

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/NLG/LST-8/HYD

Mine code : 38APR14022

- (i) Name of the Inspecting : 160) kalmata.M.K
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Shri V Subramanyam
Official with
Designation
- (iv) Date of Inspection : 17-JUL-23
- (v) Prev.inspection date : 03-JAN-23

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : SAGAR CEMENTS LST MINE 2
- (b) **Registration NO.** : IBM/825/2011
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : TELANGANA
- District : NALGONDA
- Village : PEDAVEEDU
- Taluka : HAZUR NAGAR
- Post office : MATTAMPALLI
- Pin Code : 508225
- FAX No. : 040-23356573
- E-mail : info@sagarcements.in
- Phone : 08683246533
- (f) **Police Station** : MATTAMPALLY
- (g) **First opening date** : 01-MAY-86
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : PEDDAVEEDU VILLAGE
MATTAMPALLY MANDAL
NALGONDA DISTRICT-508225
3. (a) **Lease Number** : APR0063
- (b) **Lease area** : 143.72
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 30-OCT-35
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 : S.ANANDA REDDY
 H.NO.8-2-472/B/2,ROAD NO.1
 BANJARA HILLS HYDERABAD
 HYDERABAD TELANGANA
 Phone: 04023351571
 FAX : 04023356573

Agent : M.V.Raman Murthy
 Sagar Cements Colony,
 Mattampally Suryapet Dist,
 Telangana NALGONDA
 TELANGANA
 Phone:
 FAX :

Mining Engineer

Name : N.SIVA NAGARAJU,Full Time
 Qualification : B.Tec.Mining
 Appointment/ : 08-MAR-21
 Termination date

Geologist

Name : K Jagannadha Rao,Full Time
 Qualification : Msc., Geology.
 Appointment/ : 23-DEC-21
 Termination date

Manager

Name : V V KRISHNA REDDY
 Qualification : B TECH MINING
 Appointment/ :
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	18-AUG-03
		Modif.of approved Mining Plan	28-AUG-06
		Mining Scheme rule 12 MCDR1988	15-FEB-12
		Mining Scheme rule 12 MCDR1988	03-JUN-15
		MP modif under 17(3) MCR 2016	25-MAR-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	None in the year 2022-23.	None in the year 2022-23.	There was proposal to drill 08 boreholes in the year 2021-22 and said exploration was completed as per the proposal and submitted form I to this office on 11.02.2022.
1b	Exploration over lease area for geological axis 1 or 2	In the year 2021-22 exploration was proposed to convert G-2 level to G-1 level.	Lessee has drilled 08 boreholes in the year 2021-22 and explored entire mineralized area under G-1 level.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None.	By lessee.	Lessee has carried out drilling by own machine. The exploration is monitored by the Geologist of the mine appointed under Rule 55(3) of MCDR 2017. Expenditure incurred on exploration is approximately 4.5 lakhs.
1d	Balance area to be explored to bring Geological axis in 1 or 2	10.5Ha G-2 level to G-1 level in the present plan period.	Converted 10.5Ha G-2 level exploration to G-1 level by drilling 08 exploratory boreholes in the year 2021-22.	Entire Mineralized area is covered under G-1 level of exploration.

1e	Balance reserve as on 01/04/20	As per the approved document dated 25.03.2021, Status of reserves/resources is as follows. (In million tonnes) Proved Mineral Reserves (111) - 54.102 Probable Mineral Reserves (122) - 2.004 Remaining Resources (222/221) - 13.355 Total:- 69.461	Reserves/resources as on 01.04.2023. (in million tonnes) Proved Mineral Reserves (111) - 59.421 Remaining resources (221) - 17.232 Total:- 76.653	Reserves/resources were re-estimated based on the exploration carried out in the present plan period.
1f	General remarks of inspecting officers on geology, exploration etc	The lease area forms a part of the Palnad sub basin within the cuddapah basin. The general strike of the formation is NNE to SSW and dip varies from 2 to 5 degree towards ESE. The grade of the limestone varies from Cao 34.00% to 48.52%. The entire Mineralized area is explored under G-1 level by drilling 76 core holes and 64 DTH holes.		

Development :

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

2a	Location of development w.r.t.lease area	There was a proposal to work between the co-ordinates N 240 to N 490 and E 750 to E900, N 310 to 540 and E 1010 to E 1250, N 240 to N 560 and E 1360 to 1445.	Due to Change in lease shape after DGPS survey slight deviation was observed in the proposed workings. Further, in the approved document proposal was not given to dump topsoil in the 7.5 mtr safety zone. However, on the day of inspection it was observed that topsoil was dumped in the 7.5 mts safety zone of Northern side, southern side and eastern side of the lease area.	Violation is pointed out for the same under Rule 11(1) of MCDR 2017. Further, lessee has advised to submit modified mining plan for change in shape of the lease area.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches were proposed in ore only.	Existing benches are in ore only.	Total two benches are existing in the lease area. Bench height was maintained 6.00 to 7.00 mtrs and width morethan 30 mtrs.
2c	Stripping ratio or ore to OB ratio	None.	None.	
2d	Quantity of topsoil generation in m3	None.	None.	However, the topsoil generated in Sagar cements limestone mine-I(326.58ha) was dumped in the lease-II, where there is no such proposal was given in the approved document and violation is pointed out for the same under Rule 11(1) of MCDR 2017.
2e	Quantity of overburden generation in m3	None.	None.	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Due to change in the lease shape after DGPS survey deviation was observed in the proposed and actual workings. Further, in the approved document no proposal was given to generation and dumping of topsoil in the lease-II . However, it was observed that topsoil generated in lease -I(326.58Ha), was dumped in the lease II(143.72ha), Violation is pointed out for the same under Rule 11(1) of MCDR 2017.
----	---	---

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One.	One.	Dimension of the pit is 700m(l) x 289m(w) x 13.00m (d)
3b	Quantity of ROM mineral production proposed	414789 tonnes in the year 2022-23.	349500 tonnes in the year 2022-23.	Production achieved is 84% in the year 2022-23.
3c	Recovery of sailable/usable mineral from ROM production	100%.	100%	
3d	Quantity of mineral reject generation	None.	None.	
3e	Grade of mineral rejects generation and threshold value declared.	Generation of mineral reject is none. Threshold value is Cao minimum 34% and Mgo Maximum 5%	Grade is not applicable for Mineral reject, since the generation of mineral reject is nil and Average grade of the limestone produced is 42 to 44% Cao.	
3f	Quantity of sub grade mineral generation.	None.	None.	
3g	Grade of sub grade mineral generation	Not applicable.	Not applicable.	

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised.	Mechanised.	The ROM produced is feed to crushing and screening plant existing in the lease-I of the same lessee.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None.	None.	
3j	Provision of drilling and blasting in mineral benches	Yes proposed.	Lessee is using 115mm rock drill for drilling and ANFO and slurry explosives for blasting.	Lessee is using Nonel detonators to control ground vibrations and fly rocks.
3k	Provision of mining machineries in mineral benches	Proposed combination of excavators and tippers for production and development.	Using excavator of 2.10Cum capacity and tippers of 25 ton capacity for production and development.	Using Rock driller and Air compressor for drilling holes for the purpose of blasting in the mineral benches.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed bench height is 6.00 mtrs.	Benches were proposed and made in mineral only. The bench height was maintained 5.5 to 6.00 mtrs.	The bench height maintained is suitable to the nature of the deposit and method of mining adopted.
3m	Total area covered under excavation/pits	22.334 in the present plan period up to 2024-25.	The area covered under mining was approximately 20.00Ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	No OB is proposed and generated in the present plan period.
3o	Total area put in use under different heads at the end of year	Area under Mining- 22.334Ha, Infrastructure -1.50Ha, Roads-1.50Ha.	Area under Mining- 20.00Ha, Infrastructure(including roads)- 3.00Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2022-23 4,14,789T 2021-22 4,08,272T 2020-21 20,149T 2019-20 3,50,000T 2018-19 3,51,175T	2022-23 3,49,500T 2021-22 4,00,000T 2020-21 10,000T 2019-20 3,24,883T 2018-19 3,49,000T	

3q	General remarks of inspecting officers on method of mining etc.	The method of mining adopted is fully mechanized with deep hole drilling and blasting. Lessee is using combination of excavators and tippers for production and development. Bench height was maintained almost 6.00 mtr height and width morethan 30.00 mtrs. The proposed method of mining is suitable for the strata of the lease area and method adopted for mining.
----	---	--

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	None.	Topsoil generated in lease -I, is dumped in 7.5 mtr safety zone of this lease for making bund.	
4b	Location of topsoil, OB and mineral reject dumps	None.	Topsoil generated in lease-I is utilized for making bund in the 7.5 mtr safety zone. However, proposal was not given in the approved document for the same.	Violation is pointed out for the same under Rule 11(1) of MCDR 2017.
4c	Number of dumps within lease area and outside of lease area	None.	None.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	None.	None.	
4e	Number of active and alive dumps.	None.	None.	
4f	Number of dead dumps.	None.	None.	
4g	Number of dumps established.	None.	None.	
4h	Whether Retaining wall or garland drain all along dumps are there.	None.	None	

4i	Length of Retaining wall or garland drain all along dumps	Not applicable.	Not applicable.
4j	Number of settling ponds	None.	None.
4k	Specific comments of inspecting officer on waste dump management		The generation of waste is nil and no waste dumps are existing within the lease area. Further, the topsoil generated in lease-I, was utilized for making bund along the 7.5 mtr safety zone of this lease. However, no such proposal was given in the approved document. Violation is pointed out for the same under Rule 11(1) of MCDR 2017.

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 backfilling is proposed in the present plan period.	No backfilling is made in the present plan period.	Mineral is not extracted up to the proved depth, so, no backfilling was proposed and made in the present plan period.
5b	Area under backfilling of mined out area	None.	None.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	None.	None.	
5d	Total area fully reclaimed and rehabilitated	None.	None.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		Mineral is not extracted upto the proved depth and no area is matured for backfilling, so no backfilling was proposed and made in the present plan period.	

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).	Before 1st july of every year.	Submitted PMCP report along with the Annual returns submitted for the year.	Submitted within the time limit.
6b	Area available for rehabilitation (ha) .	None.	None.	
6c	afforestation done (ha).	0.50Ha in the year 2022-23.	0.8Ha in the year 2022-23.	total area covered under plantation as on date is approximately 9.5Ha. Plantation was made morethan the proposal.
6d	No. of saplings planted during the year	500 saplings in the year 2022-23.	Planted 971 sapling in the year 2022-23.	Total plantation made as on date is 13083.
6e	Cumulative no .of plants	2000 saplings in the present plan period up to 2024-25.	1721 in the present plan period up to 2022-23.	Total saplings planted so far is 13083.
6f	Any other method of rehabilitation	None.	None.	
6g	Cost incurred on watch and care during the year	None.	lessee is spending approximately 50,000/year for taking care of plantation.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	None.	None.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	None.	None.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	None.	None.	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None.	None.	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	None.	None.	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	None.	None.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	None.	None.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	None.	None.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed regular monitoring of Air, water and noise in the core and buffer zone.	Lessee has carried out environmental monitoring for the quarter ending March 2023, for Air, Water and Noise and all the parameters are found within permissible limit.	Environmental monitoring was carried out by M/s Lawn Enviro Associates, Hyderabad. Lessee has submitted copy of report to this office.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Under PMCP only plantation was proposed in the present plan period. The plantation was made morethan the proposal. Further, lessee is regularly monitoring Air, water and noise and all the parameters are within the permissible limits.	

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise dispatch.	Dispatching Cement grade ore from the lease.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical.	Mechanical.	Lessee is doing only crushing and screening.
7c	Different grade of mineral sorted out at mines.	Cement Grade.	Cement Grade.	
7d	Any beneficiation process at mines .	None.	None.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Lessee is using entire ROM by blending high grade ore with low grade as per the requirment of the plant .	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	None.	None.	Topsoil removed from leae-I, was utilized for making bund in the 7.5mtr safety zone of this mine.
8b	Concurrent use or storage of topsoil	None.	None.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	None.	None.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	None.	None.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	None.	None.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Given information on existing plantation in the approved document. Additionally lessee has planted 13083 saplings so far within the lease area.	
8g	Survival rate	None.	90 to 95%	It was observed that survival rate is good. Lessee is well taking care of plantation by regular monitoring.
8h	Water sprinkling on roads to control airborne dust	Yes, proposed.	Regularly spraying water on the working benches, Haul road etc.	One water tanker of 4,000 ltr capacity is in use for dust suppression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		About 20Ha of the lease area is degraded by mining. Benches were systematically maintained. Plantation was made in the 7.5 mtr safety zone. Using 4000 capacity water tanker for sprinkling on mineral benches and haul roads to avoid generation of dust during mining operation and transportation from mine head to processing plant.	

Compliance of Rule 45:

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

9a	Status of submission of Monthly and Annual returns	A monthly returns shall be submitted before 10 th day of every month in respect of preceding month and an annual returns shall be submitted before 1st day of july of each year for the preceding financial year.	Lessee is regularly submitting Monthly and Annual returns within time-bound.	Submitted annual returns for the year 2022-23 and Monthly returns up to June-2023.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer:- N.siva Nagaraju, Geologist: - Mr.K.Jagannadh a Rao, Manager, ShriV.V. Krishna Reddy.	The above information given in the annual returns submitted for the year 2022-23 is correct.	Submitted notice of appointment to this office.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under mining: 18.004Ha, Infrastructure -3.00Ha. Area under garland drains-1.50Ha.	The information furnished in the AR is found almost correct.	
9d	Scrutiny of Annual return on afforestation	Number of saplings planted 971 and survival rate 96%.	Survival rate is almost 90 to 95% and details furnished in the returns are found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	None.	None.	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM:- Opening and closing stock_Nil, Production:- 349500 tonnes. Gradewise , Cement garde ore:- Opening and closing stock is nil and production and dispatch is 349500 tonnes.	The details furnished in the Annual returns submitted for the year2022-23 is found correct.	In the year 2022-23, ROM production was 349500 tonnes and lessee has diaptched entire ROM as cement grade to the Crushing and screening plant existing in lease no-1. The materials received from both the leases (Lease No-I and II) were feed to crusing and screening plant by blending.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Exmine price and cost of production:- Rs 309.15/T	The cost of production and ex-mine price mentioned is found correct.	
9h	Scrutiny of Annual return on fixed assets	Value of Fixed asset is mentioned as zero for the year 2022-23.	In the annual returns submitted for the year 2022-23, under part-V, at point no-6, Back hoe, tippers, etc machineries were shown. However, under Capital structure value is mentioned as zero for plant and machinery including transport equipments. Further, in the annual returns submitted for the year 2021-22, Paid up share capital and Reserve & surplus(all type) was mentioned as zero. However values for the same are shown as Rs 261400000 & Rs 1641000000 respectively in the AR 2022-23.	Showcause notice is issued for the same under Rule 45(7) of MCDR 2017.

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
MCDR17	Rule 11(1)	28-AUG-23			
MCDR17	Rule 27(2)	28-AUG-23			

Date :

(kalmata.M.K)

Indian Bureau of Mines