

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/PAL-32/L.ST-1

Mine code : 38RAJ21001

- (i) Name of the Inspecting : **G021**) **D R GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Amit Sharma, Geologist
Official with
Designation
- (iv) Date of Inspection : 09-FEB-23
- (v) Prev.inspection date : 03-AUG-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RAS (803.33 HA)**
- (b) **Registration NO.** : **IBM/447/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : RAJASTHAN
- District : PALI
- Village : RABRIYAWAS
- Taluka : JAITARAN
- Post office : RABRIYAWAS
- Pin Code : 306709
- FAX No. : 02939288030
- E-mail : sandeep.singh@ambujacement
- Phone : 02939-289209,288011,288012
- (f) Police Station : Ras
- (g) First opening date : 10-FEB-96
- (h) Weekly day of rest : SUN
2. Address for : AMBUJA CEMENT LTD.
correspondance P.O:-RABRIYAWAS, TEH :- JAITARAN
DIST:-PALI, RAJASTHAN,306709
3. (a) Lease Number : RAJ1604
- (b) Lease area : 803.43
- (c) Period of lease : 50
- (d) Date of Expiry : 28-DEC-45
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : AMBUJA CEMENT LTD
 VILL.- RABARIYAWAS DIST-
 PALI PALI RAJASTHAN
 Phone:02939-288011-18
 FAX :02939-288030

Owner : Neeraj Akhoury
 Elegant Business Park,MIDC
 Cross Road Boff Andheri
 Kurla Road Mumbai Andheri
 East,Maharashtra-400059
 MUMBAI (SUBURBAN)
 MAHARASHTRA
 Phone:
 FAX :

Agent : Sandeep Singh
 Ambuja Cement Limited
 Rabadiyawas Jaitaran PALI
 RAJASTHAN
 Phone: 9001090758
 FAX :

Mining Engineer
 Name : Abhay Verma,Full Time
 Qualification : BE Mining
 Appointment/ : 01-JUL-22
 Termination date

Mining Engineer
 Name : Rajnish Bora,Full Time
 Qualification : B.E.(Mining Engg)
 Appointment/ : 11-AUG-16 03-JUN-22
 Termination date

Geologist
 Name : Amit sharma,Full Time
 Qualification : M.Sc(Geology)
 Appointment/ : 01-AUG-20
 Termination date

Geologist
 Name : Santanu Chatterjee,Full Time
 Qualification : M Sc Geology(Integrated)
 Appointment/ : 24-MAY-16 31-JUL-20
 Termination date

Manager
 Name : Sandeep Singh
 Qualification : B. E. (Mining Engg), FCC (R)
 Appointment/ : 15-JUL-10 31-MAR-22
 Termination date

Manager
 Name : Rajnish Bora
 Qualification : BE Mining

Appointment/ : 01-APR-22
Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	27-JUN-97
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	05-SEP-02
		Modif.approved Mining Scheme	10-JAN-05
		Mining Scheme rule 12 MCDR1988	21-MAR-06
		Modif.approved Mining Scheme	30-MAR-09
		Mining Scheme rule 12 MCDR1988	04-NOV-11
		Mining Scheme rule 12 MCDR1988	30-JUL-15
		MP modif under 17(3) MCR 2016	25-JUL-18
		MP review under 17(1) MCR 2016	30-DEC-19
		MP modif under 17(3) MCR 2016	16-AUG-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Total 33 boreholes each with meterage of 3426m and 3181m were proposed during the year 2019-20 and 2020-21.	Total 20 and 33 boreholes were reported as completed during the year 2019-20 and 2020-21 with meterage of 1049m and 2271m respectively.	Backlog of 13 boreholes was proposed in the year 2021-22 and reported completed with meterage of 1225m.
1b	Exploration over lease area for geological axis 1 or 2	During the year 2021-22 total 13 Bore holes having 1247m drilling proposed.	During the year 2021-22 total 13 bore holes having 1225.5m drilling has been carried out.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No specific proposal given in this regard.	Agency-Synergy Geotech, Nagpur and expenditure of Rs 28.68 Lakhs	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	During the year 2021-22 total 13 Bore holes having 1247m drilling proposed.	During the year 2021-22 total 13 bore holes having 1225.5m drilling has been carried out.	Area Under G1= 183.21hHa, G2= 31.38ha, Non Mineralized Zone: 588.84ha and Total Area: 803.43ha
1e	Balance reserve as on 01/04/20	No proposal given in this regard.	Balance reserves are 92.90 million tons as on 31.03.2022	Nil
1f	General remarks of inspecting officers on geology, exploration etc			Exploration carried out during 2021-22 is not shown on updated plan as 31.03.2022 and therefore, violation letter issued in this regard during the previous inspection vide letter dated 29.09.2022.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
--------	------	-----------	-------------	---------

2a	Location of development w.r.t. lease area	W Ridge: N6150-6600/E4400-E4700, W Ridge: N5500-N5700/E4100-E4600, SW Ridge: N2600-N3100/E4500-E4600, SW Ridge: N2700-N3900/E4100-E4400 and Eastern Ridge.	W Ridge: N6150-6600/E4400-E4700 W Ridge: N5500-N5700/E4100-E4600 SW Ridge: N2600-N3100/E4500-E4600 SW Ridge: N2700-N3900/E4100-E4400	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No OB, only interburden & Six benches in mineral proposed.	No OB, only interburden & Six benches in mineral.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.59	1:0.37	ROM to IB ratio
2d	Quantity of topsoil generation in m3	No top soil generation proposal	No top soil generated during the year.	Nil
2e	Quantity of overburden generation in m3	Interburden generation of 843272m3 was proposed during the year 2021-22.	Interburden of 268650.8m3 generated during the year 2021-22.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The mine development work is satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Proposal was there to work at six different locations on four ridges.	Actual development and production carried out at five locations in three ridges.	Nil
3b	Quantity of ROM mineral production proposed	2021-22:3599705 T	2021-22: 2537074 T	Nil

3c	Recovery of sailable/usable mineral from ROM production	2021-22: 2879764 T	2021-22: 1839207 T	Nil
3d	Quantity of mineral reject generation	2021-22: 719941 T	2021-22: 697867 T	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Proposed grade of MR was not mentioned.	Mineral reject grade is 70% SiO ₂ , 6% Al ₂ O ₃ , 7% CaO and 3% Fe ₂ O ₃ as per AR 2021-22.	Nil
3f	Quantity of sub grade mineral generation.	No proposal	No subgrade generation during the year.	Nil
3g	Grade of sub grade mineral generation	No proposal	Not applicable	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised Screen & wobbler installed and continued to propose for use.	Mechanised Screen & wobbler installed.	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	None during the reporting year	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, 115mm dia holes drilling and its deephole blasting was proposed.	Yes, 115mm dia holes drilling and its deephole blasting is carried out.	Nil

3k	Provision of mining machineries in mineral benches	1) Back Hoe - 4.50CuM, 2) Back Hoe- 3.60 CuM-, 3) Dumper - 50.00Ton, 4)Dozer - 303.00HP, 5)Front End Loader- 3.10CuM, 6)Tipper- 8.00CUM, 7) Motor Grader - 195.00HP, 8)Rock Drill(Non Elect)- 115.00MM, 9)Road Roller- 11.70Ton, 10) Crusher- 1200.00T/H, 11)Water Tanker- 14000LT, 12)Water Tanker- 20000LT, 13)Explosive Van- 2.97Tonne, 14)Explosive Van- 4.225Tonne	Above all machineries are in use.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, 8m bench hieght was proposed.	As per proposal	Nil
3m	Total area covered under excavation/pits	157.38 ha	155.74 ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.59	1:0.37	ROM to IB ratio
3o	Total area put in use under different heads at the end of year	162.48 hect.	159.10 hect.	Nil

3p	Production of ROM mineral during the last five year period as applicable	2021-2022: 3.60 million tons, 2020-2021: 3.60 million tons, 2019-20:3.33 million tons, 2018-19: 3.28 million tons and 2017-18: 3.30 million tons	2021-2022:~2.54 million tons, 2020-2021:~2.92 million tons, 2019-20: 1.88 million tons, 2018-19: 2.32 million tons and 2017-18: 2.16 million tons	Nil
3q	General remarks of inspecting officers on method of mining etc.	Opencast mechanised method of mining is being used since commencement of mining operations and same was proposed.	Opencast mechanised method of mining is being used since commencement of mining operations.	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Topsoil generation is not there and separate dumps for interburden waste and mineral rejects(screen reject) is proposed.	Topsoil generation is not there and separate dumps for interburden waste and mineral rejects(screen reject) is maintained.	Nil

4b	Location of topsoil, OB and mineral reject dumps	Top soil: No proposal OB/IB & screen reject dumping proposal given: SW1:N2700-N3330 & E4668-E4768 W1: N5430-N5788 & E4046-E4140 W2: N3700-N4200 & E3895-E3975 W3: N5756-N5870 & E4635-E4815 E1: N3910-N4035 & E5725-E5895	As per proposal	Nil
4c	Number of dumps within lease area and outside of lease area	SW1 08 dumps within lease area	08 dumps within lease area	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of UPL.	Outside of UPL.	Nil
4e	Number of active and alive dumps.	08	08	Nil
4f	Number of dead dumps.	No proposal	Nil	Nil
4g	Number of dumps established.	No such proposal given during the year.	None during the reporting year.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes, proposal of retaining walls & garland drain given during the year 2021-22.	Retaining wall & garland drain are there.	Nil
4i	Length of Retaining wall or garland drain all along dumps	During the year 2021-22 total 440m retaining walls & 425m garland drain proposed.	During the year 2021-22 total 450m retaining walls & 425m garland drain made.	Nil
4j	Number of settling ponds	No proposal	One	Nil

4k	Specific comments of inspecting officer on waste dump management	No issue observed related to 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 proposal during the year 2021-22.	None	Nil
5b	Area under backfilling of mined out area	No proposal during the year 2021-22.	None	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No top soil generation proposal	No top soil generated during the reporting year	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal given for the year 2021-22.	None	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			During the year 2021-22 niether backfilling proposed nor it has been carried out.

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).	Yes, it should be submitted up to 1st July time. for the previous financial year.	PMCP report for the year 2021-22 submitted on	Nil
6b	Area available for rehabilitation (ha) .	No proposal	N/A	Nil

6c	afforestation done (ha).	2021-22: 1.0 hect area proposed	2021-22: Plantation carried out over an area of 2.36 hect.	1.7 hect. virgin area +0.66 hect. over dump area.
6d	No. of saplings planted during the year	1000 nos.	3360 nos.	Nil
6e	Cumulative no .of plants	No specific proposal given	50600 nos.	Up to year 2021-22.
6f	Any other method of rehabilitation	No proposal	Not applicable	Nil
6g	Cost incurred on watch and care during the year	Rs. 1.60 lakhs	Rs. 3.36 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx 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	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	1.0 hect. area proposed over virgin area.	2.36 hect.(1.7 hect. virgn area +0.66 hect. over dump area)	Nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.0 hect	1.7 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)	Yes, on quarterly basis	Yes, on quarterly basis monitoring is being carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliances staisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No grade wise sorting is proposed.	No grade wise sorting is being done.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	N/A	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 observed related to minerals conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil generation proposed during the year 2021-22.	No top soil generated during the reporting year.	Nil
8b	Concurrent use or storage of topsoil	No top soil generation proposed during the year 2021-22.	Not applicable	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, two types of waste are there and separately dumping proposal given.	Separate dumps have been maintained for screen reject and waste rocks.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal given during the reporting year.	None during the reporting year	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	None	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the year 2021-22 total 1000 nos. sapling proposed.	During the year 2021-22 total 3360 nos. sapling planted.	Nil
8g	Survival rate	No specific proposal given	Survival rate is 86%	Nil
8h	Water sprinkling on roads to control airborne dust	Yes, proposals are there.	3 Water tankers deployed for water sprinkling on roads.	Nil

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty is satisfactory in and around mines area.
----	--	--

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	As per rule 45 of MCDR 2017, monthaly & annual return is to be submitted.	Annual and Monthly returns are submitted on time.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sh. Sandeep Singh, Mine Manager, Sh. Rajnish Bora, Mining Engineer & Sh. Amit Sharma, Geologist.	Details are correct.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	1) Covered Under Current (o/c)Workings: 155.74 Ha 2) Used for waste Disposal: 107.63Ha 3) Occupied by Plant, buildings, residential, welfare buildings & roads: 11.35Ha 4) Other Purpose 19.11Ha:	Seems corrected	Nil
9d	Scrutiny of Annual return on afforestation	Within Lease Area:3360 trees planted & Survival Rate : 86%	Seems corrected	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral reject reported 697867 T during the year.	Seems corrected	Nil

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM & Graded Stock- Nil	Seems corrected.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Reported Ex. Mine price and cost of production is Rs. 272.98 for captive use.	Seems corrected	Nil
9h	Scrutiny of Annual return on fixed assets	Total Value of Fixed Assets is Rs 235646186	Seems corrected	Nil
9k	Scrutiny of Annual return on mining machineries	Details given in AR 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

Date :

(D R GURJAR)

Indian Bureau of Mines