

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/GNR/LST-61/HYD

Mine code : 38APR07052

- (i) Name of the Inspecting : **M001**) **S K MUDULI**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Sri J Ramakrishna-Mines Manager
Official with
Designation
- (iv) Date of Inspection : 30/01/2021
- (v) Prev.inspection date : 07/02/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TANGEDU(346.32 HA)**
- (b) **Registration NO.** : **IBM/5580/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : GUNTUR
- Village : TANGEDA
- Taluka : DACHEPALLI
- Post office : TANGEDA
- Pin Code : 522414
- FAX No. : 08649-273819
- E-mail : bhavyacementworks@gmail.com
- Phone : 08649-273900
- (f) Police Station : DACHEPALLY
- (g) First opening date : 01/10/2010
- (h) Weekly day of rest : SUN
2. Address for : Plot No.1, Bhavya Spoorti Bhavan, Jubilee Hills,
correspondance Film nagar
Hyderabad-500 033
3. (a) Lease Number : APR3190
- (b) Lease area : 346.32
- (c) Period of lease : 30
- (d) Date of Expiry : 28/04/2040
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : M/S. BHAVYA CEMENTS LTD
 GUNTUR ANDHRA PRADESH
 Phone:
 FAX :

Owner : P.SIVA KUMAR
 PLOT.NO.A, 2ND
 FLOOR, BHAVYA'S SPOORTHY
 BHAVAN, FILM NAGAR, JUBILEE
 HILLS HYDERABAD TELANGANA
 Phone: 040-23558384
 FAX : 040-23558393

Agent : Sri.A.Amrutha Raju
 Tangeda (V), Dachehalli(M)
 Guntur dt. GUNTUR ANDHRA
 PRADESH
 Phone:
 FAX :

Mining Engineer

Name : K HARSHATH, Full Time
 Qualification : B TECH MINING
 Appointment/ : 02/11/2016
 Termination date

Geologist

Name : B MAHESWARA, Full Time
 Qualification :
 Appointment/ : 22/09/2014
 Termination date

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|-------------------------------|---|--------------------------------|------------|
| 6. Date of approval of Mining | : | Fresh under rule 22 MCR1960 | 23/02/2010 |
| Plan/Scheme of Mining | : | MP modif under 17(3) MCR 2016 | 31/08/2016 |
| | : | MP review under 17(1) MCR 2016 | 13/03/2020 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1a | Backlog of previous year | 2019-20 -14 nos core bore hole | 2019-20---16 Core boreholes for 640m | 2020-21 - No exploration proposal. |
| 1b | Exploration over lease area for geological axis 1 or 2 | 43.69 Ha. | 43.69 Ha. | |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | M/s NRDCS Hyderabad 500029 | M/s NRDCS, Hyderabad Rs. 9,60,000/- | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Entire lease area has been explored in G1 scale | | |
| 1e | Balance reserve as on 01/04/20 | | 206.721 Million Tonnes | As per approved RMP dated 13.03.2020-Date of reserve/resources estimation is 30.09.2019 and the approved reserve is 207.275 million tonnes. |
| 1f | General remarks of inspecting officers on geology, exploration etc | | Entire area has been explored in G1 Scale. The deposit is of simple stratified tabular in nature without any structural disturbances. Mineralisation is still continuing after 40m depth. | |

Development :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------|
| 2a | Location of development w.r.t.lease area | It is proposed to carry out development in the North and Eastern part of the pits. | Duirng the inspections it was observed that development is being carried out as per approved proposals. | |

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| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | No separate benches are proposed for topsoil. Only benches in Mineral are proposed. | No separate bench of Top soil and Ore bench is maintained separately |
| 2c | Stripping ratio or ore to OB ratio | | Nil |
| 2d | Quantity of topsoil generation in m3 | Nil | Nil |
| 2e | Quantity of overburden generation in m3 | 54,664 m3 interburden (intercalated waste) in 2019-20 | Nil |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | | Mining operations are being carried out systematically as per the proposals by using HEMM by maintaining bench height of 8 meters and width of about 20 meters. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 3a | Number of pit proposed for production | It was proposed to work from one pit only. | It was observed that only one pit is being operated. | |
| 3b | Quantity of ROM mineral production proposed | 37,67,920 Tonnes : 2019-20 | 11,14,690 tonnes in 2019-20. | Cement plant could not be operated to its full capacity due to slump in cement market and financial difficulties etc. |
| 3c | Recovery of sailable/usable mineral from ROM production | 97.5% | 100%. Total ROM generated is being utilised in captive cement plant of the lessee company. | |
| 3d | Quantity of mineral reject generation | No MR generation assessed and no proposal in 2019-20. | NIL | |

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| 3e | Grade of mineral rejects generation and threshold value declared. | Not applicable. | NA |
| 3f | Quantity of sub grade mineral generation. | No SG generation assessed and no proposal in 2019-20. | NIL |
| 3g | Grade of sub grade mineral generation | Not applicable. | Not applicable. |
| 3h | Manual / Mechanised method adopted for segregating from ROM | No segregation proposed in 2019-20. Entire ROM proposed to be used | Entire ROM used. |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No such proposal in 2019-20. | NIL |
| 3j | Provision of drilling and blasting in mineral benches | Wagon drill- 115 mm dia. Burden-3m, spacing-5m, depth of hole- 8.8m, Booster- 83mm, Slurry Explosive: ANFO -20:80 | Deep Hole drilling is being carried out by using 115 MM dia Drill (2 nos) and Blasting is being conducted by maintaining Burden of 3 meters and Spacing of 5 Meters and depth of drill hole is 8.8 meters including subgrade drilling. Booster- 83mm, Slurry Explosive: ANFO-20:80. |
| 3k | Provision of mining machineries in mineral benches | Provision is made for operating mining machinery in the mineral benches | HEMM being utilised are Excavator of 2.5 m ³ capacity -3 Nos, Dumper of 30T capacity -1 No., Tipper -8nos. each of 19m ³ , Dozer- (155 HP) - 1 No, Pump- 22 HP-1 No. |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | As per Modified Mining Plan Height of bench - 08 mtrs. | Yes 8.0 meters bench height is suitable by deploying 2.5 cum cap excavator |

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| 3m | Total area covered under excavation/pits | 29.53 Ha. | 24.999 Ha. | |
| 3n | Ore to OB ratio for the pit/mine during the year. | | Nil | |
| 3o | Total area put in use under different heads at the end of year | 57.9 ha | 51.169 ha | |
| 3p | Production of ROM mineral during the last five year period as applicable | 2015-16-4.0 Mill.tonnes 2016-17=1.75Mill.tonnes 2017-18 = 1.758 Mill.tonnes 2018-19 = 1.753 Mill.tonnes 2019-20=3.767Mill.tonnes | 2015-16 = 0.97 Mill.tonnes 2016-17=1.05 Mill.tonnes 2017-18 = 0.943 Mill.tonnes 2018-19 = 1.202 Mill.tonnes 2019-1.11469 Mill.tonnes | Mining operations are being carried out by mechanised method by maintaining bench ht of 8 m , using HEMM & deep hole drilling and blasting. |
| 3q | General remarks of inspecting officers on method of mining etc. | | Fully mechanised Opencast Mining has been adopted by using HEMM like 2.5 cum excavator, 20 T dumpers with 115 mm dia drilling machines, Dozer etc. | |

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 approved for OB, MR. Proposal for separate stacking of IW (Intercalated Waste). | NIL | Top soil is being spreaded along 7.5m safety zone barrier for plantation. |
| 4b | Location of topsoil, OB and mineral reject dumps | Top soil & IW to be spreaded in 7.5m safety barrier zone. | Only top soil spreaded in 7.5m safety zone for plantation. | |
| 4c | Number of dumps within lease area and outside of lease area | Nil | Only one old dead dump located within mining lease area | None |

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| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Beyond UPL | Beyond UPL. |
| 4e | Number of active and alive dumps. | Nil | One Inactive old dump |
| 4f | Number of dead dumps. | | one |
| 4g | Number of dumps established. | | One. |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | No such proposal approved for 2019-20. | Retaining wall of 500m length provided earlier. |
| 4i | Length of Retaining wall or garland drain all along dumps | No proposal in 2019-20. | Nil |
| 4j | Number of settling ponds | None | None |
| 4k | Specific comments of inspecting officer on waste dump management | No generation of waste, hence no waste dump management proposal are given | There is no waste dump. However there is one old sub grade dump is there within the lease area |

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 in 2019-20. | Mineral is still to be mined upto UPL & is still to be exhausted. | |
| 5b | Area under backfilling of mined out area | No such proposal in 2019-20. | NIL as no part of the lease area is matured to start backfilling. | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | To be spreaded in 7.5m safety barrier zone for plantation purpose. | Top soil spreaded in 7.5m safety zone for plantation purpose. | |
| 5d | Total area fully reclaimed and rehabilitated | No such proposal in 2019-20. | NIL | |

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| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | Mineral is yet to be extracted upto UPL.No portion of the lease area is matured for back filling and reclamation. |
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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). | Yes | The annual report under rule 26(2) submitted by lessee on 01.06.2020. | |
| 6b | Area available for rehabilitation (ha) . | No such proposal for worked out benches in 2019-20. | Nil | |
| 6c | afforestation done (ha). | No such proposal for worked out benches in 2019-20. | Nil | |
| 6d | No. of saplings planted during the year | No such proposal for worked out benches in 2019-20. | Nil | |
| 6e | Cumulative no .of plants | No such proposal for worked out benches in 2019-20. | Nil | |
| 6f | Any other method of rehabilitation | No such proposal for worked out benches in 2019-20. | Nil | |
| 6g | Cost incurred on watch and care during the year | _____ | Nil | |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | No such proposal in 2019-20. | Nil | Mineral is yet to be extracted upto UPL. |

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| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | No such proposal in 2019-20. | Nil | |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area | No such proposal in 2019-20. | Nil | |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No such proposal in 2019-20. | Nil | |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v) any other specific means. | No such proposal in 2019-20. | Nil | |
| 6m | Compliance of rehabilitation of waste land within lease (i) afforestation | 1280 in 3.1 Ha. | 1310 in 3.15 ha. (7.5m safety barrier zone of ML). It was reported that in 2019-20 the cost incurred for watch and ward is Rs 372300.00. | 445 in 0.22 ha. during 2020-21 (Up to 30/1/2021) against 400mm in 0.18 ha. (Buffer zone of magazine) |
| 6n | Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha) | No such proposal in 2019-20. | Nil | |
| 6o | Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation | No such proposal in 2019-20. | Nil | |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Quarterly environmental monitoring is to be done regularly. | Quarterly environmental monitoring is being Done regularly. Ambient Air Quality-5 core zone locations, 6 buffer zone locations, Water Quality-1 core (sump water), buffer-2m, Noise Level-5 core, 6 buffer | |

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| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | It was proposed to carry out environmental monitoring in core and buffer zone. | Quarterly monitoring of environmental parameters in core and buffer zone being carried out regularly. |
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Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|----------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | No such proposal in 2019-20. | No grade wise sorting, Entire ROM is being consumed in the cement plant. | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | Not Applicable(NA) | N.A. | |
| 7c | Different grade of mineral sorted out at mines. | N.A. | N.A. | |
| 7d | Any beneficiation process at mines | N.A. | N.A. | |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | N.A. | Entire ROM is being consumed in captive cement plant | |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|-------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | Separate removal and utilisation of top soil proposed. | Done accordingly.830 tonnes of top soil generated in 2019-20 and utilised for GBD. | 6820 tonnes of top soil generated upto 31.12.2020 (During 2020-21) |
| 8b | Concurrent use or storage of topsoil | To be utilised for planation | Temporarily stacked and utilised for plantation all along the 7.5 m safety barrier zone of the ML. | |

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| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | N.A. | N.A. |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No proposal in 2019-20 | Nil |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | N.A. | N.A. |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | No of sapplings planted during the year - 1280 in 3.10 Ha to improve the aesthetic beauty | 1310 sapplings planted in 3.15 Ha during the year 2019-20 to improve the aesthetic beauty. |
| 8g | Survival rate | 80% | 80% |
| 8h | Water sprinkling on roads to control airborne dust | Water sprinklers arranged along the haul roads, dry fog system in crusher dump hopper and blasting muck pile wetting. | Water sprinklers arranged along the haul roads, dry fog system in crusher hopper and blasting muck pile wetting with water tanker. |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | None | Plantation is being done to increase aesthetic beauty in the lease area. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
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| 9a | Status of submission of Monthly and Annual returns | Monthly and Annual returns are to be submitted in time. | All the Monthly and Annual returns are being submitted in time |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | K Harshath, B.E. (Mining) S.Srinivasa Reddy, Geologist J Rama Krishna, Mines manager | Above are employed |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Pit-24.999 ha Dump - 1.14 Roads, buildings etc., 11.33 & Green belt development 13.7 ha | Pit-24.999 ha Dump - 1.40 Roads, buildings etc., 11.32 & Green belt development 13.7 ha |
| 9d | Scrutiny of Annual return on afforestation | No of plants 1310 | No of plants 1310 |
| 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 | 56728 tonnes Graded Ore | 56728 tonnes graded ore |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Ex-mine price & Cost of Production is Rs. 180/- | Ex-mine price & Cost of Production is Rs. 180/- |
| 9h | Scrutiny of Annual return on fixed assets | Rs. 150,40,91,034/- | As reported by lessee |

9k Scrutiny of Annual return on mining machineries SHOVEL (2.5 CUM)- 2 No., DUMPER (35 TONNE)-1, TRUCK (30 TONNE)-5 no., TRUCK (20 TONNE)-5 Nos, AIR COMPRESSOR (450CUM/MN)- 1 No., BLAST HOST DRILL (115 MM)-1 No., DOZER (324 HP) - 1 No. ROAD ROLLER- 1No, WATER TANKER (12000 LITRE)- 1 No., EXPLOSIVE VAN (3.24 TONNE)- 1 No.

HEMM as reported in AR are found deployed

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 :

(S K MUDULI)

Indian Bureau of Mines