

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

**MCDR inspection REPORT
Hyderabad regional office**

Mine file No : AP/KRM/LST-5/HYD

Mine code : 38APR09002

- (i) Name of the Inspecting : **M029**) **MADHU SUDHAN YADAV M**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri Subashish Bose, Mines Manager, Sri S. Thirupathi,
Official with
Designation
- (iv) Date of Inspection : 02-SEP-21
- (v) Prev.inspection date : 05-FEB-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **THKKALAPALLY**
- (b) **Registration NO.** :
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : **TELANGANA**
District : **KARIMNAGAR**
Village :
Taluka :
Post office :
Pin Code :
FAX No. : 08728-228160
E-mail : communication@kesoramcement
Phone : 08728-228121
- (f) Police Station : **BASANTHNAGAR**
- (g) First opening date : 01-FEB-04
- (h) Weekly day of rest : **SUN**
2. Address for : **BASANTH NAGAR**
correspondance : **KARIMNAGAR**
505187
3. (a) Lease Number : **APR2269**
- (b) Lease area : **122.28**
- (c) Period of lease : **20**
- (d) Date of Expiry : **23-DEC-22**
4. Mineral worked : **LIMESTONE** Main

5. Name and Address of the

Lessee : KESORAM CEMENT
 KESORAM CEMENT P.O.
 BASANTHNAGAR KARIMNAGAR
 DIST. KARIMNAGAR TELANGANA
 Phone:
 FAX :040 4657472

Owner : M/S KESORAM CEMENT
 9/1 RN MUKHERJI ROAD
 KALKATTA KOLKATA WEST
 BENGAL
 Phone:
 FAX :

Agent : Ch. S. Nageswara Rao
 Kesoram Cement Basantnagar
 KARIMNAGAR TELANGANA
 Phone: 08728228135
 FAX : 08728228160

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	26-JUL-02
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	21-APR-09
		Mining Scheme rule 12 MCDR1988	01-APR-15
		MP modif under 17(3) MCR 2016	17-JAN-19

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 - No proposal	2020-21 - 02 Nos. core boreholes drilled to ascertain the thickness of the mineral in the hanging wall side of the I- Block	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	02 Nos. boreholes drilled by the lessee company	
1d	Balance area to be explored to bring Geological axis in 1 or 2	----	Entire lease area has been explored into G1 level of exploration.	
1e	Balance reserve as on 01/04/20	----	Proved Mineral Reserves as on 01/04/2021 - 1.54 million tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			Entire potentially mineralise area has been explored into G1 level of exploration by drilling 134 core boreholes.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Section D-D1 in I-Block & J-J' in F-Block	Work done within the proposed co-ordinates.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No topsoil and OB bench, only mineral benches proposed	Only mineral benches developed	

2c	Stripping ratio or ore to OB ratio	1:1.18	1:2.053	Blasted material not transported completely. Hence high stripping ratio during the year 2020-21.
2d	Quantity of topsoil generation in m3	No proposal	Nil	
2e	Quantity of overburden generation in m3	2020-21 - 151800 cu.m	2020-21 - 45104 cu.m	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine is developed with one bench of 8 meters height. Blasted material is not completely removed due to rain water accumulation in the pit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	2020-21 - 321000 Te	2020-21 - 55000 Te	
3c	Recovery of sailable/usable mineral from ROM production	85%	100%	Entire ROM produced was consumed by the cement plant during the year 2020-21.
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 the mineral benches	Drilling is being carried out using wagon drill machine for drilling with a blast hole dia of 150 mm & depth of 9 m, spacing of 7 meters and burden of 5 meters. Blasting with slurry and ANFO 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 10 meters	Bench height is being maintained as 8 m. Digging height of the excavators are compatible with bench height.

3m	Total area covered under excavation/pits	14.823 Ha	9.0 Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:1.18	1:2.053	Blasted material not transported completely. Hence high stripping ratio during the year 2020-21.
3o	Total area put in use under different heads at the end of year	28.07 Ha	20.52 Ha	
3p	Production of ROM mineral during the last five year period as applicable	2016-17 - 140545 Te 2017-18 - 239205 Te 2018-19 - 192000 Te 2019-20 - 398225 Te 2020-21 - 321000 Te	2016-17 - 50000Te 2017-18 - 70000 Te 2018-19 - 40000 Te 2019-20 - 100000 Te 2020-21 - 55000 Te	
3q	General remarks of inspecting officers on method of mining etc.			Mining is carried out in common mine boundary with Basantnagar Limestone Mine, which is in northeast direction of the lease by obtaining permission from DGMS.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate dumping for topsoil and OB were earmarked in the lease area	Two OB dumps proposed during the plan period	
4b	Location of topsoil, OB and mineral reject dumps	North and southern side of the mining lease	OB dump maintained in the north and southern side of the mining lease	

4c	Number of dumps within lease area and outside of lease area	Two dumps within the lease area	Two dumps within the lease lease	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps to be developed outside the UPL	Dumps developed outside the UPL	
4e	Number of active and alive dumps.	Two active dumps	Two active dumps	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	No proposal	No dumps established during the year 2020-21	
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall and garland drain to be maintained along the dumps.	Retaining wall and garland drain maintained along the dumps.	
4i	Length of Retaining wall or garland drain all along dumps	Dump 2 - Retaining wall - 688mx1mx1m Garland drain - 693x1mx1m	Retaining wall and garland drain maintained along the dumps.	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			Two dumps developed in the northern and southern side of the lease area.

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 during the year 2020-21	Nil	
5b	Area under backfilling of mined out area	No proposal during the year 2020-21	Nil	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal during the year 2020-21	Nil	
5d	Total area fully reclaimed and rehabilitated	No proposal during the year 2020-21	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			The pit is not mined out 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	Submitted	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
6c	afforestation done (ha).	2020-21 - 0.1927 Ha	2020-21 - Nil	No plantation done as per the proposal. Violation issued as per rule.
6d	No. of saplings planted during the year	2020-21 - 385 Nos.	2020-21 - Nil	
6e	Cumulative no .of plants	No proposal	Nil	
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 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.			Plantation not carried out in the year 2020-21 as per proposal made in the approved mining plan. Violation issued as per rule.

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	Proposed recovery of usable mineral from ROM production was 70 % whereas 100% recovery made from the ROM produced the year 2020-21.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal during the year 2020-21	Nil	
8b	Concurrent use or storage of topsoil	No proposal during the year 2020-21	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate dumps proposed for ovderburden	Seperate dumps maintained for overburden	
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	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	385 Nos. plantation prosed with an area of 0.1927 Ha during the year 2020-21	No plantation done during the year 2020-21
8g	Survival rate	85%	Nil
8h	Water sprinkling on roads to control airborne dust	It was proposed to use water tanker for dust suppression in the lease area.	Water tankers used for dust suppression in the lease area.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		The general aesthetic beauty is satisfactory in nature.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual returns and monthly returns to be submitted as per rule	Annual and monthly returns submitted in time.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager - Sri. Subashish Bose Mining Engineer - Sri. Ravider Rao Geologist - Sri. S.Tirupathi	Manager - Sri. Subashish Bose Mining Engineer - Sri. Ravider Reddy Geologist - Sri. B.Sadashiva Rao	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Openpit - 9.0 Ha Plantation - 9.3 Ha Waste Dumps - 2.22 Ha	Same as submitted.	

9d	Scrutiny of Annual return on afforestation	Nil	Nil
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	Nil	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price is Rs.363.41/-	Total overhead cost, depreciation 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 reported as Nil	Annual returns referred back to the lessee by the MMS division. Advised to correct the fixed assets details.
9k	Scrutiny of Annual return on mining machineries	Drill machine - 01 Nos. Hydraulic shovel - 1 Nos. Dumper - 4 Nos.	All proposed machineries found in the mining area.

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
MCDR17	Rule 11(1)	06-SEP-21			

Date :

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines