

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/GNR/LST-21/HYD

Mine code : 38APR07013

- (i) Name of the Inspecting : **M001**) **S K MUDULI**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Sh DVDSN Murthy, Sri B.Gurusekhar Reddy
Official with
Designation
- (iv) Date of Inspection : 01/02/2021
- (v) Prev.inspection date : 19/02/2020

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PETASANNIGANDLA**
- (b) **Registration NO.** :
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : ANDHRA PRADESH
- District : GUNTUR
- Village : PETASANNIGANDLA
- Taluka : GURUZALA
- Post office : KAREMPUDI
- Pin Code : 522614
- FAX No. :
- E-mail :
- Phone : 08649-272254
- (f) **Police Station** : KARAMPUDI
- (g) **First opening date** : 21/12/1982
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : PETASANIGANDLA LIMESTONE MINE
KARAMPUDI
GUNTUR DIST
3. (a) **Lease Number** : APR1340
- (b) **Lease area** : 202.35
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 23/12/2002
4. **Mineral worked** : LIMESTONE Main

5. Name and Address of the

Lessee : M/S SRI CHAKRA CEMENTS LTD
 H.NO 6-3-668/10/66
 P.B.NO.33, PUNJAGUTTA,
 DURGANAGAR COLONY HYDERABAD
 TELANGANA
 Phone:3318939,65023474
 FAX :040-3318938

Owner : SRI CHAKRA CEMENTS LTD
 H.NO 6-3-668/10/66
 P.B.NO.33, PUNJAGUTTA,
 DURGANAGAR COLONY, HYD
 GUNTUR ANDHRA PRADESH
 Phone:
 FAX :

Agent : D.V.D.S.N.Murthy
 Sri Narasimhapuri(po)
 Karampudi(M) Guntur Dist.
 GUNTUR ANDHRA PRADESH
 Phone:
 FAX :

Manager

Name : B.GURUSEKHAR REDDY
 Qualification : DIPLOMA IN MINING
 Appointment/ :
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	03/03/2005
Plan/Scheme of Mining	:	Modif.approved Mining Scheme	20/02/2007
	:	Mining Scheme rule 12 MCDR1988	22/07/2009
	:	MP review under 17(1) MCR 2016	16/01/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2017-18 Backlog = 3 2018-19 = 10	2018-19 = 11 boreholes have already been completed. 5 non trial pits dug.	Two boreholes could not be done due to lack of approach road to the top of mound at present. Form I submitted on 9th April, 2018.
1b	Exploration over lease area for geological axis 1 or 2	Nil	Entire potential mineralised lease area is covered under G1 or G2 level of exploration.	The non mineralised land is about 73.41 hectare , remaining is all mineralised and has been explored to G2 level of exploration.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	2018-19=All 11 boreholes proposed to be under taken in 2017-18 were completed in 2018-19 only.	- NA -
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	entire mineralised area has been explored to G1 or G2 level of exploration	12(4) - G2 area to be converted in G1 level.
1e	Balance reserve as on 01/04/20	111/121/122= 3 7.196mT 211/221/222= 29.842mT	2016-17=508186T 2017-18= 575447T 2018-19=624952T Total depletion 1.69mT Reserves assessed on 1.04.2020- 35.043215 million tonnes 111/121/122 2019-20 - 444200 tonnes	2019-20(upto Jan 20)=359221T
1f	General remarks of inspecting officers on geology, exploration etc			The general strike of the deposit is in NE-SW direction with dipping at 5 to 30 degree due SE.The Limestone deposit falls under the Narji Limestone formation.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	N1500-1800 E2400-2800	Broadly in the area proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Being separately worked wherever possible.	The interstitial material is being dumped separately. No Yellow ochre production reported.
2c	Stripping ratio or ore to OB ratio	2018-19=1:.01	2018-19= Area is devoid of OB except for the interstitial waste material. However, 1T LST is generated for : 0.05T of Interstitial material.
2d	Quantity of topsoil generation in m3	2018-19=NIL 2019-20=NIL	2018-19=NIL 2019-20=NIL till Jan 2020
2e	Quantity of overburden generation in m3	2019-20=32288 cu.m of interstitial waste (yellow clay) generation assessed 2020-21= 33394 cu.m of interstitial waste (yellow clay) generation assessed	2019-20=16656 tonnes (8328 m3) ToF interstitial waste (yellow clay) generation reported 2020-21 (till 31 Jan.Jan 21=11757 T (5878 m3) interstitial waste (yellow clay) generation reported.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The mine is being developed from top to bottom. The mine is developed with benches of 6-7 m high and width as per MMR are being maintained.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	The excavation was proposed form the only one pit	Only one pit has been developed.	
3b	Quantity of ROM mineral production proposed	714627 T 2019-20= 726360 T	2019-20 = 444200 tonnes 2020-21 (453915 tonnes produced upto 31.01.2021).	

3c	Recovery of sailable/usable mineral from ROM production	(90%) Entire mineral was proposed to be utilized after segregation of interstitial waste.	(96.38%)Being done accordingly. Interstitial waste is segregated and kept at the earmarked place..	
3d	Quantity of mineral reject generation	Nil assessed	Nil generated	
3e	Grade of mineral rejects generation and threshold value declared.	Not Applicable	Not Applicable	
3f	Quantity of sub grade mineral generation.	Nil assessed	Nil generated	
3g	Grade of sub grade mineral generation	Not Applicable	Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Only interstitial yellow clay is proposed to be segregated from ROM	Only interstitial Yellow clay is being segregated from ROM	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Not done	
3j	Provision of drilling and blasting in mineral benches	Drilling & Blasting is carried out	Drilling is carried by 115 mm dia drill and blasting is conducted by using nonel electric detonators in combination with slurry (20%) and ANFO(80%)	Normally BxS of 3mx4m in top benches and normally 4x5 in bottom benches. Depth of hole - 8.8m.
3k	Provision of mining machineries in mineral benches	Provided	1.7 cu m backhoe type shovel (1 Nos.)is being used along with dumpers of 25T capacity (3 nos). L&T wheel loader of 1.7 Cu m Water Tanker of 6KL capacity is available for dust suppression.	

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM		excavators with Boom height of about 10m is used for the benches of 6-7 m high benches.	
3m	Total area covered under excavation/pits	26.114 hectare is proposed under pit till 2021-22	26.114 ha is reported under pit till 31/3/2020.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.01	Ore : waste=1 : 0.01	
3o	Total area put in use under different heads at the end of year	43.036 hectare is proposed under land put to use till 2021-22	43.038 ha is reported under land put to use till 31/3/2020.	
3p	Production of ROM mineral during the last five year period as applicable	2014-15=lapsed period 2015-16=lapsed period 2016-17=1282766T 2017-18=lapsed period 2017-18(jan-mar19)=373133T 2018-19=714627T	2014-15=486438T 2015-16=547245T 2016-17=508186T 2017-18=575447T 2018-19=624952 T 2019-20 - 444200 T	2020-21=453915T till 31 Jan 2020
		2014-15 lapsed period 2015-16 - lapsed period 2016-17 - 1282766 T 2017-18 Lapsed period (April - December 2017) 2017-18 (Jan-March19) = 373133T 2018-19=714627T T 2019-20 - 726360 T 2019-20=359221T		

3q	General remarks of inspecting officers on method of mining etc.	The mine is being worked with opencast method of mining with mechanised drilling, excavation, loading and transport.
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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)	No proposal in 2019-20	No OB or topsoil is generated in 2019-20. However the institial clay generated is stacked separately.	
4b	Location of topsoil, OB and mineral reject dumps	Proposed around N1400-1500 E2600 - 2900	Being done accordingly	
4c	Number of dumps within lease area and outside of lease area	There is one main dump near pit where the interstitial clay has been proposed to be dumped in 2019-20.	However one dump has been noticed to the south of the pit.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)		Dump is located on non mineralized land.	
4e	Number of active and alive dumps.	one proposed in the pit.	One dump is there in the lease.	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	No proposal	No dump has been stabilised.	
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	The retaining wall is there around the dump.	
4i	Length of Retaining wall or garland drain all along dumps		About 330m of retaining wall is there.	
4j	Number of settling ponds	No proposal	NO settling pond is there.	

4k	Specific comments of inspecting officer on waste dump management	Lease is granted for ochre as well and lessee has reported nil yellow ochre generation. The lessee has been asked to comment on the quality of yellow clay and it's utility as yellow ochre.
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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.	-----	The mineralisation is continuing at the pit bottom as such backfilling is not required.	
5b	Area under backfilling of mined out area	No proposal in 2019-20.	Not done	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	IN 2019-120 top soil generation assessed	no No top soil generated as mine is working in the degraded pit only.	Lessee has consumed the top soil generated for the purpose of plantation in the previous years.
5d	Total area fully reclaimed and rehabilitated	No proposal in 2019-20.	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			

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).	----	Not Submitted	Rule 26(2)
6b	Area available for rehabilitation (ha) .	No proposal for rehab. of worked out benches in 2019-20	Not done	

6c	afforestation done (ha).	No proposal for rehab. of worked out benches	Not done
6d	No. of saplings planted during the year	No proposal for rehab. of worked out benches in 2019-20.	Not done
6e	Cumulative no .of plants	No proposal for rehab. of worked out benches	NIL
6f	Any other method of rehabilitation	No proposal for rehab. of worked out benches	nil
6g	Cost incurred on watch and care during the year	No proposal for rehab. of worked out benches	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal for rehab. By backfilling in 2018-19	Not done. Further the mineralisation is seen continuing at the pit bottom.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal for rehab. By backfilling in 2018-19	Not done
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Not done
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal for rehab. By backfilling	Not done. At the end of the deposit rehabilitation by water reservoir may be the only viable option.

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	----	----
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Proposal-1500 saplings in 2019-20 within ML.	1500 saplings with 70% survival in 2019-20 within ML.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Proposal-1500 saplings in 2018-19 within ML.	1500 saplings with 70% survival in 2018-19 within ML.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Not done.
6p	Compliance of environmental monitoring (core zone and buffer zone)	----	Environment monitoring done regularly.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal	No grade wise limestone sorting is undertaken.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	entire mineral after separation of interstitial clay in top benches is proposed for utilisation.	being done accordingly.	

7c	Different grade of mineral sorted out at mines.	grading of limestone not proposed	Not done
7d	Any beneficiation process at mines	No proposal	Mineral sizing is done at the crusher located in the lease area
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Lease is granted for ochre as well and lessee has reported nil yellow ochre generation. The utility of yellow clay may be assessed.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Not Generated & utilised	
8b	Concurrent use or storage of topsoil	No proposal	Not Generated & utilised	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump is there for the interstitial waste	As proposed	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal in 2018-19	Not done	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal in 2018-19	Not done	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1500 samplings on 0.6 ha in 2019-20	1500 samplings on 0.6 ha in 2019-20
8g	Survival rate	80%	70%
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		Except for the degradation of land due to pit , dumps and infrastructure. The natural aesthetics is maintained

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		M.R.Submitted upto Dec-2020 (By hard copy) A.R.Submitted upto 2019-20. Due to pw related problem return for Dec. 2020 (monthly) not submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Reported Shri . G Ramesh- as Mining Engineer, Sri. NVSPL Ravikanth- as Geologist reported	Shri . G Ramesh- as Mining Engineer Sri. NVSPL Ravikanth- as Geologist reported.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under pit- 26.114 ha. Area under dump 3.022 ha. Infra/road- 16.010 ha.	Broadly as reported.	
9d	Scrutiny of Annual return on afforestation	1500 saplings with 70% survival in 2019-20 within ML.	Broadly as per proposal.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil reported	No Limestone reject has been produced.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Prod- 444199.88T reported	As per submission
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	CoP reported as 217 Rs PMT.	It has been noted that the return has been referred back by statistics division which need to be attended properly
9h	Scrutiny of Annual return on fixed assets	Submitted as Nil.	Cement plant cost has been considered in fixed assests. Plant colony cost also included. In addition to crusher and screening plant and office cost.
9k	Scrutiny of Annual return on mining machineries	Submitted	

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

Date :

(S K MUDULI)

Indian Bureau of Mines