

**Indian Bureau of Mines**  
**Minerals Development and Regulation Division**  
**MCDR Inspection Report**  
**Hyderabad Regional Office.**

**Mine File:** MCDR-Misc/1/2023-HYD

**Mine Code:** 38APR14008

1) Name of Inspecting officer:	<b>Shri .M.K. Kalmata</b>
2) Designation	Regional mining Geologist
3) Accompanying mine official with designation	N.Hari Prasad Rao, General Manager
4) Date of Inspection	<b>12.12.2024</b>
5) Date of Previous Inspection	17.10.2023

**Part-I: General**

S.No.	Particulars	Details
1	Name of the Mine	SITAPURM LIMESTONE MINE-1
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	770.23 Ha.
3	Mine code	IBM/996/2011
4	IBM Registration Number under rule 45 of	38APR14008
5	Name of the lessee, Address, phone, email and fax number	Sitapuram Limestone Mine-I Zuari Cement Ltd. Dondapadu-VillagChintalapalem-Mandal, Suryapet-Dist., Telangana-508246. Phone No-7674974888Mail : <a href="mailto:n.hariprasadrao@zcltd.com">n.hariprasadrao@zcltd.com</a>
6	Village	Dondapadu
7	Taluka/Mandal	Chintalapalem
8	District	Suryapet
9	Pin code	508246
10	State	Telangana
11	Post office	Dondapadu
12	Nearest police station	Chintalapalem
13	Nearest Railway station	Bonakallu
14	Date of Grant of Mining Lease	07.03.1984
15	Date of Execution	24.04.1984

16	Period	valid up to 23.04.2024. Deemed extension up to 50 years i.e up to 23-04.2034, as per MMDR Amendment Act is under process with the State Government.
17	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Sri. Vimal Kumar Jain ZUARI CEMENT LIMITED Adventzcentre, 2 <sup>nd</sup> floor No-28 Cubbon road, Bengaluru-560001 Date: 10.06.2022
18	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sri .G.N.B. Rao ZUARI CEMENT LIMITED Sitapuram Works, Dondapadu-508246 Date: 14.09.2024 Cell: +91 9129152226.
19	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines, qualification	Sri.N.Hari Prasad Rao Mines Manager ZUARI CEMENT LIMITED Sitapuram Works, Dondapadu-508246 Date 17.07.2014
20	Name of the Mining Engineer & Geologist, Qualification and date of appointment in mine,	<b>Mining Engineer:</b> Himavamsi B.Tech Mining Date of Appointment:- 06.08.2024 <b>Geologist:</b> V. Venkatesh, M.Sc. Geology Date of Appointment : 29.08.2020
21	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Modified Mining Plan approved on 11.01.2022. (Jan 2021-22 to 2023-24) And Review of Mining Plan approved on 22.12.2023. F.Y.2024-25 to F.Y. 2028-29
22	Name of the Mineral	Limestone
23	Method of Mining (Opencast, Underground)	Opencast

24	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
25	Captive/Non Captive	Captive

<b>PART-II</b>				
<b>Exploration :</b>				
<b>Sl. No.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>
1a	Backlog of previous year	None in the year 2024-25.	None in the year 2024-25.	Entire area is already explored under G-1 level, during previous block periods.
1b	Exploration over lease area for geological axis 1 or 2	None in the year 2024-25.	None in the year 2024-25.	Entire area is already explored under G-1 level, during previous block periods.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None in the year 2024-25.	None in the year 2024-25.	During previous block periods exploration is carried out by M/s Synergy Geo-teck Pvt. Ltd. Nagpur and Expenditure incurred on exploration is Rs 16651785

1d	Balance area to be explored to bring Geological axis in 1 or 2	None in the year 2024-25.	None in the year 2024-25.	Total lease area is 770.23Ha, and entire lease area is explored under G-1 level.
1e	Balance reserves as on 01/04/2017	As per the approved document dated 22-12-2023, details of reserves/resources are as follows:- (Estimation as on 07-11-2023) (In million tonnes) Proved M Reserves (111) - 267.481 Feasibility M Resources (211) - 454.134 Total:- 721.615	Reserves/resources as on 01-04-2024 are as follows: (In million tonnes) Proved M Reserves (111) - 267.160 Feasibility M Resources (211) - 454.134 Total:- 721.294	Updated reserves/resources by depleting 321079 tonnes of ROM production achieved during the period 01-11-2023 to 31-03-2024.
1f	General remarks of inspecting officers on geology, exploration etc.		The rock type in the lease- hold area (lease-1) of Sitapuram limestone mine belongs to Palnad (Narji) Limestone stage of	Total lease area is 770.23Ha, and entire lease area is explored under G-1 level by drilling 277 boreholes to a total depth of 9755 mtrs

		<p>Jamalamadugu series in kurnool system. The limestone is exposed in the low lying areas, like the water course depressions and at few places. The subject area forms a part of the proterozoic paland litho-units belonging to the kurnool group (Cuddapah super group) and correlatable to the pre-cambrian sedimentary formation occure perforce in the area. The carbonate rocks outcrops in the subject area belong to the Narji limestone formation of kurnool group .The litho stratigraphic of the several litho units deppicted and mapped in the area is present below.Grey Limestone-Cao:43 to 47%. Light Grey Limestone-Cao:39 to 42%.Overlying this</p>	<p>and expenditure incurred on exploration is Rs 16651785 In the Annual returns submitted for the year 2023-24, details of expenditure carried out on exploration was not given and details of Total boreholes drilled and meterage was also not matching with the recently approved document. Show cause notice is issued for the same under Rule 45(7) of MCDR 2017.</p>
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section is a stretch underlain by buff and Argillaceous limestone beds, Which include both massive and flaggy strata. The flaggy stratum is essentially argillaceous and massive beds are siliceous. Buff and brown colours are common. Overlying this zone is a massive, thick bedded, grey limestone bed, christened as the upper grey limestone and calcareous phyllite beds are omnipresent. The general trend of the beds in NE-NW with shallow (<25 Degree)dips to the South-East over a major part of the area. There are joints both along and across the strike of the beds. The Limestone beds in the North Eastern part of the area have a NE-SW trend with

			swerves to NNE-SSW and at shallow angles towards South-East.	
<b>Development :</b>				
<b>Sl.N o.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>
2a	Location of development w.r.t. lease area	In the year 2024-25, there is a proposal to work in two pits and co-ordinates of proposed area is as follows:- Pit No-1:- N1860640 to 1861255 and E 394820 to 395355. PitNo-4:- N1859990 to N 1860485 & E 394265 to E 394600	In pit No-1, working is carried out within the proposed co-ordinates. However in pit No-4, working is carried out between the co-ordinates N1859970 to 1860575 and E 394190 to 394565.	The working has been not carried out as per the proposal in the pit No-4. Violation is pointed out for the same under Rule 11(1) of MCDR 2017.
2b	Separate benches in topsoil, overburden and minerals (Rule-15)	Benches were proposed in ore only.	Benches exist in ore only.	No topsoil or OB is existing in the proposed working area. And existing benches are in ore only.
2c	Stripping ratio of ore to OB ratio	1:0	1:0	No OB is existing in the proposed working area.
2d	Quantity of topsoil generation in m3	None in the year 2024-25.	None in the year 2024-25.	No topsoil generation is proposed in the present plan

				period.
2e	Quantity of overburden generation in m3	None in the year 2024-25.	None in the year 2024-25.	No OB/waste generation is proposed in the present plan period.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc.		In the year 2024-25, there is a proposal to work in two pits, pit No-1 and Pit No-4. However, it is observed that in pit No-1 working is carried out within the proposed area, but in Pit No-4 working is not carried out as per the proposal in the North-Western side and Southern side.	Violation is pointed out for the same under Rule 11(1) of MCDR 2017.
<b>Exploitation :</b>				
<b>Sl.No.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>
3a	Number of pit proposed for production	Two pits in the year 2024-25.	In the year 2024-25, working is carried out in both the pits.	Working is carried out in Pit No-1 and 4. However, in pit no-4 working is not carried out as per the proposal and violation is pointed out for the same under Rule 11(1) of MCDR 2017.
3b	Quantity of ROM mineral production proposed	1603950T in the year 2024-25.	379250T in the year 2024-25( Up to November 2024)	Up to November 2024 production achieved is only 23.65% for the

				year 2024-25.
3c	Recovery of saleable / usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	None in the year 2024-25.	None in the year 2024-25.	
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	Not applicable.	
3f	Quantity of sub grade mineral generation.	None.	None.	
3g	Grade of sub grade mineral generation.	Not applicable.	Not applicable.	
3h	Manual / Mechanized method adopted for segregating from ROM	None.	None.	Lessee is doing only size reduction by feeding ROM to Crusher existing in the plant area.
3i	Any analysis or beneficiation study proposed and carried out for subgrade mineral and rejects	None.	None.	
3j	Provision of drilling and	yes, proposed deep	Lessee is doing drilling	Using drilling

	blasting in mineral benches	hole drilling and blasting.	and blasting as per the proposal.	machine of 150mm capacity for drilling blast holes and loose ammonium nitrate & slurry explosive for blasting.
3k	Provision of mining machineries in mineral benches	Yes proposed.	Using Combination of excavators and tippers for production and development.	Additionally using rock drilling machine of 150mm for drilling blast holes.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed bench height is 8.5 mtr	Maintained bench height 6.5 to 8.5mtrs in pit no-1 and 5 to 8.00 mtr in pit No-4.	The Ore Bench proposed and maintained is suitable for the method of mining adopted. No OB benches are proposed in the present block period.
3m	Total area covered under excavation / pits	89.62Ha up to 2024-25.	94.50Ha up to 2024-25.	It appears the area under mining mentioned in the approved document dated 22-12-2023 is incorrect and not taken up to the area which is cleaned for advancement of

				benches. Showcause notice is issued under Rule 45(7) of MCDR 2017 to rectify the area under pits based on the latest survey.
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	No OB is proposed and handled in the year 2024-25.
3o	Total area put in use under different heads at the end of year	Area under mining:- 89.62Ha, Infrastructure:- 53.28Ha, Others:- 67.76Ha,	Area undr Mining: 94.50Ha, Infrastructure:- 52.62Ha, Others- 50.26Ha.	The land use patterns is not updated properly and show cause notice is issued for the same under Rule 45(7) of MCDR 2017 to update land use details in the Annual returns submitted for the year 2023-24.
3p	Production of ROM mineral during the last five year period as applicable	2024-25 - 1603950T 2023-24 - 1604993T 2022-23 - 1604993T 2021-22 -1590000T 2020-21 - 1590000T	2024-25 - 379250T (Up to Nov-24) 2023-24 - 772300 T 2022-23 - 794250 T 2021-22 - 1097120 T 2020-21 - 994649 T	

3q	General remarks of inspecting officers on method of mining etc.		The method of mining adopted is fully mechanized. The bench height is maintained 6.50 to 8.5 mtr and width more than 15.00 mtrs. The bench parameters maintained are suitable for the nature of the deposit and method of mining adopted.	Total three pits are existing within the lease area. However, in present five year block period working is proposed in two pits (Pit No-1 and 4). The third pit is converted into water reservoir/harvesting pit.
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**Solid Waste Management - Dumping :**

Sl.No.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32, 33)	None in the year 2024-25.	None in the year 2024-25.	No topsoil, OB is existing in the area proposed for mining in the present five years block period. Recovery is 100% and generation mineral reject is also Nil.
4b	Location of topsoil, OB and mineral reject dumps	None in the year 2024-25.	None in the year 2024-25.	No dumps are existing within the lease area.
4c	Number of dumps within lease area and outside of	None in the year 2024-25.	None in the year 2024-25.	

	lease area			
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not applicable.	Not applicable.	
4e	Number of active and alive dumps.	None in the year 2024-25.	None in the year 2024-25.	No dumps are existing within the lease area.
4f	Number of dead dumps.	None in the year 2024-25.	None in the year 2024-25.	
4g	Number of dumps established.	None in the year 2024-25.	None in the year 2024-25.	
4h	Whether retaining wall or garland drains all along dumps are there.	None in the year 2024-25.	None in the year 2024-25.	
4i	Length of retaining wall or garland drain all along dumps.	None in the year 2024-25.	None in the year 2024-25.	
4j	Number of settling ponds	None in the year 2024-25.	None in the year 2024-25.	
4k	Specific comments of inspecting officers on		No topsoil, OB, and mineral reject is proposed and generated in the	No dumps are existing within the lease area.

	waste dump management		present five year block period, so no dumping was made.	
<b>Solid Waste Management - Backfilling :</b>				
<b>Sl.N o.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>
5a	Status of part or full extraction of mineral from mined out area before starting backfilling	Not proposed.	Nil	No backfilling is proposed in the present plan period.
5b	Area under backfilling of mined out area	Not proposed.	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not proposed.	Nil	
5d	Total area fully reclaimed and rehabilitated	Not proposed.	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation		Present working is not reached up to the proved depth and no proposals were made for reclamation and	

	etc.		rehabilitation in the present plan period.	
<b>Progressive Mine Closure Plan :</b>				
<b>Sl.No.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 26(2)	Before 1st July of every year.	Submitted yearly report on PMCP within the prescribed time limit.	Lessee has attached PMCP report along with the Annual returns submitted for the year 2023-24 on 27-06-2024.
6b	Area available for rehabilitation (ha)	None in the year 2024-25.	None in the year 2024-25.	
6c	Afforestation done (ha)	1.5Ha in the year 2024-25	1.5Ha in the year 2024-25	Plantation is done as per the proposal.
6d	No. of saplings planted during the year	1500 saplings in the year 2024-25.	1500 saplings in the year 2024-25.	Plantation is done as per the proposal.
6e	Cumulative no. of plants	7500 saplings in the present five year block period of 2024-25 to 2028-29.	The latest review of mining plan is approved for the five year block period of 2024-25 to 2028-29 and in the first year lessee has planted 1500 saplings.	Total plantation made so far is 62460 saplings covering an area of 41.10Ha.
6f	Any other method of rehabilitation	None in the year 2024-25.	None in the year 2024-25.	

	n			
6g	Cost incurred on watch and care during the year	Rs 4.5 lakh in the year 2024-25.	Approximately Rs 6.00 lakhs in the year 2024-25.	Lessee is well taking care of the plantation by engaging manpower for regular monitoring.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (LxBxD)	Nil	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Nil	Nil	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Nil	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Nil	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Nil	Nil	
6o	Compliance of rehabilitation of waste	Nil	Nil	

	land within lease (ii) Method of rehabilitation			
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes, Air, Water and Noise monitoring was proposed in Core and Buffer zone.	Environmental monitoring in the core and buffer zone is carried out as per the proposal and results are within permissible limits.	Environmental monitoring is carried out by Earth & Environment Lab., Bhubaneswar.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Only Plantation was proposed under progressive Mine Closure plan. Accordingly lessee has planted 1500 sapling in the year 2024-25 and total saplings planted so far is 62,460. Carried out environmental monitoring for Air, Water etc. and results are within the permissible limits.	
<b>Mineral Conservation:-</b>				
<b>Sl.N o.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>
7a	ROM mineral dispatch or gradewise sorting within lease	Proposed dispatch of Cement grade ROM to Captive Cement Plant.	Lessee is dispatching Cement grade ROM to Captive plant as proposed.	Lessee is doing only crushing for size reduction.

	area			
7b	Method of gradewise mineral sorting i.e. manual or mechanical	None.	None.	Lessee is doing only crushing for size reduction. After crushing feeding to Captive Cement plant linked with the mine.
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 officers on mineral conservation and beneficiation issues.		Lessee is doing only crushing for size reduction. After crushing feeding to Captive Cement plant linked with the mine.	Lessee is using entire ROM by blending and recovery is 100%.

**Environment:-**

Sl.No	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	None in the year 2024-25.	None in the year 2024-25.	No topsoil exists in the area proposed for production and development in the year 2023-24, so no topsoil is removed in the

				present plan period.
8b	Concurrent use or storage of topsoil	None in the year 2024-25.	None in the year 2024-25.	
8c	Separate dumps for overburden , waste rock, rejects and fines (Rule 33)	None in the year 2024-25.	None in the year 2024-25.	
8d	Use of overburden , waste rock, rejects and fines dumps for restoring the land to its original use	None in the year 2024-25.	None in the year 2024-25.	
8e	Phased restoration, reclamation and rehabilitation of land affected by mining operations (pits, dumps etc.)	None in the year 2024-25.	None in the year 2024-25.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information was furnished in the mining plan. Additional plantation proposals are being given in the Mining Plan documents.	Additionally lessee has planted about 62,460 saplings so far within the lease area.	
8g	Survival rate	None.	Survival rate is 80 to 85%.	
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 10000 ltr capacity is in use for dust suppression.
8i	General remarks of inspecting officers on aesthetic beauty in and around mine areas.		Total three pits are existing within the lease area. However, in present five year block period working is proposed in two pits (Pit No-1 and 4). Benches are made systematically in the active pits. The third pit is converted into water reservoir/harvesting pit. Huge plantation is made in the waste land and in the 7.5 mtr safety zone.	
<b>Compliance of Rule 45 :</b>				
<b>Sl.No.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>

9a	Status of submission of monthly and annual returns	A monthly return shall be submitted before the tenth day of every month in respect of the preceding month and an annual return shall be submitted before the 1st day of July each year for the preceding financial year.	Submitting Monthly and Annual returns within the time limit.	Submitted Annual returns for the year 2023-24 on 27-06-2024.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	As per the Annual returns submitted for the year 2023-24, details are as follows, <b>Mining Engineer:-</b> Y.Rajakumar, <b>Geologist:</b> V.Venkatesha , <b>Mines Manager:-</b> N.Hariprasad Rao.	The details furnished in the AR submitted for the year 2023-24 is found correct. However, in place of Y.Rajakumar, lessee has appointed Mr. Himavamsi as the Mining Engineer.	Lessee has submitted notice of appointment of Shri Himavamsi to this office.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under mining:- 86.20Ha, Infrastructure:- 52.62Ha, Others:- 51.76Ha,	Area under Mining: 94.50Ha, Infrastructure:- 52.62Ha, Others- 50.26Ha.	The land use patterns is not updated properly and show cause notice is issued for the same under Rule 45(7) of MCDR 2017 to update land use details in the Annual returns submitted for the

				year 2023-24.
9d	Scrutiny of Annual return on afforestation	1500 saplings in the year 2023-24 with survival rate of 85%.	The information furnished in the Annual returns submitted for the year 2023-24 is found correct.	Survival rate is 80 to 85%.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	None in the year 2023-24.	None in the year 2023-24.	Entire ROM is dispatched to Captive plant under cement grade.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening and closing stock:- Nil, Production:- 772300 tonnes. Grade wise: Cement Grade:- Opening & Closing stock:- Nil, Production & Dispatch :- 772300T	The details furnished in the AR submitted for the year 2023-24 is found correct.	Entire ROM produced is dispatched to captive plant under cement grade.
9g	Scrutiny of Annual return on Sale value, Ex Mine price and production cost	Sale value, cost of production and Ex-mine price is shown as Rs 260.63/ton.	The information furnished in the Annual returns submitted for the year 2023-24 is found correct.	Since the mine is captive cost of production and Ex-mine price is same. And as per the instruction given by HQ, Sale value is given by multiplying quantity dispatched and

				cost of production.
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset is mentioned as Rs 58311791	The land value was not shown in the AR submitted for the year 2023-24.	Show cause notice is issued for the same under Rule 45(7) of MCDR 2017.
9k	Scrutiny of Annual return on mining machineries	Back hoe 2.8cum-01, Back hoe 0.9cum-01, Dumper-05, Loader-01, Dozer-01, Drilling machine-01.	The information furnished in the Annual returns submitted for the year 2023-24 is found correct.	

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule No.	Issued on	Compliance position	Rule No.	Issued on	Compliance position
11(1), 27(1)	30-01-2025		45 (7)	30-01-2025	

Date:-17-02-2025

(KALMATA.M.K)

Indian Bureau of Mines