

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/NLG/LST-26/HYD

Mine code : 38APR14036

- (i) Name of the Inspecting : **M001**) **S K MUDULI**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Sri M.Ramchander, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 04/02/2021
- (v) Prev.inspection date : 19/02/2020

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **CHANAKYA CEMENTS**
- (b) **Registration NO.** : **IBM/1099/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : **TELANGANA**
- District : **NALGONDA**
- Village : **GANESHPAHAD**
- Taluka : **DAMARCHERLA**
- Post office : **WADAPALLY**
- Pin Code : **508355**
- FAX No. : **09848079847**
- E-mail : **ganeshpahad@pennacement.com**
- Phone : **914023353945, 23353950, 98480**
- (f) Police Station : **WADAPALLY**
- (g) First opening date : **21/01/2002**
- (h) Weekly day of rest : **SUN**
2. Address for : **GANESHPAHAD VILLAGE**
correspondance : **WADAPALLY POST, DAMARACHERLA MANDAL,**
NALGONDA DISTRICT
3. (a) Lease Number : **APR1098**
- (b) Lease area : **354.23**
- (c) Period of lease : **20**
- (d) Date of Expiry : **20/12/2021**
4. Mineral worked : **LIMESTONE** Main

5. Name and Address of the

Lessee : PENNA CEMENT INDUSTRIES LTD
 PLOTNO.703,
 SRINIKETANCOLONYROADNO.3
 BANJARAHILLS.HYDERABAD
 HYDERABAD TELANGANA
 Phone:08558, 86055,86066
 FAX :08558-86044

Owner : D. Lakshmikantham
 M/s Penna Cement Industries
 Limited Lakshmi Nivas, Plot
 No. 705 Road
 No.3,Srinikethan Colony
 HYDERABAD TELANGANA
 Phone:
 FAX :

Agent : Sri V Gurumurthy
 M/S Penna Cements Limited
 Ganesh Pahad village
 NALGONDA TELANGANA
 Phone:
 FAX :

Mining Engineer

Name : V. Lakshman Rao,Full Time
 Qualification : BTech Mining
 Appointment/ : 25/12/2015
 Termination date

Geologist

Name : D.SAMBIAH,Full Time
 Qualification : M.SC(GEOLOGY)
 Appointment/ : 25/07/2003
 Termination date

Manager

Name : M. Ramchander
 Qualification : B Tech Mining
 Appointment/ : 11/08/2016
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	20/11/2001
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	09/04/2007
		Mining Scheme rule 12 MCDR1988	15/10/2012
		MP review under 17(1) MCR 2016	24/06/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No such exploration proposal in 2019-20.	Nil	
1b	Exploration over lease area for geological axis 1 or 2	No such exploration proposal in 2019-20.	Nil in 2019-20	Entire lease area is covered under G1 level of exploration by 113 nos. Core Bore Hole for 2276 m and 63 nos. DTH Bore holes for 1403m.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	Entire lease area is covered under G1 level of exploration.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Exploration completed over the entire area
1e	Balance reserve as on 01/04/20		Balance Reserves as on 1.04.2020 Under category 111/121/122 = 59.76 million tonnes	
1f	General remarks of inspecting officers on geology, exploration etc		The geological plan & sections have not been updated as per the boreholes drilled in the year 2017-18 and total mineral resource need to be reassessed.	Violation under rule 31(4) issued.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Mining has been proposed in the year 2019-20 in the East of pit-2.	Broadly in the area proposed	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No such proposal for top soil, OB. Separate Benches to be developed only in mineral.	Lease area is devoid of overburden. Benches developed only in mineral.	

2c	Stripping ratio or ore to OB ratio	2019-20= 1T:0.01cu m	2019-20= 1T:0.01cu m	
2d	Quantity of topsoil generation in m3	2019-20=5360 cu.m	2019-20=2668 cu.m.	
2e	Quantity of overburden generation in m3	2019-20=10835 cu.m. of Interstitial clay.	(9100 m3 interstitial clay generated during the mining operation in 2019-20.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	Mining is being done in two pits. Pit-1 660m x 360m x 20m, 2 benches. Pit-2 750m x 720m x 25m. 3 benches.	Over sized boulder has been stacked all along the North of the pit, which is not as per the proposal.violation under rule 11(1) issued.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Mining has been proposed in pit no-2	Carried out broadly as per proposal from pit 2 only.	However there are 2 pits separated by a cart track and production is obtained from pit-2 which is the main pit.
3b	Quantity of ROM mineral production proposed	2019-20= 13,27,222T	2019-20=1261440 T	1020730 T produce upto 31/1/2021. (During 2030-21)
3c	Recovery of sailable/usable mineral from ROM production	98%. Entire mineral was proposed to be utilized after segregation of interstitial waste.	Being done accordingly. In the year 2019-20, 126140 MT of Limestone and 9100 cum/22730 T of interstitial waste was generated. No mineral reject generation has been reported.	
3d	Quantity of mineral reject generation	No generation assessed during 2019-20. Hence no proposal in 2019-20.	Nil	

3e	Grade of mineral rejects generation and threshold value declared.	Not Applicable	Not Applicable	
3f	Quantity of sub grade mineral generation.	No generation assessed during 2019-20. Hence no proposal in 2019-20.	Nil generated	
3g	Grade of sub grade mineral generation	Not Applicable	Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Only interstitial waste is proposed to be segregated from Rom.	Only interstitial waste is segregated from Rom.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal in 2019-20.	Not done	
3j	Provision of drilling and blasting in mineral benches	Wagon drill - 115 mm dia-1 no, Burden-3.5m, spacing -6m, Depth of hole -8.8m, Slurry Explosive:ANFO = 20 : 80.	Wagon drill - 115mm dia -1mmDrilling is carried by 115 mm dia drill and blasting is conducted by using nonel electric detonators in combination with slurry(20%) and ANFO (80%)	Burden of 3.5m and spacing of 6m is being maintained in the first bench and in subsequent benches 3mx6m is being practiced on bench height of about 8m.
3k	Provision of mining machineries in mineral benches	Provided	3.1 cu m backhoe type shovel (2 Nos.)is being used along with dumpers of 35T capacity (5 nos). For road maintenance dozer of 450hp power is available. And sprinkler of 15KL capacity is available for dust suppression. Explosive van - 5T.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height of 8m is proposed.	8.0 m high benches are suitable for the m/c of 10.5 m boom height .	

3m	Total area covered under excavation/pits	68.52 hectare is proposed under mining pit till 19/12/2021	61.04 ha is reported under mining pit till 31/3/2020.
3n	Ore to OB ratio for the pit/mine during the year.	2019-20= 1T:0.01cu m	2019-20= 1T:0.01cu m
3o	Total area put in use under different heads at the end of year	129.85 hectare is proposed upto 19/12/2021	Total area put to use for waste disposal, infrastructure/ road and other purposes is not found to be correct.
3p	Production of ROM mineral during the last five year period as applicable	2014-15= 1.49mT 2015-16= 1.5mT 2016-17=1.49mT 2017-18=1.33mT 2018-19=1.31mT 2019-20 - 1.32mT	2014-15= 0.8mT 2015-16=0.982mT 2016-17= 1.195mT 2017-18=1.244m.T 2018-19=1.49mT 2019-20 - 1.26 mT
3q	General remarks of inspecting officers on method of mining etc.	The substantial quantity of oversized boulders are being kept in the mine beside the waste dump which needs to be consumed. Hence adequate arrangement be done to ensure the utilisation of the mineral.	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Concurrent utilisation of top soil was proposed. Dumping of interstitial clay proposed.	Top soil being utilised accordingly for GBD.Interstitial Clay mixed with Limestone boulder is dumped in the NW part of pit-2.	Violation has been issued u/r 14(1)(3) of MCDR-2017.

4b	Location of topsoil, OB and mineral reject dumps	Top soil has been proposed to be used concurrently. Interstitial waste is to be dumped within the exhaust part of the pit temporarily. N 10040-N-10300,E-20590-E 20680.	Being done accordingly. However no overburden is reportedly generated in 2019-20. Interstitial clay N 10040-N 10300 E-20590-E 20680.	
4c	Number of dumps within lease area and outside of lease area	There is one main dump within pit where the interstitial clay has been proposed to be dumped in 2019-20.	There is one main dump within pit where the interstitial clay mixed with Lst boulder has been dumped in 2019-20.	However there are a lot of scattered dumps in the lease area, which have been reported to be created during the laying of railways tracks in the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumping of the mineral was proposed within the pit.	Main dump is reported on the exhausted mineral portion within the pit.	-do-
4e	Number of active and alive dumps.	Only One proposed in the pit.	Only one active dump is there	-do-
4f	Number of dead dumps.	Nil	Nil	The dumps are all not being used and is lying as it is.
4g	Number of dumps established.	Nil	No dump has been stabilised	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	retaining bund is there along the dump	
4i	Length of Retaining wall or garland drain all along dumps		About 100m of toe bund is there along the main dump in the pit.	
4j	Number of settling ponds	Nil	Nil	

4k	Specific comments of inspecting officer on waste dump management	The scattered dumps about 22 nos which are reported to be created while laying of rail passing through the lease has some mineral. This material may be used after segregation and the waste material may be used for plantation along the lease boundary. The lessee has been advised accordingly.
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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.	No proposal for reclamation in 2019-20.	The mining is carried out above the pink limestone.	The lessee has been advised to keep the record of floor samples.
5b	Area under backfilling of mined out area	-	Meagre part of lease area has been reported to be backfilled sometime in the past .	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Topsoil proposed to be used for plantation	Topsoil utilized for plantation	
5d	Total area fully reclaimed and rehabilitated	Nil	It has been reported that the waste generated during the earlier period was utilised for backfilling some part of the area between pit-1 and pit-2.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		The complete backfilling of the pit is not possible. It may be converted into water reservoir with plantation on the top benches.	

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted.	Submitted on 23.05.2020.	
6b	Area available for rehabilitation (ha) .	No proposal for rehab. of worked out benches in 2019-20.	Not done	
6c	afforestation done (ha).	0.76 Ha	0.77 Ha	
6d	No. of saplings planted during the year	2000	2055	1570 nos of saplings planted in 0.80 Ha upto 31.01.2021 during 2020-21.
6e	Cumulative no .of plants		23430 nos plants planted in 15.14 Ha within the M.L since from opening of the Mine.	
6f	Any other method of rehabilitation	No such proposal for 2019-20.	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal for rehab. By backfilling	Not done	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal for rehabilitation by backfilling	Not done	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No proposal in 2019-20	Not done	About 3000 nos. sapling has been planted over 2.85 ha. backfilled area in western side of pit.

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal in 2019-20	Not done	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal in 2019-20	in the pit is proposed to be converted to water reservoir at the end of the deposit as it is not having enough waste for backfilling.	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	2000 nos saplings in an area about 0.76 ha	2055 nos of saplings Planted in an area of about 0.77 ha. internal road within ML.	1570 nos. in 0.80 ha. up to 31/01/2021 during 2020-21.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposal in 2019-20.	NIL	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal in 2019-20.	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental Monitoring to be carried out.	Environmental Monitoring are being done regularly. Ambient Air Quality-5 core and 2 buffer zone location Water quality -2 core and 2 buffer zone locations Noise level -5 core and 2 buffer zone location.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Plantation and Environmental Monitoring is being done by the lessee.	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal in 2019-20.	No grade wise limestone sorting is undertaken.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal in 2019-20.	Not Applicable	
7c	Different grade of mineral sorted out at mines.	No proposal in 2019-20.	Not Applicable	
7d	Any beneficiation process at mines .	No proposal in 2019-0-20	Mineral processing is not done in the lease . Only sizing is done at th crusher located at the boundary of the lease , outside the lease area.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Beneficiation is not warranted .Interstitial clay dump is having substantial quantity of Limestone boulder, which needs to be rehandled.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	5360 m3 top soil proposed	2668 m3 of top soil generated and utilized for GBD	Used for green belt development
8b	Concurrent use or storage of topsoil	Topsoil proposed to be used for plantation	Topsoil being used for plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of Interstitial clay proposed.	Interstitial clay dump is within Pit-2	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal in 2019-20.	Not done
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal in 2019-20	Not done.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2000 samplings and area about 0.76 ha. in 2019-20.	2055 samplings and area about 0.77 ha. in 2019-20 . In 2020-21 upto (31/01/2021), 1570 nos. in 0.80 ha. have been planted so far. 23430 nos. saplings have been planted in 15.14 ha. Since from opening of mine/inspection. About 75% is the survival rate.
8g	Survival rate	80%	75%
8h	Water sprinkling on roads to control airborne dust	Proposed	Sprinklers provided on haul roads
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		The land degraded by mining cannot be restored, it can now only be used for water reservoir. But the presence of dumps/ stacks created during the rail laying is spoiling the general ambience. Lessee has been advised to do the needful for ensuring the utilisation of mineral.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	MR and AR to be submitted.	M.R.Submitted upto December, 2020. A.R.Submitted upto 2019-20.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Submitted as reported in the returns. Mining Engineer- Sh V Lakshman Rao Geologist- Sh D Sambaiah Mines Manager - Sri M.Ramchander	Submitted as reported in the returns. Mining Engineer- Sh V Lakshman Rao Geologist- Sh D Sambaiah Mines Manager - Sri M.Ramchander	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining pit 61.04 Ha.	The scattered dumps (reportedly done by railways) during the railway track laying are not submitted in the returns. Remaining submissions are broadly as per submission.	
9d	Scrutiny of Annual return on afforestation	2055 saplings with 75% survival in 2019-20 within ML. 1655 saplings were planted outside ML.	Broadly as per proposal.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil reported	As per submission	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	33871 tonnes of ROM stock.	1261440 T production during 2019-20.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost Per tonne reported as Rs 156.63.		Royalty furnished as Rs.77.34/tonnes instead of Rs.80/-
9h	Scrutiny of Annual return on fixed assets	Submitted as Rs.158/-	Submitted information is reported to be of mines only.	
9k	Scrutiny of Annual return on mining machineries	Submitted	As per submission.	

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)	19/04/2021			
MCDR17	Rule 14(1)	19/04/2021			
MCDR17	Rule 31(1)	19/04/2021			
MCDR17	Rule 33	19/04/2021			

Date :

(S K MUDULI)

Indian Bureau of Mines