

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

**Review and updation of Mining Plan REPORT**

**Hyderabad regional office**

Mine file No : AP/KSN/LST-12/HYD

Mine code : 38APR10004

- (i) Name of the Inspecting : M029 ) MADHU SUDHAN YADAV M  
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri Ramana Reddy, Mines Manager, Sri. T.Dileep, Geolo  
Official with  
Designation
- (iv) Date of Inspection : 02-MAR-22
- (v) Prev.inspection date : ~~04-FEB-17~~ 13/12/2019

**PART-I : GENERAL INFORMATION**

1. (a) Mine Name : KAKATIYA
- (b) Registration NO. : IBM/985/2011
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address  
State : ANDHRA PRADESH  
District : KRISHNA  
Village : SRINIVASANAGAR  
Taluka : JAGGAYYAPET  
Post office : JAGGAYYAPET  
Pin Code : 521175  
FAX No. : 040-7630172  
E-mail : info@kakatiyacements.com  
Phone : 7637717, 7633627
- (f) Police Station : JAGGAYYAPET
- (g) First opening date : 12-JAN-83
- (h) Weekly day of rest : MON
2. Address for : KAKATIYA LIMESTONE MINE  
correspondance : SRINIVASNAGAR COLONY, JAGGAYYAPETA  
KRISHNA DIST.
3. (a) Lease Number : APR0060
- (b) Lease area : 121.4
- (c) Period of lease : 50
- (d) Date of Expiry : 19-MAY-32
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : KAKATIYA CEMENT SUGAR INDUSTRIES LTD  
 H.NO 1/10/140/1 ASHOKNAGAR  
 HYDERABAD HYDERABAD  
 TELANGANA  
 Phone:  
 FAX :

Owner : K Venkat rao  
 M/s Kakatiya Cement Sugar &  
 Industries Ltd Gurukrupa  
 Ashok Nagar HYDERABAD  
 TELANGANA  
 Phone:  
 FAX :

Agent : D G K Raju  
 M/s kakatiya Cements &  
 Sugars Ltd Srinivasa Nagar  
 Jaggayyapeta Mandal KRISHNA  
 ANDHRA PRADESH  
 Phone: 08654-200014  
 FAX :

## Mining Engineer

Name : M Devanand, Full Time  
 Qualification : B TECH MINING  
 Appointment/ : 05-MAR-10  
 Termination date

## Geologist

Name : N.VITTAL BABU, Full Time  
 Qualification : M.Sc (GEOLOGY)  
 Appointment/ :  
 Termination date

## Manager

Name : B. Chandrashekhar Gupta  
 Qualification : B TECH MINING  
 Appointment/ : 05-SEP-19  
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	13-MAY-02
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	08-FEB-07
		Mining Scheme rule 12 MCDR1988	05-JUN-12
		Mining Scheme rule 12 MCDR1988	15-OCT-12
		MP modif under 17(3) MCR 2016	24-MAR-17

## 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	Nil	G1 Level - 80.04 Ha G2 Level - 11.95 Ha G3 Level - 29.419 Ha	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Balance area of G2 level (11.95 Ha) & G3 level (29.419 Ha) to be explored under G1 level.	30 Nos. of boreholes proposed to bring the mining area into G1 level of exploration.
1e	Balance reserve as on 01/04/20	-----	Proved Reserves as on 30/09/2021 - 46.55 million tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			Entire mining lease area is not explored under G1 level of exploration. In the Review of Mining Plan document submitted it is proposed to bring the entire mining area into G1 level by drilling 30 Nos. of boreholes in the year 2022-23.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t. lease area	5th Bench in between grid S100 to N 200 & W 200 to E 200 3rd Bench in between grid S 100 to N 300 & E00 to E 400 1st Bench in between grid N300 to N 500 & W100 to E 400	Work done within the proposed co-ordinates.	The respective proposal of approved mining plan for various activities pertaining to that year were not shown in the plans and sections maintained. Violation issued as per rule.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal	Nil	
2c	Stripping ratio or ore to OB ratio	No proposal	Nil	
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	No proposal	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Intercalated waste is encountered as pockets in the limestone benches. Intercalated waste of 11136 cu.m generated against the proposal of 10337 cu.m.

### Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	2020-21 - 516855 Te 2021-22 - 512285 Te	2020-21 - 292223 Te 2021-22 - 399456 (upto Feb'22)	

3c	Recovery of sailable/usable mineral from ROM production	2020-21 - 95% 2021-22 - 95%	2020-21 - 93% 2021-22 - 99% (Upto Feb'22)
3d	Quantity of mineral reject generation	No proposal	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable	Nil
3f	Quantity of sub grade mineral generation.	No proposal	Nil
3g	Grade of sub grade mineral generation	Not applicable	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal	Nil
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	Drilling and blasting proposed in the mineral benches.	Wagon drill being used for drilling with a blast hole dia of 115 mm & depth of 6.6 m, spacing of 3 meters and burden of 4 meters. Blasting with ANFO & slurry explosives with NONELS as initiating system.

3k	Provision of mining machineries in mineral benches	It was proposed to use wagon drills, exvators & dumpers for drilling, loading & transporting of ore to crushing plant.	During inspection, it was observed that wagon drills, dumpers & excavators are being used for drilling, loading & transportation of ore to crushing plant.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It was proposed to maintain the bench height of 6 meters	During inspection it was noticed that the bench height is being maintained 6 m and digging height of the excavators are compatible with bench height.
3m	Total area covered under excavation/pits	37.661 Ha.	33.647 Ha.
3n	Ore to OB ratio for the pit/mine during the year.	No proposal	Nil
3o	Total area put in use under different heads at the end of year	Pit=37.661 ha Dump= 2.38 hectare Infra, roads etc = 4.494 hectare Green belt : 11.30 Total : 55.921 Ha+	Pit=34.68 ha Dump= 2.38 hectare Infra, roads etc = 4.494 hectare Green belt : 11.669 hectare
3p	Production of ROM mineral during the last five year period as applicable	2016-17 - 509656 Te 2017-18 - 485711 Te 2018-19 - 487649 Te 2019-20 - 467186 Te 2020-21 - 516855 Te	2016-17 - 349750 Te 2017-18 - 228100 Te 2018-19 - 296527 Te 2019-20 - 393253 Te 2020-21 - 292223 Te 2021-22 - 399456 Te (upto Feb'22)

3q General remarks of inspecting officers on method of mining etc.

There was no proposal for stacking of minerals, whereas during inspection it was found that limestone mineral has been stacked at various places in the working pit. Violation issued as per rule.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No topsoil, OB & Mineral rejects dumps proposed. Intercalated waste dump was proposed to maintained.	Only intercalated waste dump is developed and maintained in the lease area.	
4b	Location of topsoil, OB and mineral reject dumps	Intercalated waste dump location - E399300- E399500 & N186480- E186680	Dump maintained in the proposed location	
4c	Number of dumps within lease area and outside of lease area	Outside lease area - Nil Inside lease area - One	Outside lease area - Nil Inside lease area - One	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within the UPL	Within the UPL	
4e	Number of active and alive dumps.	01 No.	01 No.	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	No proposal	Nil	

4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Maintained.	Retaining wall is constructed of clay/mud material It is proposed to strengthen the retaining wall during the plan period. Proposal submitted in the Review of Mining Plan.
4i	Length of Retaining wall or garland drain all along dumps	No proposal in the year 2020-	Nil	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			Retaining wall is constructed of clay/mud material It is proposed to strengthen the retaining wall during the plan period. Proposal submitted in the Review of Mining Plan.

#### Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	No area is matured for backfilling
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	



5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The pit is not mined out upto its ultimate pit limit to start backfilling.

#### 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).	To be submitted as per rule	Submitted	
6b	Area available for rehabilitation (ha) .	No proposal for rehabilitation of worked out benches	Nil	
6c	afforestation done (ha).	2020-21 - 0.15 Ha 2021-22 - 0.15 Ha	2020-21 - 0.15 Ha 2021-22 - 0.15 Ha	
6d	No. of saplings planted during the year	2020-21 - 40 Nos. 2021-22 - 40 Nos.	2020-21 - 150 Nos. 2021-22 - 250 Nos.	
6e	Cumulative no .of plants	No proposal	17570 Nos. (approx.) of saplings planted in and around lease area till Feb'22.	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	No proposal	Nil	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No proposal	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	40 Nos of saplings over 0.15 hectare area	150 Nos. of saplings over 0.15 Ha
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly environmental monitoring of core and buffer zone.	Quarterly environmental monitoring carried out during 2022-21 and all the parameters are within the permissible limit.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No area of pit has reached its ultimate pit limit to start Reclamation and Rehabilitation and backfilling activities.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposed to dispatch 516855 Te of ROM to cement plant. No grade wise sorting proposed	317000 Te of ROM dispatched to cement plant. No grade wise sorting proposed	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Nil	
7c	Different grade of mineral sorted out at mines.	No proposal	Nil	
7d	Any beneficiation process at mines	No proposal	Nil	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No beneficiation is proposed except crushing of Limestone ore to feed the cement plant.
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**Environment:**

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed to maintain intercalated waste dump	Intercalated waste dump maintained	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed to plant 40 Nos. of saplings in the year 2020-21	150 Nos. of saplings planted in the year 2020-21	

8g	Survival rate	70%	60%	
8h	Water sprinkling on roads to control airborne dust	Water Tankers and sprinklers to be provided for dust suppression.	Water tanker & sprinklers provided for dust suppression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		About 16000 sapplings has been planted to improve aesthetic beauty.	Plantation well developed and maintained in the mining office area, workshop area and in the 7.5 m safety zone.

#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	To be Submitted as per rule.	Monthly and Annual Returns are being submitted regularly.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager & Mining Engineer - Sri. R.V.Ramana Reddy Geologist - Sri.T.Dileep	Manager & Mining Engineer - Sri. R.V.Ramana Reddy Geologist - Sri.T.Dileep	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings : 34.68 Ha Used for waste disposal : 2.38 Ha Occupied by plant, buildings, residential, welfare buildings & roads: 4.49 Ha Other Purpose (Afforestation ) : 11.69 Ha	Broadly as per submission.	

9d	Scrutiny of Annual return on afforestation	150 Nos. within the lease area	Broadly as submission and same quantity is verified in afforestation register maintained.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production is reported as Rs.190/-	Total depreciation cost is not matching with the data entered in other chapters. Overhead cost per tonne not submitted. Advised to correct the annual returns since it has been referred back by the MMS division.
9h	Scrutiny of Annual return on fixed assets	The value of fixed assets reported by the lessee in annual returns is Rs.1752448795/-	Fixed assest couldn't be verified.
9k	Scrutiny of Annual return on mining machineries	Air Compressor : 450 cum (1 No.) Tipper (12 cum) : 5 Nos. Rock Drill (115 mm)- 1 No. Back Hoe (0.9 cum) : 1 No. Front end Loader ( 1.5 cum) : 1 No	Machineries found in the mining area.

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
MCDR17	Rule 11(1)	09-MAR-22			
MCDR17	Rule 31(1)	09-MAR-22			

Date : 12/04/2022

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines

