

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

**MCDR inspection REPORT  
Hyderabad regional office**

**Mine file No :** AP/RR/LST-4/HYD

**Mine code :** 38APR23003

- (i) Name of the Inspecting : 160 ) kalmata.M.K  
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Shri Chaitanya Nalamatta, Mines Manager.  
Official with  
Designation
- (iv) Date of Inspection : 29-SEP-22
- (v) Prev.inspection date : 17-SEP-21

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : SANGAMKALAN NO. 2
- (b) **Registration NO.** : 613
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : TELANGANA
- District : RANGAREDDY
- Village : SANGAMKALAN
- Taluka : TANDUR (MANDAL
- Post office : MALKAPUR
- Pin Code : 501147
- FAX No. : 044-28528106
- E-mail : mkp\_mines@indiacement.com
- Phone : 044-28521526
- (f) **Police Station** : Tandur
- (g) **First opening date** : 15-JUL-02
- (h) **Weekly day of rest** : SUN
2. **Address for** : VISAKA CEMENT IND. LTD.  
**correspondance** MALKAPUR, TANDUR(M)  
RANGA REDDY DIST.
3. (a) **Lease Number** : APR1350
- (b) **Lease area** : 112.68
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 03-SEP-48
4. **Mineral worked** : LIMESTONE Main

## 5. Name and Address of the

Lessee : THE INDIA CEMENTS LTD  
 DHUN BUILDING 827, ANNA  
 SALAI CHENNAI CHENNAI CITY  
 TAMIL NADU  
 Phone:282521526  
 FAX :28520638

Owner : Mrs laxmi Aparna Srikumar  
 Coromandal tower, 93,  
 Santhome High Avenue, raja  
 Annamalaipuram, Chennai  
 CHENNAI CITY TAMIL NADU  
 Phone:  
 FAX :

Agent : Dinesh Mangal  
 India Cements ,Sangamkalan  
 Village Vikarabad district  
 Telangana State RANGAREDDY  
 TELANGANA  
 Phone:  
 FAX :

## Mining Engineer

Name : A Shiva Kumar,Full Time  
 Qualification : B Tech Mining  
 Appointment/ :  
 Termination date

## Geologist

Name : Janardhan Reddy,Full Time  
 Qualification : Msc Geology  
 Appointment/ :  
 Termination date

## Manager

Name : . T Mallikarjun Reddy  
 Qualification :  
 Appointment/ : 09-AUG-18  
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	07-DEC-03
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	24-FEB-05
		Modif.approved Mining Scheme	07-MAR-08
		Mining Scheme rule 12 MCDR1988	04-AUG-10
		MP modif under MCR 1960	24-AUG-15
		MP modif under 17(3) MCR 2016	20-DEC-19

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration was proposed in the year 2021-22.	Nil	No exploration has been proposed and carried out in the present plan period.
1b	Exploration over lease area for geological axis 1 or 2	No such proposals were given in the approved document.	Nil.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed.	Nil.	Earlier, the exploration was carried out by Natural Resources Development Co-operative Society Ltd, Hyderabad under the Suprvision of Mining Engineer and Geologist of the lessee. Informartion on expenditure incurred on exploration is not available.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed.	Nil.	Entire Mineralized area is explored under G-1 level.

1e	Balance reserve as on 01/04/20	As per the approved document dated 20.10.2019, Reserves/resources as on 01.09.2019 are as follows. Unit-Million tonnes. Mineable Reserves - 90.85 Remaining Resources - 29.66 Total :  120.51	Reserves/resources as on 01.04.2022 are as follows. Unit-Million tonnes. Miineable Reserves - 84.96 Remaining resources - 29.66 Total :- 114.62	Reserves/resources figures are updated by depelting 5.19 million tonnes of production carried out during the period. 2019-20 (01.09.2019 onwards) to 2021-22.
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1f	General remarks of inspecting officers on geology, exploration etc	The mining lease area hosts limestone of the stratigraphic horizon " kurkunta Limestone" of Bhima Basin. The deposit is bedded in nature with strike NE to SW. Lessee has explored entire mineralized area under G- level by drilling 73 number of boreholes with a total meterage of 3395.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In the year 2021-22 working was proposed between the Grids S 18 to S 23 and W 6 to W 13.	Production and development was carried out between the grids S 18 to S 23 and W 6 to W 13.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	In the year 2021-22, Benches were proposed in the ore only.	Benches were made in the ore only.	The working was carried out in the broken up area only and no topsoil was removed in the year 2021-22.
2c	Stripping ratio or ore to OB ratio	1:0	1:0	No waste handling was proposed and carried out in the year 2021-22.
2d	Quantity of topsoil generation in m3	7800 in the year 2021-22.	12327 in the year 2021-22	Production was achieved only 77%. Since the thickness of the topsoil was more than the proposal the quantity of topsoil generation was increased.
2e	Quantity of overburden generation in m3	Nil.	Nil.	No OB generation was proposed in the year 2021-22.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The benches were advanced in the Eastern and Southern part of the lease area. The working has been carried out as per the proposal. Sufficient bench height and width were maintained. Bench height is maintained average 8. mtrs and width more than 15.00 mtrs. Bench parameters were maintained as per the proposal. The topsoil was removed completely by scarping to expose the ore body and no OB benches were proposed and made in the year 2021-22.

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Exploitation:

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Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	One pit	One pit.	Dimension of the existing pit is 1185M (L ) x 397M(W ) X 58M ( H)
3b	Quantity of ROM mineral production proposed	29,90,920 tonnes in the year 2021-22.	23,23,172 tonnes in the year 2021-22.	Production is achieved up to 78%. Due to fluctuation in the market, production is not achieved 100%.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%.	Entire ROM is dispatched to plant for captive consumption.
3d	Quantity of mineral reject generation	Nil.	Nil.	Entire ROM generated is utilized for cpative consumption.
3e	Grade of mineral rejects generation and threshold value declared.	The threshold value declared is Cao 34% minimum and no mineral reject was proposed in the year 2021-22.	Entire ROM removed was dispatched to captive plant as cement grade.	No mineral reject was generated in the year 2021-22.
3f	Quantity of sub grade mineral generation.	Nil.	Nil.	
3g	Grade of sub grade mineral generation	Not applicable.	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Nil	Nil.	Lessee is diapatching entire ROM to plant site which is loacted outside the lease area, where only crushing will be done for size reduction.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil.	Nil.	
3j	Provision of drilling and blasting in mineral benches	Yes, proposed drilling and blasting.	Lessee is using 115mm rock driller for drilling and using slurry explosive for blasting.	
3k	Provision of mining machineries in mineral benches	Proposed combination of excavators and tippers for production and development.	Using Back hoe excavator of 2.4Cum capacity and tippers of 15 cum capacity for production and development.	using 02 number of excavators and 09 number of tippers for production and development.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height was proposed 8.00 mtrs in the mineral and No benches were proposed in OB.	Benches were maintained at 7.00 to 8.00 mtrs height and width is maintained at more than 15 mtrs.	Bench paramtrs were maintained as per the proposal and suitable for the method of mining adopted.
3m	Total area covered under excavation/pits	53.17 Ha in the present plan period i.e up to 2024-25.	Area covered under pits up to 2021-22 is 47.00Ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	No OB has been proposed and produced in the year 2021-22.
3o	Total area put in use under different heads at the end of year	Area under mining - 53.17Ha, Topsoil storage- 0.24Ha, Mineral storage- 0.35Ha, Roads- 2.13Ha.	Area under mining- 47.00Ha, Roads-2.13Ha, Topsoil storage-0.24Ha up to 2021-22.	

3p	Production of ROM mineral during the last five year period as applicable	2021-22 29,90,920 T 2020-21 29,87,045 T 2019-20 22,78,509 T 2018-19 24,00,289T 2017-18 24,00,462T	2021-22 23,23,172T 2020-21 15,70,000T 2019-20 22,51,000T 2018-19 20,17,797T 2017-18 15,66,715T	Production has been carried out within the proposed limit only.
3q	General remarks of inspecting officers on method of mining etc.	The mine is working by fully mechanized method. drilling and blasting is adopted for loosening the strata. Production and development has been carried out as per the proposals and benches were maintained systematically. Bench height is maintained 7 to 8 mtrs and width morethan 15. mtrs.Lessee is using excavator for loading the blasted material and 15 cum capacity tippers for dispatching ROM from mine to plant. No OB is existing in the lease area and all benches were made in ore only.		

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not proposed.	No topsoil, OB and Mineral reject dumps were made in the present plan period. However, lessee has dumped ROM dispatched from the mine head out side the lease area in the South - Eastern side of the lease.	Violation is pointed out for the same under Rule 11 (1) of MCDR 2017. Further, one old topsoil dump covering an area of 0.24Ha is existing in the Western part of the lease area near pillar number-20,21 and 22. The said dump is covered with plantation.
4b	Location of topsoil, OB and mineral reject dumps	Not proposed.	One old topsoil dump is existing in the western part of the lease area. The topsoil dump is covered with plantations. Further, lessee has dumped ROM dispatched from the mine head out side the lease area in the South -Eastern side of the lease.	Violation is pointed out under Rule 11 (1) of MCDR 2017, for dumping ROM outside the lease area.
4c	Number of dumps within lease area and outside of lease area	Not proposed.	One old topsoil dump is existing within the lease area and ROM dump is existing outside the lease area.	Violation is pointed out for dumping the ROM outside the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not proposed.	No dumping was made in the present plan period. However one old topsoil dump is existing within the UPL.	The old topsoil dump is existing within the UPL, but faraway from the current working. The topsoil dump will be rehandled during the next plan periods.
4e	Number of active and alive dumps.	Not proposed.	Nil.	One ROM dump is existing out side the lease area.
4f	Number of dead dumps.	Not proposed.	Nil in the present plan period.	One inactive topsoil dump is existing within the lease area.

4g	Number of dumps established.	Not proposed.	Nil.
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed.	Nil
4i	Length of Retaining wall or garland drain all along dumps	Not applicable.	Not applicable.
4j	Number of settling ponds	Not proposed.	Nil.
4k	Specific comments of inspecting officer on waste dump management		No dumping was proposed and made in the present plan period. One inactive old topsoil dump is existing within the lease area and it is covered with plantation. Further lessee has dumped ROM outside the lease area and violation is pointed out for the same. Since no OB dumps are existing within the lease area, retaining walls are not proposed and made in the present plan period.

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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.	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	No such proposals were given in the approved document.	Nil.	No area is matured for backfilling.

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5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed.	Nil.	The topsoil removed in the present plan period is utilized for plantation work within the lease area.
5d	Total area fully reclaimed and rehabilitated	Not proposed.	Nil.	
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.	Lessee has submitted PMCP report for the year 2021-22.	Submitted PMCP report for the year 2021-22, within the time limit.
6b	Area available for rehabilitation (ha) .	Not proposed.	Nil.	
6c	afforestation done (ha).	0.2Ha in the year 2021-22.	0.52Ha	Total area covered under plantation during last five years is 2.5Ha.
6d	No. of saplings planted during the year	500 in the year 2021-22.	1310 in the year 2021-22.	
6e	Cumulative no .of plants	2500 in the present plan period.i.e. from 2020-21 to 2024-25.	1810 in the present plan period. i.e up to 2021-22.	Lessee has planted about 5910 saplings during last five years.
6f	Any other method of rehabilitation	Not proposed.	Nil.	

6g	Cost incurred on watch and care during the year	Not proposed.	approximately 25000 to 30000 for taking care of plantation.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Not proposed.	Nil.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed.	Nil.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not proposed.	Nil.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed.	Nil.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not proposed.	Nil.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed.	Nil.

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed.	Nil.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not proposed.	Nil.	
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 is regularly monitoring, Air, water, noise in the core and buffer zone and results were within permissible limit.	Environmental monitoring was carried out in the month of July 2022 submitted copy of report to this office.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		No reclamation and rehabilitation was proposed and made in the present plan period. Lessee has planted about 1810 saplings in the present plan period. The plantation was made more than the proposal. Lessee is regularly monitoring air, water and noise and all the parameters were found within the permissible limits.	

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#### Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposed Cement grade dispatch.	Entire ROM produced is dispatched to plant as cement grade for captive consumption.	Lessee has dispatched cement grade ore by blending lowgrade with high grade as per the requirement of the plant.

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7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Not proposed.	Nil.	Entire ROM is dispatched as cement grade by blending.
7c	Different grade of mineral sorted out at mines.	Cement grade.	Cement grade.	
7d	Any beneficiation process at mines .	Not proposed.	Nil.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Lessee is using entire ROM by blending lowgrade with the high grade as per the requirement of the plant. Lessee is not doing any beneficiation within the lease area. However, doing only size reduction by crushing plant outside the lease area before feeding to cement plant.	

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposed.	Yes lessee has removed topsoil separately.	
8b	Concurrent use or storage of topsoil	Proposed concurrent use.	The topsoil removed during the year 2021-22 was utilized for plantation in the 7.5 mtr safety zone.	About 12327 cum topsoil was removed in the year 2021-22 and enire quantity is utilized for plantation in the 7.5mtr safety zone.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not proposed.	Nil.	No OB, waste rock, rejects and fines were generated in the year 2021-22.

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8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed.	Nil.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed.	Nil.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Yes, information was given in the approved mining plan. Additionally lessee has planted about 5910 saplings . within the lease area during the last five years.	
8g	Survival rate	No such proposal was given.	70 to 80%	Lessee is monitoring the plantation by regular maintenance and watering by deploying man power.
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 10,000 ltr capacity is in use for dust suppression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Benches and haulage roads were maintained systematically. One water tanker is deployed for sprinkling water in the working area and on the haulage roads. Plantation was made in the 7.5 mtr safety zone and engaged manpower for monitoring plantation.	

## 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 has submitted Annual returns for the year 2021-22 within the time limit. However, submission of monthly returns for the month of oct, Dec-2021 and January and february 2022 were delayed by one day.	Violation is pointed out by this office for the same under Rule 45 (5) (b) (i) of MCDR 2017. So no fresh violation is issued.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining engineer: B.Shivakumar, Geologist:- Janardhan Reddy and Mines Manager- Chaitanya Nalamatta.	The details of Mining engineer, Geologist and Mines Manager given in the Annual returns are found correct.	Lessee has 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 pits- 46.665Ha, Topsoil dump 0.24Ha, and Roads-2.13Ha.	The land use information given in the annual returns is found correct.	
9d	Scrutiny of Annual return on afforestation	1310 plantaion survival rate of 70%	The information is found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	No mineral reject was generated in the year 2021-22.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: opening and closing stock nil and production- 2323172 tonnes.	The information is found corrected.	Lessee has dipatched entire ROM to plant for captive consumption as cement grade.



9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value and exmine price- Rs 194.39 cost of productin- Rs 194.39/T	The details of Sale vale, exmine price and cost of production given in the annual returns submitted for the year 2021-22. is found correct.	Since it is the captive mine and lessee is consuming entire ROM for captive consumption. Cost of production and exmine price will be same.
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset was shown as Rs 60911743.	The details given in return is found correct.	
9k	Scrutiny of Annual return on mining machineries	Excavator of 2.4cum capacity-02 number, tippers of 15 cum capacity-09, Dozer-01, Rock drill-01,	The information given on mining machineries is found correct.	

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

**Date :**

**(kalmata.M.K)**

Indian Bureau of Mines