

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-29.MDS

Mine code : 38TMN38045

- (i) Name of the Inspecting : **J103**) **V. Jaya Krishna Babu**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : **K.Abraham, Manager (Mines), P.Senthamilselvan, Manager(**
Official with
Designation
- (iv) Date of Inspection : 05/03/2020
- (v) Prev.inspection date : 28/06/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PERIYANAGALUR17.36.0 HA**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : ARIYALUR
- Village : PERIYANAGALUR
- Taluka : ARIYALUR
- Post office : ARIYALUR
- Pin Code : 621704
- FAX No. : 044-28478676
- E-mail : magesh@ramcocements.co.in
- Phone : 044-28478666
- (f) Police Station : Ariyalur
- (g) First opening date : 10/01/2017
- (h) Weekly day of rest : SUN
2. Address for : THE RAMCO CEMENTS LTD
correspondance : AURAS TOWERS,98-A, RADHAKRISHNAN ROAD
MYLAPORE,CHENNAI-600004
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : THE RAMCO CEMENTS LTD
 AURAS CORPORATE CENTRE 98-
 A,RADHAKRISHNAN ROAD
 MYLAPORE,CHENNAI CHENNAI
 CITY TAMIL NADU
 Phone:
 FAX :

Owner : P.R.Venketrama Raja
 Ramasamiraja
 Nagar,Virudhnagar, Chennai-
 626204 VIRUDHUNAGAR TAMIL
 NADU
 Phone: 04562 256201 -
 FAX : 04562 256268

Agent : C. RAVICHANDRAN
 GENERAL MANAGER (Adm)
 MADRAS CEMENTS LTD,
 GOVINDAPURAM WORKS,
 SENDURAI ROAD ARIYALUR
 TAMIL NADU
 Phone: 04329-226001
 FAX : 04329-226005

Mining Engineer

Name : R.JAYAKER,Full Time
 Qualification : B E MINING
 Appointment/ : 18/05/2018
 Termination date

Geologist

Name : P.SENTHAMILSELVEM,Full Time
 Qualification : M.SC-GEOLOGY
 Appointment/ : 18/05/2018
 Termination date

Manager

Name : Shri.K.Abraham,
 Qualification : B.TECH MINING, FIRST CLASS CERTIFICATE
 Appointment/ : 18/05/2018
 Termination date

6. Date of approval of Mining : MP under 16(1) of MCR 2016 23/05/2016
 Plan/Scheme of Mining : MP modif under 17(3) MCR 2016 04/04/2018

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	G-1	G-1 axis.	6 no of vertical bore holes have been drilled under exploration programme for a toal depth of 240.20m for depth ranging from 33m-50m.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal.	Nil.	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal.	Nil.	Entire lease area has been explored under G1 category by state govt., in the year 2015.
1e	Balance reserve as on 01/04/20		6855790Tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			Entire lease area has been explored by State Government under G1 category with 200mx200m grid interval for total depth of 240.20m.Exploratio n report has been submitted vide letter no.6301/MM1/2014 dated 12.2.2016.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Sections 2-2' to 3-3' RL-68.0 to 64.0 for the year 2018-19 . Sections 2-2' to 3-3' RL-64.0 to 60.0 for the year 2019-2020.	Working has not been carried out as per the approved proposals on section 2-2' and working has reached upto 12 m depth from RL 68m to RL56 m. Further, working has been extended towards western side on section line 3-3', where there is no proposal.	Violation of rule 11(2) of MCDR-2017 has been communicated to lessee vide letter no.TN/ALR/Lst-29.Mds dated 11.3.2020.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in topsoil, overburden and mineral proposed.	As proposed ,separate benches in topsoil, overburden and mineral are maintained.	Satisfactory.
2c	Stripping ratio or ore to OB ratio	1:0.16	1:0.08	-
2d	Quantity of topsoil generation in m3	25275cu m	24496cu m	-
2e	Quantity of overburden generation in m3	No proposal.	Nil.	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Violation of rule 11(2) of MCDR-2017 has been communicated to lessee .

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit operation.	As proposed ,in single pit operation.	-
3b	Quantity of ROM mineral production proposed	Year:2018-19= 299816 Tons Year:2019-20 =299896 Tons	Year:2018-19= 299809 Tons Year:2019-20 =299888 Tons	Within approved limits.But,development cum working reached beyond the proposed area for which violation of rule 11(2) of MCDR-2017 has been communicated.

3c	Recovery of sailable/usable mineral from ROM production	100% of ROM.	As proposed 100 % of ROM .	Entire ROM is being recovered.
3d	Quantity of mineral reject generation	Nil.	No generation of mineral reject.	-
3e	Grade of mineral rejects generation and threshold value declared.	Nil.	No generation of mineral reject.	-
3f	Quantity of sub grade mineral generation.	Nil.	No generation of sub grade mineral.	-
3g	Grade of sub grade mineral generation	Nil.	Not applicable.	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised.	Mechanised and conventional method of mining.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	No generation of mineral reject/sub grade mineral.
3j	Provision of drilling and blasting in mineral benches	Drilling & Blasting is proposed.	Proposed controlled blasting techniques are in practice.	-
3k	Provision of mining machineries in mineral benches	Yes.	Pneumatic drilling machine & compressor - 1 No . Excavator-EX-220 - 1 No. Water Tanker - 1 No.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes.	Yes.	Suitable bench height is maintained.
3m	Total area covered under excavation/pits	1.86.0 Ha	1.56.0 Ha	-
3n	Ore to OB ratio for the pit/mine during the year.	1:0.13	1:0.08	-

3o	Total area put in use under different heads at the end of year	Area under mining-4.33Ha; Infrastructure (workshop, administrative building-0.20Ha Roads-0.50Ha; Others to be specified (green belt etc.,)-12.33Ha	Area under mining-1.56Ha; Infrastructure (workshop, administrative building-0.20Ha Roads-0.50Ha; Others to be specified (green belt etc.,)-15.10Ha	-
3p	Production of ROM mineral during the last five year period as applicable	Year 2018-19-299819Tonnes 2019-20-299896Tonnes	Year 2018-19-299809.94Tonnes 2019-20-299888.70Tonnes	Production quantity achieved are with in the approved limits.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal of dumps, as the entire lease area is having only topsoil which is proposed for green belt all along the periphery of the mining lease area.	As per the proposal, the topsoil and small quantity of over burden removed had been used for green belt development all along the periphery of the mining lease area, haul roads .	Top soil cover is very thin upto 0.5m only.
4b	Location of topsoil, OB and mineral reject dumps	Nil.	The topsoil removed had been used for green belt development all along the periphery of the mining lease area, haul roads etc.,	-
4c	Number of dumps within lease area and outside of lease area	Nil.	Nil.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Nil.	NIL.	-

4e	Number of active and alive dumps.	Nil.	Nil.	-
4f	Number of dead dumps.	Nil.	Nil.	-
4g	Number of dumps established.	Nil.	Nil.	-
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil.	Nil.	
4i	Length of Retaining wall or garland drain all along dumps	Nil.	Nil.	
4j	Number of settling ponds	Nil.	Nil.	-
4k	Specific comments of inspecting officer on waste dump management		Thin cover of topsoil is being used for green belt development all along the periphery of the mining lease area, haul roads, etc.,	Satisfactory.

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.	Nil.	Mine started in may 2018 . No area is matured for backfilling.
5b	Area under backfilling of mined out area	Nil.	Nil.	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil.	Top soil removed is being used for green belt development.	Satisfactory.
5d	Total area fully reclaimed and rehabilitated	Nil.	Nil.	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No area is matured for reclamation/rehabilitation.

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) .	Nil.	Nil.	-
6c	afforestation done (ha).	Nil.	0.50Ha.	-
6d	No. of saplings planted during the year	200 No's	250 No's	-
6e	Cumulative no .of plants	400 No's	500 No's	-
6f	Any other method of rehabilitation	Nil.	Nil.	-
6g	Cost incurred on watch and care during the year	3.83Lakhs.	1.00lakh.	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil.	Nil.	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil.	Nil.	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil.	Nil.	-

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil.	Nil.	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil.	Nil.	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil.	Nil.	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil.	Nil.	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil.	Nil.	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes.	Quarterly monitoring reports on environment Air,Water and Noise are submitted.	Monitoring outputs are within limits.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-		Satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Nil.	Entire ROM is being dispatched to the plant for captive consumption.	-

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Nil.	Entire ROM is being transported to the plant for captive consumption.	-
7c	Different grade of mineral sorted out at mines.	Nil.	Entire ROM is being transported to the cement plant for captive consumption.	-
7d	Any beneficiation process at mines .	Nil.	Nil.	No beneficiation method is in practice. Limestone grade as per analysis reports, the content of Cao-46.49%, SiO ₂ -6.97%, Fe ₂ O ₃ -4.73%.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Entire ROM is being used for captive consumption.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes.	Yes.	Thin cover of topsoil is being utelised for green belt development.
8b	Concurrent use or storage of topsoil	Yes.	Topsoil is being utelised for green belt development.	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No dump is proposed.	No generation of waste ,reject or fines.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil.	Nil.	-

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil.	Nil.	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	200 No's.	500 No's.	
8g	Survival rate	90%	90%	-
8h	Water sprinkling on roads to control airborne dust	Yes.	Yes.	10000 Liters tankar is being engaged for the purpose.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes.	Monthly returns are being submitted regularly.AR for the year 2018-19 has been submitted.	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information furnished under Part-I of para 7,8.	Provided in parat -I of para 7,8&9 and found correct.	Satisfactory.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Information furnished under Part-I of para 12.	Provided under Part-I and para 12.Found satisfactory.	-
9d	Scrutiny of Annual return on afforestation	Information furnished under Part-V of para 4.4.	Provided in part-V of para 4.4.Found satisfactory.	-

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Information furnished under Part-V of section 4.	Provided in part-V and para 4.5(B).Entire ROM consumed for captive purpose.	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Information furnished under Part-VI of para 1.2.	Provided in Part-VI and para 1&2.Entire ROM is cement grade.	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Information furnished under Part-VI of para 5 andPart-VII.	Provided in Part-VI and para 5 and Part-VII.Captive use ,details found satisfactory.	-
9h	Scrutiny of Annual return on fixed assets	Information furnished under Part-II-A.	Provided in Part-IIA and Para 1.	-
9k	Scrutiny of Annual return on mining machineries	Information furnished under Part-V of section 5.	Provided in part-V and para 5.Found satisfactory.	-

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(2)	11/03/2020			

Date :

(V. Jaya Krishna Babu)

Indian Bureau of Mines