

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-9

Mine code : 38RAJ09001

- (i) Name of the Inspecting : **G021**) **DATA RAM GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Kashi Kant Singh, Agent & Sh. Narendra Menaria,
Official with
Designation
- (iv) Date of Inspection : 07-MAY-22
- (v) Prev.inspection date : 07-JUN-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JAI SURJANA (BIRLA)**
- (b) **Registration NO.** : **IBM/4349/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : RAJASTHAN
District : CHITTORGARH
Village : JAI SURJANA & BHERDA
Taluka : CHITTORGARH
Post office : CEMENT FACTORY
Pin Code : 312021
FAX No. : 01472-256609,
E-mail : mines@birlacement.com
Phone : 01472-256601 TO 256608
- (f) Police Station : CHANDERIYA
- (g) First opening date : 17-AUG-94
- (h) Weekly day of rest : SUN
2. Address for : Birla Cement Works , JAI SURJANA
correspondance CEMENT FACTORY
CHITTORGARH, Rajasthan
3. (a) Lease Number : RAJ0005
- (b) Lease area : 588.19
- (c) Period of lease :
- (d) Date of Expiry : 31-MAR-30
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : Birla Cement Works
 Madhavnagar, P.O. Cement
 Factory, Chittorgarh PIN
 312021 CHITTORGARH
 RAJASTHAN
 Phone:
 FAX :

Owner : Arvind Pathak
 1, Shakespeare Sarani (2nd
 Floor), Kolkata-700071
 KOLKATA WEST BENGAL
 Phone: 033-22130379
 FAX : 033- 22482872

Agent : Kashi Kant Singh
 Birla Cement Works P.O.
 Cement Factory Madhav Nagar
 Chanderia CHITTORGARH
 RAJASTHAN
 Phone: 9116009421
 FAX :

Mining Engineer

Name : Rajesh Choudhry, Full Time
 Qualification : B E (Mining Engg)
 Appointment/ : 16-MAR-17
 Termination date

Geologist

Name : Shri Narendra Manaria, Full Time
 Qualification : M Tech Geology
 Appointment/ : 17-NOV-05
 Termination date

Manager

Name : G. R, Bishnoi
 Qualification : B E (mining engg)
 Appointment/ : 05-MAY-19
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	23-MAY-03
Plan/Scheme of Mining		Modif.of approved Mining Plan	17-JAN-07
		Mining Scheme rule 12 MCDR1988	08-SEP-08
		Mining Scheme rule 12 MCDR1988	06-APR-15
		MP review under 17(1) MCR 2016	02-DEC-19
		MP modif under 17(3) MCR 2016	19-JUL-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog of previous year.	None	Nil
1b	Exploration over lease area for geological axis 1 or 2	During the year 2021-22, proposal of 61 holes total meterage 3400 m	During the year 2021-22 total 51 bore holes having 2395m drilling completed.	Remaining drilling has been carried out during the current financial year 2022-23.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration Agency- Not specified, Expenditures- Not specified	Exploration Agency-B K Associates, Rajkot Expenditures- Rs. 526900	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	All the mineralised area(217.52 hect.) out of total lease area 588.59 hect. has already under G1 level. However proposal of exploration given to prove depth continuity of limestone mineral as per norms of MEMC Rules 2015.	During the year 2021-22 total 51 bore holes having 2395m drilling carried out to prove mineral continuity in depth.	217.52 hect area is mineralised area out of total 588.59 hect. lease area. All the mineralised area has been explored under G1 level, however proposal given to prove the mineral continuity in depth as per MEMC Rules 2015.
1e	Balance reserve as on 01/04/20	No specific proposal given.	Balance reserves as on 01.04.2022: 7,93,30,051 T	Nil
1f	General remarks of inspecting officers on geology, exploration etc			No issue observed related to geology & exploration.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Total four locations proposed: In Block B- Bherda Pit In Block C- Pits namely Jai pit no.1, Jai Pit No2, Surjana pit & Nagri Pit	In Block C- in Pits namely Jai Pit No1, Jai Pit no.2 & Surjana pit.	(1) No work has been carried out in Bherda Pit. In Nagri Pit work has not been carried out due to Hon'ble NGT restrictions.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There is not separate benches in topsoil at mine however benches in mineral & OB was proposed.	There is not separate benches in topsoil at mineral & OB was observed.	However no systematic mine benches were observed in Jai Pit No.2, hence violation of Rule 11(1) of MCDR 2017 issued vide letter dated 01.07.2022.
2c	Stripping ratio or ore to OB ratio	2021-22: 1:0.16	2021-22: 1:0.24	(m3/ m3)
2d	Quantity of topsoil generation in m3	No specific proposal given	2200 tons top soil generated during the year which is utilized in plantation.	Nil
2e	Quantity of overburden generation in m3	2021-22: 3,28,061 cum	2021-22: 2,90,691 cum	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			However no systematic mine benches were observed in Jai Pit No.2, hence violation of Rule 11(1) of MCDR 2017 issued vide letter dated 01.07.2022.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2021-22: Total 05 pits. Block B- Bherda Pit Block C- 4 Pits namely Jai pit no.1, Jai Pit No. 2, Surjana pit & Nagri Pit	2021-22: Production carried out in 03 pits of Block C namely Jai Pit No.1, Jai Pit No.2 & Surjana Pit.	Nil

3b	Quantity of ROM mineral production proposed	2021-22: 48.92 lac Tonnes	2021-22: 28.24 lac Tonnes	Nil
3c	Recovery of sailable/usable mineral from ROM production	2021-22: 43.06 lac Tonnes	2021-22: 28.21 lac Tonnes	Nil
3d	Quantity of mineral reject generation	2021-22: 5.85 lac Tonnes	2021-22: 0.033 lac Tonnes	Screen Reject
3e	Grade of mineral rejects generation and threshold value declared.	Cao less than 34% Mgo=1%	Cao less than 34% Mgo=1%	Nil
3f	Quantity of sub grade mineral generation.	No subgrade mineral generation proposal.	No subgrade mineral generated during the year.	Nil
3g	Grade of sub grade mineral generation	No subgrade mineral generation proposal	No subgrade mineral generated during the year.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized method	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	Proposal of Drilling & Blasting is Subjected to decision of Honorable Court.	Worked with mechanical means without Blasting using Rock breaker. Decision is still awaiting	Nil
3k	Provision of mining machineries in mineral benches	Excavator , Rock Breaker/Ripper /terminator ,Dumper, Dozer, Water Tanker etc.	Excavator , Rock Breaker/Ripper/terminator ,Dumper, Dozer, Water Tanker 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	195.459 hect. (up to 31.03.2021)	193.039 Hectare at the end of Year 21-22	Nil
3n	Ore to OB ratio for the pit/mine during the year.	2021-22: 1:0.16	2021-22: 1:0.24	(m3/ m3)
3o	Total area put in use under different heads at the end of year	At the end of Approved Plan Period (Up to 2024-25) total 293.4396 Hectare (Including 16..4 hectare reclaimed area and 17.07 hectares Railways)	Total 261.2296 Hectare under various heads up to March 2022 (Including 16..4 hectare reclaimed area and 17.07 hectares Railways)	Nil
3p	Production of ROM mineral during the last five year period as applicable	2017-18 = 49.60Lac tonne 2018-19 =49.60Lac tonne 2019-20=49.60 Lac tonne 2020-21=43.17 lac Tonnes 2021-22=48.92 lac Tonnes	2017-18=23.28 Lac tonne 2018-19=28.57 Lac tonne 2019-20=27.21 Lac tonne 2020-21=27.05 lac Tonnes 2021-22=28.24 lac Tonnes	Nil
3q	General remarks of inspecting officers on method of mining etc.			The open cast mining method being using which is best suited 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)	Yes separate dump for O/B and mineral reject proposed	Yes separate dump for O/B and mineral reject observed.	Nil

4b	Location of topsoil, OB and mineral reject dumps	Top soil: No proposal OB & Screen Reject Dumping has been carried out near working pits. OB was also dumped in Bunds made around the pits.	Top soil: generated which was simultaneously used for plantaion. OB & Screen Reject Dumping has been carried out near Jai Pit, Surjana Pit, Nagri Pit & Bherda Pit. OB was also dumped in Bunds made around the pit	Nil
4c	Number of dumps within lease area and outside of lease area	10 dumps within lease area (Including 03 OB bunds)	10 dumps within lease area (Including 03 OB bunds)	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	Out side UPL	Nil
4e	Number of active and alive dumps.	08 in Block C (including 2 OB bunds)	08 in Block C (including 2 OB bunds)	Nil
4f	Number of dead dumps.	2 (in Block B i.e. Bherda Block including 1 OB Bund)	2 (in Block B i.e. Bherda Block including 1 OB Bund)	Nil
4g	Number of dumps established.	No such proposal has been given	02 dumps.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes proposal given for retaining wall & garland drain	Yes as per proposal	Nil
4i	Length of Retaining wall or garland drain all along dumps	Year 2021-22: Retaining wall - 540m, Garland drian-590m	Year 2021-22: Retaining wall - 600m, Garland drian-500m	Nil
4j	Number of settling ponds	Not specified	01	Nil
4k	Specific comments of inspecting officer on waste dump management			No specific issue was observed related to waste dump management.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No backfilling proposed during the year 2021-22.	No backfilling has been carried out during the year 2021-22.	Nil
5b	Area under backfilling of mined out area	No backfilling proposed during the year 2021-22.	No backfilling has been carried out during the year 2021-22.	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Only meager Quantity of top soil available and whatever generated will be utilized for plantation	2200 tonne soil generated and utilized for plantation during the year 2021-22.	Nil
5d	Total area fully reclaimed and rehabilitated	No specific proposal has been given during the year 2021-22.. however as per approved review of mining plan 16.4 hectarea has been considered as reclaimed Area a fully reclaimed as water storage for Bherda Block.	None during the last year.	However as per approved review of mining plan total 16.4 hectare area of Bherda Pit (Block B) has been considered as reclaimed area which is using for water storage.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No backfilling & reclamation has been carried out during the last year.

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).	PMCP yearly report should be submitted up to 1 july of previous year .	PMCP report for the year 2021-22, which was submitted by the lessee on time.	Nil

6b	Area available for rehabilitation (ha) .	1.0 hect	5.6 hect. area	Nil
6c	afforestation done (ha).	2021-22: 1 hect.	2021-22: 5.6 hect.	Nil
6d	No. of saplings planted during the year	1000 Plants	8,497 Plants	Nil
6e	Cumulative no .of plants	Not specified	1,38,820 nos. up tp year 2021-22.	Nil
6f	Any other method of rehabilitation	No proposal	None	Nil
6g	Cost incurred on watch and care during the year	Not specified	Rs. 30 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No backfilling 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 for the last year	Nil	As per approved Review of MP total 16.4 hectare area of Bherda Pit (Block B) has been considered as reclaimed area which is using for water storage.
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	1.0 Hectare area is proposed for Development of green belt during the year 2021-22.	Green belt was developed over an area 5.6 hectare during the year 2021-22.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.0 hect. by plantation	5.6 hect. by plantation.	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 was proposed.	As per proposal	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP complinaces satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	During the year 2020-21 total 43.06 lac tonnes limestone will be dispatched.	During the year 2020-21 total 28.21 lac tonnes limestone dispatched.	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	Nil	Nil

7d	Any beneficiation process at mines	No proposal during the year 2021-22.	None	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No issue was observed related to mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Only meager quantity of top soil available and whatever generated will be utilized for plantation.	Top soil generated during the year 2021-22, which was simultaneously used for plantaion.	Nil
8b	Concurrent use or storage of topsoil	Plantation	Plantation	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Separate dumps for OB waste & screen rejects were observed.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal given	None	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal for the last year	Nil	Nil

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation over 1.0 hectare area was proposed with 1000 no. plants	Green belt was developed in 5.6 hectare with plantation of 8497 plants	Nil
8g	Survival rate	Not specified	About 90%	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling was proposed.	Water sprinkling was observed.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Easthetic beauty is good in and around mine area.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	At the time of inspection: Annual return was due up to year 2020-21. Monthly returns submitted up to May 2022 months.	Regular submisson of monthly & annual returns. At the time of inspection(7.05.2021) anual return for the year 2021-22 was not due hence scrutiny of annual return 2021-22 has been carried out.	Regular & timely sumsission of returns.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	In AR 2020-21: Mining Engineer - Rajesh Chaudhary Geologist - Narendra Menaria Manager - Biswaranjan Mohanty	Found ok	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR 2020-21.	Seems correct	Nil
9d	Scrutiny of Annual return on afforestation	Details given	Seems corrected	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Quantity = 6100 tonnes (Screen reject) Grade - Total Carbonate < 60 %	Seems to be correct	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock-Nil	Seems correct.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production - Rs 594.49 per tonne	Seems correct	Nil
9h	Scrutiny of Annual return on fixed assets	Rs.238720924	Seems correct	Nil
9k	Scrutiny of Annual return on mining machineries	Details given	Seems correct	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)	01-JUL-22			

Date :

(DATA RAM GURJAR)

Indian Bureau of Mines