

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/KSN/LST-15/HYD

Mine code : 38APR10015

- (i) Name of the Inspecting : **PR09**) **M.Pratap.Reddy**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : S. VENKATESWAR REDDY MINES MANAGER
Official with
Designation
- (iv) Date of Inspection : 17/07/2018
- (v) Prev.inspection date : 14/03/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JAYANTHIPURAM MS NO 71**
- (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 : **JAGGAYYAPET**
- Post office : **KUMARASWAMYRAJA NAGAR**
- Pin Code : **521457**
- FAX No. : **08654-222532**
- E-mail : **mcljpm@madrascements.co.in**
- Phone : **08654-224400 to 09**
- (f) **Police Station** : **CHILLAKALLU**
- (g) **First opening date** : **16/05/1986**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **JAYANTIPURAM LIMESTONE MINE**
JAYANTIPURAM, CHILLAKALLU (M)
KRISHNA DIST.
3. (a) **Lease Number** : **APR0125**
- (b) **Lease area** : **18.64**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **19/08/2011**
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 : P.R.VENKATRAMA RAJA
 AURAS CORPORATE CENTRE, Vth
 FLOOR, Dr.RADHAKRISHNA
 ROAD,MYLAPORE, CHENNAI
 CHENNAI CITY TAMIL NADU
 Phone: 044-28478666
 FAX : 044-28478676

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

Mining Engineer

Name : KHAJA ASHRAF ALI,Full Time
 Qualification : B.E(Mining)
 Appointment/ : 01/08/2017
 Termination date

Geologist

Name : P.SURYANARAYANA MURTHY,Full Time
 Qualification : M.Sc
 Appointment/ : 11/06/1992
 Termination date

Manager

Name : S.VENKATESWARA REDDY
 Qualification : FCC
 Appointment/ : 01/08/2017
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	13/05/2002
Plan/Scheme of Mining		Modif.of approved Mining Plan	18/06/2003
		Renewal under rule 24 MCR1960	07/04/2006
		Modif.approved Mining Scheme	17/10/2014
		MP modif under 17(3) MCR 2016	22/09/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration proposals envisaged during 2017-18.	-	
1b	Exploration over lease area for geological axis 1 or 2	Nil	The entire mineralised area has been explored in the scale of G1/G2.	However, there is a area in two non contiguous non mineralised blocks on the the eastern side of the ML area comprising Quartzite formation.Hence no exploration is required.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None	-	However, so far the expenditure incurred on exploration is around Rs. 50,00,000/-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	-	
1e	Balance reserve as on 01/04/20	22.96 million tonnes	23.60 million tonnes	The balance reserve is on heigher side due to less intake of Limestone by the Plant.
1f	General remarks of inspecting officers on geology, exploration etc	The deposit is smple sedimentary bedded deposit of Type-I category of UNFC system.	The deposit falls in Type-1 of UNFC system and it pertains to Nargi group of formation of Kurnool group (Equivalent of Semri series of Vindhyan system. An extent of 79.93 has been explored to the G1 level of exploration.	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Development cum production is proposed between section lines ML-12.5 and 13.5 in first and second benches.(1000N-1800N and 800E-1600E)	As proposed the Development cum production is done between section lines ML-12.5 and 13.5 (1000N-1800N and 800E-1600E) in first and second benches.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB and Ore(Limestone) have been proposed.	Separate benches in OB and Ore(Limestone) have been formed: Two benches in OB and five benches in Limestone have been formed.
2c	Stripping ratio or ore to OB ratio	1:0.48	1:0.35
2d	Quantity of topsoil generation in m3	Nil	-
2e	Quantity of overburden generation in m3	2,48,186 cum	1,42,766 cum
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development cum production is proposed between section ML-12.5 and ML-13.5 (1000N-1800N and 800E-1600E)	Development is in the form of formation of Limestone benches and it has been carried out between section ML-12.5 and ML-13.5 (1000N-1800N and 800E-1600E). There is no existance of top soil

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	The production is proposed from one pit.	The production was done from one pit only.	
3b	Quantity of ROM mineral production proposed	14,15,899 T Limestone	14,09,030 T Limestone	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	23,030 cum	2,285 cum	

3e	Grade of mineral rejects generation and threshold value declared.	+18% SiO ₂ .	+18% SiO ₂
3f	Quantity of sub grade mineral generation.	Nil	However a quantity of 1,06,458 T of sub grade Limestone has been generated which has been simultaneously consumed by way of blending the same with the high grade Limestone.
3g	Grade of sub grade mineral generation	None	-
3h	Manual / Mechanised method adopted for segregating from ROM	No such proposal exists.	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None.	-
3j	Provision of drilling and blasting in mineral benches	Yes,	Provision of deep hole drilling and blasting in mineral benches has been made as per the proposals made in the approved document.
3k	Provision of mining machineries in mineral benches	Yes,	Provision for the deployment of mining machinery (Hydraulic excavators & Tippers) in mineral benches has been made.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes,	Suitable height of 8m bench height in OB and 8m height in mineral (Limestone) has been formed as proposed in the approved document.
3m	Total area covered under excavation/pits	100.52 ha	89.88 ha
3n	Ore to OB ratio for the pit/mine during the year.	1:0.48	1:0.35

3o	Total area put in use under different heads at the end of year	160.42 ha	159.35 ha
3p	Production of ROM mineral during the last five year period as applicable	2013-14=14,72,151 T, 2014-15=14,06,419 T, 2015-16=13,98,022 T, 2016-17=13,49,478 T & 2017-18=14,15,899 T.	2013-14=9,54,343 T, 2014-15=8,54,500 T, 2015-16=6,34,000 T, 2016-17=7,94,000 T & 2017-18=14,09,030 T.
3q	General remarks of inspecting officers on method of mining etc.	Opencast fully mechanised method of mining is proposed.	The mining operations are being carried out by opencast fully mechanised method of mining is practiced.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate provision for dumping of waste and mineral reject is made.	As proposed seperate dumping of waste and mineral reject is being done.	There is no generation of top soil and hence no top soil dump.
4b	Location of topsoil, OB and mineral reject dumps	The location of OB and mineral reject dumps are as below: OB dump 1: 800N-1400N and 400E-600E OB dump 2: 2000N-2200N and 1000E-1400E OB dump 3: 1800N-2000N and 1600E-1800E Mineral Reject Dump: 1600N-1800N and 800E-1000E	The dumps are situated at designated locales.	
4c	Number of dumps within lease area and outside of lease area	Four dumps with in ML area	The said four dumps are located with in ML area.	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The location of dumps are beyond UPL.	The existing four dumps are located beyond UPL	
4e	Number of active and alive dumps.	One OB dump and Mineral reject are proposed to be active.	The OB dump no.3 and Mineral reject dump is active.	
4f	Number of dead dumps.	Two OB dumps are proposed to be inactive.	The two dumps are inactive and dead.	
4g	Number of dumps established.	Two	Two	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal is given	However, a retaining wall is made.	
4i	Length of Retaining wall or garland drain all along dumps	Not furnished.	However a retaining wall of a dimension of 2657x2x1.5 has been constructed.	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management	Provision for seperate dumping of waste and merial reject has been proposed.	The Waste material i.e overburden is dumped in Dump no.3 and the mineral reject with high silica content is dumped in dump no.4.	The dump no. 1&2 are inactive dumps.

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.	An extent of 2.54 ha mined out area which has been fully extracted is available.	In addition to 2.54 ha mined out extent, an area of 0.5 is also made available during 2017-18 .	
5b	Area under backfilling of mined out area	0.28 ha	0.23 ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal has been made.	-	

5d	Total area fully reclaimed and rehabilitated	13.85 ha	12.23 ha
5e	General remarks of inspecting officers on backfilling and reclamation etc.	An extent of 13.85 ha mined out area has been proposed for reclamation and rehabilitation	An extent of 12.23 ha has been reclaimed and rehabilitated.

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,	Submitted	
6b	Area available for rehabilitation (ha) .	0.50 ha	0.72 ha	
6c	afforestation done (ha).	Proposed	Done	
6d	No. of saplings planted during the year	1000 saplings	3085 saplings	
6e	Cumulative no .of plants	1,36,202 saplings	1,38,287 saplings	
6f	Any other method of rehabilitation	None	-	
6g	Cost incurred on watch and care during the year	Rs5,62,500/-	Rs 6,63,600/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	1.5 ha	1.34 ha	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Reclamation and rehabilitation of the mined out area has been proposed	An extent of 1.34 ha has been Reclamed and rehabilitated.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	1.5 ha	1.34 ha
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal is made.	-
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal is made.	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposal has been made	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No such proposal has been made.	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposal has been made.	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quartely monitoring of Environmental parameters is proposed.	As proposed, monitoring of Environmental prarmeters is being done on the quarerly basis both in core and buffer zones. The parameters found to be with in permissble limits.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	The progressive closure operations of mined out area has been proposed during the Plan period 2015-16 to 2019-20	The progressive mine closure proposals of the mined out extet has been implimented. Afforestation in the safety barrier zone is being carried out. Periodical monitoring of Environmental parameters is being carried out both in Core and buffer zone. The parameters were found with in permissible limits.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	14,15,900 T	14,09,030 T	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No such proposal has been made.	The entire ROM is consumed.	
7c	Different grade of mineral sorted out at mines.	No such proposal is made.	-	
7d	Any beneficiation process at mines	No such proposal is made.	Except sizing, no beneficiation is practiced.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The entire ROM is meant for captive consumption.	The entire ROM is consumed in the Cement Plant.	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No such proposal has been made.	-	

8b	Concurrent use or storage of topsoil	No such proposal has been made.	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes, proposaed.	The overburden and rejects have been seperately dumped.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	It is proposed to back fill the minedout area with the overburden material	As proposed the mined our area has been backfilled with the overburden material.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Phasewise backfilling has been proposed.	Phasewise backfilling is being carried out.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Existing plantation is 1,35,202 saplings and proposed sapling in 2017-18 is about 1000 saplings.	Existing saplings is about 1,35,202 and saplings done in 2017-18 is about 3085 saplings .
8g	Survival rate	Not given	90%
8h	Water sprinkling on roads to control airborne dust	Yes, proposed.	Periodical water sprinkling is done to arrest airborne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Afforestation is proposed in and around the ML area to improve the aesthetic beauty.	The proposed afforestation is done to improve the aesthetic beauty in and around the ML 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 Return Submitted shall be submitted before 10th of every month in respect of preceding month. Annual return shall be submitted before 1st July each year for the preceding Financial year.		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	To be furnished.	Furnished	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	To be furnished	Furnished.	
9d	Scrutiny of Annual return on afforestation	To be furnished.	Details have been furnished.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	To be furnished.	A quantity of 5,713 T has been furnished.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	To be furnished.	A closing stock of 1,32,030 T of Limestone is furnished.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	To be furnished.	The sale/Ex-mine price furnished to be Rs.185.83/-	
9h	Scrutiny of Annual return on fixed assets	To be furnished.	The Value of Fixed Assets (in Rs) 124662747/-	This figure pertains to all the mines of M/s Ramco Cements Ltd in Krishna district,AP.
9k	Scrutiny of Annual return on mining machineries	To be furnished.	The mining machinery details have been furnished.	

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 :

(M.Pratap.Reddy)

Indian Bureau of Mines