

INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/NLG/LST-9/HYD

Mine code : 38APR14026

- (i) Name of the Inspecting : K007) SHAIVAL KARTIKEYA
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri M. Devanand, Manager (Mines)
Official with
Designation
- (iv) Date of Inspection : 27-JUL-22
- (v) Prev.inspection date : 09-DEC-21

PART-I : GENERAL INFORMATION

1. (a) Mine Name : LAKSHMIPURAM-II (GONO.131)
- (b) Registration NO. : IBM/613/2011
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : TELANGANA
District : NALGONDA
Village : IRIKIGUDEM
Taluka : MIRYALAGUDA
Post office : WADAPALLY
Pin Code : 508355
FAX No. : 08689-228447
E-mail : iclvpm@rediffmail.com
Phone : 08689-228580
- (f) Police Station : WADAPALLY
- (g) First opening date : 01-OCT-85
- (h) Weekly day of rest : SUN
2. Address for correspondence : M/s India Cements Limited, Vishnupuram
Wadapally Village
Nalgonda District, Telangana State
3. (a) Lease Number : APR0156
- (b) Lease area : 316.47
- (c) Period of lease : 52 yrs (As per section 3A of MMDR Amendment Act, 2015)
- (d) Date of Expiry : 31-MAR-30
4. Mineral worked : LIMESTONE Main
CLAY (OTHERS) Associated
SHALE Associated

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 : M.Manickam
 Coromandel Towers, 93
 Santhome High Road,
 Karpagam Avenue, Raja
 Annamal aipuram, CHENNAI
 CITY TAMIL NADU
 Phone: 044-28521526
 FAX : 044-28520638

Agent : M.Tirupati Rao
 Visshnupuram works, ICL
 Wadapally PO Damarcherla
 mandal NALGONDA TELANGANA
 Phone: 08689228580
 FAX : 0868/9228447

Mining Engineer
 Name : M.LAKSHMANA KRANTHI KUMAR, Full Time
 Qualification : B.Tech (MINING)
 Appointment/ : 14-SEP-16
 Termination date

Manager
 Name : A.JANAKI RAMI REDDY
 Qualification : DIPOLMA IN MINING ENGINEERING
 Appointment/ : 02-APR-12
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	05-MAR-03
		Modif.of approved Mining Plan	17-APR-08
		Mining Scheme rule 12 MCDR1988	25-MAR-14
		MP modif under 17(3) MCR 2016	13-OCT-17

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal.	NIL	The entire mineralized zone has already been explored under G1 level.
1b	Exploration over lease area for geological axis 1 or 2	No Proposal.	NIL	-do-
1c	Exploration Agencies and 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 reserve as on 01/04/20	Balance reserves as on 01.04.2022 Under (111) Category: 92.307 Million Tonnes	Balance reserves as on 01.04.2022 Under (111) Category: 95.302 Million Tonnes	Average grade of Limestone: CaO: 46.10% SiO2: 13.52%

1f	General remarks of inspecting officers on geology, exploration etc	The lease area located in the North-Eastern margins of the Kadapa Basin is known as Palnad sub-basin. The geological formation of the area comprises of a sequence of arenaceous, argillaceous and calcareous rocks belonging to the Kurnool group of rocks. Kurnool group of rocks are the youngest rocks in the Kadapa Basin.	These younger rocks are developed in Palnadu area stretching on both sides of Krishna River, called as Palnads, resting unconformably on the Kadapa formation. The topography of the lease area is undulating and gently dipping towards E-SE in the direction where river Musi flows in a gorge.	The Limestone deposit is a Simple, Tabular, undisturbed stratigraphic horizon of the Palnad sub-basin (Nargi Formation). No major structural disturbance in the sedimentary units are present.
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Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Pit No. 1: In between local co-ordinates N4800 to N5090 and E4210 to E4560 Pit No. 2: In between local co-ordinates N4970 to N6140 and E3205 to E3780	Pit No. 1: In between local co-ordinates N4800 to N5090 and E4210 to E4560 Pit No. 2: In between local co-ordinates N4970 to N6140 and E3205 to E3780	Broadly development and production have been carried out in the proposed co-ordinates.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Pit No. 1: Topsoil: 01 no. Mineral/Ore: 03 nos. Pit No.2: Topsoil: 01 no. Mineral/Ore: 05 nos.	Pit No. 1: Topsoil: 01 no. Mineral/Ore: 03 nos. Pit No.2: Topsoil: 01 no. Mineral/Ore: 05 nos.	-
2c	Stripping ratio or ore to OB ratio	No Proposal.	1 : 0.005	3260.0 CuM of waste has been generated during F.Y. 2021-22.
2d	Quantity of topsoil generation in m3	No Proposal.	NIL	-
2e	Quantity of overburden generation in m3	No Proposal.	3260.0 CuM of waste has been generated during F.Y. 2021-22.	Generated waste has been utilized for reclamation and rehabilitation in 0.60 Ha. in between local co-ordinates N5280 to N5575 and E2715 to E2870
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The development and production is being done through fully mechanized means.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	02 nos.	02 nos.	-
3b	Quantity of ROM mineral production proposed	F.Y. 2021-22: 1399966.00 Metric Tonnes.	F.Y. 2021-22: 645565.00 Metric Tonnes.	Less production due to covid 19 pandemic and lack of market demand.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	-

3d	Quantity of mineral reject generation	No Proposal.	NIL	-
3e	Grade of mineral rejects 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	Mechanised crushing for fraction size of -75 mm to +20 mm has been proposed with the rated capacity of crusher plant of 500 Tonnes Per Annum.	Mechanised crushing is being done for fraction size of -75 mm to +20 mm through 500 TPH crushing unit.	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal.	NIL	-
3j	Provision of drilling and blasting in mineral benches	Dia: 115 mm Spacing: 5.50 m Burden: 3.50 m Depth: 8.00 m Explosive: ANFO	Dia: 115 mm Spacing: 5.50 m Burden: 3.50 m Depth: 8.00 m Explosive: ANFO	-

3k	Provision of mining machineries in mineral benches	1. Excavator 02 nos. with 3.90 CuM bucket size. 2. Dumpers 11 nos. with 31.75 Tonnes capacity 3. Dozer 01 no. with 320 H.P. capacity. 4. Front End Loader 01 no. with 430 H.P. capacity 5. Water Tanker 01 no. with 10000 Liters capacity. 6. Drilling Machine 02 nos. with bit diameter 115 mm. 7. Air Compressor 02 nos. with 445 CFM capacity.	1. Back Hoe 02 nos. with 2.0 CuM bucket capacity 2. Tippers 08 nos. with 12 CuM careering capacity. 3. Water Tanker 01 no. with 12000 Liters capacity. 4. Drilling Machine 01 with bit diameter 115 mm. 5. Air Compressor 0 no. with 12.6 CuM/MN capacity. 6. Explosive Van 01 no. with 9.280 Tonnes capacity.	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Topsoil/OB: 0.50 to 1.0 m Mineral/Ore: 3.0 m to 8.0 m	Topsoil/OB: 0.50 to 1.0 m Mineral/Ore: 3.0 m to 8.0 m	-
3m	Total area covered under excavation/pits	Pit- 132.47 Ha. up to end of F.Y. 2022-23.	Pit- 132.343 Ha. up to end of F.Y. 2021-22.	-
3n	Ore to OB ratio for the pit/mine during the year.	No Proposal.	1 : 0.005	3260.0 CuM of waste has been generated during F.Y. 2021-22.

3o	Total area put in use under different heads at the end of year	Pit- 132.47 Ha. Waste/reject- 5.92 Ha. Others- 8.17 Ha. Up to end of F.Y. 2022-23	Pit- 132.343 Ha. Waste/reject- 5.922 Ha. Others- 21.25 Ha. Up to end of F.Y. 2021-22	13.080 Ha. area has been reclaimed in the mined out pit no. 2.-
3p	Production of ROM mineral during the last five year period as applicable	Yr. 2017-18: 1400000.00 Metric Tonnes Yr. 2018-19: 1400242.00 Metric Tonnes Yr. 2019-20: 1399912.00 Metric Tonnes Yr. 2020-21: 1399912.00 Metric Tonnes Yr. 2021-22: 1399966.00 Metric Tonnes	Yr. 2017-18: 667264.00 Metric Tonnes Yr. 2018-19: 618605.00 Metric Tonnes Yr. 2019-20: 665104.00 Metric Tonnes Yr. 2020-21: 676083.00 Metric Tonnes Yr. 2021-22: 645565.00 Metric Tonnes	Less production due to less market demand.
3q	General remarks of inspecting officers on method of mining etc.			Mining has been carried out through the opencast method with fully mechanized means using conventional drilling and blasting.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32, 33)	No Proposal.	3260.0 CuM generated overburden has been dumped over 0.60 Ha. in between local co-ordinates N2794 to N2874 and E5348 to E5524 in the mined out pit.	Cumulative 13.08 Ha. area in the mined out pit situated in between local co-ordinates N2703 t N3260 and E5319 t E6256 has been utilized for reclamation and rehabilitation up to end of F.Y. 2021-22.
4b	Location of topsoil, OB and mineral reject dumps	No Proposal.	-do-	Two old inactive mineral-reject dumps are present in the lease area Dump no. 1: In between local co-ordinates N4895 t N5110 and E5195 t E5370 (2.31 Ha. area utilized) Dump no. 2: In between local co-ordinates N4595 t N4875 and E5040 t E5260 (3.61 Ha. area utilized)
4c	Number of dumps within lease area and outside of lease area	No Proposal.	-do-	-do-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No Proposal.	-do-	-do-
4e	Number of active and alive dumps.	No Proposal.	-do-	-do-
4f	Number of dead dumps.	No Proposal.	NIL	-do-
4g	Number of dumps established.	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 dumps	No Proposal.	NIL	-
4j	Number of settling ponds	No Proposal.	NIL	-
4k	Specific comments of inspecting officer on waste dump management			NIL

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of 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.	0.60 Ha. area in between local co-ordinates N2794 to N2874 and E5348 to E5524 in the mined out pit has been backfilled through 3260.0 CuM generated overburden.	Backfilling has been done over the non-mineralized area. Cumulative 13.08 Ha. non-mineralized area at pit bottom has been backfilled up to end of F.Y. 2021-22.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal.	NIL	Negligible quantity has been generated during F.Y. 2021-22 and same has been utilized for plantation over the backfilled area.

5d	Total area fully reclaimed and rehabilitated	No Proposal.	13.08 Ha. area in the mined out pit situated in between local co-ordinates N2703 to N3260 and E5319 to E6256 has been utilized for reclamation and rehabilitation up to end of F.Y. 2021-22.	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			NIL

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).	As per rule 26(2), lessee has to submit the annual report before 1st day of July of every year.	Submitted before due date. Information has been cross verified during inspection.	No major deviation has been observed.
6b	Area available for rehabilitation (ha) .	0.60 Ha.	0.60 Ha.	-
6c	afforestation done (ha).	1500 nos.	1500 nos.	-
6d	No. of saplings planted during the year	500 nos.	750 nos.	-
6e	Cumulative no .of plants	2000 nos.	2250 nos.	-
6f	Any other method of rehabilitation	By plantation.	By plantation.	-
6g	Cost incurred on watch and care during the year	Rs. 1,00,000/-	Rs. 1,20,000/-	-

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	No Proposal.	0.60 Ha.	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal.	3260 CuM Waste/OB	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	500 nos. of saplings	750 nos. of saplings	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal.	NIL	-
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	By Plantation	By Plantation	-
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No Proposal.	NIL	-
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No Proposal.	NIL	-

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposal.	NIL	-
6p	Compliance of environmental monitoring (core zone and 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.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			NIL

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No Proposal.	NIL	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No Proposal.	NIL	-
7c	Different grade of mineral sorted out at mines.	No Proposal.	NIL	-
7d	Any beneficiation process at mines	No Proposal.	NIL	-

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Chemical specification of Limestone required in the captive cement plant: CaO- 45.00% to 45.50% and SiO ₂ - 13.00% to 13.50% Average grade of Limestone present in the mine: CaO- 46.10% and SiO ₂ - 13.52%
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Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal.	NIL	Negligible quantity has been generated during F.Y. 2021-22 and same has been utilized for plantation over the backfilled area.
8b	Concurrent use or storage of topsoil	No Proposal.	NIL	-do-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposal.	3260.0 CuM generated overburden has been dumped over 0.60 Ha. in between local co-ordinates N2794 to N2874 and E5348 to E5524 in the mined out pit.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal.	0.60 Ha. area in between local co-ordinates N2794 to N2874 and E5348 to E5524 in the mined out pit has been backfilled through 3260.0 CuM generated overburden.	-

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal.	13.08 Ha. non-mineralized area at pit bottom has been backfilled and 2250 nos. of saplings have been planted over the backfilled area up to end of F.Y. 2021-22.	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 nos. of saplings will be planted over an area of 0.60 Ha. backfilled area.	750 nos. of saplings have been planted over an area of 0.60 Ha. backfilled area.	-
8g	Survival rate	Not mentioned in the approved document.	Approx 95%	-
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

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to June 2022 A.R. Submitted up to F.Y. 2021-22	M.R. Submitted up to June 2022 A.R. Submitted up to F.Y. 2021-22	NIL

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Shri M. Devanand Mining Engineer: Shri M. Devanand Geologist: Shri B. Sabarilakshmanan	Manager: Shri M. Devanand Mining Engineer: Shri M. Devanand Geologist: Shri B. Sabarilakshmanan	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 132.343 Ha. Waste/reject- 5.922 Ha. Others- 21.25 Ha.	Pit- 132.343 Ha. Waste/reject- 5.922 Ha. Others- 21.25 Ha.	NIL
9d	Scrutiny of Annual return on afforestation	Within Lease area: 750 nos. with 95% survival rate. Outside Lease area: NIL	Within Lease area: 750 nos. with approx 95% survival rate. Outside Lease area: NIL	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral-reject: NIL Grade: NIL	Mineral-reject: NIL Grade: NIL	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock ROM: NIL Graded Ore: Cement Grade Limestone: 103289.00 Metric Tonne	Closing Stock ROM: NIL Graded Ore: Cement Grade Limestone: 103289.00 Metric Tonne	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine Price: Rs. 238.82 Per Metric Tonne Cost of Production: Rs. 238.82 Per Metric Tonne	Ex-mine Price: Rs. 238.82 Per Metric Tonne Cost of Production: Rs. 238.82 Per Metric Tonne	NIL

9h	Scrutiny of Annual return on fixed assets	Rs. 3248514904.00	Rs. 3248514904.00	Common for all three leases i.e. 38APR14011, 38APR14026 and 38APR14029
9k	Scrutiny of Annual return on mining machineries	<ol style="list-style-type: none"> 1. Back Hoe 02 nos. with 2.0 CuM bucket capacity 2. Tippers 08 nos. with 12 CuM careering capacity. 3. Water Tanker 01 no. with 12000 Liters capacity. 4. Drilling Machine 01 with bit diameter 115 mm. 5. Air Compressor 0 no. with 12.6 CuM/MN capacity. 6. Explosive Van 01 no. with 9.280 Tonnes capacity. 	Cross verified from the field logbooks.	NIL

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
MCDR17 Rule 33	05-AUG-22				

Date : 10/08/2022

शैवाल कार्तिकेय
(SHAIVAL KARTIKEYA)
10/08/2022

Indian Bureau of Mines