

**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 : **S012**) **H C SHARMA**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sh. S M Ahmed
Official with
Designation
- (iv) Date of Inspection : 22-JUL-19
- (v) Prev.inspection date : 31-JUL-17

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 : 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	Nil	Nil	
1b	Exploration over lease area for geological axis 1 or 2	No Proposal	The entire potential area has already been explored in detail.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Not applicable	
1e	Balance reserve as on 01/04/20	78.04 million tonnes.	88.02 million tonnes.	As per Constraint of mining operation without blasting, lessee could not able to achieve production target as per proposal
1f	General remarks of inspecting officers on geology, exploration etc	Not applicable	There are no exploration proposed in the mine. The entire potential area has already been explored in detail.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	3 location Jai pit, Surjana pit ,Nagri Pit ,& Bherda Block	3 location Jai pit, Surjana pit ,Nagri Pit ,& Bherda Block	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There is no top soil at site of excavation, separate bench in O/B provided.	There is no top soil at site of excavation, separate bench in O/B provided.	
2c	Stripping ratio or ore to OB ratio	1:0.06	1:0.02	

2d	Quantity of topsoil generation in m3	Nil	Nil
2e	Quantity of overburden generation in m3	149000 Cu M	290651 Cu M
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Not applicable	Due to constraint of mining operation without blasting, lessee had to work at four location to achieve production target as per proposals.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	4 pits	4 pits	
3b	Quantity of ROM mineral production proposed	49.60 lac Tonnes	28.57 lac Tonnes	
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	
3e	Grade of mineral rejects generation and threshold value declared.	Total Carbonate less than 60	Total Carbonate < 60(Cao <34)	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized method	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	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
3k	Provision of mining machineries in mineral benches	Dumper Excavator Combination.	Rock Breaker Dumper Combination.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes
3m	Total area covered under excavation/pits	192.49 ha (Up to 2020)	187.31 ha up to 1/4/19.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.07	1:0.02
3o	Total area put in use under different heads at the end of year	At the end of Approved Plan Period Mining (Excavation) = 176.09 Ha. (Excluding Reclaimed Area) Excavated Area Reclaimed = 16.40 Ha. Settling Pond = 1.50 Ha. Railway Land = 17.07 Ha. Crusher = 10.30 Ha. Roads = 12.53 Ha. OB/ Waste Dump = 55.48 Ha. Plantation = 63.56 Ha.	For Period (2018-19) Mining (Excavation) = 187.31 Ha. (Excluding Reclaimed Area) Excavated Area Reclaimed = 16.40 Ha. Settling Pond = 1.50 Ha. Railway Land = 17.07 Ha. Crusher = 1.20 Ha. Roads = 12.53 Ha. OB/ Waste Dump and Bunds = 45.11 Ha. Plantation = 61.11 Ha.

3p	Production of ROM mineral during the last five year period as applicable	2014-15 = 64.49 Lac tonne 2015-16 = 49.63 Lac tonne 2016-17 = 49.60 Lac tonne 2017-18 = 49.60 Lac tonne 2018-19 = 49.60 Lac tonne	2014-15 = 20.56 Lac tonne 2015-16 = 24.54 Lac tonne 2016-17 = 24.06 Lac tonne 2017-18 = 23.28 Lac tonne 2018-19 = 28.57 Lac tonne.
3q	General remarks of inspecting officers on method of mining etc.	Not applicable	The opencast method of mining has been deployed to work the deposit 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 carried out.	
4b	Location of topsoil, OB and mineral reject dumps	E = 1900 to 2100 N = 1950 to 2350	E= 1900 to 2100 N = 1950 to 2300	
4c	Number of dumps within lease area and outside of lease area	Within lease =10 Outside lease = Nil	Within lease =9 Outside lease = Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side UPL	As per proposals	
4e	Number of active and alive dumps.	8 (in Block C)	7 (in Block C)	
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.	2 (in Block B i.e. Bherda Block)	2 (in Block B i.e. Bherda Block)	

4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Not applicable
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Not applicable
4j	Number of settling ponds	One	One
4k	Specific comments of inspecting officer on waste dump management	Not applicable	No specific issue worth reporting about waste dump management.

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 backfilling proposed	No backfilling carried out.	
5b	Area under backfilling of mined out area	No proposal	Not applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	For plantation.	For Plantation.	
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not applicable	No backfilling & reclamation proposed neither done.	

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).	Yes as per rule	Not submitted
6b	Area available for rehabilitation (ha) .	No proposal	Not applicable
6c	afforestation done (ha).	3.5 ha	1.25 ha
6d	No. of saplings planted during the year	5000 nos	1500 nos
6e	Cumulative no .of plants	Not reported	77.56 ha afforested
6f	Any other method of rehabilitation	No proposal	Not applicable
6g	Cost incurred on watch and care during the year	Not reported	Not applicable
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Not applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Not applicable
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Not applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Not applicable

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Not applicable
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	3.5 ha	1.25 ha
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Not applicable
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Not applicable
6p	Compliance of environmental monitoring (core zone and buffer zone)	Regular monitoring as per MOEF.	As per proposal
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Not applicable	The annual report of work for progressive mine closure plan not submitted for which violation of rule 26(2) is being pointed out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Limestone dispatch =49.60 lac tonnes.	Actual Dispatch = 27.94lac tonnes	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No Proposal	Not applicable	
7c	Different grade of mineral sorted out at mines.	No Proposal	Not applicable	

7d	Any beneficiation process at mines	Proposed	Not carried out due to delay in grant of Environment Clearance
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Not applicable	No issue worth reporting regarding 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 is generated during 2018-19	
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 is generated during 2018-19	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	As per Proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal for the year 2018-19.	Not applicable	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation over 3.5 hectare area is proposed with 5000 plant	Green belt is developed in 1.25 hectare with plantation of 1500 plants
8g	Survival rate	95%	96.72%
8h	Water sprinkling on roads to control airborne dust	Airborne dust generation is controlled by water spraying	Three tankers of 25000 to 28000 liters capacity and fitted with water guns and water spreading system are being used
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not applicable	The general aesthetic beauty in & around the mine was satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Not applicable	The monthly returns is submitted up to July 2019. The annual return had been submitted up to 2018-19.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details Given	Mining Engineer -Rajesh Chaudhary Geologist -Narendra Menaria Manager - D.Purohit	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details Furnished.	Area covered under current working- 187.31 Ha. Reclaimed Area - 16.40 Ha. O/B Dumps - 29.91Ha Area occupied by Crusher, Building, roads - 13.73 Ha. Area in Settling pond, protective bund & Plantation - 77.56 Ha	
9d	Scrutiny of Annual return on afforestation	Details furnished	Green belt is developed over 1.25 hectare area	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Details furnished	Quantity = 62800 tonnes Grade - Total Carbonate < 60 %
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Details Furnished	ROM = 28.57 Lac tonne with closing stock as 0.00
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details Furnished	Sale Value - 0 Ex Mine Price- 423.92 Cost of Production - Rs 441.46
9h	Scrutiny of Annual return on fixed assets	Details given	Rs.225283892.00 is the depreciation of Fixed assets.
9k	Scrutiny of Annual return on mining machineries	Details Given	Details Given

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :

(H C SHARMA)

Indian Bureau of Mines