

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/KSN/LST-13/HYD

Mine code : 38APR10001

- (i) Name of the Inspecting : **M001**) **S K MUDULI**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Sri Ram Reddy, Mines Manager and Sri Naresh-Geologist
Official with
Designation
- (iv) Date of Inspection : 23-FEB-20
- (v) Prev.inspection date : 23-FEB-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **HEMADRI(NO.221)**
- (b) **Registration NO.** :
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : **ANDHRA PRADESH**
- District : **KRISHNA**
- Village : **VEDADRI**
- Taluka : **JAGGAIYAPET**
- Post office : **VEDADRI**
- Pin Code : **521438**
- FAX No. : **0865422373**
- E-mail : **NA**
- Phone : **27373 22317**
- (f) **Police Station** :
- (g) **First opening date** : **01-APR-85**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **HEMADRI LIMESTONE MINE**
correspondance **VEDADRI, JAGGAYYAPET**
KRISHNA DIST
3. (a) **Lease Number** : **APR0058**
- (b) **Lease area** : **38.69**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **09-NOV-21**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : M/S HEMADRI CEMENTS LIMITED
 KRISHNA ANDHRA PRADESH
 Phone:22373 22317
 FAX :08654 22373

Owner : M/SHEMADRI CEMENTS LTD
 M/S HEMDRI CEMENTS LTD
 VEDADRI JAGGAYYAPET KRISH
 KRISHNA ANDHRA PRADESH
 Phone: 22373/22317
 FAX : 0865422373

Agent : SRI P.RAMA KRISHNA RAO.
 M/S HEMADRI CEMENTS LTD,
 VILL& POST: VEDADRI, DIST:
 KRISHNA, KRISHNA ANDHRA
 PRADESH
 Phone: 08678-284538
 FAX : 0878- 284859

Mining Engineer

Name : SHRI D.Venkata Akhil Kalyan,Full Time
 Qualification : B.Tech in Mining Engineering
 Appointment/ : 10-NOV-16
 Termination date

Geologist

Name : M.RAMACHANDRA REDDY,Full Time
 Qualification : MSc, Geology.
 Appointment/ : 02-JUN-08
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	28-JUL-94
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	18-APR-08
	:	MP modif under MCR 1960	29-FEB-16
	:	MP review under 17(1) MCR 2016	15-MAY-18

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	08 Core Bore Holes and 02 DTH Bore Holes were proposed during 2018-19	Completed 08 Core Bore Holes for 265 m and 02 DTH Bore Holes for 40 m during 2018-19.	
1b	Exploration over lease area for geological axis 1 or 2	18.04 Hect (approx)	Entire mineralised area has been Explored Under G1 level	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal approved.	Rock Engineering Core Drillers -Hyderabad-Rs 4.065 Lakh Analysis carried in own lab	
1d	Balance area to be explored to bring Geological axis in 1 or 2	18.04 Ha	Entire ML area has been Explored Under G1 level	
1e	Balance reserve as on 01/04/20	1.249 Million Ton in 111 category.	1.273 Million Ton in 111 category	
1f	General remarks of inspecting officers on geology, exploration etc			Phylite occur above Limestone.The deposits belong to Narji formation of Kurnool Group.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N1857973 N1857838, E 408519 E408679	Carried with the proposed area	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate Benches in Limestone & OB	In total 3 benches in OB and 3Benches limestone	
2c	Stripping ratio or ore to OB ratio	1 : 0.21	1.0.362	

2d	Quantity of topsoil generation in m3	No proposal for generation of top soil	Nil	----
2e	Quantity of overburden generation in m3	37831 CUM	30093 CU M/60187.930 Tons	----
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	----	----	Mechanized Mining method has been adopted. Separate benches in OB and Limestone has been developed.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	---
3b	Quantity of ROM mineral production proposed	173673 Tonnes	149500 Tonnes	-----
3c	Recovery of sailable/usable mineral from ROM production	93%	100%	
3d	Quantity of mineral reject generation	No proposals	Nil	----
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not applicable, Cao>34 %,Mgo<5%	
3f	Quantity of sub grade mineral generation.	No proposal	Nil	
3g	Grade of sub grade mineral generation	NA	NA	---
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal.	Beneficiation not warranted	----

3j	Provision of drilling and blasting in mineral benches	Wagon Drill Machine Dia 115 mm -1No &Compressor - 16. M3/450cfm Burden -4M, Spacing -3 m,Bench height-7m,Explosive Van	Wagon Drill Machine Dia 115 mm -1No &Compressor -16. M3/450cfm Burden - 4M, Spacing -3 m,Bench height-7m,Explosive Van	
3k	Provision of mining machineries in mineral benches	Excavator-0.9 m3-1no, Tippers (17 Tons) -7 Nos	Excavator -0.9 m3-2no, Tippers (18 Tons) -5 Nos	----
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	----	Deployed machinery boom height can easily reach the bench height.	-----
3m	Total area covered under excavation/pits	15.542 Ha	Tentatively 15.50 Ha	-----
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.21	1:0362	----
3o	Total area put in use under different heads at the end of year	21.584 Ha	About 21 Ha	----
3p	Production of ROM mineral during the last five year period as applicable	2016-17 :180058 Ton 2017-18 : 179970 Ton 2018-19 : 173673 Ton	2014-15 : 153200 Tonnes 2015-16 : 142800 Tonnes 2016-17 : 158100 Tonnes 2017-18 : 145500 Tonnes 2018-19 : 149500 Tonnes	-----
3q	General remarks of inspecting officers on method of mining etc.			Adopted Mechanized Method of mining. Conventional deep hole drilling and blasting has been adopted.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	In 2018-1 it was proposed to utilise the waste generated for backfilling. There was no proposal of generation of top soil and MR.	30093 m3 (OB+IW) Generated & used for backfilling mined out area.	-----
4b	Location of topsoil, OB and mineral reject dumps	No dumping of waste proposed in 2018-19	No dumping of waste done during 2018-19.	However there are two nos waste dump lying within the lease..
4c	Number of dumps within lease area and outside of lease area	2 WML	2 WML	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	----
4e	Number of active and alive dumps.	2	2	----
4f	Number of dead dumps.	No proposal	NIL	-----
4g	Number of dumps established.	No proposal	NIL	----
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed to be constructed during 2018-19 for 450m length each	Both not constructed	Violation u/r 11(1) issued
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall and Garland drain each of 450m x1.5m X 1m.	-do-	-do-
4j	Number of settling ponds	No proposal	Settling Pond not constructed as the retaining wall and garland drain is yet to be constructed.	---
4k	Specific comments of inspecting officer on waste dump management	---	---	Retaining wall and garland drain all along the dump needs to be constructed.Waste generated during 2018-19 has been utilised for back filling.

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 for additional mined out area.	Nil	1.28 Ha completely mineral mined out area is already existing prior to 2018-19.
5b	Area under backfilling of mined out area	0.40 ha to be partially back filled by 37831 m3 waste	30093 m3 waste utilised for partial back filling of 0.40 ha.	----
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	There is no Proposal for generation of top soil hence no concurrent utilisation proposed.	Nil	-----
5d	Total area fully reclaimed and rehabilitated	No proposal for full reclamation and rehabilitation	Nil	0.40 Ha partially back filled.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	.		0.40 Ha partially back filled during 2018-19.

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	Yes submitted	----
6b	Area available for rehabilitation (ha) .	No proposal	Nil	-----
6c	afforestation done (ha).	No proposal	Nil	-----
6d	No. of saplings planted during the year	No proposal	Nil	----
6e	Cumulative no .of plants	No proposal	Nil	
6f	Any other method of rehabilitation	No proposal	Nil	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	1.28 Ha completely mineral mined out area available for back filling but proposal is for 0.40 Ha area	0.40 Ha	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.40 Ha	0.40 Ha partially back	
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	1500 on slopes of waste dump 1075 in safety barrier zone of Mining Lease	Plantation at slope of waste dump has not been carried. How ever 1075 nos of planataion has been done in 7.5 m safety barrier.	Violation issued u/r 11(1)
6p	Compliance of environmental monitoring (core zone and buffer zone)	Core and buffer zone enviornmental monitoring	Carrying Core and buffer zone enviornmental monitoring	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Partial back filling in 0.40 carried out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Not Proposed	During 2018-19 100% ROM has been utilised. Despatch during 2018-19 is 151500 Tonnes	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Nil during 2018-19	-----
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			100% ROM utilised.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal for top soil generation	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	----
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No separate dumping of waste proposed in 2018-19. Waste generated is to be utilised for partial backfilling.	waste generated has been utilized for partyial back filling of 0.40 ha mined out area during 2018-19	----
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	waste Proposed to be utilised for back filling	waste utilised for back filling	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Partial Back filling in 0.40 Ha	Parttial back filling carried out in 0.40 Ha	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		1075 saplings planted in 0.208 ha in 7.5m safety barrier within the mining lease.	-----
8g	Survival rate	80%	80%	----
8h	Water sprinkling on roads to control airborne dust	Arranged water tanker	Arranged water tanker	-----
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR and AR to be submitted	MR and AR submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Submitted as appointed	Appointed	----
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	20.89 total land area under utilisation	Tentatively 21 Ha	----
9d	Scrutiny of Annual return on afforestation	1075 nos in 7.5m safety barrier zone within the ML	1075 nos in 7.5m safety barrier zone within the ML	----

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Submitted as Nil	Nil	----
9f	Scrutiny of Annual return on ROM stock and/or graded ore	7818.80 tonnes-Limestone 228 tonnes-Clay	---	----
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost/ton of Limestone-Rs 251/Tonne of Limestone Ex Mine Price of Limestone-Rs 251/Tonne of Limestone Sale Value-Nil	---	-----

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-JUL-20			

Date :

(S K MUDULI)

Indian Bureau of Mines