

**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 : **J003** ) **Jangid G.K.**  
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Mr Manish Kumar Upadhyay, Mine Manager and Mr. Narend  
Official with  
Designation
- (iv) Date of Inspection : 16-DEC-22
- (v) Prev.inspection date : 15-NOV-21

**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 : 01-DEC-13
- (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 : Sridhar Balakrishnan  
 Cement House,121, M K Road,  
 Mumbai, Maharashtra-400020  
 BUNDI RAJASTHAN  
 Phone: 022-22836672  
 FAX : 022-22836672

Agent : Suresh Dubey  
 Lakheri Cement Works,  
 Lakheri, Dist. Bundi,  
 Rajasthan BUNDI RAJASTHAN  
 Phone: 07438-261642  
 FAX : 07438-261642

## 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 : Ajay Kumar Shrivastava  
 Qualification : B E (mining)  
 Appointment/ : 05-MAR-14  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Existing rule 11 MCDR1988	16-AUG-90
		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
		MP modif under 17(3) MCR 2016	21-JUL-17
		Modif.of approved Mining Plan	20-NOV-18
		MP review under 17(1) MCR 2016	22-JAN-20
		MP modif under 17(3) MCR 2016	08-DEC-20
		MP modif under 17(3) MCR 2016	23-DEC-21

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog was reported till 2021-22	No boreholes drilled	G2 category boreholes were not drilled due to RTR issue.
1b	Exploration over lease area for geological axis 1 or 2	Total 162.02ha explored under G-1 and 10ha under G-4. Remaining 1344.86ha as non-mineralised.	No exploratory drilling was carried out.	V/L issued in this regard.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not defined	No agency involved	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Proposed to explore 10ha area in 2022-23. No exploration was proposed in 2021-22.	No exploration carried out during the year 2021-22. However, proposal for the year 2022-23 for 52BHs not commenced.	Not done due to RTR issue.
1e	Balance reserve as on 01/04/20	218.30mt Proved under G-1 and 27.71mt blocked reserves.	Same as above, as document was approved as on 01.04.2022.	
1f	General remarks of inspecting officers on geology, exploration etc	Nil	Nil	Exploration of 52 BHs during the year 2022-23 not commenced.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposal was to work in P3 Upper, P3 Lower, Uttarna, Sakoda and Gandoli pits.	Working in all these pits are observed as per the proposals.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB and mineral was proposed.	Separate benches in OB and mineral are observed in all the pits.	
2c	Stripping ratio or ore to OB ratio	Proposed Ore to OB ratio is different pits varies from 2.23 to 5.40.	Actual Ore to OB ratio for the year is 1.20	
2d	Quantity of topsoil generation in m3	No proposal	No generation of topsoil.	
2e	Quantity of overburden generation in m3	1067080m3 waste was proposed to remove.	895600m3 waste was removed during the year.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Nil	Nil	Development was lacking in the pits for the required width of benches.

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Proposal was to work in P3 Upper, P3 Lower, Uttarna, Sakoda and Gandoli pits.	Working in all these five pits are observed as per the proposals.	
3b	Quantity of ROM mineral production proposed	1499623t ROM	1070677t ROM production reported.	
3c	Recovery of sailable/usable mineral from ROM production	100% recovery was proposed.	100% recovery of ROM was reported in the returns.	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
3f	Quantity of sub grade mineral generation.	Nil	Nil	

3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Direct crushing of ROM.	Direct crushing of ROM is in use.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	
3j	Provision of drilling and blasting in mineral benches	115mm dia drill M/cs are proposed for drilling & blasting.	115mm dia drill M/cs are used for drilling & blasting.	Blast holes of 115 mm dia are drilled up to 9 mtrs.
3k	Provision of mining machineries in mineral benches	Yes, 3 excavators, 8 dumpers are proposed.	All the mining machineries are in use as per proposals.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes , 6-9 mtrs in OB and mineral.	Yes , 6-9 mtrs observed in OB and mineral.	
3m	Total area covered under excavation/pits	Area covered under mining was 150.36ha with additional requirement of 3.32ha.	Area covered under the pits is 153.68ha.	
3n	Ore to OB ratio for the pit/mine during the year.	Ore to OB ratio for the pits was 1:1.41	The Ore to OB ratio achieved is 1:1.67	
3o	Total area put in use under different heads at the end of year	Area under mining 153.68ha, under dumps 62.18ha, infrastructure 32.81ha, roads 11.5ha, township area 36ha, railways 22.94ha.	Area put in use under different heads is matching.	

3p	Production of ROM mineral during the last five year period as applicable	2017-18: 1000000t, 2018-19: 1158245t, 2019-20: 1202330t, 2020-21:1372831t, 2021-22: 1499623t	2017-18: 807761t, 2018-19: 1157250.7t, 2019-20: 1158926.7t, 2020-21:1041272t, 2021-22: 1070677t	
3q	General remarks of inspecting officers on method of mining etc.	NA	Na	Mineral is dipping towards hill side and additional development in OB benches is required.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Provision of separate dumping of OB was proposed along with backfilling in mined out area.	Separate dumps of OB are maintained.	
4b	Location of topsoil, OB and mineral reject dumps	Proposal was to dump the OB as well to backfill inside mined out area of P3 lower pit.	Old OB dumps are there near the working pits.	
4c	Number of dumps within lease area and outside of lease area	Total 7 active dumps and 40 inactive dumps reported in the plan.	Working was observed in five pits and partial dumping over existing dumps.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps were proposed beyond UPL.	Dumps are located beyond UPL. Presently, backfilling inside the mined out area is in progress.	
4e	Number of active and alive dumps.	Total 7 active dumps are there.	Total 7 active dumps observed.	
4f	Number of dead dumps.	Total 40 dead dumps reported in the MP.	Total 40 dead dumps, as reported are there.	

4g	Number of dumps established.	40 dead dumps established with plantation with no fresh proposal.	40 dead dumps established with plantation.	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes, it was proposed to construct 40m retaining wall.	Yes, retaining wall of 45m constructed and reported in PMCP annual report.	Retaining wall all along old 47 dumps are not reported and not observed.
4i	Length of Retaining wall or garland drain all along dumps	Yes, it was proposed to construct 40m retaining wall.	Yes, retaining wall of 45m constructed and reported in PMCP annual report 2021-22.	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management	Nil	Nil	Nil

#### 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.	Yes full extraction of mineral was proposed before commencement of backfilling.	Yes, mineral is of 15m thickness below the OB of shale. Backfilling is started in P3 Lower Pit from the year 2021-22.	
5b	Area under backfilling of mined out area	Proposal over 1.9ha area was there to backfill in P3 Lower Pit.	Backfilling was started in P3 Lower Pit over 0.63ha during the year.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Topsoil generation was not proposed.	Topsoil generation is not reported.	
5d	Total area fully reclaimed and rehabilitated	Total 19.79ha was considered as fully reclaimed & rehabilitated in the last approved RMP.	Total 19.79ha was considered as fully reclaimed & rehabilitated in the last approved RMP out of 29.26ha backfilled area.	

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Nil
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### 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).	Holder of mining lease shall submit PMCP report as per rule 26 of MCDR, 2017.	PMCP report for the year 2021-22 has been submitted on 10.06.2022.	
6b	Area available for rehabilitation (ha) .	An area of 153.68 is under pit, 29.26ha considered as backfilled, 19.79ha considered as fully rehabilitated and 9.47ha area reclaimed in the last approved modified RMP.	Actually, 0.63ha reported as backfilled and 7ha area fully rehabilitated during the year 2021-22.	Data provided in PMCP report is not matching with last approved modified RMP. A V/L is issued in this regard.
6c	afforestation done (ha).	Plantation over 10000ha area of waste land, 7ha backfilled area and 5000ha dump area was reported under proposal for 2021-22 in PMCP report.	Actual afforestation is reported over 7ha waste land, 0ha backfilled area and 2ha dump area.	A V/L is issued for providing incorrect information in PMCP report.
6d	No. of saplings planted during the year	Waste Dump: 5000 nos and Waste land: 10000 nos.	Waste Dump: 5000 nos and Waste land: 15000 nos.	
6e	Cumulative no .of plants	No specific proposal on cumulative number of plantation.	Cumulatively 7.33 lacs of plants have been planted.	



6f	Any other method of rehabilitation	Other than plantation, no proposal of any other method of rehabilitation	Not applicable.
6g	Cost incurred on watch and care during the year	Not specified.	27 Lac reported.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( L x B x D	3.29 Hectare.	0.63ha
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	385953 Tons	78475t quantity was backfilled as per AR 2021-22
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	7ha area was proposed for plantation.	0 plantation during the year.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil, Old exhausted pits have observed water logged.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	10000nos sapling was proposed.	15000 nos was reported.

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No specific proposal.	7ha area of waste land is reported.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Provision for monitoring of environment parameter has been given.	Environment monitoring is being carried out in core and buffer zone. Parameters are found to be within permissible limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Violation of rule 11(1) of MCDR issued for incorrect information in annual PMCP report

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Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1499623t	1070677t ROM directly despatched to the plant. Company is purchasing limestone from minor mineral leases of limestone for use in cement manufacturing and to utilise low grade limestone of the mine.	V/L is issued to purchase limestone from minor mineral leases.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No grade wise sorting proposed.	Entire ROM is being used after crushing and screening. Benchwise production & despatch is there to maintain the grade.	

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7c	Different grade of mineral sorted out at mines.	No grade wise sorting proposal.	Entire ROM is being used after crushing and screening. Benchwise production & despatch is there to maintain the grade required for the plant. Further, there is no stacker & reclaimer in the plant for uniform grade supply. No stock is maintained in the mines, whereas cement plant is also located within lease area.
7d	Any beneficiation process at mines .	No	No beneficiation process other than crushing and screening. Low grade limestone is utilised by blending with high grade limestone purchased from minor mineral leases.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No proposal of any beneficiation.	Nil, V/L is issued to purchase limestone from minor mineral leases without registration of the seller with IBM.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal of top soil removal.	No top soil patch encountered during mining.	
8b	Concurrent use or storage of topsoil	No proposal of top soil generation during RY.	Not applicable as no top soil generation has been reported during RY.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping for OB/waste. No rejects and fines generation.	OB/waste has been dumped separately.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste/OB has been proposed to backfill in mine out area of 2.29 Hect.	Partial Backfilling and major dumping has been carried out as per proposal during RY.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	An area of 1.9ha proposed to backfill.	An area of 0.63ha has been backfilled.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Base line information is not maintained and total 15000 numbers of saplings have been proposed to plant.	Total 20000 numbers of saplings reported in AR 2021-22.	
8g	Survival rate	No proposal.	80 %	
8h	Water sprinkling on roads to control airborne dust	To control the air born dust particle, water sprinkling has been proposed.	Water sprinkling has been observed during the mine inspection. Water tankers are there for it.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The general aesthetic beauty is satisfactory in and around mine area.

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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 monthly and annual return to be submitted to competent authority.	Monthly and annual returns have been submitted for the RY.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on Manager, Mining Engineer and geologist has been furnished.	Mining Engineer, Geologist and Manager has been appointed in the mine and fount correct details during inspection.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under pits- 154.75ha Reclaimed area- 67.42ha Infrastructure - 103.35ha	Information furnished is not matching with the approved modified RMP dated 23.12.2021, where it is reported as Area under mining 153.68ha, under dumps 62.18ha, infrastructure 32.81ha, roads 11.5ha, township area 36ha, railways 22.94ha.	
9d	Scrutiny of Annual return on afforestation	19400 nos reported within ML and 600 nos outside ML area.	Inside Lease: 15000	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL.	No mineral reject has been generated.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock: NIL and Graded Stock: NIL.	ROM Stock: NIL and Graded Stock: NIL.	There is no stacker & reclaimer in the plant for uniform grade supply. No stock is maintained in the mines, whereas cement plant is also located within lease area.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. Mine price and Cost of production: Rs. 356.09 per tones.	Found to be correct.	
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset has been furnished as Rs. 545685813/-	The information furnished appears to be in order.	
9k	Scrutiny of Annual return on mining machineries	Shovel, Back Hoe, Dumper, Rock Drill, Water tanker, Explosive Van etc.	Shovel, Back Hoe, Dumper, Rock Drill, Water tanker, Explosive Van etc.	

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**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 :**

**(Jangid G.K.)**

Indian Bureau of Mines