

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/KSN/LST-25/HYD

Mine code : 38APR10026

- (i) Name of the Inspecting : **M029**) **MADHU SUDHAN YADAV M**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Jani Reddy, Agent, Sri.Satya Balaji, Mine Manage
Official with
Designation
- (iv) Date of Inspection : 19/10/2020
- (v) Prev.inspection date : 19/12/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RAVIRALA**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ANDHRA PRADESH
- District : KRISHNA
- Village : JAYANTHIPURAM
- Taluka : JAGGAYYAPETA
- Post office : KUMARASAMYRAJA
- Pin Code : 521457
- FAX No. : 08654-222532
- E-mail : mcljpm@madrascements.co.in
- Phone : 08654-224400
- (f) Police Station : JAGGAYYAPETA
- (g) First opening date : 25/06/2003
- (h) Weekly day of rest : SUN
2. Address for : THE RAMCO CEMENTS LIMITED,
correspondance : kUMARASWAMY RAJA NAGAR,
JAGGAYYAPETA, KRISHNA DIST.
3. (a) Lease Number : APR1204
- (b) Lease area : 124.33
- (c) Period of lease : 50
- (d) Date of Expiry : 30/09/2047
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : THE RAMCO CEMENTS LTD
 KUMARASWAMY RAJANAGAR
 JAGGAYAPET MANDAL KRISHNA
 ANDHRA PRADESH
 Phone:08654-224400
 FAX :08654-222532

Owner : THE RAMCO CEMENTS LIMITED.
 KUMARASAMY RAJA NAGAR-
 5217457, JAGGAYAPET
 MANDAL, KRISHNA DISTRICT.
 KRISHNA ANDHRA PRADESH
 Phone:
 FAX : 08654-222532

Agent : P JANI REDDY
 KUMARASWAMY .RAJA.NAGAR,
 JAYATNTHIPURAM KRISHNA
 DISTRICT KRISHNA ANDHRA
 PRADESH
 Phone: 08654-224400
 FAX : 08654-222532

Mining Engineer

Name : P VIDYA KIRAN, Full Time
 Qualification : B TECH MINING
 Appointment/ : 04/07/2007
 Termination date

Geologist

Name : B RAJU, Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 02/03/2006
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Modif.of approved Mining Plan	31/07/2001
		Mining Scheme rule 12 MCDR1988	13/05/2008
		Mining Scheme rule 12 MCDR1988	21/10/2013
		MP modif under 17(3) MCR 2016	13/11/2017
		MP modif under 17(3) MCR 2016	26/02/2019
		MP modif under 17(3) MCR 2016	16/03/2020

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	2019-20 - No proposal 2020-21- 3 holes proposed	4 core boreholes drilled in 2020-21	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	----	Exploration agency - Natural Resources department Co-operative society Ltd (NDRCS), Hyderabad Expenditure - Rs.4,29,000/- (Reported by the lessee)	
1d	Balance area to be explored to bring Geological axis in 1 or 2	---	Entire area has been explored under G1 level.	
1e	Balance reserve as on 01/04/20	----	Proved reserves - 21.002 million Tonnes as on 30/09/2020	
1f	General remarks of inspecting officers on geology, exploration etc			Entire lease area is cover under G1 level of exploration.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed between sections ML-1, ML-2 & ML-3	Work done within the proposed section lines.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	OB- 1st bench, Mineral - 1st, 2nd, 3rd, 4th and 5th benches	OB- 1st bench, Mineral - 1st, 2nd, 3rd, 4th and 5th benches	Work done as per proposal.
2c	Stripping ratio or ore to OB ratio	1:0.22	1:0.2	
2d	Quantity of topsoil generation in m3	No proposal	Nil	

2e	Quantity of overburden generation in m3	107197 cu.m 246553 Tonnes	94833 cu.m 218116 Tonnes	218116 Tonnes of overburden generated during the year 2019-20 is not reported in the annual returns. Violation issued as per rule.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Workdone as per the proposal by mechanised method of mining.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	2019-20 - 1200000 Tonnes	2019-20 - 1184000 Tonnes	
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 the mineral benches	Drilling is being carried out by maintaining spacing of 3.5m and burden of 3m with a hole depth of 7 meters and 115mm dia holes . Blasting done by using ANFO and slurry explosives with NONEL detonators for initiation.
3k	Provision of mining machineries in mineral benches	Wagon drill, Tippers , excavators and water tanker.	Wagon drill - 1 Nos. Tippers - 11 Nos. Excavators - 2 Nos. Water Tanker - 1No.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	It is proposed to maintain the bench height of 8 meters in OB and mineral benches	Digging height of the excavator is compatible for proposed bench height fo 8m.
3m	Total area covered under excavation/pits	33.31 Ha	28.46 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1:0.22	1:0.2
3o	Total area put in use under different heads at the end of year	Openpit - 33.31 Ha Waste dump - 12.01 Ha Infrastructure - 4.18 Ha	Openpit - 28.46 Ha Waste dump - 10.27 Ha Infrastructure - 4.03 Ha Greenbelt - 8.41 Ha
3p	Production of ROM mineral during the last five year period as applicable	2014-15 - 1072664 Tonnes 2015-16 - 1015273 Tonnes 2016-17 - 1129500 Tonnes 2017-18 - 1040668 Tonnes 2018-19 - 1204095 Tonnes 2019-20 - 1200000 Tonnes	2014-15 - 820600 Tonnes 2015-16 - 536000 Tonnes 2016-17 - 397000 Tonnes 2017-18 - 526164 Tonnes 2018-19 - 1199500 Tonnes

3q General remarks of inspecting officers on method of mining etc.

Mining is carried out by fully mechanised method by deploying HEMM.

Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	1. No Topsoil and mineral reject dump proposed. 2. OB dump proposed - 02 Nos.	1. No topsoil and mineral reject dump developed. 2. OB dump maintained - 02 Nos.	
4b	Location of topsoil, OB and mineral reject dumps	1. No Topsoil and mineral reject dump proposed. 2. OB dumping - E-407600 to E-407700 and N-1862410 to N-1861450. 3. Temporary Dump - E-408800 to E-409000 and N-1861600 to N-1861900.	1. There is no topsoil and mineral reject. 2. OB dumping - E-407700 to E-407900 and N-1862100 to N-1862400. 3. Temporary Dump - E-408800 to E-409000 and N-1861600 to N-1861900.	
4c	Number of dumps within lease area and outside of lease area	Two	Two	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	1. OB dumping in West side of Mining Lease 2. Temporary Dump South East side of Mining Lease	1. OB dumping in West side of Mining Lease 2. Temporary Dump South East side of Mining Lease	Temporary dump proposed within the UPL. The material will be utilised for reclamation before carrying out mining operations in the temporary dump area.
4e	Number of active and alive dumps.	Two	Two	
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Two	Two	

4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Garland drain was filled with silt.	Violation issued as per rule for not maintaining/de-silting the garland drain and settling pond.
4j	Number of settling ponds	One	One	
4k	Specific comments of inspecting officer on waste dump management			Plantation done in the OB dump. Garland drain and settling pond was filled with silt.

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	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.			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
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted as per rule	Submitted as per rule
6b	Area available for rehabilitation (ha) .	No proposal	Nil
6c	afforestation done (ha).	0.10 Ha	0.80 Ha
6d	No. of saplings planted during the year	200 Nos.	1150 Nos.
6e	Cumulative no .of plants	No proposal	11557 Nos. (Till 2019-20)
6f	Any other method of rehabilitation	No proposal	Nil
6g	Cost incurred on watch and care during the year	Rs.87500/-	Rs.407156/-
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 2019-20.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Environment monitoring has been carried out during 2019-20 and all the parameters are within the permitted limits.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	2019-20 - 1200000 Tonnes	2019-20 - 1184000 Tonnes	
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			No sub grade has been generated. Beneficiation is not required as the entire ROM mineral is utilised for captive plant.

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)	OB dumps - 02 Nos. Mineral rejects - Nil	OB dumps - 02 Nos. Mineral rejects - 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	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposal	Till 2019-20 - 11557 Nos. of saplings planted within and around the lease area.	

8g	Survival rate	90%	95%	
8h	Water sprinkling on roads to control airborne dust	Water Tankers to be provided for dust suppression.	Water tanker is provided for dust suppression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation is well developed on the dumps and in the buffer zone area.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	To be submitted as per rule	Submitted within time	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer : K.Ashraf Ali Geologist : B.Raju Mines Manager : B.Satya Balaji	Manager, Mining Engineer and Geologist working as per submission.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Openpit - 33.31 Ha Waste dump - 12.01 Ha Infrastructure - 4.18 Ha	Same as submitted.	
9d	Scrutiny of Annual return on afforestation	1150 Nos.	Broadly as submission and same quantity is verified in afforestation register maintained.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generated in the mine.	
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	Rs.207.19/-	Rs.207.19/-	

9h	Scrutiny of Annual return on fixed assets	Rs.18597511/-	---
9k	Scrutiny of Annual return on mining machineries	Wagon drill - 1 Nos. Tippers - 11 Nos. Excavators - 2 Nos. Water Tanker - 1No.	Machineries available as per the submission.

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
MCDR17	Rule 11(1)	11/12/2020			
	Rule 45(7)	11/12/2020			

Date :

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines