

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT
Hyderabad regional office

Mine file No : AP/GNR/LST-55/HYD

Mine code : 38APR07069

- (i) Name of the Inspecting : KQ07) SHAIVAL KARTIKEYA
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri S. Brahmaiah, Manager (Mines)
Official with
Designation
- (iv) Date of Inspection : 08/11/2021
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) Mine Name : PEDAGARLAPADU (377.523 HA)
- (b) Registration NO. : IBM/170/2011
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : ANDHRA PRADESH
District : GUNTUR
Village : PEDAGARLAPADU
Taluka : DACHEPALLI
Post office : PEDAGARLAPADU
Pin Code : 522437
FAX No. : 044-28291558
E-mail : chtdmds vsnl.com
Phone : 9698011144
- (f) Police Station : DACHEPALLI
- (g) First opening date : 27/03/2019
- (h) Weekly day of rest : SUN
2. Address for : Pedagarlapadu-Village,
correspondance Dachepalli-mandal, Guntur.
AP
3. (a) Lease Number :
- (b) Lease area : 377.68 Ha.
- (c) Period of lease : 50 yrs.
- (d) Date of Expiry : 23/02/2066
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : M/S.CHETTINAD CEMENTS
GUNTUR ANDHRA PRADESH
Phone:
FAX :

Owner : M/S. CHETTINAD CEMENTS
M/S. chettinad Cement
Corporation (p) Ltd,4th
floor, Chettinad Towers
603, Annasalai, Chennai-
600006 T.N. GUNTUR ANDHRA
PRADESH
Phone:
FAX :

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	22/07/2014
Plan/Scheme of Mining	:	MP review under 17(1) MCR 2016	10/11/2020

[Faint handwritten text]

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration has been proposed during F.Y. 2020-21.	F.Y. 2020-21: Shortfall of the 58 nos. of boreholes with the cumulative depth of 5800 meters has been done.	-
1b	Exploration over lease area for geological axis 1 or 2	No proposal during F.Y. 2020-21.	After competition of 106 nos. of boreholes over an area of 296.39 Ha. (Approx), the entire mining lease area has been converted in to G1 level of exploration.	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not mentioned in the approved document.	M/s Global Environment and Mining Services, Hospet (Karnataka) Expenditure: Rs. 94,25,000/-	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	To know the lateral continuity of the mineralization 10 nos. of core boreholes with the cumulative depth of 1000 meters will be drilled during F.Y. 2021-22.	None of the boreholes have been drilled so far.	Deviation has been pointed out.
1e	Balance reserve as on 01/04/20	Under (111): 214.446 Million Tonnes Under (122): 26.322 Million Tonnes	Under (111): 214.446 Million Tonnes Under (122): 26.322 Million Tonnes	Updated reserves have been taken from the latest approved Modified Mining Plan dated 10/11/2020. Avg. Grade, CaO 47.16%, SiO ₂ 10.23%, MgO 0.80%

1f	General remarks of inspecting officers on geology, exploration etc	In this area the Proterozoic rocks are deposited in a liner basin, overlying the Eparchean unconformity, it is referred as Kadapa Basin in Peninsular India.	These are sedimentary rocks comprising of conglomerate, sandstone, shale and limestone. The Kadapa basin in crescentic in shape with the Palnad Group of Kurnool equivalent of rocks occupying the northeastern portion between Nadikudi, Pondugula, Seetharamapuram and Pidugurala areas Banaganapalli Quartzite and Narji Limestone of Kurnool Super Group are occupying major part of the Palnad Basin, which is Southern Part of Nkrekal area.	Limestone deposit exposed in this area is Narji Limestone of Kurnool Super Group and is well bedded grey to white in colour and flaggy to massive in nature. Limestone beds show varying trends from NE-SW dipping with 5-15 degree to near horizontal, due to structural disturbance.
----	--	--	--	--

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	F.Y. 2020-21: In between UTM co-ordinates N1829587 to N1829667 and E365703 to E365875	F.Y. 2020-21: N1828710 to N1829035 and E365489 to E365837	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benching of Topsoil and Mineral/Ore have been proposed Topsoil: 01 no. Mineral/Ore: 02 nos.	Separate benches of Topsoil and Mineral/Ore have been developed and maintained. Topsoil: 01 no. Mineral/Ore: 02 nos.	-
2c	Stripping ratio or ore to OB ratio	1 : 0.002	1 : 0.044	Stripping ratio has been increased due to less production of ROM/Ore.

2d	Quantity of topsoil generation in m3	13024.0 CuM	40850.0 CuM	Excess topsoil has been generated due to uneven surface RL and the soil has been filled in the fractured zone in top bench.
2e	Quantity of overburden generation in m3	No overburden will be generated during F.Y. 2020-21	No overburden has been generated during F.Y. 2020-21	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Permission for reduction of the Limestone production from 50,00,000 Metric Tonnes to 30,45,301 Metric Tonnes has been obtained from the Industries and Commerce (M.III) Department, Government of Andhra Pradesh vide Memo no. INC01-MG0MAJM/30/2019-M-III dated 17/03/2020. The development and production is being done through fully mechanized means.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01 no.	01 no.	-
3b	Quantity of ROM mineral production proposed	F.Y. 2020-21: 50,00,000.00 Metric Tonnes	F.Y. 2020-21: 923000.00 Metric Tonnes	-

3c	Recovery of sailable/usable mineral from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	No mineral reject will be generated during plan period.	No mineral reject has been generated during F.Y. 2020-21.	-
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	NIL	-
3f	Quantity of sub grade mineral generation.	No mineral sub-grade will be generated during plan period.	No mineral sub-grade has been generated during F.Y. 2020-21.	-
3g	Grade of sub grade mineral generation	No proposal	NIL	-
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal	NIL	The average grade of CaO 47% has been produced and consumed in the captive plant.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation study has been proposed during plan period.	Not applicable.	-
3j	Provision of drilling and blasting in mineral benches	Mineral/Ore: Dia.: 150 mm Spacing: 4.0 m to 5.0 m Burden: 3.0 m to 4.0 m Depth: 8.0 m - 10.0 m Explosive: ANFO	Mineral/Ore: Dia.: 150 mm Spacing: 4.0 m to 5.0 m Burden: 3.0 m to 4.0 m Depth: 8.0 m - 10.0 m Explosive: ANFO	-

3k	Provision of mining machineries in mineral benches	1. Hydraulic Drill Machine 04 nos. with 150 mm dia bit and 10.0 m drilling capacity 2. Shovel 08 nos. with 4.2 CuM bucket capacity 3. Rear Dumpers 22 nos. with 35.0 Tonnes capacity 4. Bulldozer 01 no. with 410 HP capacity 5. Hydraulic Rock Breaker 01 no. with 110 HP capacity 6. Explosive Van 01 no. with 4.0 Tonnes capacity 7. Water Tanker 02 nos. with 10000 Liters capacity 8. Mobile repair Van 01 no. 9. Tractor 01 no. 10. Canteen Van 01 no. 11. Pickup Van 02 nos. 12. Jeep 02 nos.	1. Backhoe 02 nos. with 2.6 CuM Bucket capacity 2. Rock Drill 01 no. with 115 mm dia bit size 3. Hydraulic Shovel 01 no. with 1.20 CuM bucket capacity 4. Dozer 01 no. with 320 HP capacity 5. Explosive Van 01 no. with 9.10 Tonnes capacity 6. Tippers 05 nos. with 16.0 Tonnes capacity 7. Water Tanker 01 no. with 12000 Liters capacity 8. Pumps 02 nos. with 400 Liters Per Minute Discharge capacity	-
----	--	---	--	---

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Topsoil: 0.50 m to 1.0 m Mineral/Ore: 8.0 to 9.0 m	Topsoil: 0.50 m to 1.0 m Mineral/Ore: 8.0 to 9.0 m	Maintained as per proposal.
3m	Total area covered under excavation/pits	26.21 Ha. up to end of F.Y. 2020-21	10.770 Ha. up to end of F.Y. 2020-21	-
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.002	1 : 0.044	Stripping ratio has been increased due to less production of ROM/Ore
3o	Total area put in use under different heads at the end of year	Pit- 26.21 Ha. Waste/reject- NIL Others- 19.752 Ha. Up to end of F.Y. 2020-21	Pit- 10.770 Ha. Waste/reject- NIL Others- 9.56 Ha. Up to end of F.Y. 2020-21	-
3p	Production of ROM mineral during the last five year period as applicable	Yr. 2016-17: 3000000.00 Metric Tonnes Yr. 2017-18: 3000000.00 Metric Tonnes Yr. 2018-19: 5000000.00 Metric Tonnes Yr. 2019-20: 5000000.00 Metric Tonnes Yr. 2020-21: 5000000.00 Metric Tonnes	Yr. 2016-17: NIL Yr. 2017-18: NIL Yr. 2018-19: NIL Yr. 2019-20: 100000.00 Metric Tonnes Yr. 2020-21: 923000.00 Metric Tonnes	-
3q	General remarks of inspecting officers on method of mining etc.			Mining is being carried out through the opencast method with fully mechanized means using conventional method of drilling and blasting.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposal has been given in the approved document for separate stacking of topsoil for building the bunds of about 2.0 m height along the 50.0 m safety barrier of the Seasonal Nalllas passing through Mining Lease area and along the 7.5 m buffer zone of the Mining Lease boundary.	Stacking of Topsoil is being done for building the bunds of about 2.0 m height along the 50.0 m safety barrier of the Seasonal Nalllas passing through Mining Lease area and along the 7.5 m buffer zone of the Mining Lease boundary.	-
4b	Location of topsoil, OB and mineral reject dumps	-do-	-do-	-
4c	Number of dumps within lease area and outside of lease area	No proposal.	No waste/overburden has been generated during plan period.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal.	NIL	-
4e	Number of active and alive dumps.	No proposal.	NIL	-
4f	Number of dead dumps.	No proposal.	NIL	-
4g	Number of dumps established.	No proposal.	NIL	-

- 4h Whether Retaining wall or garland drain all along dumps are there. Proposal has been given in the approved document for construction of
 Constructed.
 Garland Drain: 400 m along lease boundary to divert the runoff water with sediments away from the mine.
 Garland Drain: 350 m along lease boundary to divert the runoff water with sediments away from the mine.
 Retaining Wall: 450 m with 2.0 m height along seasonal nallahs.
 Retaining Wall: 350 m with 2.0 m height along seasonal nallahs.
- 4i Length of Retaining wall or garland drain all along dumps Garland Drain: 350 m along lease boundary to divert the runoff water with sediments away from the mine.
 Garland Drain: 400 m along lease boundary to divert the runoff water with sediments away from the mine.
 Retaining Wall: 450 m with 2.0 m height along seasonal nallahs.
 Retaining Wall: 350 m with 2.0 m height along seasonal nallahs.
- 4j Number of settling ponds No proposal. 01 no. of check dam has been constructed within lease area.

4k	Specific comments of inspecting officer on waste dump management	No overburden and waste have been generated during plan period. 40850.0 CuM of Topsoil has been generated during F.Y. 2020-21 and the same has been utilized for construction of safety bunds along the statutory barriers in between Pillar no BP 29 to BP 55 (UTM Co-ordinates N1829642 to N1829683 and E365603 to E365956).
----	--	--

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 during F.Y. 2020-21.	NIL, Area not matured for the reclamation and the rehabilitation.	-
5b	Area under backfilling of mined out area	No Proposal	NIL	-

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	F.Y. 2020-21: 13024.0 CuM of Topsoil will be utilized for construction of safety bunds up to the height of 2.0 meters along the Seasonal Nalllas passing through Mining Lease area and along the 7.5 m buffer zone of the Mining Lease boundary.	F.Y. 2020-21: 40850.0 CuM of generated Topsoil has been utilized for construction of safety bunds up to the height of 2.0 meters along the Seasonal Nalllas and along the 7.5 m buffer zone of the Mining Lease boundary in between Pillar no. BP 29 to BP 55 (UTM Co-ordinates N1829642 to N1829683 and E365603 to E365956).	-
5d	Total area fully reclaimed and rehabilitated	No proposal.	NIL	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			During Plan period 67.47 Ha. area has been proposed for plantation through the 107952 nos. of saplings, whereas, 8840 nos. of saplings have been planted over 6.75 Ha. Deviation has been pointed 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).	Submitted before due date.	Information has been cross verified during inspection.	Shortfall has been observed for less plantation.

6b	Area available for rehabilitation (ha) .	7.50 Ha.	2.51 Ha.	Deviation has been pointed out. Plantation has been done in the 7.5 m buffer zone along the mining lease boundary.
6c	afforestation done (ha).	67.47 Ha.	6.75 Ha.	-do-
6d	No. of saplings planted during the year	12000 nos.	4010 nos.	-do-
6e	Cumulative no .of plants	107952 nos.	8840 nos.	-do-
6f	Any other method of rehabilitation	By Plantation	By Plantation	-do-
6g	Cost incurred on watch and care during the year	Not mentioned in the approved document.	Rs. 5,12,840/-	-do-
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	12000 nos.	4010 nos.	Plantation has been done in the 7.5 m buffer zone along the mining lease boundary. Deviation has been pointed out.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	7.50 Ha.	2.51 Ha.	Deviation has been pointed out.
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	By plantation	By plantation	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposal has been given in the approved document for quarterly monitoring of the environmental parameters in the core and buffer zone.	Being done as per proposal.	All the parameters are within the permissible limits.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Mine has been opened on 27/03/2019.
----	---	-------------------------------------

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal.	ROM mineral is being directly detached to the crusher erected adjacent to the lease boundary. No grade wise sorting has been done.	Average grade of Limestone with 46% to 47% Cao has been dispatched to the captive plant.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	-do-	-do-
7c	Different grade of mineral sorted out at mines.	No proposal	-do-	-do-
7d	Any beneficiation process at mines	No proposal	NIL	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			In view of the Mineral conservation, the entire produced Limestone with 34% CaO and above is being utilized in the Captive Cement Plant.

Environment:

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

8a	Separate removal and utilization of topsoil (Rule 32)	F.Y. 2020-21: 13024.0 CuM of topsoil will be utilised for building the bunds of about 2.0 m height along the 50.0 m safety barrier of the Seasonal Nalllas passing through Mining Lease area and along the 7.5 m buffer zone of the Mining Lease boundary.	F.Y. 2020-21: 40850.0 CuM of topsoil has been utilized for building the bunds of about 2.0 m height along the 50.0 m safety barrier of the Seasonal Nalllas passing through Mining Lease area and along the 7.5 m buffer zone of the Mining Lease boundary in between Pillar no. BP 29 to BP 55 (UTM Co-ordinates N1829642 to N1829683 and E365603 to E365956).	-
8b	Concurrent use or storage of topsoil	-do-	-do-	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	-do-	-do-	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	-do-	-do-	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	7.5 Ha. area at 7.5 m buffer zone will be rehabilitated by 12000 nos. of plants.	2.51 Ha. area at 7.5 m buffer zone has been rehabilitated by 4010 nos. of plants.	Deviation has been pointed out.

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	12000 nos. of sapling will be plated over 7.5 Ha. at 7.5 m buffer zone along lease boundary.	4010 nos. of saplings have been plated over 2.51 Ha. area at 7.5 m buffer zone along lease boundary in between Pillar no. BP 29 to BP 55 (UTM Co-ordinates N1829642 to N1829683 and E365603 to E365956).	-
8g	Survival rate	Not mentioned	Approx 80%	-
8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling on roads to control airborne dust through the water tanker.	Being done as per proposal.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			NIL

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 October 2021 A.R. Submitted up to F.Y. 2020-21	M.R. Submitted up to October 2021 A.R. Submitted up to F.Y. 2020-21	NIL
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Shri S. Brahmaiah Mining Engineer: Shri Ch.Naresh Kumar Geologist: Shri T Venkata Ramarao	Manager: Shri S. Brahmaiah Mining Engineer: Shri Ch.Naresh Kumar Geologist: Shri T Venkata Ramarao	NIL

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 10.770 Ha. Waste/reject- NIL Others- 9.56 Ha.	Pit- 10.770 Ha. Waste/reject- NIL Others- 9.56 Ha.	NIL
9d	Scrutiny of Annual return on afforestation	Within Lease Area: 4010 nos. with 80% Survival rate. Outside Lease Area: 2700 nos. with 90% Survival rate.	Within Lease Area: 4010 nos. with 80% Survival rate. Outside Lease Area: 2700 nos. with 90% Survival rate.	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject: NIL Grade: NIL	Mineral Reject: NIL Grade: NIL	No mineral reject has been generated during F.Y. 2020-21
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock ROM: NIL Graded Ore: NIL	Closing Stock ROM: NIL Graded Ore: NIL	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value: NIL Ex Mine Price: Rs. 189.17 Per Metric Tonne Cost of Production: Rs. 189.17 Per Metric Tonne	Sale Value: NIL Ex Mine Price: Rs. 189.17 Per Metric Tonne Cost of Production: Rs. 189.17 Per Metric Tonne	Depreciation of the fixed assets has not been added for computation of the Cost of Production. Deviation has been pointed out.
9h	Scrutiny of Annual return on fixed assets	Rs. 5719136353/-	Rs. 5719136353/-	Incorrect value has been mentioned under fixed assets. Deviation has been pointed out.

9k	Scrutiny of Annual return on mining machineries	Given in the annual returns.	Cross verified from the field logbooks.	NIL
----	--	------------------------------------	--	-----

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)	15/11/2021				
MCDR17 Rule 33	15/11/2021				
MCDR17 Rule 35(4)	15/11/2021				
Rule 45(7)	15/11/2021				

Date :

शैवाल कार्तिकेय
(SHAIVAL KARTIKEYA) 15/11/2021

Indian Bureau of Mines