

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/BND-01/LST-1

Mine code : 38RAJ08002

- (i) Name of the Inspecting : **S012**) **Sharma H.C.**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Suresh M Wandhare, Manager (Mines)
Official with
Designation
- (iv) Date of Inspection : 05-SEP-16
- (v) Prev.inspection date : 16-SEP-15

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **LAKHERI**
- (b) **Registration NO.** : **IBM/256/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **RAJASTHAN**
- District : **BUNDI**
- Village : **LAKHERI**
- Taluka : **INDERGARH**
- Post office : **LAKHERI**
- Pin Code : **323603**
- FAX No. : **07438-261504**
- E-mail : **suresh.wandhare@acclimited**
- Phone : **07438-261642**
- (f) **Police Station** : **Lakheri**
- (g) **First opening date** : **26-JAN-17**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **Associated Cement Copany Ltd.**
correspondance **Lakheri Cement Works, P.O.Lakheri**
Dist:- Bundi,Rajasthan, Pin-323603
3. (a) **Lease Number** : **RAJ0003**
- (b) **Lease area** : **137.68**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **12-APR-99**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : ASSOCIATED CEMENT CO. LTD.
LAKHERI CEMENT WORKS PO
LAKHERI-323603 BUNDI
RAJASTHAN
Phone:
FAX :

Owner : Harish Badami
Harish Badami, MD & CEO,
ACC Limited Cement House,
121, M K Road, Mumbai-
400020 BOMBAY HIGH BOMBAY
HIGH
Phone: 022-22845928
FAX : 022-22836672

Agent : Manoj Jindal
Director (Plant), ACC
Limited, Lakheri Cement
works, Lakheri, Bundi, Pin
Code- 323603 BUNDI
RAJASTHAN
Phone: 07438-261642
FAX : 07438-261504

Mining Engineer

Name : Deepal Gorasia, Full Time
Qualification : B E Mining & FCC
Appointment/ : 12-MAR-14
Termination date

Geologist

Name : N. K. Pandey, Full Time
Qualification : M Sc Geology
Appointment/ : 10-MAR-13
Termination date

Manager

Name : Suresh M Wandhare
Qualification : B. E. Mining
Appointment/ : 05-MAR-14
Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	16-AUG-90
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	13-NOV-95
		Renewal under rule 22 MCR1960	13-NOV-00
		Renewal under rule 22 MCR1960	03-JUN-05
		Mining Scheme rule 12 MCDR1988	31-MAY-10
		Mining Scheme rule 12 MCDR1988	12-AUG-15

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There is no proposal in mining plan approved on 12/8/2015.	Not applicable	
1b	Exploration over lease area for geological axis 1 or 2	Not Applicable	Detailed geological survey has been done. Previously 222 Bore holes were drilled to a meterage of 8098.15 m with 200m grid.	
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	Not Applicable	Not Applicable	
1e	Balance reserve as on 01/04/20	10509772 lac Tonnes	There is no major change in reserve position except the production raised is deductible.	
1f	General remarks of inspecting officers on geology, exploration etc	30 (Core) boreholes proposed during 2017-18 to a meterage of 1200m.		

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML- 00 to ML-12, ML-74 to ML-78 & P-3	ML- 00 to ML-12, ML-72 to ML-74 & P-3	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top Soil is not available, O/B bench 6m to 7m Ht & width. In mineral also with same Parameters.	Top Soil is not available, O/B bench observed 6m to 9m Ht & width.	
2c	Stripping ratio or ore to OB ratio	1:1	1:0.88	

2d	Quantity of topsoil generation in m3	Top Soil is not available.	Not applicable
2e	Quantity of overburden generation in m3	1002000 Cu M	700818 Cu M.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The height & width of benches is not maintained during development of Mine.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	03	03	
3b	Quantity of ROM mineral production proposed	1020000 Tonnes	791582.6 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	83.47%	92.98%	
3d	Quantity of mineral reject generation	202000 Tonnes	59744 Tonnes	
3e	Grade of mineral rejects generation and threshold value declared.	34 % of total Carbonates	33 %	
3f	Quantity of sub grade mineral generation.	There is no Sub Grade generation at Mine.	Not Applicable	
3g	Grade of sub grade mineral generation	Not Applicable	Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Wobbler	Wobbler	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Applicable	Not Applicable	
3j	Provision of drilling and blasting in mineral benches	Holes of 115 mm dia are drilled with 4 to 6m Spacing & 3 to 4.5m Barden.	Being done.	
3k	Provision of mining machineries in mineral benches	The Method of Mining fully mechanised with deephole Blasting & deploying hydraulic excavator - Dumper Combination.	Being Done	
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			
3n	Ore to OB ratio for the pit/mine during the year.	7 ha	5 ha	
3o	Total area put in use under different heads at the end of year	Afforestation - 36 ha, Excavation 123.7 ha, waste dumping 29.8 ha	Area broken- 199.0, Reclaimed-24 ha, Afforestation - 25 ha	The deviaten of afforested area is proposed to be issued as VL of Rule 13(1).
3p	Production of ROM mineral during the last five year period as applicable	2011-12-- 1071840 T, 2012-13-- 1071840 T, 2013-14-- 1071840 T, 2014-15 -- 1071840 T. 2015- 16-- 1002000 Tonnes.	2011-12--971007 T, 2012- 13--879877 T, 2013-14-- 613872 T, 2014-15 -- 584773 T. 2015- 16-- 791583 T	

3q	General remarks of inspecting officers on method of mining etc.	The Production raised is much less than the approved proposals.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is no top soil, the waste material proposed to be dumped in worked out pits of lower series.	There is no top soil, the waste material had been dumped in worked out pits of Upper series.	The deviation is proposed to be pointed out as VL of Rule 13(1).
4b	Location of topsoil, OB and mineral reject dumps	ML- 70	ML-70	
4c	Number of dumps within lease area and outside of lease area	01 Dumps proposed to be made within lease area during the current year.	Being done	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	ML-70	Backfilling in exhausted pit ML 70	
4e	Number of active and alive dumps.	Two active dumps within exhausted area of ML-70.	Being done	
4f	Number of dead dumps.	20	20	
4g	Number of dumps established.	20	20 dumps stablised.	
4h	Whether Retaining wall or garland drain all along dumps are there.	yes	yes	
4i	Length of Retaining wall or garland drain all along dumps	5.6 Km	about 5 Km	
4j	Number of settling ponds	Not Applicable	Not Applicable	

4k	Specific comments of inspecting officer on waste dump management			The general house keeping of backfilled dumps is poor.
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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.	Full extraction	Full	
5b	Area under backfilling of mined out area	2 ha	About 1.5 ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	There is no Top Soil.	Not Applicable	
5d	Total area fully reclaimed and rehabilitated	81 ha	81 ha	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The current backfilling is lagging due to less development & less production raised.

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	The annual report on PMCP under rule 23 E (2) had not been submitted.	The VL of Rule 23 E (2) proposed to be issued.
6b	Area available for rehabilitation (ha) .	2 ha	About 1.5 ha	

6c	afforestation done (ha).	34 ha	about 25 ha	The deviation made is proposed to be issued as VL of Rule 13(1).
6d	No. of saplings planted during the year	15000	22500	
6e	Cumulative no .of plants	75000	45000	The deviation made is proposed to be issued as VL of rule 13(1).
6f	Any other method of rehabilitation	No	Not applicable	
6g	Cost incurred on watch and care during the year	Rs. 13 lacs	Rs. 25 lacs	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	5 lakhs Cu. M.	5 lakhs Cu. M.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	4.8 lac. Cu M	2 lac Cu m	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	2 ha	2 ha	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None	Nil	

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	34 ha	25 ha	The deviation made is proposed to be issued as VL of rule 13(1).
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	34 ha	25 ha	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	The environment monitoring is done as per EC conditions.	All environment parametres are within permissible limit.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	AS per EC conditions.	Being done	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The management of Environmental protective measures is satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1020000 T during 2015-16	791583 T during 2015-16.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Wobbler	5- 10% rejection of shale/clay through wobbler.	
7c	Different grade of mineral sorted out at mines.	Not applicable	Not applicable	
7d	Any beneficiation process at mines	Wobbler	Being done	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The 5 to 10% rejection of shale & clay through wobbler is used in layering of haul roads.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There is no top soil generation.	Not Applicable	
8b	Concurrent use or storage of topsoil	Not Applicable	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	yes	There is 1 active dump for O/B & wobbler reject.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposals	Part of O/B & Wobbler reject used in road maintainace & Plantations.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposals	Not Applicable	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposals	Not Applicable	
8g	Survival rate	No proposals	90%	

8h	Water sprinkling on roads to control airborne dust	Mine is having a 12 KL water tanker for water sprinkling on road to control dust.	Besides having above facilities, no water sprinkling on haulage road was observed during site inspection.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty is good, although, but no water sprinkling on haulage road was observed during site inspection.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M. R. submitted up to july 2016 & A. R. submitted for 2015-16.	The position of Submission of M/R & A/R is satisfactory.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Found O.K.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given	Found O.K.	
9d	Scrutiny of Annual return on afforestation	yes, given	Found O.K.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Details given for O/B removed & reject generation.	Found O.K.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	DEtails Given	Found O.K.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Found O.K.
9h	Scrutiny of Annual return on fixed assets	Given	Fixed assets given as nil.
9k	Scrutiny of Annual return on mining machineries	Yes	Found O.K.

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
Rule 13(1)	28-SEP-16				
Rule 15(1)	28-SEP-16				
Rule 23E(2)	28-SEP-16				
Rule 29	28-SEP-16				
Rule 37	28-SEP-16				

Date :

(Sharma H.C.)

Indian Bureau of Mines