

**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 : Sh. Narendra Menaria, Sr. Manager(Geology)
Official with
Designation
- (iv) Date of Inspection : 19-OCT-19
- (v) Prev.inspection date : 22-JUL-19

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 : 588.59
- (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 : P. Majumdar
 Birla Cement Works Madhav
 Nagar CHITTORGARH
 RAJASTHAN
 Phone:
 FAX :

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

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.	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	No exploration was proposed in approved Scheme of Mining for the year 2018-19.	Nil	All the mineralised area has been explored up to G1 level however depth continuity of mineral found continue, hence in this current submitted review of mining plan document the exploration proposal will be incorporated as per MCDR 2017 & MEMC Rules 2015.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal during the year 2018-19.	Nil	All the mineralised area has been explored up to G1 level however depth continuity of mineral found continue, hence in this current submitted review of mining plan document the exploration proposal will be incorporated as per MCDR 2017 & MEMC Rules 2015.
1e	Balance reserve as on 01/04/20	Balance reserves as on 01.04.2019 88.02 million tonnes.	Balance reserves as on 01.04.2019 88.02 million tonnes.	Nil

1f	General remarks of inspecting officers on geology, exploration etc	All the mineralised area has been explored up to G1 level however depth continuity of mineral found continue, hence in this current submitted review of mining plan document the exploration proposal will be incorporated as per MCDR 2017 & MEMC Rules 2015.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Total four locations In Block B- Bherda Pit In Block C- 3 Pits namely Jai pit, Surjana pit & Nagri Pit	Total four locations In Block B- Bherda Pit In Block C- 3 Pits namely Jai pit, Surjana pit & Nagri Pit	Violation of rule 11(1) of MCDR 2017 issued to the lessee for the following mine development issues: 1)Mine development in Nagri Pit between grids E2800 to E3050 & N3170 to N3380 has been carried out up to year 2018-19 which was not proposed. 2)Mine development in Jai pit has not been carried out as per approved proposal.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There is not sperate benches in topsoil at mine however benches in mineral & OB was proposed.	There is not sperate benches in topsoil at mine however benches in mineral & OB was observed.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.07	1:0.2	Over all stripping ratio

2d	Quantity of topsoil generation in m3	No proposal	Nil	Nil
2e	Quantity of overburden generation in m3	149000 cum	290651 cum	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Violation of rule 11(1) of MCDR 2017 issued to the lessee for the following mine development issues: 1) Mine development in Nagri Pit between grids E2800 to E3050 & N3170 to N3380 has been carried out up to year 2018-19 which was not proposed. 2) Mine development in Jai pit has not been carried out as per approved proposal. 3) Large quantities of boulders were lying all around in Surjana, Nagri & Jai pits.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Total 04 pits. Block B- Bherda Pit Block C- 3 Pits namely Jai pit, Surjana pit & Nagri Pit	Total 04 pits. Block B- Bherda Pit Block C- 3 Pits namely Jai pit, Surjana pit & Nagri Pit	Nil
3b	Quantity of ROM mineral production proposed	49.60 lac Tonnes	28.57 lac Tonnes	Nil
3c	Recovery of sailable/usable mineral from ROM production	40.65 lac Tonnes	27.94 lac Tonnes	

3d	Quantity of mineral reject generation	8.95 lac Tonnes	0.63lac 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	Nil	Nil
3g	Grade of sub grade mineral generation	No subgrade mineral generation proposal	Nil	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	Nil	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	192.49 (Up to 2020)	187.31 up to 2018-19	This area also included 16.4 hect. Bherda pit up to III bench and water is being used by PHED for drinking water supply. This area has been considered as reclaimed.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.07	1:0.2	Over all stripping ratio
3o	Total area put in use under different heads at the end of year	328.35 hect. total area will be utilised up to end of SOM period i.e. 2020. (This area also include 52.86 hect. Green belt area)	308.76 hect. total area utilised up to 2018-19. (This area also include 61.11 hect. Green belt area)	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15 = 49.63 Lac tonne 2015-16 = 49.63 Lac tonne 2016-17 = 49.60 Lac tonne 2017-18 = 49.60Lac tonne 2018-19 =49.60Lac tonne	2014-15 = 20.56 Lac tonne 2015-16 = 24.54 Lac tonne 2016-17 = 24.06Lac tonne 2017-18=23.28 Lac tonne 2018-19=28.57 Lac tonne.	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
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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: No proposal 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 pits.	Nil
		Around the pits Bunds are formed through OB & in		
4c	Number of dumps within lease area and outside of lease area	Within lease =10 Outside lease = Nil	Within lease =10 Outside lease = Nil	OB was also used in Bunds made around the pits.
4e	Number of active and alive dumps.	08 in Block C	08 in Block C	OB was also used in Bunds made around the pits.
4f	Number of dead dumps.	2 (in Block B i.e. Bherda Block)	2 (in Block B i.e. Bherda Block)	
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.	Graland drain was propoed	Garland drain made.	Nil
4i	Length of Retaining wall or garland drain all along dumps	Not specified	194 m along dump near crusher Ramp	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.

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No backfilling proposed	No backfilling has been carried out.	Nil
5b	Area under backfilling of mined out area	No backfilling proposed	Not applicable	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 it will be utilized for plantation	No top soil generated during 2018-19	Nil
5d	Total area fully reclaimed and rehabilitated	No specific proposal has been given during the year 2018-19. however as per approved Scheme of Mining total 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 Scheme of Mining 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
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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 2019 for the FY 2018-19.	PMCP report for the year 2018-19 has not submitted by the lessee.	Violation of Rule 26(2) of MCDR 2017 issued for non submission of PMCP report for the year 2018-19 by the previous inspecting officer vide letter dated 22-10-2019.
6b	Area available for rehabilitation (ha) .	3.5 hect.	3.5 hect.	Nil
6c	afforestation done (ha).	3.5 hect.	1.25 hect.	For less plantation during the year 2018-19, violaion of Rule 11(1) of MCDR 2017 issued to the lessee by the previous inspecting officer vide letter dated 22-10-2019.
6d	No. of saplings planted during the year	5000 nos.	1250 nos. within lease area & 700nos. outside of the lease area	For less plantation during the year 2018-19, violaion of Rule 11(1) of MCDR 2017 issued to the lessee by the previous inspecting officer vide letter dated 22-10-2019.
6e	Cumulative no .of plants	Not specified.	Not reported.	Violation of Rule 26(2) of MCDR 2017 issued for non submission of PMCP report for the year 2018-19 by the previous inspecting officer vide letter dated 22-10-2019.
6f	Any other method of rehabilitation	No proposal	None	Nil

6g	Cost incurred on watch and care during the year	Not specified	Not reported	Violation of Rule 26(2) of MCDR 2017 issued for non submission of PMCP report for the year 2018-19 by the previous inspecting officer vide letter dated 22-10-2019.
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 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 Scheme of Mining 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	3.5 Hectare area is proposed for Development of green belt	Green belt was developed over an area 1.25 hectare	For less plantation during the year 2018-19, violaion of Rule 11(1) of MCDR 2017 issued to the lessee by the previous inspecting officer vide letter dated 22-10-2019.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	3.5 hect. by plantation	1.25 hect. by plantation	For less plantation during the year 2018-19, violaion of Rule 11(1) of MCDR 2017 issued to the lessee by the previous inspecting officer vide letter dated 22-10-2019.
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.			(1)Violation of Rule 26(2) of MCDR 2017 issued for non submission of PMCP report for the year 2018-19 by the previous inspecting officer vide letter dated 22-10-2019. (2)For less plantation during the year 2018-19, violaion of Rule 11(1) of MCDR 2017 issued to the lessee by the previous inspecting officer vide letter dated 22-10-2019.

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	During the year 2018-19 total 40.65 lac tonnes limestone will be dispatched.	During the year 2018-19 total 27.94 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 .	Proposed	No beneficiation plant commissioned due to delay in grant of Environment Clearance	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	No top soil was generated during 2018-19	Nil
8b	Concurrent use or storage of topsoil	Only meager quantity of top soil available and whatever generated will be utilized for plantation	No top soil was generated during 2018-19	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 3.5 hectare area was proposed with 5000 no. plants	Green belt was developed in 1.25 hectare with plantation of 1250 plants	For less plantation during the year 2018-19, violaion of Rule 11(1) of MCDR 2017 issued to the lessee by the previous inspecting officer vide letter dated 22-10-2019.
8g	Survival rate	Not specified	96.72%	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	Annual return submitted up to year 2018-19. Monthly returns submitted up to Nov. 2019 months.	Regular submisson of monthly & annual returns.	Nil

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details given in AR.	Found ok	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR.	Found to be correct.	Nil
9d	Scrutiny of Annual return on afforestation	Details given	As reported in return total 1250 nos. sapling planted within lease area & 700 nos. sapling planted outside of the lease area.	For less plantation during the year 2018-19, violation of Rule 11(1) of MCDR 2017 issued to the lessee by the previous inspecting officer vide letter dated 22-10-2019.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Details given	Quantity = 62800 tonnes as screen reject.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	In AR ROM limestone reported 2794980 tonnes.	ROM production of 28.57 Lac tonne has been carried out during the year 2018-19.	Violation of Rule 45(7) of MCDR 2017 issued for not reporting correct ROM figure in part VI of AR 2018-19.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine price shown Rs. 423.92 & Cost of Production reported Rs 441.46 per tonne	Difference in Ex mine price & cost of production was observed.	It is captive mine & due to difference in cost of production & ex-mine price, violation of rule 45 was already issued by the previous inspecting officer vide letter dated 22-10-2019.
9h	Scrutiny of Annual return on fixed assets	Details given	Found to be correct.	Nil
9k	Scrutiny of Annual return on mining machineries	Detail given.	Found 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)	19-NOV-19			
MCDR17	Rule 31(4)	19-NOV-19			
MCDR17	Rule 45(7)(a)	19-NOV-19			

Date :

(DATA RAM GURJAR)

Indian Bureau of Mines