

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

**Mine File:** MCDR-MiFL0LST/48/2023-HYD

**Mine Code:** 38APR14023

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-II
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	558.71 Ha.
3	Mine code	IBM/996/2011
4	IBM Registration Number under rule 45 of	38APR14023
5	Name of the lessee, Address, phone, email and fax number	Sitapuram Limestone Mine-II 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	15.06.1992
15	Date of Execution	12.11.1992

16	Period	Deemed Extension received up to 50 years and valid up to 11.11.2042.
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 Date17.07.2014
20	Name of the Mining Engineer & Geologist, Qualification and date of appointment in mine,	MiningEngineer: CH.Ramesh Kumar B.Tech Mining Appointment on:19.06.2018 Geologist: M.Ramakrishnanaidu, M.Sc.Tech (Applied) Geology Appointment on:24.12.2021
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 26.12.2023 For the year 2023-24 To 2026-27 (Five year block period is 2022-23 to 2026-27)
22	Name of the Mineral	Limestone

23	Method of Mining(Open cast, Underground)	Open cast
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 2023-24.	None in the year 2023-24.	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 2023-24.	None in the year 2023-24.	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 2023-24.	None in the year 2023-24.	During previous block periods exploration is carried out by M/s Synergy Geo-teck Pvt. Ltd. Nagpur and Expenditure incurred on exploration is Rs 25441128

1d	Balance area to be explored to bring Geological axis in 1 or 2	None in the year 2023-24.	None in the year 2023-24.	Total lease area is 558.71Ha, and entire lease area is explored under G-1 level.
1e	Balance reserves as on 01/04/2017	In the approved document dated 26-12-2023, details of reserves/resources furnished are as follows.(Date of estimation 03-10-2023) (In million tonnes) Proved M Reserves (111) - 288.362 Feasibility M Resources (211) - 380.870 Total:- 669.232	In the approved document dated 26-12-2023, details of reserves/resources furnished are as follows.(Date of estimation 03-10-2023) (In million tonnes) Proved M Reserves (111) - 288.348 Feasibility M Resources (211) - 380.870 Total:- 669.218	Reserves/resources were updated by depleting the ROM Production of 14000tonnes achieved between the periods Oct 2023 to march 2024.
1f	General remarks of inspecting officers on geology, exploration etc.		The rock type in the lease- hold area (lease-1I) of sitapuram limestone mine belongs to Palnad (Narji) Limestone stage of Jamalamadugu series	Total lease area is 558.71Ha, and entire lease area is explored under G-1 level by drilling 215 boreholes to a total depth of 13656 mtrs and expenditure

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 supergroup) 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 lithostratigraphic 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 section is a

incurred on exploration is Rs 25441128. 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 matchng with the recently approved document. Show cause notice is issued for the same under Rule 45(7) of MCDR 2017.

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.	
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**Development :**

<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 2023-24, there was a proposal to work between the co-ordinates N1859873 to 1859925 and E 394712 to 394765.	Actual working is almost carried out within the proposed area and area already broken up by mining.	
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 m <sup>3</sup>	None in the year 2023-24.	None in the year 2023-24.	No topsoil generation is proposed in the present plan period.
2e	Quantity of overburden generation in m <sup>3</sup>	None in the year 2023-24.	None in the year 2023-24.	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.		Only one pit is existing within the lease area and working has been carried out within the proposed area only. Working is carried out in the already broken up area only by advancing existing bench in the southern part of the lease..	
<b>Exploitation :</b>				
<b>Sl.N o.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>
3a	Number of pit proposed for production	One in the year 2023-24	One in the year 2023-24.	Only one pit is existing within the lease area and dimension of the pit is as follows. 408m (L) x 403m (W) x 8m(h)
3b	Quantity of ROM mineral production proposed	29026 in the year 2023-24	21940 tonnes in the year 2023-24.	The MMP is approved on 26-12-2023 for the period 2023-24 (Dec 23 to 31.03.2024) to 2026-27) So proposal is taken as 12026T achieved up to November 2023 + 17000 tonnes proposal given in the

				approved MMP dated 26-12-2023 for remaining period for the year 2023-24.
3c	Recovery of saleable / usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	None in the year 2023-24.	None in the year 2023-24.	
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	None.	None.	

	for subgrade mineral and rejects			
3j	Provision of drilling and blasting in mineral benches	yes, proposed deep hole drilling and blasting.	Lessee is doing drilling and blasting as per the proposal.	Using drilling 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	The average bench height maintained is 7.5 to 8.5mtrs.	Only one bench(Ore) is existing in the lease area. The bench parameter maintained is suitable for the method of mining adopted.
3m	Total area covered under excavation / pits	9.45Ha up to 2023-24.	Area under Mining- 16.45Ha	It appears; in the approved document area covered under pits at the start of the year is inadvertently mentioned as 9.45Ha, so there is

				a deviation in land use pattern even though lessee is working within the proposed capacity. However, show-cause notice is issued for incorrect land use pattern under Rule 45(7) of MCDR 2017.
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 2023-24.
3o	Total area put in use under different heads at the end of year	Area under mining:- 9.45Ha, Infrastructure:- 8.92Ha, Others:- 9.22Ha,	Area under Mining: 16.45Ha, Infrastructure:- 10.17Ha, Others- 8.60Ha. Area covered under benches is 11.30Ha only, but including the area which is kept ready for advancement of benches by exposing limestone by removing soil cover is approximately 16.45Ha.	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	2023-24 - 29026T 2022-23 - 150750T 2021-22 -30000T 2020-21 -594990 T 2019-20 - 595990	2023-24 - 21940T 2022-23 - NIL 2021-22 - NIL 2020-21 - 7650T 2019-20 - NIL	
3q	General remarks of inspecting officers on method of mining etc.		The method of mining adopted is fully mechanized. The bench height is maintained 7.50 to 8.5 mtr and width more than 15.00 mtrs. The bench parameters maintained is suitable for the nature of the deposit and method of mining adopted.	
<b>Solid Waste Management - Dumping :</b>				
<b>Sl.N o.</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual Work</b>	<b>Remarks</b>
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32, 33)	None in the year 2023-24.	None in the year 2023-24.	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 2023-24.	None in the year 2023-24.	No dumps are existing within the lease area.

4c	Number of dumps within lease area and outside of lease area	None in the year 2023-24.	None in the year 2023-24.	
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 2023-24.	None in the year 2023-24.	No dumps are existing within the lease area.
4f	Number of dead dumps.	None in the year 2023-24.	None in the year 2023-24.	
4g	Number of dumps established.	None in the year 2023-24.	None in the year 2023-24.	
4h	Whether retaining wall or garland drains all along dumps are there.	None in the year 2023-24.	None in the year 2023-24.	
4i	Length of retaining wall or garland drain all along dumps.	None in the year 2023-24.	None in the year 2023-24.	
4j	Number of settling ponds	None in the year 2023-24.	None in the year 2023-24.	

4k	Specific comments of inspecting officers on waste dump management .		No topsoil, OB, and mineral reject is proposed and generated in the present five year block period, so no dumping was made.	No dumps are existing within the lease area.
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**Solid Waste Management - Backfilling :**

<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		Present working is not reached up to the proved depth and no	

	officers on backfilling and reclamation etc.		proposals were made for reclamation and rehabilitation in the present plan period.	
<b>Progressive Mine Closure Plan :</b>				
<b>Sl.N o.</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)	0.22Ha in the year 2023-24.	1.0Ha in the year 2023-24.	
6d	No. of saplings planted during the year	220 saplings in the year 2023-24.	1000 saplings in the year 2023-24.	
6e	Cumulative no. of plants	1100 saplings in the present five year block period (2022-23 to 2026-27)	2000 sapling in first two years of current five years block period.	Total plantation made so far is 13212 covering an area of 8.60Ha.
6f	Any other method of rehabilitation	None in the year 2023-24.	None in the year 2023-24.	
6g	Cost incurred on watch and	Rs 0.66 lakh in the year 2023-24.	Approximately Rs 1.25 lakhs in the year 2023-	Lessee is well taking care of the

	care during the year		24.	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	Nil	Nil	

	and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir			
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 land within lease (ii) Method of	Nil	Nil	

	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 1000 sapling in the year 2023-24 and total saplings planted so far is 13212. Carried out environmental monitoring for Air, Water etc. and results are within the permissible limits.	

**Mineral Conservation:-**

Sl.No.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or gradewise sorting within lease area	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.
7b	Method of gradewise mineral sorting i.e.	None.	None.	Lessee is doing only crushing for size reduction.

	manual or mechanical			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 2023-24.	None in the year 2023-24.	No topsoil is existing 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	None in the year	None in the year 2023-	

	storage of topsoil	2023-24.	24.	
8c	Separate dumps for overburden , waste rock, rejects and fines (Rule 33)	None in the year 2023-24.	None in the year 2023-24.	
8d	Use of overburden , waste rock, rejects and fines dumps for restoring the land to its original use	None in the year 2023-24.	None in the year 2023-24.	
8e	Phased restoration, reclamation and rehabilitation of land affected by mining operations (pits, dumps etc.)	None in the year 2023-24.	None in the year 2023-24.	
8f	Baseline information on existence of plantation and additional plantation done (Rule	Baseline information was furnished in the mining plan. Additional plantation proposals are being given in the Mining Plan documents.	Additionally lessee has planted about 13212 saplings so far within the lease area.	

	41)			
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 12000 ltr capacity is in use for dust suppression.
8i	General remarks of inspecting officers on aesthetic beauty in and around mine areas.		Only one bench is made so far and parameters of the bench are maintained within the proposed limit. Huge plantation is made in the waste land and in the 7.5 mtr safety zone. Haul roads are maintained in good condition.	

**Compliance of Rule 45 :**

Sl.N o.	Item	Proposals	Actual Work	Remarks
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	Submitting Monthly and Annual returns within the time limit.	Submitted Annual returns for the year 2023-24 on 27-06-2024.

		the 1st day of July each year for the preceding financial year.		
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: Mr. C H. Rameshkumar-</b> <b>Geologist: M Ramkrishnanaidu ,</b> <b>Mines Manager:- N.Hariprasad Rao.</b>	The details furnished in the AR submitted for the year 2023-24 is found correct.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under current workings:- 9.19Ha, Infrastructure (Buildings, Roads, Residential etc):- 24.81Ha Others:- 4.40Ha	Area under Mining: 16.45Ha, Infrastructure:- 10.17Ha, Others- 8.60Ha. Area covered under benches is 11.30Ha only, but including the area which is kept ready for advancement of benches by exposing limestone by removing soil cover is approximately 16.45Ha.	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	1000 saplings in the year 2023-24 with survival rate of 86%.	The information furnished in the Annual returns submitted for the year 2023-24 is	Survival rate is 80 to 85%.

			found correct.	
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	<b>ROM:</b> Opening and closing stock:- Nil, Production:-21940 tones. <b>Grade wise:</b> Cement Grade:- Opening Stock:- 8060T , Production:- 21940T , Dispatch :- 30000T Clsoing stock:-NIL ,	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 250.83/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	Value of fixed asset is	The value of fixed asset is shown combinedly in	

	return on fixed assets	mentioned as Rs 0	the Annual returns of the Sitapur Limestone mine -I (38APR14008)	
9k	Scrutiny of Annual return on mining machineries	Back hoe 2.8cum-01, Dumper of 30T capacity-02, 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
			45 (7)	30-01-2025	

Date:-06-03-2025

(KALMATA.M.K)

Indian Bureau of Mines