

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

**MCDR inspection REPORT**

**Hyderabad regional office**

**Mine file No :** AP/NLG/LST-5/HYD

**Mine code :** 38APR14007

- (i) Name of the Inspecting : **M001** ) **S K MUDULI**  
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : **V SUBRAMANYAM CHIEF GENERAL MANAGER(MINES)**  
Official with  
Designation
- (iv) Date of Inspection : 11/02/2019
- (v) Prev.inspection date : 28/10/2017

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **SAGAR - I**
- (b) **Registration NO.** : **IBM/825/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : **TELANGANA**
- District : **NALGONDA**
- Village : **PEDAVEEDU**
- Taluka : **HUZURNAGAR**
- Post office : **METTAMPALLY**
- Pin Code : **508225**
- FAX No. : **08683-247029**
- E-mail : **SUBRAMANYAMV@SAGARCEMENTS..**
- Phone : **040316571/316572,08683-670**
- (f) Police Station : **MATTAMPALLY**
- (g) First opening date : **18/08/1984**
- (h) Weekly day of rest : **SUN**
2. Address for : **PEDDAVEEDU VILLAGE, MATTAMPALLY MANDAL,**  
correspondance : **SURYAPET DISTRICT**  
**TELANGANA STATE**
3. (a) Lease Number : **APR0067**
- (b) Lease area : **143.67**
- (c) Period of lease : **20**
- (d) Date of Expiry :
4. Mineral worked : **LIMESTONE** Main

## 5. Name and Address of the

Lessee : M/S SAGAR CEMENTS LTD  
 H.NO.8-2-472/B/2 ROAD NO.1  
 BANJARA HILLS HYDERABAD  
 TELANGANA  
 Phone:040-3351571,0403356572  
 FAX :

Owner : SAMMETA VEERA REDDY  
 H.NO.8-2-472/B/2 ROAD NO 1  
 BANJARAHILLS HYDERABAD  
 TELANGANA  
 Phone: 04023351571  
 FAX : 04023356573

Agent : N.KRISHNA REDDY  
 M/S SAGAR CEMENTS LTD  
 MATTAMPALLY VILLAGE &  
 MANDAL NALGONDA TELANGANA  
 Phone: 08683247029  
 FAX : 08683247041

## Mining Engineer

Name : P MANOJ KUMAR REDDY,Full Time  
 Qualification :  
 Appointment/ : 27/01/2011  
 Termination date

## Geologist

Name : MD.NAYEEM,Full Time  
 Qualification : M.SC(GEO)  
 Appointment/ : 24/12/2007  
 Termination date

## Manager

Name : V.SUBRAHMANYAM  
 Qualification : DIPLOMA IN MINING & FIRSTCLASS MINES MAN  
 Appointment/ : 02/03/2005  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	17/01/2001
		Modif.of approved Mining Plan	07/12/2003
		Renewal under rule 22 MCR1960	26/03/2004
		Modif.of approved Mining Plan	12/09/2008
		Modif.of approved Mining Plan	03/08/2010
		Mining Scheme rule 12 MCDR1988	23/05/2014
		MP review under 17(1) MCR 2016	21/03/2018

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposals made for 2017-18	9 Core Bore holes were drilled covering a meterage of 249 m during 2017-18.	In 2018-19 there is proposal of 7 nos core bore holes against which 7 nos core bore holes were drilled for a total meterage of 282m.
1b	Exploration over lease area for geological axis 1 or 2	No Proposals of exploration was made.	During 2017-18 apprx. Rs 2,98,800.00 is the expenditure towards core bore hole drilling.	During 2018-19, apprx. Rs 3,73,200.00 is the expenditure towards core bore hole drilling.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposals of exploration was made for 2017-18	9 core Bore holes drilled by the Lessee himself and the apprx. expenditure is Rs 2,98,800.00	The exploratory agency in both 2017-18 and 2018-19 exploration is the lessee himself.
1d	Balance area to be explored to bring Geological axis in 1 or 2	...	16.58 Ha to be proved under G1&G2 level exploration.	
1e	Balance reserve as on 01/04/20	38.29 Million tonnes	75.9687 Million tonnes	Reserves accessed on 01.10.2017 and approved vide modification of mining plan on 21.03.2018
1f	General remarks of inspecting officers on geology, exploration etc			Approximately 50 Ha in which plant exists is yet to be proved by means of exploratory drilling.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	East side: N 9600 - 10080 & E 10810 - 11386 West Side: N 10220 - 10560 & E10410 - 10785	Workings observed to be carried out as per the proposal.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	There are no proposals for making benches in topsoil and OB.	Since top soil is found to occur with an average thickness of 1m and the immediate contagious weathering zone of limestone with SiO <sub>2</sub> >18% was treated as OB which thickness is max upto 1m. Due to this reason no separate benches in soil and maintained. Separate benches developed only in mineral. During 2017-18 no OB and top soil generated.	
2c	Stripping ratio or ore to OB ratio	1 : 0.471	Nil	No OB generated
2d	Quantity of topsoil generation in m <sup>3</sup>	No Proposals Made	Nil	
2e	Quantity of overburden generation in m <sup>3</sup>	5,30,000 Cu.mtrs or 10,60,000 tonnes	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			As no OB generated and also as the proposed part i.e 5.18 Ha area of the mining lease is not completely exhausted back filling of said proposed area was not carried out.

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 Pits	2 Pits	
3b	Quantity of ROM mineral production proposed	22,50,000 Tonnes	22,86,900 Tonnes	36900 Tonnes i.e 1.64 % extra produced wrt the proposed limestone production of 2017-18. As per practice +20% is allowed, so no violation pointed out.

3c	Recovery of sailable/usable mineral from ROM production	100%	100%
3d	Quantity of mineral reject generation	No Proposal	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Threshold Value-CaO-35% (Min), MgO- 4% (Max), SiO <sub>2</sub> - 18% (Max) & Alkalies 0.5% (Max)
3f	Quantity of sub grade mineral generation.	No Proposals were made	1,00,000 tonnes sub grade produced and utilised simultaneously by blending with high grade limestone.
3g	Grade of sub grade mineral generation	No proposal of sub grade generation	SiO <sub>2</sub> % ranging between 15% to 18%
3h	Manual / Mechanised method adopted for segregating from ROM	Segregation not required	No segregation carried out
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	Deep Hole Drilling and Blasting with explosives (Slurry type- 20%, ANFO-80%). Blast drill hole dia- 115 mm dia, depth of each hole- 9.90m, Spacing- 3m, Burden- 5m	Deep hole drilling and blasting carried out as proposed in the approved SOM

3k	Provision of mining machineries in mineral benches	Drill Machine- 115 mm dia-2 nos (which include one standby) Excavation- Shovel (Hydraulic)-2 nos-6.5 m <sup>3</sup> ,4 m <sup>3</sup> (one standby of 4 m <sup>3</sup> is additional) Loading-Wheel Loader-1 no-6.9 m <sup>3</sup> Hauling- Dumpers-5nos-60 tonners	SHOVEL (HYDRAULIC)-3 nos-6.5 m <sup>3</sup> ,6 m <sup>3</sup> ,4.3 m <sup>3</sup> WHEEL LOADER-1 no-6.9 m <sup>3</sup> AIR COMPRESSOR-2 no BLAST HOST DRILL-1 no-300 mm DUMPER-55 tonners-5 nos DOZER- 1 no-11.8 HP Road Roller-1 no-10000 tonnes Explosives Van-1 no-7 tonnes Water Tanker-12000 litre-2 nos Pumps-1 no-2400.000 L/MN	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	9m	Hydraulic shovel of 6.5m <sup>3</sup> is suitable to reach upto 12m easily.	
3m	Total area covered under excavation/pits		103.11Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.471	1:0	No over burden produced.
3o	Total area put in use under different heads at the end of year	170.007	159.799	
3p	Production of ROM mineral during the last five year period as applicable	2013-14-2.28 million tonnes 2014-15-2.25 million tonnes 2015-16-2.25 million tonnes 2016-17-2.25 million tonnes 2017-18-2.25 million tonnes	2013-14-1.38 million tonnes 2014-15-1.53 million tonnes 2015-16-1.64 million tonnes 2016-17-1.56 million tonnes 2017-18-2.2869 million tonnes	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	During 2017-18, Proposals made for back filling of 5.18 Ha by using OB but no top Soil generation and dumping proposed in the same year.	But in 2017-18 there is no OB and Top Soil generation.
4b	Location of topsoil, OB and mineral reject dumps	During 2017-18 there is proposal of back filling the OB in 5.18 Ha Mined out area located in between N9640 to N10100 and E10230 to E10530 (approximately). Sub grade- N10280 to N10350-E10160 to E10260 Top soil stack-N10385 - N10415 and E 10255-E10325	During 2017-18 no top soil,OB generated and 1,00,000 tonnes sub grade generated was simultanesouly used.
4c	Number of dumps within lease area and outside of lease area	1 OB Dump within ML(6.087 Ha area with height of 10 m)	1 Dump with 1.4 Ha area and height average height 6m.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side the UPL	Out side the UPL
4e	Number of active and alive dumps.	One	Nil
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.	As per approved Scheme of Mining in 2017-18 there is no proposal for construction of retaining wall or garland drains	Retaining wall and garland drain earlier constructed at the OB dump area.	
4i	Length of Retaining wall or garland drain all along dumps	No proposals were made in 2017-18	100 m retaining wall made earlier year and maintained. Garland drain is there.	
4j	Number of settling ponds	Nil	Existing One made in earlier year	
4k	Specific comments of inspecting officer on waste dump management			Back filling not carried out in the proposed 5.18 Ha area in 2017-18 but later on the Modification of Mining plan was approved for the period 2018-19 to 2022-23 on 21.03.2018.

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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.	5.18 Ha	The proposed area in not exhausted of mineral Limestone.	
5b	Area under backfilling of mined out area	5.18 Ha.	Proposed area is not mined out.	Modification of mining plan approved on 21.03.2018.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposals of top soil restoration or rehabilitation .	No top soil generated during 2017-18.	
5d	Total area fully reclaimed and rehabilitated	5.18 Ha	Nil.	The proposed area of 5.18 Ha is not completely exhausted of mineral.



5e General remarks of inspecting officers on backfilling and reclamation etc.

5.18 Ha area as proposed is not completely exhausted so the backfilling and reclamation proposal was not carried out as proposed in the year 2017-18 and subsequently the Modification of Mining Plan got approved on 21.03.2018.

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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).	Submitted on time in the format	Submitted	
6b	Area available for rehabilitation (ha) .	5.18 Ha	Proposed area not completely exhausted of mineral Limestone.	
6c	afforestation done (ha).	1.85 Ha area with 2775 nos plants	No back filling has been done and also no plantation done over back filled area.How ever 5276 nos planted witin the lease over 2.005 Ha during 2017-18.	
6d	No. of saplings planted during the year	2775 Saplings in 1.85 Hectares	5276 Saplings planted in 2.005 Hectares	Watch and care charges Rs.10,72,963/-
6e	Cumulative no .of plants		2,09,896 (Within ML area)	
6f	Any other method of rehabilitation	Quarterly Environmental Monitoring	Carrying out Environmental monitoring at Core & Buffer Zone.In a quarter 11 nos AAQ & Nosie sample, 4nos water samples, 3nos soil samples are collected.Yearly 4 personal dust samples are collected.	Expenditure incurred for monitoring and personal dust sampling Rs. 4,51,972/-

6g	Cost incurred on watch and care during the year		Watch and care charges Rs.10,72,963/-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	5.18 Ha	The proposed area is not completely exhausted of mineral Limestone
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	.....
6p	Compliance of environmental monitoring (core zone and buffer zone)	It is proposed to carry out quarterly environmental monitoring of the all parameters both in the core and buffer zones.	It was observed during the inspection that quarterly monitoring of the environmental parameters has been carried for 2017-18.It was also observed that all environmental parameters are within permissible limits.

#### Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposals of sorting	No grade wise sorting carried out	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposals of sorting	No sorting carried out	
7c	Different grade of mineral sorted out at mines.	No proposals of sorting	No sorting carried out	
7d	Any beneficiation process at mines	No beneficiation proposed	No beneficiation carried out	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	In 2017-18 a total of 1,00,000 tonnes of sub grade generated and simultaneously utilised for blending.
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## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil generation proposed in 2017-18	In 2017-18 there is no top soil generation.	However top soil is being removed separately and using for plantation purpose.
8b	Concurrent use or storage of topsoil	During 2017-18 there was no proposal for top soil generation and storage.	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposals made	In 2017-18 there is no generation of OB and top soil. What ever Subgarde Limestone produced was blended with high grade Limestone and utilised.	Provision provided for separate temporary top soil dump, OB dump, sub grade.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposals made to backfill and reclaim 5.18 Ha of mineral exhausted area with OB.	The proposed 5.18 Ha area is not completely exhausted during 2017-18 and also no OB generated in 2017-18.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposals made to reclaim the 5.18 Ha area with OB.	Proposed area has not been backfilled and reclaimed as the said area is not completely exhausted of mineral.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Existing Plantation within the mining lease is 209896 Plants over an area of 89.020 Hectares.	

8g	Survival rate	86%	86%	
8h	Water sprinkling on roads to control airborne dust	Continuous water sprinkling on roads is proposed	Water being sprinkled on roads by water tankers	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Afforestation is done to maintain the aesthetic beauty with in the ML area.

#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	To submit Monthly and annual returns in time.	Submitting in time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Sri.P.Manoj Kumar Reddy Geologist- Sri.Md.Nayeem Manager- Sri.V.Subramanyam	Mining Engineer- Sri.P.Manoj Kumar Reddy Geologist- Sri.Md.Nayeem Manager- Sri.V.Subramanyam	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Working Pit-103.11 Ha,Waste disposal-2.45 Ha,Reclaimed area- Nil	Working Pit-103.11 Ha,Waste disposal-2.45 Ha,Reclaimed area- Nil	
9d	Scrutiny of Annual return on afforestation	5276 nos sapling planted	5276 nos sapling planted in 2.005 Ha	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral reject generated	No mineral reject generated	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock- Nil	ROM Stock- Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine price -Rs 177.34 Production cost/tonne- Rs 177.34	Ex Mine price -Rs 177.34 Production cost/tonne- Rs 177.34	

9h	Scrutiny of Annual return on fixed assets	Rs 699036921.00	Rs 699036921.00 (As reported by Lessee)
9k	Scrutiny of Annual return on mining machineries	SHOVEL (HYDRAULIC)-3 nos-6.5 m3,6 m3,4.3 m3 WHEEL LOADER-1 no-6.9 m3 AIR COMPRESSOR-2 no BLAST HOST DRILL-1 no- 300 mm DUMPER-55 tonners-5 nos DOZER- 1 no- 11.8 HP Road Roller-1 no-10000 tonnes Explosives Van-1 no-7 tonnes Water Tanker- 12000 litre-2 nos Pumps-1 no-- 2400.000 L/MN	Deeployed as mentioned.

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**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