

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

**MCDR inspection REPORT
Hyderabad regional office**

Mine file No : AP/GNR/LST-24/HYD

Mine code : 38APR07026

- (i) Name of the Inspecting : 25) SHRI IBRAHIM SARIF
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sri A.Janki Rami Reddy & Sri M.Uday Bhaskar Rao
Official with
Designation
- (iv) Date of Inspection : 08-DEC-21
- (v) Prev.inspection date : 03-FEB-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : KRISHNAPURAM (GO.469)
- (b) **Registration NO.** : IBM/613/2011
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : ANDHRA PRADESH
- District : GUNTUR
- Village : PONDUGALA
- Taluka : PIDUGURALLA
- Post office : PONDUGALA
- Pin Code : 522414
- FAX No. : 08689-28447
- E-mail : iclvpm@rediffmail.com
- Phone : 08689-28447
- (f) **Police Station** : DACHEPALLY
- (g) **First opening date** : 09-MAR-88
- (h) **Weekly day of rest** : SUN
2. **Address for** : THE INDIA CEMENTS LTD, VISHNUPURAM-WADAPALLY(PO)
correspondance MIRYALAGUDA TQ
NALGONDA DIST.
3. (a) **Lease Number** : APR0205
- (b) **Lease area** : 652.92
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 03-APR-07
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 : 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 : CH.SRINIVAS,Full Time
 Qualification : BE (MINING)
 Appointment/ : 01-JAN-07
 Termination date

Geologist

Name : K.SRINIVAS,Full Time
 Qualification : M.Sc(Tech)
 Appointment/ : 25-JUN-13
 Termination date

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| 6. Date of approval of Mining | : | Mining Scheme rule 12 MCDR1988 | 09-MAY-02 |
| Plan/Scheme of Mining | | Modif.approved Mining Scheme | 20-SEP-04 |
| | | Modif.approved Mining Scheme | 04-OCT-05 |
| | | Renewal under rule 22 MCR1960 | 02-APR-07 |
| | | Mining Scheme rule 12 MCDR1988 | 30-NOV-12 |
| | | Mining Scheme rule 12 MCDR1988 | 20-JAN-17 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|--|---|--|
| 1a | Backlog of previous year | No such proposals approved for 2020-21 | 7 core bore holes drilled for 510 meters 41 core bore holes drilled for 2988 meters | |
| 1b | Exploration over lease area for geological axis 1 or 2 | - | As per the exploration carried out so far area explored under G1 scale is 593.35 ha G2 scale is 58.75 ha | |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | Lessee | NRDCS (Natural Resources Development Co-operative Society). Expenditure on Exploratory drilling is Rs. 19 lakhs | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | No such proposal | Nil | Entire Potential mineralised area has been explored in G1 and G2 scale |
| 1e | Balance reserve as on 01/04/20 | - | As on 1.1.2022 balance Reserves 553.224 Million Tonnes: 111- 488.057 Million Tonnes & 122- 65.187 Million Tonnes as per recent approved Review of Mining plan | |

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| 1f | General remarks of inspecting officers on geology, exploration etc | The Limestone deposit within the Mining lease hold area forms a part of Proterozoic Palnadu Basin equivalents of Narji Limestone formation of Kurnool Group. These Carbonate rocks or Narji Limestone are sub divided into several distinct Lithological units. Lithological succession of the area is as follows: Argillaceous Limestone Grey Limestone (Upper) Variegated Siliceous Limestone Grey Limestone (Lower) Green Limestone Purple Shale (Base) |
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Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--|--|
| 2a | Location of development w.r.t.lease area | Pit - I SE side I, II, III Bench IV | Pit - I SE side I, II, III Bench IV - Delopment at SW | There is no development except formation of benches. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Except mineral benches, no other benches have been proposed. | Only mineral benches of 6.5 to 8m have been formed. | |
| 2c | Stripping ratio or ore to OB ratio | F.Y 2020-21: No such proposal | Nil | |

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| 2d | Quantity of topsoil generation in m3 | F.Y 2020-21: No such proposal | 6148 cum of Top Soil generated during the year 2020-21 |
| 2e | Quantity of overburden generation in m3 | F.Y 2020-21: No such proposal | Nil |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | - | Development is in the form of formation of Limestone benches. Four benches in Limestone have been formed. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|--|
| 3a | Number of pit proposed for production | One | One | 6,48,351 tonnes produced during 2020-21. |
| 3b | Quantity of mineral production proposed | 14,00,000 Tonnes in 2020-21 | 5,48,351 Tonnes in 2020-21 | |
| 3c | Recovery of sailable/usable mineral from ROM production | 95% Recovery | 100% Recovery. | |
| 3d | Quantity of mineral reject generation | No such proposals approved for 2020-21 | Nil | |
| 3e | Grade of mineral rejects generation and threshold value declared. | No proposal of generation of mineral rejection for the year 2020-21. The Threshold value for Limestone is CaO=34% (Min) &MgO=5%(Max). | There is no generation of mineral rejects during the year 2020-21. The Limestone occuring in the ML area is above threshold limits. | |
| 3f | Quantity of sub grade mineral generation. | No such proposals for 2020-21 | No sub grade generated during the year | |

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| 3g | Grade of sub grade mineral generation | - | Not Applicable |
| 3h | Manual / Mechanised method adopted for segregating from ROM | No such proposal | Nil |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No such proposal of beneficiation Study for the year 2020-21 | No such study done. |
| 3j | Provision of drilling and blasting in mineral benches | Deep hole drilling with High explosives is th practive with following attributes. Mineral/Ore: Dia.: 155 mm Spacing: 4.0 m to 5.0 m Burden: 3.0 m to 3.5 m Depth: 6.0m - 8.0m Explosive: ANFO | Deep hole drilling and Blasting is being carried out as per the proposals |

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| 3k | Provision of mining machineries in mineral benches | 1.Shovel (Hyundai 320) : 02 No - 2.1m3. 2.Shovel (Hyundai 510) : 01 No -2.9m3 3.Back Hoe / Rock Breaker : 1 No. 2.79 cum 4.Bharath Benz Tippers : 14 Nos - 13 m3 5. Air Compressor- 1No- 12.6 cum 6. water Tanker- 1 No. 12000 Liter capacity | 1.Shovel (Hyundai 320) : 02 No - 2.1m3. 2.Shovel (Hyundai 510) : 01 No -2.9m3 3.Back Hoe / Rock Breaker : 1 No. 2.79 cum 4.Bharath Benz Tippers : 14 Nos - 13 m3 5. Air Compressor- 1No- 12.6 cum 6. water Tanker- 1 No. 12000 Liter capacity |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Fullu mechanised method of opencast mining is to be adopted by using 2.2 cum capacity excavators No proposals on OB as there is no OB. 7 m bench height in Limestone is proposed and Boom length of 2.2 cum capacity excavator is suitable to maintain said bench height | Yes 2.2 cum shovel suitable to maintain bench height of 7 meters |
| 3m | Total area covered under excavation/pits | 50.41 ha upto 31.03.2022 | 45.84 ha |
| 3n | Ore to OB ratio for the pit/mine during the year. | No such proposal approved for 2020-21 | Nil |

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| 3o | Total area put in use under different heads at the end of year | Mining pit - 50.41 Ha. Mineral Storage : Nil Infrastructure - 2.22 Ha. Total : 51.63 Ha | Mining pit - 43.44 Ha. Mineral Storage : 0.5 Ha. Infrastructure - 1.76 Ha. Total : 45.7 Ha |
| 3p | Production of ROM mineral during the last five year period as applicable | 2016-17 : 1.40 million tonnes 2017-18 : 1.40 million tonnes 2018-19 : 1.40 million tonnes 2019-20 : 1.40 million tonnes 2020-21 : 1.40 million tonnes | 2016-17 : 1.06 million tonnes 2017-18 : 0.81 million tonnes 2018-19 : 1.33 million tonnes 2019-20 - 1.04 million tonnes 2020-21 - 0.64 million tonne |
| 3q | General remarks of inspecting officers on method of mining etc. | - | The mining operations are being carried out by opencast fully mechanised method of mining by combination of shovel, tippers & deep hole drilling & blasting in Northern block. |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|---|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | No such proposal for dumping of top soil, OB and mineral rejects is made since there is no such generation of material during the year 2020-21 | No OB generated, top soil generated is used for plantation purpose. | |
| 4b | Location of topsoil, OB and mineral reject dumps | No such proposal for the F.Y 2020-21 | Nil | |

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| 4c | Number of dumps within lease area and outside of lease area | No such proposal for the F.Y 2020-21 | Nil |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | No such proposal | Not applicable |
| 4e | Number of active and alive dumps. | - | Not applicable |
| 4f | Number of dead dumps. | - | Not applicable |
| 4g | Number of dumps established. | No such proposal | not applicable |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | -do- | Not applicable |
| 4i | Length of Retaining wall or garland drain all along dumps | - | Not applicable |
| 4j | Number of settling ponds | -do- | NA |
| 4k | Specific comments of inspecting officer on waste dump management | - | There is no waste dump and hence the management of waste dump does not arise. |

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 such proposal for the F.Y 2020-21 | Nil | The mineral is yet to exhaust and backfilling at this stage does not arise. |
| 5b | Area under backfilling of mined out area | - | Not applicable | |

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| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | No proposal | not applicable | |
| 5d | Total area fully reclaimed and rehabilitated | - | NA | No area is matured for reclamation |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | | | The mineral is yet to be extracted upto UPL, hence backfilling does not arise. |

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). | To be submitted before due date. | Submitted in time. | |
| 6b | Area available for rehabilitation (ha) . | No such proposal is approved for 2020-21 | Not applicable | |
| 6c | afforestation done (ha). | 1.2 Ha | 1.2 Ha | |
| 6d | No. of saplings planted during the year | 1000 sapplings to be planted | 1000 sapplings planted during the year 2020-21 | |
| 6e | Cumulative no .of plants | - | 27704 no. of Sapplings planted till 2020-21 | |
| 6f | Any other method of rehabilitation | No proposal | Nil | |
| 6g | Cost incurred on watch and care during the year | No proposal | About Rs. 10,000.00 | |

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| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | No proposal for the year 2020-21 | Not applicable | |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | - | Not applicable | |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area | - | NA | |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | - | Not applicable | |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | - | Not applicable | |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | 1000 in 1.20 Ha | 1000 in 1.20 Ha Planted alongwith safety barrier zone of HT line | 1000 nos planted in 1.2 Ha. (upto 31.12.2021) during 2021-22. 27704 nos. saplings has been planted in 24.34 Ha Mining Lease area |

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| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | No proposal | not applicable |
| 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) | Quartely monitoring of Environmental parameters is proposed. | As proposed, monitoring of Environmental prarmeters is done on the quarerly basis both in core and buffer zone. |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | No progressive closure operations have been proposed during the Plan period 2017-18 to 2021-22. | Afforesation in the safety barrier zone is being carried out. Periodical monitoring of Environmental parameters is being carried out both in Core and buffer zone. The parameters were found with in permissible limits. |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|--|---|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 14,00,000 tonnes produced to be dispatched | 6,19,900 tonnes dispatched during the year. No grade wise sorting has been done. | Due to low cement demenad in the market |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | No such approved proposal was made for 2020-21. | Not applicable | |
| 7c | Different grade of mineral sorted out at mines. | No proposal | Nil | |

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| 7d | Any beneficiation process at mines . | No proposal except Crushing for size reduction of ROM ore | Only Crushing of ROM ore is being carried out. | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | | | The entire ROM is consumed in the Cement Plant. |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|--|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No such proposal approved for 2020-21. | About 6148 cum of Top soil is generated and is utilised for plantation | |
| 8b | Concurrent use or storage of topsoil | No proposal | Top soil generated is used for plantation. | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | No proposal | 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) | No proposal for the year 2020-21 | Not applicable | |

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| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | No proposal | 27704 nos. saplings planted in 24.34 Ha. within ML & 6680 nos. saplings in 8.59 Ha. has been planted outside the ML | |
| 8g | Survival rate | Not mentioned | About 93% | |
| 8h | Water sprinkling on roads to control airborne dust | Through water tanker & permanent water sprinklers | Water sprinkling is being done to arrest airborne dust. | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | | | The afforestation is done to improve the aesthetic beauty in and around the ML area. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|---------|
| 9a | Status of submission of Monthly and Annual returns | M.R. up to October 2021 and A.R. up to F.Y. 2020-21 to be submitted | M.R. up to October 2021 and A.R. up to F.Y. 2020-21 submitted | |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Manager & Mining Engineer: Shri C H Srinivas Geologist: Shri M Dheivendiran | Manager & Mining Engineer: Shri C H Srinivas Geologist: Shri M Dheivendiran are appointed by Lessee | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Information to be furnished. Mining pit 41.986 ha Occupied by Plant and Other - 1.22 ha | Information to be furnished. Mining pit 41.986 ha Occupied by Plant and Other - 1.22 ha | |
| 9d | Scrutiny of Annual return on afforestation | 1000 nos. | 1000 nos. saplings with 93% survival rate. | |

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| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Nil | Nil | |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | ROM - stock : Nil, Graded ore : 49150 Tonnes | As reported by lessee graded ore stock furnished is 49150 Tonne | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | The Cost of Production & Ex-mine price furnished to be Rs201.73. | The Cost of Production & Ex-mine price furnished to be Rs201.73. | |
| 9h | Scrutiny of Annual return on fixed assets | Value of Fixed Assets (in Rs.) 3258375164/- | As submitted by Lessee | This figure is common for three mines 1) Laxmipuram Limestone Mine 2) Vishnupuram Limestone mine 3) Krishnapuram Lst mine. |
| 9k | Scrutiny of Annual return on mining machineries | 1.Shovel (Hyundai 320) : 02 No - 2.1m3. 2.Shovel (Hyundai 510) : 01 No -2.9m3 3.Back Hoe / Rock Breaker : 1 No. 2.79 cum 4.Bharath Benz Tippers : 14 Nos - 13 m3 5. Air Compressor- 1No- 12.6 cum 6. water Tanker- 1 No. 12000 Liter capacity | Above machineries are deployed in the lease. | |

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 :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines