

## MCDR INSPECTION REPORT

File No. AP/NLG/LST-1/Hyd. Vol. IV

Mine Code: 38APR14011

1	Name of the Inspecting Officer	Shaival Kartikeya
2	Designation	Senior Mining Geologist
3	Accompanying mine Official with Designation	Shri V. Rami Reddy, HoD (Mines)
4	Date of inspection	30-September-2024
5	Previous inspection date	29-February-2024

### Part -I General Information

S. N.	Particulars	Details
1	Name of the Mine	Vishnupuram Limestone Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest- Nil. Non-Forest: 316.47 Ha. Total Lease Area: 316.47 Ha.
3	Minecode	38APR14011
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/613/2011
5	Name of the lessee, Address, phone, email and fax number	M/s The India Cements Limited Coromandel Towers, 93, Santhome High Road, Karpagam Avenue, R.A. Puram, Chennai (Tamil Nadu) - 600028
6	Village	Wadapally
7	Taluk/Mandal	Damercherla
8	District	Nalgonda
9	Pincode	Wadapally – 508355
10	State	Telangana
11	Post office	Wadapally
12	Nearest police station	Wadapally
13	Nearest Railway station	Vishnupuram
14	Date of Grant of Mining Lease	25/11/1977
15	Date of Execution	15/02/1978 to 14/02/1998 (20 Years)
16	Date of opening of Mine	16/01/1981
17	Date of first Renewal, if applicable and its period & expiry	Supplementary Mining Lease for the extended period has been made. Period: 15/02/1998 to 31/03/2030 (22 Years) Executed on 11/05/2018
18	Date of second Renewal, if applicable and its period & expiry	N.A.
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	N.A.
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri V. M. Mohan, Director, M/s The India Cements Limited Coromandel Towers, 93, Santhome High Road, Karpagam Avenue, R.A. Puram, Chennai (Tamil Nadu) – 600028 Phone: +91 (0) 9841080593 Email: mohan@indiacements.co.in DOA: 01/11/2023

21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Mahesh Kumar Vasat Rao Mutyalwar, Sr. G.M. M/s The India Cements Limited, Vishnupuram Works, Wadapally Post, Damarcherla Mandal, Nalgonda District, Telangana State, Pin Code: 508355 Phone: +91 (0) 08689-228580 Email: Mahesh.v@indiacements.co.in DOA: 22/04/2024
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri A. Shiva Kumar, M/s The India Cements Limited, Vishnupuram Works, Wadapally Post, Damarcherla Mandal, Nalgonda District, Telangana State, Pin Code: 508355 Phone: +91 (0) 08689-228580 Email: Sivakumar.a@indiacements.co.in DOA: 10/10/2023
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri A. Shiva Kumar, M/s The India Cements Limited, Vishnupuram Works, Wadapally Post, Damarcherla Mandal, Nalgonda District, Telangana State, Pin Code: 508355 Phone: +91 (0) 08689-228580 Email: sivakumar.a@indiacements.co.in DOA: 10/10/2023 Qualification: B.E. Mining Exp.: +10 Years
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes, Appointed. Shri V. Ananda Kumar M/s The India Cements Limited, Vishnupuram Works, Wadapally Post, Damarcherla Mandal, Nalgonda District, Telangana State, Pin Code: 508355 Phone: +91 (0) 08689-228580 Email: anankumar.v@indiacements.co.in DOA: 01/04/2024 Exp.: +8 Years
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan AP/NLG/Lst./MP-MS-9-SZ dated 26/06/1998 (F.Y. 1999-2000 to F.Y. 2003-04)
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Review of Mining Plan AP/NLG/MP/LST-9/HYD. Dated 31/03/2020 (F.Y. 2020-21 to 2024-25)
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised.
30	Captive/ Non captive	Captive

**Scientific Mining:** Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

## 1.0 Exploration

S.N.	Item	Proposals F.Y. 2022-23	Actual work F.Y. 2022-23	Remarks
1a	Backlog of previous year	No proposal	Nil.	The entire mining lease area has already been explored under G1 level of exploration.
1b	Exploration over lease area for Geological axis 1 or 2.	No proposal	Nil.	G1 level: 316.47 Ha.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No proposal	Nil.	-do-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Nil.	-do-
1e	Balance reserves as on 01.04.2024	As on 01/10/2024  Under (111): 25.749402 Million Tonnes  Under (211): 90.770447 Million Tonnes	As on 01/10/2024  Under (111): 25.749402 Million Tonnes  Under (211): 90.770447 Million Tonnes	Updated reserves and resources has been obtained from the latest approved RMP dated 28/10/2024. Average grade: Cao - 46.00%, MgO: 0.09% SiO2: 14.34% Fe2O3: 1.90% Al2O3: 3.53%
1f	General remarks of inspecting officer on geology, exploration etc.	This area located in the North - Eastern margins of the Kadappa basin is called as Palnad Sub basin. The geological formation in the area comprises of a sequence of arenaceous, argillaceous and calcareous rocks belonging to the Kurnool group of rocks.		

		<p>Kurnool system of rocks are the younger group of rocks in the Kadappa basin. These younger rocks are developed in Palnad area stretching on both side of the Krishna river, called as Palnads, resting unconformably on the Kadappa basin. The stratigraphic sequence of the palnadu is as follows :  Recent : Soil &amp; Alluvim  Kurnool System : Upper Kurnools : Quartzites (as those of Paniam Group) Shales (Auk Shales)(as those of Jammalmadugu Group) Lower Kurnools : Sandstones and Conglomerates (as those of Banaganapalli group)  Kadapa-Kistna Series: Quartzites &amp; Shales  Archeans : Granite &amp; Gneiss with dykes of dolerite &amp; Quartz Veins. The Archean formation forms the basement for the basin over which the arenaceous, argillaceous and calcareous sediments were deposited. This can be observed all along the fringes of the basin Regional Geological setup including stratigraphic succession. The captive Vishnupuram Limestone Mining lease sprawling over an extent of 316.47 ha with an undulating topography, gently dipping towards E-SE in the direction where river Musi flows in a gorge. The shape of the lease is Polygonal. The limestone deposit is a Simple, Tabular, undisturbed stratigraphic horizon of the Palnad sub basin (Nargi Formation). No major structural disturbance in the sedimentary unit are observable. The deposit is type-1 bedded stratiform and tabular deposits of regular habit as per MEMC Rules 2015. A typical section of the stratigraphic core bore holes exhibits the following sequence of Lithological succession: Top Soil: 00.00-01.00 Variegated Siliceous Limestone: 00.00-10.00 Grey Limestone: 00.00-09.00 Green Limestone: 03.00-05.00 Purple Argillaceous Limestone: 03.00-04.00 Shale: Bottom Rock  The lease hold is undisturbed and devoid of structural elements. Diagenesis of these litho-units was apparently controlled by palaeo lineaments which the river Krishna flows in a gorge of avg.depth of 20m. The river probably follows small &amp; multiple dip-slip fault axis.</p>
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## 2.0 Development

S.N.	Item	Proposals F.Y. 2023-24	Actual work F.Y. 2023-24	Remarks
2a	Location of development w.r.t. lease area	F.Y. 2023-24: In between UTM co-ordinates  <b>Block A:</b> (a) N1846850 to N1847042 and	F.Y. 2023-24: In between UTM co-ordinates  <b>Block D:</b> N1847618 to N1848234 and	Deviation has been pointed out.

		E356610 to E356735 and  (b) N1847490 to N1847678 and E356457 to E356518  <b>Block D:</b> (a) N1847625 to N1848050 and E355575 to E356108 and  (b) N1848125 to N1848258 and E355150 to E355335	E355545 to E356100 at several places.	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Topsoil: 01 no. Mineral/Ore: 03 nos.	Topsoil: 01 no. Mineral/Ore: 03 nos.	-
2c	Stripping ratio or ore to OB ratio	1 : 0.0	1 : 0.0	No overburden present in the mining lease.
2d	Quantity of topsoil generation in m3	23239.00 CuM	11341.00 CuM	-
2e	Quantity of overburden generation in m3	No proposal.	Nil.	No overburden present in the mining lease.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The development and production is being done through fully mechanized means.		

### 3.0 Exploitation

S.N.	Item	Proposals F.Y. 2023-24	Actual work F.Y. 2023-24	Remarks
3a	Number of pits proposed for production	02 no.	01 no.	Deviation has been pointed out.
3b	Quantity of ROM mineral production proposed	13,99,842.00 Tonnes.	2,02,425.00 Tonnes	Less production has been done.
3c	Recovery of salable/usable mineral from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	No proposal.	Nil.	-

3e	Grade of mineral reject generation and threshold value declared	No proposal.	Nil.	-
3f	Quantity of sub-grade mineral generation	No proposal.	Nil.	-
3g	Grade of sub-grade mineral generation	No proposal.	Nil.	-
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal.	Nil.	The entire produced limestone is being dispatched to the crusher, erected outside lease area.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal.	Nil.	-
3j	Provision of drilling & blasting in mineral benches	Diameter: 115.0 mm Spacing: 5.50 m Burden: 3.50 m Depth: 8.0 m Explosive: AFNO	Diameter: 115.0 mm Spacing: 5.50 m Burden: 3.50 m Depth: 8.0 m Explosive: AFNO	-
3k	Provision of mining machineries in mineral benches	1. Excavator 01 no. with 1.02 CuM bucket capacity. 2. Excavator 01 no. with 2.09 CuM bucket capacity. 3. Tippers 8 nos. with 13.0 CuM carrying capacity. 4. Water Tanker 01 no. with 10000 Liters capacity. 5. Jeep/Tractor 01 no. with 40 HP capacity. 6. Air Compressor 01 no. with 12.60 CuM/MN capacity. 7. Blast Drilling Machine 01 no. with 115.0 mm bit size.	1. Back Hoe 01 no. 1.02 CuM bucket capacity. 2. Tippers 4 nos. with 13.0 CuM carrying capacity. 3. Water Tanker 01 no. with 10000 Liters capacity. 4. Air Compressor 01 no. with 12.74 CuM/MN capacity. 5. Blast Drilling Machine 01 no. with 115.0 mm bit size. 6. Jeep/Tractor 02 nos. with 111 HP capacity.	-
3l	Whether height of benches in overburden	Topsoil: 0.50 m to 1.0 m	Topsoil: 0.50 m to 1.0 m	-

	and mineral suitable for method of mining proposed in MP/SOM	Mineral/Ore: 8.0 m.	Mineral/Ore: 8.0 m.	
3m	Total area covered under excavation/pits	97.01 Ha. Up to end of F.Y. 2024-25	78.52 Ha. Up to end of F.Y. 2023-24	-
3n	Ore to OB ratio for the pit/mine during the year	1 : 0.0	1 : 0.0	No overburden present in the mining lease.
3o	Total area put in use under different heads at the end of year	Pit- 97.1 Ha. OB/Waste- Nil. Others- 59.35 Ha. Up to end of F.Y. 2024-25	Pit- 78.52 Ha. OB/Waste- Nil. Others- 73.06 Ha. Up to end of F.Y. 2023-24	Deviation has been pointed out. Revised land use details have been given in the latest approved RMP dated 28/10/2024.
3p	Production of ROM mineral during last five-year period, as applicable	Yr. 2019-20: 13,99,716.00 Tonnes Yr. 2020-21: 13,99,836.00 Tonnes Yr. 2021-22: 13,99,870.00 Tonnes Yr. 2022-23: 13,99,582.00 Tonnes Yr. 2023-24: 13,99,842.00 Tonnes	Yr. 2019-20: 8,13,225.000 Tonnes Yr. 2020-21: 7,10,252.000 Tonnes Yr. 2021-22: 5,84,271.000 Tonnes Yr. 2022-23: 7,84,701.000 Tonnes Yr. 2023-24: 2,02,425.000 Tonnes	-
3q	General remarks of inspecting officer on method of mining etc.	Mining has been carried out through the opencast method with fully mechanized means using conventional drilling and blasting.		

#### 4.0 Solid Waste Management-Dumping

S.N.	Item	Proposals F.Y. 2023-24	Actual work F.Y. 2023-24	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Proposal has been given in the approved document for partial stacking of topsoil in between UTM co-ordinates N1847070 to	Generated topsoil has been utilized for the purpose of plantation.	-

		N1847222 and E355552 to E355867.		
4b	Location of topsoil, OB & mineral reject dumps	Topsoil Stacking: In between UTM co-ordinates N1847070 to N1847222 and E355552 to E355867.	Topsoil Stacked: In between UTM co-ordinates N1847070 to N1847222 and E355552 to E355867.	-
4c	Number of dumps within lease area and outside lease area	No proposal.	Nil.	Old dumps/stocks Topsoil – 01 no. OB/Waste – Nil. Mineral/Ore- Nil.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal.	01 no. of topsoil stock present within UPL.	-
4e	Number of active & alive dumps	No proposal.	Nil.	-
4f	Number of dead dumps	No proposal.	Nil.	-
4g	Number of dumps stabilized	No proposal.	Nil.	-
4h	Whether Retaining wall or garland drain all along dumps are there	No proposal.	Nil.	-
4i	Length of Retaining wall or garland drain all along dump	No proposal.	Nil.	-
4j	Number of settling ponds	No proposal.	Nil.	-
4k	Specific comments of inspecting officer on waste dump management.	Nil.		

## 5.0 Solid Waste Management-Backfilling

S.N.	Item	Proposals F.Y. 2023-24	Actual work F.Y. 2023-24	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal.	Nil.	-
5b	Area under backfilling of mined out area	No proposal.	Nil.	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mined	Out of 23239.0 CuM, 13239.00 CuM of generated	11341.0 CuM topsoil has been generated and	-



	out area (Rule 32)	topsoil will be utilized for plantation in safety zone of Railway Station.	utilized for plantation in safety zone of Railway Station.	
5d	Total area fully reclaimed & rehabilitated	1.20 Ha. area will be utilized for plantation of 1000 nos. of saplings along the mining lease boundary.	1.20 Ha. area has been utilized for plantation of 1000 nos. of saplings along the safety zone of Railway Station.	-
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Nil.		

## 6.0 Progressive Mine Closure Plan

S.N.	Item	Proposals F.Y. 2023-24	Actual work F.Y. 2023-24	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	As per rule 26(2), lessee has to submit the annual report before 1st day of July of every year.	Annual report on PMCP for F.Y. 2023-24 has been submitted before due date.	The given information has been cross verified during inspection.
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	No proposal.	Nil.	-
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir	No proposal.	Nil.	-

	v) Any other specific means			
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	1000 nos. 1.20 Ha. By plantation	1000 nos. 1.20 Ha. By Plantation	-
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposal has been given in the approved document for regular monitoring of the environmental parameters in the core and buffer zone.	Being done as per proposal.	All the parameters are within the permissible limits.
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Nil.		

## 7.0 Mineral Conservation

S.N.	Item	Proposals F.Y. 2023-24	Actual work F.Y. 2023-24	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM/Ore will be dispatched directly to the crusher plant without sorting.	Being done as per proposal.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No proposal for grade wise sorting.	ROM/Ore is being dispatched to the captive plant without sorting.	-
7c	Different grade of mineral sorted out at mines	-do-	-do-	-
7d	Any beneficiation process at mines	No Proposal.	NIL	-
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Nil.		

## 8.0 Environment

S.N.	Item	Proposals F.Y. 2023-24	Actual work F.Y. 2023-24	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Proposal has been given in the approved document for separate removal and concurrent use of topsoil for the purpose of plantation.	Separate removal and the concurrent use of generated topsoil is being done.	-
8b	Concurrent use or storage of topsoil	13239.00 CuM of generated topsoil will be utilized for the purpose of plantation.	11341.00 CuM of generated topsoil has been utilized for the purpose of plantation.	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal.	Nil.	Old dumps/stocks Topsoil – 01 no. OB/Waste – Nil. Mineral/Ore- Nil.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal.	NIL	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	1.20 Ha. area will be utilized for plantation of 1000 nos. of saplings.	1.20 Ha. area has been utilized for plantation of 1000 nos. of saplings.	Planation has been done along the safety barrier of railway station.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	1000 nos. of saplings will be planted over 1.20 Ha. area.	1000 nos. of saplings have been planted over 1.20 Ha. area.	-do-
8g	Survival rate	90%	Approx 90%	-
8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling on roads to control airborne dust through the water tanker.	Being done as per proposal.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Nil.		

## 9.0 Compliance of Rule 45

S.N.	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to December 2024 A.R. Submitted up to F.Y. 2023-24	Nil.

S.N.	Item	Details GIVEN in A.R. F.Y. 2023-24	Observation of I/Officer F.Y. 2023-24	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Shri A. Shiva Kumar.  Mining Engineer: Shri Shri N. Chaitanya.  Geologist: Shri V. Anand Kumar.	Manager: Shri N. Chaitanya.  Mining Engineer: Shri Shri N. Chaitanya.  Geologist: Shri V. Anand Kumar.	Nil.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 78.52 Ha. OB/Waste- Nil. Others- 73.06 Ha.	Pit- 78.52 Ha. OB/Waste- Nil. Others- 73.06 Ha.	Nil.
9d	Scrutiny of Annual return on afforestation	Within ML: 1000 nos. with 90% survival rate.  Outside ML: Nil nos. with Nil survival rate.	Within ML: 1000 nos. with 90% survival rate.  Outside ML: Nil nos. with Nil survival rate.	Nil.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Mineral Reject: Nil.  Grade: Nil.	Mineral Reject: Nil.  Grade: Nil.	Nil.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Closing Stock: Nil.  Cement Grade Limestone Closing stock: 30366.000 Tonnes.	ROM Closing Stock: Nil.  Cement Grade Limestone Closing stock: 30366.000 Tonnes	Nil.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale value: Rs. 36960448.00  Ex-mine Price: Rs. 194.12 Per Metric Tonne	Sale value: Rs. 36960448.00  Ex-mine Price: Rs. 194.12 Per Metric Tonne	Nil.

		Cost of Production: Rs. 194.12 Per Metric Tonne	Cost of Production: Rs. 194.12 Per Metric Tonne	
9i	Scrutiny of Annual return on fixed assets	Rs. 3237901946/-	Rs. 3237901946/-	Nil.
9k	Scrutiny of Annual return on mining machineries	1. Back Hoe 01 no. 1.02 CuM bucket capacity. 2. Tippers 4 nos. with 13.0 CuM carrying capacity. 3. Water Tanker 01 no. with 10000 Liters capacity. 4. Air Compressor 01 no. with 12.74 CuM/MN capacity. 5. Blast Drilling Machine 01 no. with 115.0 mm bit size. 6. Jeep/Tractor 02 nos. with 111 HP capacity.	1. Back Hoe 01 no. 1.02 CuM bucket capacity. 2. Tippers 4 nos. with 13.0 CuM carrying capacity. 3. Water Tanker 01 no. with 10000 Liters capacity. 4. Air Compressor 01 no. with 12.74 CuM/MN capacity. 5. Blast Drilling Machine 01 no. with 115.0 mm bit size. 6. Jeep/Tractor 02 nos. with 111 HP capacity.	Machinery log books has been cross verified.

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

Violation Rule 11(1) of MCDR, 2017 has been pointed out during inspection.

**(Name of inspecting officer with designation and date)**

**Shaival Kartikeya  
Senior Mining Geologist  
Date of Inspection 30/09/2024**