

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

**Mining Plan Modification REPORT**

**Hyderabad regional office**

**Mine file No :** AP/NLG/LST-7/HYD

**Mine code :** 38APR14008

- (i) Name of the Inspecting : **M029** ) **MADHU SUDHAN YADAV M**  
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri N.Hari Prasad Rao, Mines Manager & Sri. P.R. Mishr  
Official with  
Designation
- (iv) Date of Inspection : 17-DEC-21
- (v) Prev.inspection date :

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **SITAPURAM-I**
- (b) **Registration NO.** : **IBM/996/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **TELANGANA**
- District : **NALGONDA**
- Village : **DONDAPADU**
- Taluka : **KODAD**
- Post office : **DONDAPADU**
- Pin Code : **508246**
- FAX No. : **08683-235229**
- E-mail : **N.HARPRASADRAO@ZCLTD.COM**
- Phone : **08683-246721**
- (f) **Police Station** : **HUZURNAGAR**
- (g) **First opening date** : **09-NOV-93**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **SITAPURAM, DONDAPADU VILLAGE**  
**correspondance** : **KODAD TQ, DONDAPADU POST-508246**  
: **NALGONDA DISTRICT**
3. (a) **Lease Number** : **APR0478**
- (b) **Lease area** : **558.71**
- (c) **Period of lease** : **50**
- (d) **Date of Expiry** : **11-NOV-42**
4. **Mineral worked** : **LIMESTONE** **Main**

## 5. Name and Address of the

Lessee : ZUARI CEMENT  
 HALL 10TH MAIN ROAD  
 JEEVANBHEEMANAGAR BANGLORE  
 URBAN KARNATAKA  
 Phone:0805207610  
 FAX :0805207622

Owner : Suhil Kumar Tiwari  
 Zuari Cements Adventz  
 center Cubbon Road BANGLORE  
 URBAN KARNATAKA  
 Phone:  
 FAX :

Agent : G Gopala Krishna Murthy  
 Zuari cements sitapuram  
 works, Dondapadu village  
 NALGONDA TELANGANA  
 Phone:  
 FAX :

## Mining Engineer

Name : Madhu babu, Full Time  
 Qualification :  
 Appointment/ : 19-JUN-18  
 Termination date

## Geologist

Name : K Jaggannadha Rao, Full Time  
 Qualification :  
 Appointment/ : 19-SEP-18  
 Termination date

## Manager

Name : N Hari Prasad  
 Qualification :  
 Appointment/ : 17-JUL-14  
 Termination date

|                               |   |                                |           |
|-------------------------------|---|--------------------------------|-----------|
| 6. Date of approval of Mining | : | Mining Scheme rule 12 MCDR1988 | 14-NOV-96 |
| Plan/Scheme of Mining         | : | Mining Scheme rule 12 MCDR1988 | 19-OCT-00 |
|                               | : | Renewal under rule 22 MCR1960  | 12-NOV-03 |
|                               | : | Mining Scheme rule 12 MCDR1988 | 07-APR-05 |
|                               | : | Modif.of approved Mining Plan  | 26-OCT-06 |
|                               | : | Mining Scheme rule 12 MCDR1988 | 06-MAY-09 |
|                               | : | MP review under 17(1) MCR 2016 | 09-DEC-16 |
|                               | : | MP review under 17(1) MCR 2016 | 14-DEC-18 |

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

## Exploration :

| Sl.No. | Item  | Proposals  | Actual work  | Remarks   |
|--------|---|--|--|---|
| 1a     | Backlog of previous year  | No proposal                                      | Nil  |   |
| 1b     | Exploration over lease area for geological axis 1 or 2              | 2020-21 - 10 Boreholes<br>2021-22 - 09 Boreholes | 2020-21 - 10 Boreholes<br>2021-22 - 09 Boreholes               | 07 Nos. boreholes proposed for the year 2022-23 are drilled in the year 2021-22 itself.   |
| 1c     | Exploration Agencies and Expenditure in lakh rupees during the year | ---  | Rs.2765000/- for drilling and analysis of 28 nos. of boreholes |   |
| 1d     | Balance area to be explored to bring Geological axis in 1 or 2      | ---  | G1 - 538.90 Ha<br>G3- 231.33 Ha                                | Lessee has proposed 08 Nos. boreholes in the year 2021-22 to bring the entire lease area into G1 level of exploration.  |
| 1e     | Balance reserve as on 01/04/20                                      | ---  | Proved reserves as on 31/10/2021 - 269.781 million Tonnes      | Reserves and Resources are re-estimated considering the new boreholes drilled in the lease area.  |
| 1f     | General remarks of inspecting officers on geology, exploration etc  |  |  | Lessee has competed the exploration proposed till 2023-24as per the earlier approved Review of Mining Plan. In the Modified Mining Plan submitted lessee has proposed to drill 08 Nos. boreholes in the year 2021-22 to bring the entire area into G1 level of exploration. |

## Development :

| Sl.No. | Item  | Propasals  | Actual work                                 | Remarks                                |
|--------|---|--|---|--|
| 2a     | Location of development w.r.t.lease area  | E 1864972 to E 1865237<br>N 391293 to N 391015                           | Work done within the proposed co-ordinates. |  |
| 2b     | Separate benches in topsoil, overburden and minerals (Rule 15)                          | No topsoil and OB benches proposed.<br>Mineral benches proposed to work. | Mineral benches developed.                  |  |
| 2c     | Stripping ratio or ore to OB ratio  | No proposal  | Nil   |  |
| 2d     | Quantity of topsoil generation in m3  | No proposal  | Nil   |  |
| 2e     | Quantity of overburden generation in m3   | No proposal  | Nil   |  |
| 2f     | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc |  |   | No OB is generated in the mining area. |

## Exploitation:

| Sl.No. | Item  | Propasals  | Actual work   | Remarks |
|--------|---|--|---|---------|
| 3a     | Number of pit proposed for production                   | Two  | Two   |         |
| 3b     | Quantity of ROM mineral production proposed             | 2020-21 - 1599716 Tonnes<br>2021-22 - 1596681 Tonnes | 2020-21 - 994649 Tonnes<br>2021-22 - 639620 Tonnes<br>(till Nov'21) |         |
| 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.                               | Not applicable   | Nil  |
| 3f | Quantity of sub grade mineral generation.   | No proposal  | Nil  |
| 3g | Grade of sub grade mineral generation   | Not applicable   | Nil  |
| 3h | Manual / Mechanised method adopted for segregating from ROM                                     | No proposal  | Nil  |
| 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   | Drilling and blasting proposed in mineral benches  | Wagon drill being used for drilling with a blast hole dia of 150 mm depth of 9 m, spacing of 6 meters and burden of 4 meters. Blasting with ANFO & slurry explosives with NONELS as initiating system. |
| 3k | Provision of mining machineries in mineral benches  | It was proposed to use wagon drills, exvators & dumpers for drilling, loading & transporting of ore to crushing plant. | Wagon drills, dumpers & excavators are being used for drilling, loading & transportation of ore to crushing plant  |

|    |  |   |   |
|----|--|---|---|
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | It was proposed to maintain the bench height of 9 meters  | During inspection it was noticed that the bench height is being maintained not more than 9 m and digging height of the excavators are compatible with bench height.                                     |
| 3m | Total area covered under excavation/pits   | 83.66 Ha  | 78.14 Ha  |
| 3n | Ore to OB ratio for the pit/mine during the year.  | No proposal   | Nil   |
| 3o | Total area put in use under different heads at the end of year                                       | 199.13 Ha   | 181.02 Ha   |
| 3p | Production of ROM mineral during the last five year period as applicable                             | 2016-17 - 0.96 Million tonnes<br>2017-18 - 1.54 Million tonnes<br>2018-19 - 1.55 Million tonnes<br>2019-20 - 1.59 Million tonnes<br>2020-21- 1.59 Million tonnes<br>2021-22 - 1.59 million tonnes | 2016-17 - 0.95 Million tonnes<br>2017-18 - 1.0 Million tones<br>2018-19 - 0.64 Million tonnes<br>2019-20 - 1.07 Million tonnes<br>2020-21 - 0.9 million tonnes<br>2021-22 - 639620 Tonnes (Till Nov'21) |
| 3q | General remarks of inspecting officers on method of mining etc.                                      |   | Mining is carried out in common lease boundary with Sitapuram Limestone Mine-2 by obtaining permission from DGMS.   |

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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)   | No proposal    | Nil | 1. No OB and mineral rejects found in the lease area.<br>2. Topsoil found as a thin layer, which is scrapped/dozed and utilised for plantation purpose. |
| 4b | Location of topsoil, OB and mineral reject dumps                   | Not applicable | Nil |   |
| 4c | Number of dumps within lease area and outside of lease area        | No proposal    | Nil |   |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16)              | No proposal    | Nil |   |
| 4e | Number of active and alive dumps.                                  | Nil            | Nil |   |
| 4f | Number of dead dumps.  | Nil            | Nil |   |
| 4g | Number of dumps established.                                       | Nil            | Nil |   |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Nil            | Nil |   |
| 4i | Length of Retaining wall or garland drain all along dumps          | Nil            | Nil |   |
| 4j | Number of settling ponds   | Nil            | Nil |   |
| 4k | Specific comments of inspecting officer on waste dump management   |                |     | No topsoil, overburden and mineral rejects are generated in the mining area.  |

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Solid Waste Management - Backfilling:

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| Sl.No. | Item  | Propasals   | 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 | Nil         |  |
| 5c     | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)     | No proposal | Nil         |  |
| 5d     | Total area fully reclaimed and rehabilitated  | No proposal | Nil         |  |
| 5e     | General remarks of inspecting officers on backfilling and reclamation etc.                    |             |             | No area of the mine is excavated upto its ultimate pit limit to start backfilling. |

#### 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 in time | Submitted in time         |         |
| 6b     | Area available for rehabilitation (ha) .                                     | Nil                     | Nil                       |         |
| 6c     | afforestation done (ha).   | 3.0 Ha                  | 3.6 Ha                    |         |
| 6d     | No. of saplings planted during the year                                      | 1500 Nos.               | 1800 Nos.                 |         |
| 6e     | Cumulative no .of plants   | ---                     | 57960 Nos. till (Nov'21). |         |



|    |  |             |     |
|----|--|-------------|-----|
| 6f | Any other method of rehabilitation   | No proposal | Nil |
| 6g | Cost incurred on watch and care during the year  | No proposal | Nil |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D | No proposal | Nil |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings          | No proposal | Nil |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area         | No proposal | Nil |
| 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.                  | No proposal | Nil |
| 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)                                | Quarterly environmental monitoring of core and buffer zone. | Quarterly environmental monitoring carried out during 2020-21 and all the parameters are within the permissible limit. |   |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. |   |  | No area of pit has reached its ultimate pit limit to start Reclamation and Rehabilitation and backfilling activities. |

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#### Mineral Conservation:

| Sl.No. | Item  | Propasals  | Actual work                                       | Remarks |
|--------|---|--|---|---------|
| 7a     | ROM Mineral dispatch or grade-wise sorting within lease area    | Entire ROM to be utilized directly for captive purpose, hence no grade wise sorting is proposed within the ML. | Entire ROM utilized directly for captive purpose. |         |
| 7b     | Method of grade-wise mineral sorting i.e. manual or mechanical. | No proposal  | Nil   |         |
| 7c     | Different grade of mineral sorted out at mines.                 | Not applicable   | Nil   |         |

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|----|--|-------------|-----|---|
| 7d | Any beneficiation process at mines .   | No proposal | Nil |   |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues |             |     | No sub grade has been generated. Beneficiation is not required as the entire ROM mineral is utilised for captive plant. |

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**Environment:**

| Sl.No. | Item  | Propasals   | Actual work | Remarks |
|--------|---|-------------|-------------|---------|
| 8a     | Separate removal and utilization of topsoil (Rule 32)   | No proposal | Nil         |         |
| 8b     | Concurrent use or storage of topsoil  | No proposal | Nil         |         |
| 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 | Nil         |         |

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|    |  |   |  |  |
|----|--|---|--|--|
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | It was proposed to plant about 1500 saplings during the year 2020-21. | 1800 Nos. saplings planted in the year 2020-21 and cumulative of 57960 Nos. of saplings planted till Nov'21. |  |
| 8g | Survival rate  | 80%   | 85%  |  |
| 8h | Water sprinkling on roads to control airborne dust                                       | Water Tankers to be provided for dust suppression.                    | Water tanker & sprinklers provided for dust suppression.   |  |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area       |   |  | Greenbelt development is well developed within the lease area. |

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Compliance of Rule 45:

| Sl.No. | Item  | Propasals  | Actual work  | Remarks |
|--------|---|--|--|---------|
| 9a     | Status of submission of Monthly and Annual returns  | To be submitted  | Submitted in time  |         |
| 9b     | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | Manager - Sri.Hariprasad Mining Engineer - Sri. Madhu Babu Geologist - Sri.V.Venkatesh                   | Manager - Sri.Hariprasad Mining Engineer - Sri. Madhu Babu Geologist - Sri. V. Venkatesh |         |
| 9c     | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Area under Mining - 78.14 ha<br>Area under Infrastructure - 52.62 ha<br>Area under green belt - 50.26 ha | Same as submitted.   |         |

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|----|---|---|---|
| 9d | Scrutiny of Annual return on afforestation                                  | 1800 Nos.   | Broadly as per submission and same quantity is verified in afforestation register maintained.   |
| 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                    | As per the Annual return 2020-21 lessee reported 0.34 million tonnes of limestone as opening stock.   | Same is verified in the Production and despatch register maintained.  |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Cost of production is reported as Rs.275.33/-   | Total depreciation and over head cost are not matching with the cost per tonne calculation. Advised to correct the annual returns since it has been referred back by the MMS division |
| 9h | Scrutiny of Annual return on fixed assets                                   | The value of fixed assets reported by the lessee in annual returns is Rs.39/-   | Fixed assest couldn't be verified.  |
| 9k | Scrutiny of Annual return on mining machineries                             | 1. Hydraulic shovel -1<br>2. Back hoe - (5.8 Cum & 1.5 Cum) -2<br>3. Dumpers - 6<br>4. Wagon drill - 1<br>5. Explosive van - 1<br>6. Water tanker -1<br>7. Front end loader - 1 | Machineries found in the mining area.   |

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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 :**

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines