of mineral sorted out at mines.	Cement Grade limestone and Mineral reject (Sub-grade).	Cement Grade limestone and Mineral reject (Sub-grade).	NIL
7d	Any beneficiation process at mines .	No proposal.	Not applicable.	NIL
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	ROM processing through Crushing and Screening.	ROM is being processed through Crushing and Screening.	No issue related to mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Top soil of 7000.00 tons was proposed to generate and concurrent utilization.	Top soil of 6960.00 tons was generated and utilized for plantation.	NIL
8b	Concurrent use or storage of topsoil	Concurrent use of top soil for plantation.	Top soil generated used for plantation purpose.	NIL

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for waste (IB) & MR/Sub-grade.	Separate dumping of waste (IB) & MR/Sub-grade.	NIL
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal.	Not applicable.	NIL
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Not applicable.	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	An area of 0.75 hectare with 1500 nos of saplings has been proposed to plant.	An area of 4.54 hectare with 10761 nos of saplings has been planted.	NIL
8g	Survival rate	Survival rate- 85%	Survival rate - 88.50%	NIL
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul road etc.	Water spraying observed.	NIL
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	An area of 0.75 hectare with 1500 nos of saplings has been proposed to plant.	An area of 4.54 hectare with 10761 nos of saplings has been planted.	The general aesthetic beauty in and around lease area is satisfactory

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	As per rule 45 of MCDR, 2017 monthly and annual returns to be submitted.	Annual and Monthly returns of RY have been submitted.	NIL

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: LS Pokharna, Geologist: Prasant Tiwari, Mining engineer: Parag Dangi	Manager, Mining Engineer and Geologist appointed.	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit area: 100.88 Ha, Reclaimed area: 2.82 Ha, Waste Dump: 2.55 Ha, Infrastructure : 27.73 ha, Mineral reject: 2.018 ha etc.	The information on land use furnished appears in order.	NIL
9d	Scrutiny of Annual return on afforestation	Within lease area: 10761 No. Outside Lease area: NIL	Found in order.	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral reject : 4950.00 tons & CaO: 41.33%	Found in order.	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock: NIL and Limestone stock: 419075.71tons.	Closing stock of sub-grade mineral has been shown in the cement grade limestone.	Violation rule 45(7) of MCDR, 2017 issued.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price and cost of production: Rs 222.46/tons. Sale value: Rs. NIL being a captive mine.	Captive use of limestone.	NIL
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets: Rs. 166666472.00	Appears in order.	NIL
9k	Scrutiny of Annual return on mining machineries	Back Hoe, Tipper, Air compressor, Drilling Machine, Water Tanker, Explosive van, Pumps etc.	Back Hoe, Tipper, Air compressor, Drilling Machine, Water Tanker, Explosive van, Pumps etc.	NIL

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)	15-SEP-23				
MCDR17 Rule 45(7)(a)	15-SEP-23				

Date :

(DILIP JAIN)

Indian Bureau of Mines