

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-11

Mine code : 38RAJ09009

- (i) Name of the Inspecting : **G021**) **DATA RAM GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri M.K. Bokadia, HOD (Mines)
Official with
Designation
- (iv) Date of Inspection : 29-JUL-22
- (v) Prev.inspection date : 28-JUL-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHATKOTRI**
- (b) **Registration NO.** : **IBM/226/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : RAJASTHAN
- District : CHITTORGARH
- Village : NIMBAHERA
- Taluka : NIMBAHERA
- Post office : NIMBAHERA
- Pin Code : 312601
- FAX No. : +91-1477-307333
- E-mail : nbh.mines@wondercement.com
- Phone : 91-1477-307000, 0294-66022:
- (f) Police Station : NIMBEHERA
- (g) First opening date : 16-JAN-11
- (h) Weekly day of rest : SUN
2. Address for : R.K. NAGAR,
correspondance : NIMBEHERA
DIST. - CHITTORGARH (RAJ.)
3. (a) Lease Number : RAJ3224
- (b) Lease area : 740.93
- (c) Period of lease : 50
- (d) Date of Expiry : 08-SEP-58
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : WONDER CEMENT LTD
 R.K. NAGAR POST NIMBAHERA
 DIST. - CHITTORGARH (RAJ.)
 CHITTORGARH RAJASTHAN
 Phone:
 FAX :

Owner : P. PATIDAR
 WONDER CEMENT LTD. VILLAGE
 - NIMBAHERA DIST. -
 CHITTORGARH (RAJ.)
 CHITTORGARH RAJASTHAN
 Phone:
 FAX :

Agent : Nitin Jain
 R, K, Nagar, Nimbahera
 CHITTORGARH RAJASTHAN
 Phone: 01477 277777
 FAX : 01477 277333

Mining Engineer

Name : Sunil Bora, Full Time
 Qualification : B.E. Mining
 Appointment/ : 24-JUN-12
 Termination date

Geologist

Name : Kuldeep Chobisa, Full Time
 Qualification : M.Sc. (Geology)
 Appointment/ : 01-APR-14
 Termination date

Manager

Name : Shri Raju Jain
 Qualification : BE Mining
 Appointment/ : 11-MAR-21
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	20-JUL-11
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	08-JUL-13
		MP review under 17(1) MCR 2016	19-DEC-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog of exploration drilling during the previous year.	Not applicable	Nil
1b	Exploration over lease area for geological axis 1 or 2	39 boreholes (5830m) was proposed during the year 2021-22 for G1 level.	51 boreholes (4682m) was carried out during the year 2021-22 for G1 level.	Few bore holes are terminated in waste zone at lesser depth as compare to proposal, hence total meterage is less compare to proposal.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No specific proposal given in this regard	Synergy Geotech Pvt Ltd Nagpur (Core Drilling), & Inspectorate Griffith India Pvt Ltd. Gandhidham (NABL Sample Analysis). Expenditure - Rs.92.53 lakh	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Proposal given to cover entire potential mineralized area(365 Hect.) for G1 level up to depth of mineral as per norms of MEMC Rules 2015.	Exploration drilling has been carried for G1 level in the entire potential mineralised area (365 hect.) area as per norms of MEC Rules 2015.	No potential mineralised area remain to be explored.
1e	Balance reserve as on 01/04/20	As per approved document dated 19.12.2018, the position of reserve on 01.04.2018 was 436.73 million tonnes.	Balance reserve as on 01/04/21, 406.298 million tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc			No issue observed related to geology & exploration.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	570 S to 1010 N &246 W to 980 W	Mine development has been carried out within proposed limit.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes, as per proposal	Nil
2c	Stripping ratio or ore to OB ratio	2021-22: 1:0.041	2021-22: 1:0.029	MT: m3
2d	Quantity of topsoil generation in m3	2021-22: 118034 m3	2021-22: 94315 m3	Nil
2e	Quantity of overburden generation in m3	2021-22: 397974 m3	2021-22: 106279 m3	Interburden (IB)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine development has been carried out on proposed location however Infrastructure i.e. New Mine office, Stacker Reclaimer Establishment work on progress towards eastern side of the lease area between grid 1950E to 2200E & 400S to 100N which were not proposed in the approved review of mining plan, hence violation Rule 11(1) of MCDR 2017 issued vide letter dated 06.09.2022.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	Nil
3b	Quantity of ROM mineral production proposed	2021-22: 186,36,983 Tonnes	2021-22: 72,03,581 Tonnes	Nil

3c	Recovery of sailable/usable mineral from ROM production	2021-22: 141,00,000 Tonnes	2021-22: 69,66,316 Tonnes	Nil
3d	Quantity of mineral reject generation	2021-22: 436083 Tonnes	2021-22: 2,37,265 Tonnes	Screen Reject
3e	Grade of mineral rejects generation and threshold value declared.	<34% CaO	<34% CaO	Nil
3f	Quantity of sub grade mineral generation.	4100900 Tonnes	None	Subgrade Mineral is utilized with purchased high-grade limestone.
3g	Grade of sub grade mineral generation	34% to 41% CaO	Not generated hence not applicable.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method adopted for segregating from ROM was proposed.	Mechanised method adopted for segregating from ROM was carried out.	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	Deep hole drilling & blasting was proposed during the year.	Deep hole drilling & blasting was carried out during the year.	Nil
3k	Provision of mining machineries in mineral benches	HEMM excavator & dumpers combination was proposed.	HEMM excavator & dumpers was deployed.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Height of benches in overburden and mineral suitable for method of mining.	Nil
3m	Total area covered under excavation/pits	130.67 Ha (upto 2021-22)	106.00 Ha (up to 2021-22)	Nil
3n	Ore to OB ratio for the pit/mine during the year.	2021-22: 1:0.041	2021-22: 1:0.029	MT: m3

3o	Total area put in use under different heads at the end of year	It was proposed that total 277.93ha area put in use under different heads at the end of the plan period i.e. 2023-24.	At the end of the year 2021-22, total 178.72 ha used under different heads.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2017-18:9100000 T, 2018-19:14100000 T, 2019-20:17509883 T, 2020-21:20354908 T, 2021-22:18636983 T, 2022-23:19857733 T	2017-18: 6661725.00 T, 2018-19: 7519942.00 T, 2019-20: 7703170.00 T, 2020-21: 8003038.00 T, 2021-22: 7203581 T, 2022-23: 1871472 T(up to June 2022)	Nil
3q	General remarks of inspecting officers on method of mining etc.	Opencast Mining Method was proposed	Mechanised mining method is being used along with HEMM as per proposal	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)	Separate dumps for topsoil, OB/IB & mineral reject proposed.	Separate dumps for topsoil, OB/IB & mineral reject made.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Top Soil: 428S to 566S,682E to 827E (Temp stack) OB/IB Dump (up to 2021-22) : 876 S to 1188 S , 424 E to 421 W Screen reject dump:935S to 1040S & 310E to 580E Subgrade:562N to 1012N & 635W to 13E.	Top Soil: 428S to 566S,682E to 827E (Temp stack) OB/IB Dump (up to 2021-22) : 1022 S to 1170 S , 0 E to 200 E Screen reject dump:Screen reject has been dumped on existing Screen Reject Dump(1493E to 1660E,147N to340N) Subgrade dump: No subgrade generation,hence no dumping has been carried out.	Screen reject dumping has been proposed between local grid 935S to 1040S & 310E to 580E whereas it was dumped on existing screen reject dump hence violation of Rule 11(1) of MCDR 2017 issued vide letter dated 06.09.2022.

4c	Number of dumps within lease area and outside of lease area	5 nos of dumps have been proposed within mining lease area.	Total 4 Nos Dump (All are within the lease area)	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	2 dumps are situated outside the UPL limit (One Screen reject + One Old Wsate Dump) , other 3 (Screen reject, waste dump & subgrade) are within the UPL	2 waste dump (OB/IB) within ultimate pit limit and 2 dumps (one screen reject dump and one OB/IB dump) outside the ultimate pit limit were proposed.	Nil
4e	Number of active and alive dumps.	04 dumps are active	03 dumps are active	Nil
4f	Number of dead dumps.	01	01	Nil
4g	Number of dumps established.	Not specified	01	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	900m Garland Drain reported during the year, but retaining wall not made as per proposal.	Total 392m retaining wall proposed at the bottom of waste dump during the reporting year but no such wall was made, hence violation of Rule 11(1) of MCDR 2017 issued vide letter dated 06.09.2022.
4i	Length of Retaining wall or garland drain all along dumps	1. 500 Mtrs stone wall/ retaining wall at sub grade dump. 2. 392 Mtrs stone wall/ retaining wall bottom of waste dump. 3. 632 Mtrs bund on Screen reject. 4. 1100 Mtrs garland drain	1. Sub grade dump not available during the reporting year as sub grade used with high grade limestone. 2. No such wall made. 3. 512 Mtrs bund on Screen reject was made. 4. 900 Mtrs garland drain was made as per proposal.	Total 392m retaining wall proposed at the bottom of waste dump during the reporting year but no such wall was made, hence violation of Rule 11(1) of MCDR 2017 issued vide letter dated 06.09.2022.
4j	Number of settling ponds	No proposal	None	Nil

4k	Specific comments of inspecting officer on waste dump management			Total 392m retaining wall proposed at the bottom of waste dump during the reporting year but no such wall was made, hence violation of Rule 11(1) of MCDR 2017 issued vide letter dated 06.09.2022.
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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	Not applicable as no proposal	Nil
5b	Area under backfilling of mined out area	No proposal	Not applicable as no proposal	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Not applicable as no proposal	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable as no proposal	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposal of backfiling and reclamation.	No area matured for backfiling and reclamation.	Nil

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).	As per rule 26(2) 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 timely.	Nil
6b	Area available for rehabilitation (ha) .	No proposal	Not applicable as no proposal	Nil
6c	afforestation done (ha).	2021-22: 1.0 hect.	2021-22: 1.0 hect.	Nil
6d	No. of saplings planted during the year	2021-22: 1000 nos.	2021-22: 2507 nos.	Nil
6e	Cumulative no .of plants	Not specified	62211nos. (upto year 2021-22)	Nil
6f	Any other method of rehabilitation	No proposal	Not applicable as no proposal	Nil
6g	Cost incurred on watch and care during the year	Rs 3 lakhs	Rs. 7.52 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	None	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	None	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	None	Nil

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	None	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal	None	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	1000 nos	2507 nos	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	1 hect.	1 hect.	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)	As per EC Condition compliance.	Monitoring done quarterly in core & buffer zone	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance of the mine is satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM feed to crusher and clay is separated by screening before crushing & after crushing. All limestone feed to captive cement plant.	ROM feed to crusher and clay is separated by screening before crushing & after crushing. All limestone feed to captive cement plant.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	None	Nil
7c	Different grade of mineral sorted out at mines.	No proposal	None	Nil
7d	Any beneficiation process at mines	No proposal	None	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No issue were observed 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	Top soil removed seperately and simultaneously used for plantation.
8b	Concurrent use or storage of topsoil	Concurrent use	Yes, as per proposal	Top soil removed seperately and simultaneously used for plantation.

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for Overburden and screen reject were proposed	Separate dump for Overburden and screen reject were carried out .	Some deviation in location of screen dump observed hence violation of rule 11(1)of MCDR 2017 issued vide letter dated 06.09.2022.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such specific proposal given	None;However some quantity of waste is being used for haul road maintenance.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal during the year 2021-22.	None	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the year2021-22,1000nos was proposed over an area 1.0hect.	During the year2020-21,total 2507 nos. sapling planted over an area of 1.0 ha.Total62211 nos. cumulative plantation has been carried out up to year 2021-22.	Nil
8g	Survival rate	Not specified	80%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads was proposed.	2 nos. water sprinklers are being used for water spraying on roads.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The general aesthetic beauty in and around mine area was 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, monthly and annual returns to be submitted.	Monthly returns upto July, 2022 and Annual returns for the year 2021-22 have been submitted timely.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information of Mining Engineer, Geologist and Manager has been furnished.	Details found correct	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit - 106.00 Hect. Waste Dump- 16.50 Hect Plant, buildings, residential, welfare buildings & roads- 21.320Hect Plantation- 34.900 Hect.	Seems to be corrected	Nil
9d	Scrutiny of Annual return on afforestation	2507 Nos plantation within mine lease area having survival rate 79.97%.	Found to be in order.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Quantity - 237265 Grade- CaO less than 34%	Details seems to be corrected.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM & Limestone (Cement Grade) Opening Stock- Nil Closing Stock -Nil	Semms corrected	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value -Rs 0.00 (Limestone used in captive cement plant) Ex mine price & Production Cost- 257.31Rs /T	Seems corrected	Nil

9h	Scrutiny of Annual return on fixed assets	Total value of Fixed Assets - Rs 1343896196	Seems corrected	Nil
9k	Scrutiny of Annual return on mining machineries	Details given in Annual Returns 2021-22.	Seems corrected	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)	06-SEP-22			

Date :**(DATA RAM GURJAR)**

Indian Bureau of Mines