

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT 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 : **M017**) **MANISH K MAINDIRATTA**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 11/02/2020
- (v) Prev.inspection date : 17/08/2018

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 : **01/02/2004**
- (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 : **23/12/2022**
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	26/07/2002
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	21/04/2009
		Mining Scheme rule 12 MCDR1988	01/04/2015
		MP modif under 17(3) MCR 2016	17/01/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	
1b	Exploration over lease area for geological axis 1 or 2		Entire potentially mineralized area has been explored under G1 LEVEL OF EXPLORATION AS PER MMP approved on 17.01.2019	Siliceous limestone bands have not been explored.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserve as on 01/04/20	Reserves have been reassessed as on 30.09.2018= 1.72 Million tonnes	Depletion= 0.02Million tones Balance reserves= 1.7 mT	
1f	General remarks of inspecting officers on geology, exploration etc			

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Northwest side	Northwest side	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top soil - Nil OB - Nil. Ore - 1 Bench	Top soil - Nil Ore - 1Bench	OB bench developed in the year 2019-20.
2c	Stripping ratio or ore to OB ratio	Ore to waste=1:1.17	Ore to waste ratio =1:0.36	2018-19= 40000T:14340 T waste
2d	Quantity of topsoil generation in m3	Nil	Nil	

2e	Quantity of overburden generation in m3	89878 cubic metre in 2018-19	5736 cubic metre in 2018-19	Due to Less Production
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Production proposed from one pit	Production is taken from one main pit of about 1100m and width 50m	
3b	Quantity of ROM mineral production proposed	In 2018-19, 192000T of ROM mineral production proposed	In 2018-19, 40,000T of ROM mineral production achieved.	Due to less demand from Plant.
3c	Recovery of sailable/usable mineral from ROM production	70%	-	Entire IB/SB/OB are all categorized and dumped as siliceous limestone waste. No shale is reported to have been generated. Thus specific assessment of recovery not made available.
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Nil	Nil	No segregation. Total ROM is being fed to the crusher.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	
3j	Provision of drilling and blasting in mineral benches	ANFO slurry with NONEL proposed.	150mm dia drill holes being used to blast 9-10m high benches. ANFO slurry with NONEL explosive is used.	
3k	Provision of mining machineries in mineral benches	Proposed	Provided(Excavtors , Dumpers etc.,)	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed Bench height is 10 m which is suitable for the excavation proposed by the machinery.	Work is done in three benches of around 7-8 m height.	
3m	Total area covered under excavation/pits	9.21Ha	7.32 Ha	Due to less Production
3n	Ore to OB ratio for the pit/mine during the year.	1:0.20	1:0.27	
3o	Total area put in use under different heads at the end of year	19.49 ha	13.19 ha	
3p	Production of ROM mineral during the last five year period as applicable	Year Proposed (mt) 2013-14 346770 2014-15 299938 2015-16 126968 2016-17 140545 2017-18 239205 Total 1153426	Year Actual (mt) 2013-14 60000 2014-15 80000 2015-16 30000 2016-17 50000 2017-18 70000 Total 290000	Plant is having a constraint of using the entire mineral as it contains barium sulphate and silica as well.
3q	General remarks of inspecting officers on method of mining etc.			

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping sites for Topsoil & OB were earmarked within lease area.	Maintained same as Proposals.
4b	Location of topsoil, OB and mineral reject dumps	North east side of the lease area.	North east side of the lease area.
4c	Number of dumps within lease area and outside of lease area	1	one dump is there within lease area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL
4e	Number of active and alive dumps.	Only one existing dump is there that is in active.	Only one existing dump is there that is in active.
4f	Number of dead dumps.	Nil	Nil
4g	Number of dumps established.	No proposal for dump stabilisation	No dump stabilised
4h	Whether Retaining wall or garland drain all along dumps are there.		Retaining wall constructed along the dump.
4i	Length of Retaining wall or garland drain all along dumps	-	Retaining wall is there along the dump.
4j	Number of settling ponds	Nil	Nil

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 proposal	Not mature for backfilling at present.	
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	No top soil reported in 2018-19. So far about 28000 cu m of top soil is stacked in 2019-20	To used simultaneously
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		The excavtion at present is not mature for the bacflfilling or reclamation.	

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).		Submitted	
6b	Area available for rehabilitation (ha) .	No proposal for rehab. of worked out benches	Not done	
6c	afforestation done (ha).	No proposal for rehab. of worked out benches	Not done	
6d	No. of saplings planted during the year	No proposal for rehab. of worked out benches	Not done	
6e	Cumulative no .of plants	No proposal for rehab. of worked out benches	NIL	
6f	Any other method of rehabilitation	--	--	
6g	Cost incurred on watch and care during the year	---	----	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal for rehabilitation by backfilling in 2018-19	Not done	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal for rehabilitation by backfilling in 2018-19	Not done	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No proposal for rehabilitation by backfilling in 2018-19	Not done	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal for rehabilitation by making water reservoir in 2018-19	Not done	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	----	----	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1800 saplings over 0.52 ha proposed in 2018-19	1800 saplings planted over 1.2 ha.	4000 saplings planted so far.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1800 saplings over 0.52 ha proposed in 2018-19	1800 saplings planted over 1.2 ha.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	---	---	

6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring is done regularly.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	---

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No mineral sorting proposed	No sortng done	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Not Applicable	
7c	Different grade of mineral sorted out at mines.	No proposal for sorting	Entire mineral is used in the plant with simultaneous blending only.	
7d	Any beneficiation process at mines	No proposal	Beneciation is not being done.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		-----	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Very little top soil which shall be used for plantation purpose.	No top soil generated in 2018-19. Top soil generated in 2019-20 is stacked.	

8b	Concurrent use or storage of topsoil		Used , stored as and when generated
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden proposed in North West side of pit	Separate dumps for overburden undertaken in North West side of pit
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not done
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not done
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2325 saplings over an area of 1.55 Ha	1800 saplings were Planted over an area of 1.20 Ha.
8g	Survival rate	70% survival expected	About the same survival reported.
8h	Water sprinkling on roads to control airborne dust	Dedicated water tanker of 12 KL capacity shall be provided	Water tanker with 12 KL capacity deployed for water sprinkling.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		The general aesthetic is definitely disturbed by the excavation marks on the site. But with plantation and land profiling it can be improved at the FMCP. Till then the plantation activity is being taken as part of PMCP measure which maintains the general aesthetics.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns		Online M.R. & A.R Submitted up to Date for Takkalapalli Limestone Mines.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- N.Ravindar rao Geologist - S.Tirupathi	Broadly as per submission	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining-7.32Ha, Reclaimed- Nil, Dump- 0.60Ha	Broadly as per submission	
9d	Scrutiny of Annual return on afforestation	2018-19=1800 saplings	Broadly as per submission	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL reported	same as submission	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	40000 T of ROM generation reported	found to be same as per records	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production - 328.37 PMT submitted in returns.	Common cost of production has been submitted for both the leases.	
9h	Scrutiny of Annual return on fixed assets	Data submitted	---	Common machinery is used for both leases.
9k	Scrutiny of Annual return on mining machineries	submitted in the return	As per submission, the adequate machineries have been provided .	

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 :

(MANISH K MAINDIRATTA)

Indian Bureau of Mines