

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-49.MDS

Mine code : 38TMN38009

- (i) Name of the Inspecting : **J103**) **V. Jaya Krishna Babu**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : J.Ravi, Sr Manager, A.Santosh, AGM
Official with
Designation
- (iv) Date of Inspection : 03/03/2020
- (v) Prev.inspection date : 21/06/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TULAR LIMESTONE MINE(136**
- (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 : TULAR MANAKUDAYAN
- Taluka : SENDURAI
- Post office : CEMENT NAGAR
- Pin Code : 621730
- FAX No. : 04329-248303
- E-mail : mclalr@madras cements.co.i
- Phone : 04329-248305, 248306
- (f) Police Station : DALAVOI
- (g) First opening date : 29/10/2008
- (h) Weekly day of rest : SUN
2. Address for : GENERAL MANAGER (MINES)
correspondance : RAMCO CEMENTS LIMITED, (FORMERLY:MADRAS CEMENTS)
ALATHIYUR, DALAVOI, TEH-SENDURAI, DISTT- ARIYALU
3. (a) Lease Number : TMN1044
- (b) Lease area : 136.11
- (c) Period of lease : 20
- (d) Date of Expiry : 20/10/2028
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
 98-A,AURAS CORPORATE CENTRE
 RADHAKRISHNAN
 SALAI,MYLAPORE CHENNAI
 CHENNAI CITY TAMIL NADU
 Phone:
 FAX :

Agent : ASHISH KUMAR SRIVASTAVA
 ALATHIYUR CEMENT WORKS
 CEMENT NAGAR POST ARIYALUR
 DT. ARIYALUR TAMIL NADU
 Phone:
 FAX :

Mining Engineer

Name : A. Santhosh,Full Time
 Qualification : B.E mining
 Appointment/ : 01/07/2015
 Termination date

Geologist

Name : T.RAMAN,Full Time
 Qualification : M.Sc- geology
 Appointment/ : 31/03/2019
 Termination date

Geologist

Name : J. Ravi,Full Time
 Qualification : M.Sc Geology
 Appointment/ : 01/04/2019
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	21/04/2006
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	06/06/2013
	:	Modif.approved Mining Scheme	08/07/2015
	:	MP modif under MCR 1960	14/06/2016
	:	MP review under 17(1) MCR 2016	06/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Exploration completed for entire lease area.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	Exploration completed for proved reserves.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil.	Nil.	Exploration already completed.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Entire area has been explored G1 category.
1e	Balance reserve as on 01/04/20		8168255(111) 7878100(211) 6752520(331)	
1f	General remarks of inspecting officers on geology, exploration etc		Entire area has been explored with 128 no of bore holes.	Satisfactory.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	2018-19: ML 6- ML 11 2019-2020: ML 0, 1, 2, 4, 9, 10 & 11.	Working has not been carried out as per the approved ROMP, especially production and backfilling are lagging behind .	Violation of rule 11(2) of MCDR-2017 has been communicated to lessee vide letter no.TN/ALR/Lst-49.Mds dated 11.3.2020.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in topsoil, overburden and mineral proposed. No of benches on Topsoil - 1, OB -4, Mineral - 4.	As proposed ,separate benches in topsoil, overburden and mineral are maintained.	Satisfactory.
2c	Stripping ratio or ore to OB ratio	1 : 2.28	1 : 2.36	-

2d	Quantity of topsoil generation in m3	1,07,930	78,798	-
2e	Quantity of overburden generation in m3	20,20,113	17,01,768	-
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	Multiple pits.	Working has been carried out contrary to the the approved ROMP, due to lagging in previous year proposals ie production and backfilling.	-
3b	Quantity of mineral production proposed	Year:2018-19=1494224 Tons Year:2019-20 =1490017 Tons	Year:2018-19=1432790 Tons Year:2019-20 =1442361.90 Tons	Within approved limits. But, develop 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.	Nil.	-
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 mineral 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 by surface miner technology.	
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	Nil.	Nil.	As a contingency measure ,when the surface minner is under break-down for long period.
3k	Provision of mining machineries in mineral benches	Yes.	The following machinary :Surface Miner-1,Dumper- 2,Shovel-3,Dozer- 1,Tipper-14,Water Tanker-1,Explosive Van- 1,Other HEMM-2 ,Blast Host Drill-1.	Surface Minor operation is in practice for production.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes.	Yes.	Suitable benches are maintained with height 5m and 8m width.
3m	Total area covered under excavation/pits	59.26Ha.	59.26Ha.	-
3n	Ore to OB ratio for the pit/mine during the year.	1 : 2.28	1 : 2.36	-
3o	Total area put in use under different heads at the end of year	Minedout land - 59.26Ha , Reclaimed - 6.05 Ha, Road & Infra - 5.69 Ha Greenbelt - 16.016 Ha	Minedout land - 59.26 Reclaimed - 6.05 Ha Road & Infra - 5.69 Ha Greenbelt - 16.016 Ha	-

3p	Production of ROM mineral during the last five year period as applicable	Year 2015-16:1493589 Tonnes 2016-17:1496013 Tonnes 2017-18:1496983 Tonnes 2018-19:1491224 Tonnes 2019-20:1490017 Tonnes	Year 2015-16:1013395 Tonnes 2016-17:1217086 Tonnes 2017-18:1232976 Tonnes 2018-19:1432789 Tonnes 2019-20:1442361.90 Tonnes	Production quantities achieved are with in the approved limits.
3q	General remarks of inspecting officers on method of mining etc.			Mining operations are not as per the approved proposals accorded for which violation of rule 11(2) of MCDR-2017 has been communicated to lessee on 11.3.2020.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes.	As proposed separate dumps for top soil and OB are maintained.	2 no of top soil and 4 no of OB dumps are maintained.
4b	Location of topsoil, OB and mineral reject dumps	Top Soil - 1 ML 2 - 4 Grid 1000 to 1100 OB - 2 ML -1 - 0 Grid 400- 800 ML - 5-10 900 - 1200	Top Soil - 1 ML 2 - 4 Grid 1000 to 1100 OB - 2 ML -1 - 0 Grid 400- 800 ML - 5-10 900 - 1200	-
4c	Number of dumps within lease area and outside of lease area	Within ML-2 nos.	Within ML-2 nos.	As proposed within ML-2nos.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	RL - 74	RL - 74.38	-

4e	Number of active and alive dumps.	2nos.	2nos.	Topsoil & OB dumps.
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.	Yes.	Garland drain all along the dumps.	As proposed.
4i	Length of Retaining wall or garland drain all along dumps	485 x 8 x 2.5 mtr 535 x 8 x 2.5 mtr	485 x 8 x 2.5 mtr 535 x 8 x 2.5 mtr	Garland drain all along dumps.
4j	Number of settling ponds	1	1	As proposed.
4k	Specific comments of inspecting officer on waste dump management			Existing settling pond de silted. Waste dump management found satisfactory.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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) .	Yes.	2018-19: against 4.20ha, 2019-20: against 5.25ha, Reclamation is lagging behind between ML6 to ML8 where there is no proposal for the year 2019-20 as per the approved ROMP.	Violation of rule 11(2) of MCDR-2017 has been communicated.
6c	afforestation done (ha).	2018-19:3.00ha 2019-20:4.00ha	2018-19:ha 2019-20:ha	-
6d	No. of saplings planted during the year	2019- 20:3750nos.		-

6e	Cumulative no .of plants	37100nos.	71341nos.	-
6f	Any other method of rehabilitation	Nil.	Nil.	-
6g	Cost incurred on watch and care during the year	Rs.10,31,250/-	Rs.6,00,000/-	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	1.50ha	65m x 165m x 40m.backfilled area is lagging behind between ML6 to ML8 where there is no proposal for the year 2019-20 as per the approved ROMP.	Violation of rule 11(2) of MCDR-2017 has been communicated.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Yes.	Being carriedout.	-
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.	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.	Nil.	-
7d	Any beneficiation process at mines	Nil.	Nil.	No beneficiation method is in practice.Limestone grade as per analysis reports, the content of Cao-51.87%,SiO2-3.92%,Fe2O3-0.3%.
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.	Top soil is separately removed and stacked.
8b	Concurrent use or storage of topsoil	Yes.	Yes.	Both are in practice.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes.	Yes.	Separate dumps are maintained.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes.	Yes.	Over buredn used for back filling of minedout area.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes.	Yes.	Reclamation is being practised in phased manner.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	10,000nos.	21,000nos.	satisfactory.
8g	Survival rate	80%	80%	-
8h	Water sprinkling on roads to control airborne dust	Yes.	Yes.10000 Liters tankar is being engaged for the purpose.	Haul roads and transit points are water sprinkled.
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
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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.	Nil.Provided in part-V and para 4.5(B).	-
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.	The ex-mine price furnished in H8, i.e. Annual Return for the year 2018-19 is not matching with the ex-mine price furnished in the monthly returns submitted in the year 2018-19.	Violation of rule 45(7)(a) of MCDR-2017 has been communicated.
9h	Scrutiny of Annual return on fixed assets	Information furnished under Part-IIA.	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 couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(2)	11/03/2020			
MCDR17	Rule 45(7)(a)	11/03/2020			

Date :

(V. Jaya Krishna Babu)

Indian Bureau of Mines