

**INDIAN BUREAU OF MINES**  
**MDR, DIVISION**  
**MCDR INSPECTION REPORT**  
**Regional office, Ajmer**

<b>A)</b>	<b>Mine file No.</b>	<b>RAJ/PAL-32/LST-01</b>
<b>B)</b>	<b>Name of inspecting officer, Designation &amp; ID</b>	<b>G C Meena, DCOM, M006.</b>
<b>C)</b>	<b>Accompanying mine official with Designation.</b>	<b>Shri M.K.Malvi, General Manager Mines.</b>
<b>D)</b>	<b>Date of inspection</b>	<b>19/09/2015</b>
<b>E)</b>	<b>Earlier two dates of inspections</b>	<b>12/11/2014 &amp; 19/03/2015</b>
<b>Part 1 General Information</b>		
<b>S. N.</b>	<b>Particulars</b>	<b>Details</b>
1	Name of the Mine	Ras-I Limestone Mine
2.	Total lease area(Ha) with break up of Non forest & forest Land	183.53 Ha, Non Forest land.
3.	Mine Code	38RAJ21009
4.	IBM Registration Number under rule 45 of MCDR 1988.	IBM/447/38RAJ21009
5.	Name of Lessee, address, phone, email and fax Number	M/S Ambuja Cements Ltd. Village & Post-Rabriyawas, Distt.-Pali.(Rajasthan)
6.	Village	Rabriyawas.
7.	Taluka/ Mandal	Jaitaran
8.	District	Pali
9.	Pin Code	306709
10	State	Rajasthan
11.	Post Office	Rabriyawas.
12.	Nearest Police Station	Ras
13.	Nearest Railway station	Bewar
14.	Date of grant of mining lease	NA
15.	Date of Execution	25/11/1997
16.	Date of opening of mine	25/11/1997
17.	Date of First renewal, if applicable and its period & expiry	25/11/1997 – 24/11/2047
18.	Date of Second renewal, if applicable and its period & expiry	Not applicable
19.	Date of submission of renewal application if mining operations are continuing under deemed extension.	Not applicable
20.	Name of the Nominated Owner with address, phone, email, fax number & date of appointment	Mr Ajay Kumar, M/S Ambuja Cements Ltd. Elegant Business Park, MIDC Cross Road Boff Andheri Kurla Road Mumbai, Andheri East- 400059, Maharashtra. Phone-02240667000, Fax No.02266167711, email- vijaykumar@ambujacement.com, Date of appointment-01/08/2013.
21.	Name of Mine Agent with address, Phone No, email, Fax Number and Date of appointment	Shri M.K.Malvi, M/S Ambuja Cements Ltd. Village & Post-Rabriyawas, Distt.-Pali.(Rajasthan)-306709, Phone-02939- 288011-17, EPABX-9001090711 to 13, Fax

		No.02939-28803,4250,email-mnoj.malvi@ambujacement.com.Date of appointment17/11/2007
22.	Name of Mine Manager with address, Phone No, email, Fax Number and Date of appointment	Shri Chandra Shekhar Dadheech (Mines manager) ,M/S Ambuja Cements Ltd. Village &Post-Rabriyawas, Distt.-Pali.(Rajasthan) -306709,Phone-02939-288030,EPABX-9829916327,,Fax No.02939-288030,
23.	Name of Mining Engineer Qualification and total experience with address, Phone No, email, Fax Number and Date of appointment	Not appointment in mines
24.	Whether Geologist and Mining Engineer appointed in mines satisfies rule 42 & carrying out their duties as per rule 43 & 44.	Yes Appointed.
25.	Date of approval of Mining plan/ Modified Mining Plan with five year period and specific condition in approval letter if any.	19/12/2013
26.	Date of approval of scheme of mining/ modified scheme of mining with five year period and specific condition in approval letter, if any.	
27.	Mineral(s) granted in lease and proved for mining.	Limestone
28.	Method of Mining (Opencast/ underground)	Opencast
29.	Category (Fully Mechanised, others or manual)	Fully mechanized mines (category A).
30.	Captive/ Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/ scheme of mining.

#### 1.0 Exploration:

S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year (2013-14)	34	38	As per Mining plan II-Phase exploration has been completed on 1.09.2014. Total 57 borehole planned during 2012-2015. Out of that 23 boreholes have been drilled during 2012-13.
1b	Exploration over lease area for geological	57	61	04 additional boreholes

	axis 1 or 2			drilled as planned/given in mine plan.
1c	Exploration Agency & expenditure in lakh Rupees during the year 2013-14	As above.	Not applicable.	
1d	Balance area to be explored to bring geological axis in 1 or 2	Not specified.	NA	Borehole are drilled on 100x200m grid interval. However few of holes have been drilled on 100x100 grid pattern.
1e	Balance Reserves as on 1.04.2013	96.33	97.085*	Threshold value for limestone reserves is considered $\geq 34-52$ . *Present reserves is up to Feb 2015.
1 f	General Remarks of Inspecting officer on geology, Exploration etc.	This is a working mine. The reserves for the next five years working had already been established.		

## 2.0 Development

SN	Item	Proposals	Actual Work	Remarks
2a	Location of development w.r.t. Lease Area	E5500-E5700/N1100-N21400	E5500-E5700/N1100-N21400	Development work is within the limit as proposed in mine plan.
2b	Separate Benches in top soil, Overburden & in Mineral(Rule 15)	NA	NA	As such there is no overburden/top soil
2c	Stripping Ratio or Ore to OB ratio	1:0.33	About 1:0.036	Inter burden
2d	Quantity of Top Soil Generation in m <sup>3</sup>	NA	NA	There is no generation of top soil.
2e	Quantity of overburden generation in m <sup>3</sup>	74400	9344	The targeted waste has not been removed

2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit.	The targeted quantity of waste material has not been extracted from the pits thereby less development work.
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### 3.0 Exploitation

SN	Item	Proposals	Actual Work	Remarks
3a	Number of Pits Proposed for Production.	In two pits.	Being done as proposed	
3b	Quantity of ROM mineral production proposed	No such proposal	Being done as proposed	
3c	Recovery of Salable/usable mineral from ROM production	recovery of 90%.	230080MT During 2014-15	
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of Mineral reject generation and threshold value declared.	No such proposal	Not applicable.	
3f	Quantity of Subgrade Mineral Generation	---Nil---	---Nil---	
3g	Grade of Subgrade mineral Generation	No Subgrade generation envisaged.	No Subgrade generated.	
3h	Manual/ Mechanised Method adopted for segregating from ROM.	Category-A, Mechanized.	Category-A, Mechanized.	
3i	Any analysis or beneficiation study proposed & carried out for Subgrade Mineral and reject.	No proposal	None	
3j	Provision of Drilling & Blasting in Mineral Benches	No proposal	115mm dia DTH drilling.	
3k	Provisions of mining machinery in mineral	Mechanized with excavator loader&	Mechanized with excavator	

	benches	dumpers.	loader& dumpers.	
3l	Whether height of benches in overburden & in Mineral suitable for method of mining proposed in MP/SOM	No such proposal	The proposed site of working is devoid OB so benches are formed mineral bearing zone.	
3m	Total area covered under excavation/pits.	96hact.	In all about96 hact. Area covered under pit/excavation so far.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.83	About 1:0.57	
3o	Total Area put in use under different heads at the end of the year	No specific year wise proposal.	For the 2013-14 under pit 96hact, waste Dumping- 63.52hact, Tar road- 0.25hact. And Green belt- 95.95hact.	
3p	Production of ROM mineral during last five years period, as applicable	2010-11- 3.61 millionsTons, 2011-12- 2.79 million Tons, 2012-13-3.01 million Tons, 2013-14-3.37 million Tons.	2010-11-2.66 million Tons, 2011-12- 2.08millionTons, 2012-13- 2.54MillionTons, 2013-14-2.79 million Tons. 2014-15 2.30 million Tons.	
3q	General remarks of inspecting officer on method of mining	It is open cast as per mining scheme.		

#### 4.0 Solid Waste Management Dumping

SN	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of top soil, OB & Mineral Reject (Rule 32, 33)	Being done.	Being Done.	
4b	Location of top soil, OB & Mineral Reject dumps.	D1aN4586 to4267, E4735toE4960, D1b- N3596 toN3336; E4604toE4735; D1c- N4076toN3631; E5810toE6031; Dpg- N5636toN5732; E4583toE4981.	As per the proposal	

4c	Number of dumps within lease area and outside lease area	19 dumps within lease area	19 dumps within lease area	
4d	Location of dumps w.r.t. Ultimate Pit Limit	Located both Outside & inside UPL	As per approved mining scheme.	
4e	Number of Active & alive Dumps	04	19	
4f	Number of Dead Dumps	02	07	
4g	Number of Dumps Stabilized	No proposal.	Stabilization was not observed during inspection.	
4h	Whether retaining wall or garland drain all along dumps are there	Yes	No retaining wall and construction of garland drain was observed during site visit.	Pointed in violation letter.
4i	Length of retaining wall or garland drain all along the dump	No proposal.	Nil.	
4j	Number of settling Ponds	None	Not Applicable	
4k	Specific Comments of Inspecting officer on waste dump Management.	The general housekeeping of dump is satisfactory.		

### 5.0 Solid Waste Management Backfilling

SN	Item	Proposals	Actual Work	Remarks
5a	Status on Part or Full extraction of Mineral from mined out area before starting backfilling	No such proposal.	Not applicable.	Mineral is yet to be extracted up to full thickness.
5b	Area Under backfilling of Mined out area	As above	As above.	
5c	Concurrent Use of Top Soil for restoration or rehabilitation(Rule 32)	To be used for plantation	Using for plantation.	
5d	Total Area fully reclaimed & rehabilitated	No specific proposal.	Nil.	
5e	General Remarks of Inspecting Officer on backfilling, Reclamation	Back filling and reclamation has not been proposed in the approve SOM.		

## 6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual Work	Remarks
6a	Whether annual report on PMCP submitted on time & correctly Rule 23E(2). Details should be given in the format as given in Annexure 20.	No such proposal in approved mining scheme.	Annual Report to be Submitted.	
6b	Management of Worked/ mined out benches			
	i) Area available for rehabilitation (ha)	Not specified	Not applicable	
	ii) Afforestation done(ha)	5.0ha for2014-15	0.5.0hact.	
	iii) No of Saplings planted during the year	2500	16200	
	iv) Cumulative no of plants	Not specified	183872in lease area.	
	v) Any specific method of Rehabilitation	Not specified	Not applicable	
	vi) Cost incurred on watch & care during the year	Not specified	Not applicable	
6c	Compliance on reclamation and rehabilitation by Backfilling	No such proposal for the year2013-14.	Not applicable.	
	i) Voids available for backfilling (LXBXD)	As stated above	As stated above	
	ii) Voids filled by waste/tailings	No such proposal for the year2013-14.	As stated above	
	iii) Afforestation on backfilled area	No proposal.	Nil	
	iv) Rehabilitation by making Water reservoir	Not specified	Not applicable	
	v) Any other specific Means	None	Nil	
6d	Compliance of Rehabilitation of Waste land within Lease	No such proposal	Nil	
	i) Afforestation	2500 saplings.	16200saplings	
	ii) Area Rehabilitated	No specified proposals in the approved Mining Scheme.	Not applicable.	
	iii) Method of rehabilitation	By Plantation	Plantation	
6e	Compliance of Environmental Monitoring (Core & Buffer Zone)	As per EC & Consent conditions.	As per EC & Consent conditions.	
6f	General Remarks of Inspecting Officer on PMCP compliance & progressive closure operations.	Stabilization existing of waste dumps has to be carried out in phase manner.		

## 7.0 Mineral Conservation:

SN	Item	Proposals	Actual Work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area(2013-14)	ROM Mineral dispatch to Cement plant	ROM Crushed&supplied to Cement Plant.	
7b	Method of grade-wise sorting i.e. Manual or Mechanical	As stated above.	ROM is directly supplied to cement plant.	
7c	Different Grade of mineral sorted out at mines	Only Cement grade.	Not applicable.	
7d	Any beneficiation process at mines	No proposal	Not applicable	
7e	General remarks of Inspecting officer on mineral conservation & beneficiation issues.	The recovery of usable grade may be considered satiafactory.		

## 8.0 Environment:

SN	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of top soil(Rule 32)	No top Soil& no proposal	Not applicable.	
8b	Concurrent use or storage of top soil	No Top soil exist	Not applicable.	
8c	Separate dumps for Overburden, Waste rock, rejects & fines (Rule 33)	Separate dumping proposed	Being Done.	
8d	Use of overburden, waste rock, Rejects and fines dumps for restoring the land to its original use(2013-14)	Backfilling is not proposed at present in approved SOM.	Not applicable.	
8e	Phased Restoration, reclamation and rehabilitation of lands affected by mining operations (pits, Dumps etc.)	Plantation.	Being Done.	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Plantation of 2500trees per year proposed.	In all about 16200 trees are planted in the area	
8g	Survival rate	No such proposal	Not available.	
8h	Water sprinkling on roads to control airborne dust	No proposal in approved Mining Scheme.	Water sprinkling on roads to control airborne dust is being done.	
8i	General Remarks of inspecting officer on aesthetic beauty in and	It is good except degradation of land.		



	around mines area.	
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### 9.0 Compliance of Rule 45

SN	Item	Comments		Remarks
9a	Status of submission of Monthly and annual returns	M.R.&A.R submitted.		
SN	Item	Details given in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	OK	
9c	Scrutiny of annual return on annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Found OK	
9d	Scrutiny of annual return on afforestation	Yes	Found OK	
9e	Scrutiny of annual return on Mineral reject generation (Grade & Quantity)	Yes	Found OK	
9f	Scrutiny of annual return on ROM stock and/or graded ore	Yes	Found OK	
9g	Scrutiny of annual return on sale value, Ex Mine Price & production cost	Yes	Found OK	
9i	Scrutiny of annual return on fixed assets	Yes	Found OK	
9k	Scrutiny of annual return on Mining Machineries	Yes	Found OK	

10. There are no outstanding violations.

Date-

Ajmer.

(G.C.Meena)

DCOM,

Indian Bureau of Mines, Ajmer