

**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 : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sri Lal Singh Pokharna, Mine Manager, Sri Prashant Ti
Official with
Designation
- (iv) Date of Inspection : 31-OCT-22
- (v) Prev.inspection date : 29-SEP-21

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 : 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 : Ramesh, Full Time
 Qualification : BE Mining
 Appointment/ : 23-SEP-21
 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 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 for previous year i.e. 2020-21.	No exploration during the previous year i.e. 2020-21.	NIL.
1b	Exploration over lease area for geological axis 1 or 2	104 nos of boreholes with 5595m of drilling.	Drilled 104 no's of boreholes with & 8249.05m drilling.	NIL.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/s J.K. Cement works, Nimbahera. Expenditure: Not specified.	M/s J.K. Cement works, Nimbahera and M/s Synergy Geotech Pvt. Ltd. - Expenditure: 68.44 lacs.	NIL.
1d	Balance area to be explored to bring Geological axis in 1 or 2	63.80 Hectare.	Entire mineralized area converted under G1 level of exploration.	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: 16.34 and 32.05 million tons respectively. (as on 01/04/2022)	NIL.
1f	General remarks of inspecting officers on geology, exploration etc	A total of 104 nos of BHs with 5595 mts of drilling have been proposed.	A total of 104 nos of BHs with 8249.05 mts of drilling have been completed during RY.	Geologically the lease area is simple and the beds are generally sub-horizontal with gentle rolling dips.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Ahirpura and Murlia block.	Ahirpura and Murlia block.	NIL.
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 : 0.02 t/t	NIL.

2d	Quantity of topsoil generation in m3	4,895.10 CuM or 7000 tons.	4811.18 CuM or 6880.00 tons	NIL.
2e	Quantity of overburden generation in m3	15438.46 CuM or 22077.40 tons.	15107.69 CuM or 21604.00 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.	Development as per proposal.	Development method proposed is suitable for the kind of deposit.

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	8,60,420.20 tons	7,74,236.04 tons	NIL.
3c	Recovery of sailable/usable mineral from ROM production	8,04,964.00 tons	7,61,680.25 tons	NIL.
3d	Quantity of mineral reject generation	5000.00 tons	946.00 tons	NIL.
3e	Grade of mineral rejects generation and threshold value declared.	CaO- 41.19%	CaO- 41.33%	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 (crusher and screen plant).	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 to 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.	98.755 hectare at the end of the RY i.e.2021-22.	NIL.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.02 t/t	1 : 0.02 t/t	NIL.
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 131.305 hectare by the end of 2021-22.	NIL.
3p	Production of ROM mineral during the last five year period as applicable	2017-18:1340558 2018-19:1559263 2019-20:1620014 2020-21:865973 2021-22:860420	2017-18:1016,70 2018-19:954556 2019-20:742609 2020-21:697329 2021-22:774236	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	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Concurrent use of top soil and separate staking/dumping of MR and waste.	Top soil generated used for plantation purpose and separate staking/dumping of MR and waste.	NIL.
4b	Location of topsoil, OB and mineral reject dumps	IB/waste and MR: Western side of Murlia block i.e between section line ML 5 to ML10.	IB/waste and MR observed western side of Murlia block i.e. between section line ML 5 to ML10. Dumping of waste has also observed near boundary pillar P.	Violation of rule 11(1) of MCDR, 2017 issued.
4c	Number of dumps within lease area and outside of lease area	Within lease : Waste dump-1 and MR-1. No proposal of outside lease area dumping.	Within lease : Waste dump-1 and MR-1. Outside Lease area: NIL.	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.	Waste dump: 1 MR: 1	Waste dump: 1 MR: 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 proposal.	Not applicable.	NIL.
4g	Number of dumps established.	No proposal.	Not applicable.	NIL.
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall and garland drain proposed to construct.	Retaining wall: 40 m. Garland drain:50 m.	NIL.
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall: 200m. Garland drain: 50m.	Retaining wall: 40 m. Garland drain: 50 m.	Violation of rule 11(1) of MCDR, 2017 issued for shortfall in construction of retaining wall.
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.	Violation of rule 11(1) of MCDR, 2017 issued for deviation in waste dumping and retaining wall.

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 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.	An area of 2.82 hectare of Ahirpura block is reclaimed.
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.	No area matured for backfilling.	No 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 before 1st day of July every year.	PMCP report for the year 2021-22 has been submitted.	NIL.
6b	Area available for rehabilitation (ha) .	No proposal.	Not applicable	NIL.
6c	afforestation done (ha).	0.75 hectare.	2.48 hectare.	NIL.
6d	No. of saplings planted during the year	1500 nos.	3455 nos.	NIL.
6e	Cumulative no .of plants	Not Specified.	151438 nos.	NIL.
6f	Any other method of rehabilitation	No proposal.	Not applicable	NIL.

6g	Cost incurred on watch and care during the year	Rs. 300000/-	Rs. 786250.00	NIL.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x 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 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.	3455 nos.	NIL.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.75 hectare.	2.48 hectare.	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)	Regularly monitoring as per Environment Clearance and SPCB.	Periodic compliance report is regularly submitted to concerned authorities.	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.	A total of 3455 number of saplings have been planted over an area of 2.48 hectare.	Violation of rule 11(1) of MCDR, 2017 issued for shortfall in construction of retaining wall.

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 is being processed through Crushing and Screening.	NIL.
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.	Cement Grade limestone and Mineral reject.	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
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8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal of top soil.	Top soil generated used for plantation purpose.	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.	Separate dumps for waste (IB) & MR.	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 2.48 hectare with 3455 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 2.48 hectare with 3455 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
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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 for RY have been submitted.	NIL.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information of Manager, Geologist and Mining engineer is furnished.	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: 98.755 ha Reclaimed area: 2.82 ha Waste Dumps: 2.12 ha Infrastructure : 26.05 ha Plantation: 52.49 ha Subgrade dump: 1.56 ha	The information on land use furnished appears in order.	NIL.
9d	Scrutiny of Annual return on afforestation	No. of trees planted: 3455 inside lease area and Nil outside lease area.	Found in order.	NIL.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject: 946.00 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: 414125.71 MT	ROM stock: NIL and Limestone stock: 414125.71 MT	NIL.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price and cost of production: Rs 190.60/tons.	Captive use.	NIL.
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets: Rs. 170456984.00	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	NIL.
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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)	08-DEC-22			

Date :

(DILIP JAIN)

Indian Bureau of Mines