

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/CDP/L.ST-4/HYD

Mine code : 38APR04001

- (i) Name of the Inspecting : **160**) **kalmata.M.K**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : M. Devanand, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 17-MAR-23
- (v) Prev.inspection date : 12-MAR-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **COROMANDAL**
- (b) **Registration NO.** : **IBM/613/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **ANDHRA PRADESH**
- District : **CUDDAPAH**
- Village : **CHILAMKUR**
- Taluka : **YERRAGUNTLA**
- Post office : **CHILAMKUR**
- Pin Code : **516310**
- FAX No. : **08563-76155**
- E-mail : **ccp_mines@indiacements.co.:**
- Phone : **08563-276152,276201**
- (f) **Police Station** :
- (g) **First opening date** : **01-OCT-82**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **COROMANDAL LIMESTONE MINE**
correspondance : **M/S THE INDIA CEMENTS LTD**
: **CHILAMKUR(PO) CUDDAPAH DT.**
3. (a) **Lease Number** : **APR0021**
- (b) **Lease area** : **601.96**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **17-NOV-01**
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 : P MUNI REDDY
 CHILAMKUR 516310 CUDDAPAH
 ANDHRA PRADESH
 Phone:
 FAX :

Mining Engineer

Name : Muralidhar.T,Full Time
 Qualification : B.E.Mining.
 Appointment/ : 20-JAN-23
 Termination date

Geologist

Name : M Nanatha Kumar,Full Time
 Qualification : Msc. Applied Geology
 Appointment/ : 16-OCT-17
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	29-APR-92
Plan/Scheme of Mining		Existing rule 11 MCDR1988	24-NOV-98
		Existing rule 11 MCDR1988	26-NOV-98
		Mining Scheme rule 12 MCDR1988	04-MAR-03
		Mining Scheme rule 12 MCDR1988	27-APR-07
		Mining Scheme rule 12 MCDR1988	30-NOV-12
		Mining Scheme rule 12 MCDR1988	05-DEC-16
		MP modif under 17(3) MCR 2016	20-JAN-20
		MP review under 17(1) MCR 2016	21-DEC-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There was a proposal to drill 11 core bore holes in the year 2022-23.	On the day of inspection it was observed that exploration was commenced in the lease area.	Lessee has informed that exploration will be completed at the earliest.
1b	Exploration over lease area for geological axis 1 or 2	None.	None.	Entire mineralized area is explored under G-1 level. However, in the year 2022-23, Gap filling exploration was proposed in the eastern side of the lease area to know the continuity of the ore body. On the day of inspection it was observed that exploration was commenced.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None.	None.	Exploration is started by engaging coredrilling machine under the supervision of Geologist of the mine appointed under Rule 55 of MCDR 2017.
1d	Balance area to be explored to bring Geological axis in 1 or 2	None.	None.	Entire mineralized area is explored under G-1 level. However, in the year 2022-23, Gap filling exploration was proposed in the eastern side of the lease area to know the continuity of the ore body. On the day of inspection it was observed that exploration was commenced.

1e	Balance reserve as on 01/04/20	Reserves/resources as per the approved document dated 21.12.2021 is as follows. (In million tonnes, as on 31.03.2022) Proved M Reserves (111) -	Reserves/resources as on 01.04.2023. (In million tonnes) Proved M Reserves(111):- 195.979 Feasibility/pre-feasibility M Resources(211+221):- 134.083 Total:- 330.062	Reserves/resources were updated by depelting production carried out during the year 2022-23.
		197.635 Feasibility / pre-feasibilit M Resources (211+221) - 134.083 Total:- 331.718		

1f	General remarks of inspecting officers on geology, exploration etc	The depoist belongs to the Kurnool group. The general srtike of the formation is NNW to SSE and dip 3 to 5 degree towards NE. Total lease area is 602.137Ha, out of which 548.423 ha is mineralized and entire mineralized area is explored under G-1 level. Further, 11 boreholes were proposed (gap filling) in the year 2022-23 to know the continuity of the ore body. The said exploration is under progress.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	In the year 2022-23, there was a proposal to work between the co-ordinates N 1622930 to N 1623310 & E 228680 to E 228910 in the North block and between co-ordinates N 1621430 to N1622205 and E 228916 to E 229390. in the South block.	Working has been carried out almost within the proposed co-ordinates only.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, proposed separate bench for topsoil	Benches were made separately in Topsoil and Ore.	In south pit observed one small bench of 1 to 2 mtr in topsoil and 5 benches in Ore. & In north Pit, 4 benches are existing in ore and one small bench in topsoil.
2c	Stripping ratio or ore to OB ratio	1:0.054	1:0	In the approved document Ore to OB ratio was calculated for Topsoil only and there is no OB in the said lease. So Ration is mentioned as 1:0.
2d	Quantity of topsoil generation in m3	108251 in the year 2022-23	126307 in the year 2022-23	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		Working has been carried out within the proposed limits. Production was achieved 83% of the proposal and topsoil was handled more than the proposal and 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	Two	Two (North pit and South Pit)	Dimension of each pit is as follows, North Pit:- 460m(l) x 439m(w) x 30m(h), South block:- 1300m(l) x 756m(w) x 34m(h)
3b	Quantity of ROM mineral production proposed	1999995 tonnes, in the year 2022-23.	1656000 in the year 2022-23.	83% production achieved in the year 2022-23.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	Lessee is using entire ROM by blending for the captive cement plant.
3d	Quantity of mineral reject generation	None.	None.	None.
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	Not applicable.	Not applicable.
3f	Quantity of sub grade mineral generation.	None.	None.	None.
3g	Grade of sub grade mineral generation	Not applicable.	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical.	Mechanical.	Lessee is doing only crushing for size reduction.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None.	None.	None.
3j	Provision of drilling and blasting in mineral benches	Yes, proposed.	As per the proposal.	Using 115mm drilling machine for blasting holes and Kelvex-600, 500 ANFO, EID and supremedet NONELS explosives for blasting.

3k	Provision of mining machineries in mineral benches	Yes, proposed combination of Excavators and dumpers.	Excavators and dumpers are observed on the mineral benches.	Using Excavator of 2.8 and 3.7 cum capacity of dumpers of 35 tonnes capacity for production and development.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed 8.00 mtr bench height.	Average bench height was maintained at 7.00 to 8.00 mtrs.	The benches height proposed and maintained was suitable to the method of mining adopted.
3m	Total area covered under excavation/pits	124.68 Ha	118.50Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.054	1:0	In the approved document Ore to OB ratio was calculated for Topsoil only and there is no OB in the said lease. So Ration is mentioned as 1:0.
3o	Total area put in use under different heads at the end of year	Area under mining 124.68Ha, Topsoil stocks:- 60.18Ha, Infrastructure :-0.64Ha, Roads:-4.71Ha.	Area under mining:- 118.50Ha, Topsoil dump:- 60.00Ha, Roads:-4.71Ha, and Ingrastructure:- 0.64Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2022-23- 1999995 T 2021-22- 3666664T 2020-21- 3600000 T 2019-20 - 1997774 T 2018-19 - 1998320 T	2022-23- 1656000 T 2021-22 - 1437836 T 2020-21 - 1347000 T 2019-20 - 1527900 T 2018-19 - 1865000 T	The last approved Review of mining plan is approved for the block period 2022-23 to 2026-27. In the first year of the block period production achieved is 83%.

3q	General remarks of inspecting officers on method of mining etc.	The method of mining adopted is Mechanized A category. Lessee is using combination of excavators and dumpers for production and development. Bench height was maintained average 7.00 to 8.00 mtrs and suitable for the method of mining adopted. Working is proposed in two pits to maintain the quality of the ore.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Only topsoil dumps proposed in the year 2022-23	Topsoil removed during the year 2022-23 is dumped in the enmarked area.	Generation of OB and Mineral reject was not proposed in the year 2022-23. Further, two quarry slab waste dumps existing in the Nortere-eastern part of the lease area. The dumping was made by the slab quarry operators. The salb quarries are existing outside the lease area.
4b	Location of topsoil, OB and mineral reject dumps	Location of proposed topsoil dumps in the year 2022-23 is as follows. On existing Dump:- N1621648 to N1621872 and E227937 to E228162. New dump:- N1622664 to N1622767 & E228600 to E228795.	In the North block topsoil dumping was made b/w the co-ordinates N1622920 to 1622940 & E228480 to 228630	In the south block topsoil dumping was made almost as per the proposal. However, in the North block topsoil dump was not made as per the proposal and 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	Two top soil dumps were proposed in the year 2022-23	dumping was made in two places in the year 2022-23.	Total 14 topsoil dumps existing within the lease area, Four in the North block and remaining 10 in the South block. Additionally two slab quarry waste dumps are existing in the Eastern part of the North block. The dump was made by some quarry operators and same was communicated to State Government for necessary action.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL.	Lessee has made some temporary topsoil dumps within UPL.	Lessee has advised to remove the dumps within the UPL. Further, Violation is pointed out under Rule 11(1) of MCDR 2017, for not dumping as per the proposal.
4e	Number of active and alive dumps.	fourteen topsoil dumps	Fourteen topsoil dumps	Fourteen topsoil dumps are existing within the lease area. Plantation was made on some topsoil dumps and lessee has not declared any dumps as dead and stabilized.
4f	Number of dead dumps.	None.	None.	None.
4g	Number of dumps established.	None.	None.	Plantation was made on some topsoil dumps and dumps are not fully stabilized.
4h	Whether Retaining wall or garland drain all along dumps are there.	A garland drain/ bund of 650 mtr was proposed in the year 2022-23.	The said garland drain was not made as per the proposal.	Violation is pointed out for the same under Rule 11(1) of MCDR 2017.

4i	Length of Retaining wall or garland drain all along dumps	650 meter.	Garland drain was not made as per the proposal.	Violation is pointed out for the same under Rule 11(1) of MCDR 2017.
4j	Number of settling ponds	None.	None.	
4k	Specific comments of inspecting officer on waste dump management		Only topsoil dumping is proposed and made in the lease area. In the year 2022-23, topsoil dumping is not made as per the proposal and violation is pointed out for the same under Rule 11(1) of MCDR 2017. Total 14 topsoil dumps and two slab quarry waste dumps are existing within the lease area. Garland drain was not made as per the proposal in the year 2022-23 and violation is pointed out for the same.	Two slab quarry waste dumps are exists in the Eastern part of the lease area in North block. The dumping was made by the some slab quarry operators and same was communicated to State Government for necessary action.

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 present plan period.
5b	Area under backfilling of mined out area	None.	None.	None.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	None.	None.	Topsoil removed utilized for making bund and plantation in the 7.5 mtr safety zone and stacked separately for future use.
5d	Total area fully reclaimed and rehabilitated	None.	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.
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Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	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 a yearly report on protective and rehabilitative works carried out as envisaged in the approved mine closure plan, for the year 2021-22.	Submitted yearly report on PMCP within the time limit.
6b	Area available for rehabilitation (ha) .	None.	None.	None.
6c	afforestation done (ha).	1.0Ha. In the year 2022-23.	2.1Ha in the year 2022-23.	Afforestation was made in 7.5 mtrs safety zone
6d	No. of saplings planted during the year	1000 saplings in the year 2022-23.	3700 saplings in the year 2022-23.	
6e	Cumulative no .of plants	5000 in the present block period. i.e. from 2022-23 to 2026-27.	Only one year completed in the present plan period and 3700 saplings were planted.	
6f	Any other method of rehabilitation	None.	None.	
6g	Cost incurred on watch and care during the year	None.	Approximately 2.0lakhs	For taking care of plantation.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	None.	None.	None.

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	None.	None.	None.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	None.	None.	None.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None.	None.	None.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	None.	None.	None.
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	proposed plantation in the waste land existing within the lease area.	Plantation is made in the Western part of the lease area.	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	None.	About 1.9 ha waste land is covered by plantation.	
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)	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. Results are within the permissible limits.	Environmental monitoring was carried out by Lawn Enviro Associates, Hyderabad.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	There was a proposal to plant 1000 saplings in the year 2022-23, lessee has planted 3700 sapling in the year 2022-23. There was a proposal for garland drain/bund of 650m in the year 2022-23. the said work was not completed by the lessee and violation is pointed out for the same under Rule 11(1) of MCDR 2017. Further, lessee is regularly monitoring air and water and results are within the permissible limit.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Dispatch of Cement grade ore.	As per the proposal.	Dispatched Cement garde ore to the captive plant linked with the mine.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	None.	None.	Lessee is doing only crushing for size reduction.
7c	Different grade of mineral sorted out at mines.	Cement Grade.	Cement Grade.	
7d	Any beneficiation process at mines .	None.	None.	None.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Lessee is utilizing enrie ROM by blending and recovery is 100%. Doing only crushing for size reduction as per the requirement of the plant.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposed.	Yes topsoil is removed separately by scarping.	The topsoil removed is utilized for plantation and stored separately for future use.
8b	Concurrent use or storage of topsoil	Storage in the year 2022-23.	Most of the topsoil removed stored separately for future use and negligible quantity is used for plantation work within the lease area.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	None.	None. No waste rock and reject and fines dumping was made in the year 2022-23.	However, two slab quarry waste dumps which are made by slab quarry operators are existing in the North -Eastern part of the lease. Same was communicated to State DMG for necessary action.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	None.	None.	None.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	None in the year 2022-23.	None in the year 2022-23.	Earlier, about 0.9Ha, worked out area is covered by plantation in the western part of the lease and plantation was done on the old topsoil dumps existing within the lease area.
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 9100 saplings within the lease area, during last five years.	

8g	Survival rate	Not proposed.	85 to 90%.	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, topsoil dumps and on the waste land existing within the lease area 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 is regularly submitting monthy and annual returns within the time limit.	Submitted Monthly returns up to Feb 2023 and annual returns 2021-22.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	As per the annual returns submitted for the year 2021-22, details of Mining Engineer, Geologist and manger is as follows. Mining Engineer:- A Nagendra Kumar, Geologist:- M Nanta Kumar and Mine Manager:- M Venugopal Reddy.	Mining Engineer:- Muralidhar T, Manager:- M Devanand. Geologis:- M Nanta Kumar.	Details of geologist is correct as mentioned in the Annual returns. The Mining Engineers and Manager as mentioned above were appointed recently. Lessee has sent notice of appointment for the both.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining- 118.57Ha, Reclaimed/reha illilitated- 1.90Ha, Waste disposal- 59.910(Topsoil), Infrastructure -5.56Ha.	118.57Ha, Reclaimed and rehailitated-1.90Ha, Topsoil dumps- 59.910Ha, Infrastructure-5.56Ha.	The land use pattern given in the annual returns is almost correct.
9d	Scrutiny of Annual return on afforestation	1200 saplings with survival rate of 90%.	The information is found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	None.	None.	Entire ROM is cosumed by blending.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM:- Opening and closing stock_ Nil, Production:- 1437836T, Cement Grade:- Opening stock- 56300T, production- 1437836T, Dispatch- 1465000T and closing Stock- 29136T	In the monthly returns submitted for the month of March 2022 & in the annual returns submitted for the year 2021-22, closing stock for cement grade ore is mentioned as 29136 tonnes. However, in the monthly returns submitted for the Month of April 2022, Opening Stock for the same is shown as 35500 tonnes. There is a difference of 6364 tonnes in the closing and opening stock. Same was continued in the monthly returns submitted from April 2022 onwards.	Showcause notice is issued for the same under Rule 45(7) of MCDR 2017.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Exmine price and cost of production is shown as Rs 228.08/T	The cost of proction and ex-mine price given appears correct.	The mine is captive mine and entir quantity produced will be utilized in plant linked with the mine. So sale value is not applicable.
9h	Scrutiny of Annual return on fixed assets	Value of fixed assets is mentioned as Rs 2403504917.	In annual returns submitted for the year 2020-21 net closing balance for Industrial, residential & plant and machinery is mentioned as Rs 139916201, 38056419 & 12741620 respectively. However, in the annual returns submitted for the year 2021-22 value at the beginning of the year for the same is mentioned as Rs 144530903, 39186816 & 13109145 respectively.	There is a mismatch in net closing balance and value at the beginning. Showcause notice is issued for the same under Rule 45(7) of MCDR 2017.
9k	Scrutiny of Annual return on mining machineries	Backhoe 2.8 Cum capacity-01, Shovel 3.7cum capacity-03, Dumper of 35T capacity-08, Rcok drill-01.	The details of mining machineries furnished in the annual returns is found correct.	

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

Date :

(kalmata.M.K)

Indian Bureau of Mines