

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

MCDR INSPECTION REPORT

Chennai regional office

Mine file No : TN/RP/LST-5.MDS

Mine code : 38TMN30002

- (i) Name of the Inspecting : **T003**) **S.THIRUNAVUKKARASU**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : MR.JAGDISH BABU- SR.GM-MINES
Official with
Designation
- (iv) Date of Inspection : 05/03/2020
- (v) Prev.inspection date : 28/08/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PANDALGUDI**
- (b) **Registration NO.** : **IBM/638/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **TAMIL NADU**
- District : **VIRUDHUNAGAR**
- Village : **PANDALGUDI**
- Taluka : **ARUPPUKOTTAI**
- Post office : **PANDALGUDI**
- Pin Code : **626113**
- FAX No. : **04562-256268**
- E-mail : **adminrn@madrascements.co.in**
- Phone : **04562-256201 / 256202**
- (f) **Police Station** :
- (g) **First opening date** : **03/10/1960**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **M/s. RAMCO CEMENTS LIMITED**
RAMASAMY RAJA NAGAR POST
VIRUDUNAGAR DISTRICT - 626204
3. (a) **Lease Number** : **TMN0020**
- (b) **Lease area** : **4.74**
- (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
 98-A,AURAS CORPORATE CENTRE
 RADHAKRISHNAN
 SALAI,MYLAPORE CHENNAI
 CHENNAI CITY TAMIL NADU
 Phone:
 FAX :

Agent : S. RAMALINGAM
 Executive Director(Mines)
 NLC Ltd.,Administrative
 Office, Block-26, Neyveli-3
 CUDDALORE TAMIL NADU
 Phone: 04142-228376
 FAX : 04142-228376

Mining Engineer

Name : J.KANNAN,Full Time
 Qualification : BE (MINING)
 Appointment/ : 25/07/2018
 Termination date

Geologist

Name : R.RANGARAJ,Full Time
 Qualification : M.Sc GEOLOGY
 Appointment/ : 16/08/2019
 Termination date

Geologist

Name : R.SENTHILKUMARAN,Full Time
 Qualification : MSC (GEO)
 Appointment/ : 01/04/2012 15/08/2019
 Termination date

Manager

Name : S.KESAVAN
 Qualification : MSC(GEO)
 Appointment/ : 01/04/2015
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Mining Scheme rule 12 MCDR1988 25/08/2006
 Mining Scheme rule 12 MCDR1988 25/08/2006
 Mining Scheme rule 12 MCDR1988 25/08/2006
 Mining Scheme rule 12 MCDR1988 14/10/2011
 Mining Scheme rule 12 MCDR1988 14/10/2011
 Mining Scheme rule 12 MCDR1988 18/11/2011
 Mining Scheme rule 12 MCDR1988 04/03/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	NA	The Area was fully explored
1b	Exploration over lease area for geological axis 1 or 2	66.50 Ha	66.50 Ha	The Area is Fully Explored. Sufficient drilling of about 7379 mts of DDH drilled so far.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	NA	The area was fully explored by TRCL & ACC
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	NA	Total Mineralised are already explored
1e	Balance reserve as on 01/04/20	3.58 Mil. Tons	3.58 Mil. Tons	Nil
1f	General remarks of inspecting officers on geology, exploration etc	--	--	Satisfactory

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML - 40 to 44	Between ML - 40 to 44	The workings are confined to the area proposed.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Separate benches are maintained in Topsoil & OB	Nil
2c	Stripping ratio or ore to OB ratio	1:2.45	1:2.10	Nearer to the proposals.
2d	Quantity of topsoil generation in m3	Nil	NA	No topsoil generated this year
2e	Quantity of overburden generation in m3	224700	220086	Nearer to the proposals

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	--	--	Satisfactory
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2	As per proposal.	Nil
3b	Quantity of ROM mineral production proposed	305438 Tonnes	299736 Tonnes	Production target is almost achieved.
3c	Recovery of sailable/usable mineral from ROM production	90 %	As per proposal.	No segregation at mine head, beneficiation plant is located outside the ML.
3d	Quantity of mineral reject generation	Nil	NA	No beneficiation Plant within ML
3e	Grade of mineral rejects generation and threshold value declared.	<35 CaO	<35 CaO	Threshold value maintained.
3f	Quantity of sub grade mineral generation.	Nil	NA	No subgrade mineral generation.
3g	Grade of sub grade mineral generation	Nil	NA	No subgrade mineral generation.
3h	Manual / Mechanised method adopted for segregating from ROM	Nil	NA	No subgrade mineral generation.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No subgrade mineral generation.	No proposal during the plan period.	Nil

3j	Provision of drilling and blasting in mineral benches	Deep hole drilling and blasting is proposed and blasting with delay detonators.	As per proposal	Nil
3k	Provision of mining machineries in mineral benches	Yes	Bench height and width is facilitating for moving of Mining machinery.	Bench height is 9m and width 9-12 m. maintained.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Bench height and width is facilitating for moving of Mining machinery.	Bench height is 9m and width 9-12 m. maintained.
3m	Total area covered under excavation/pits	41.48 Ha	41.48 Ha	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:2.45	1:2.10	The shortfall in development will be adjusted in the subsequent year.
3o	Total area put in use under different heads at the end of year	51.48 Ha	51.48 Ha	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15=3,05,556 2015-16=3,05,556 2016-17=3,05,250 2017-18=3,05,500 2018-19=3,05,438 2019-20=3,05,188	2014-15=1,16,338 2015-16=1,89,346 2016-17=2,93,341 2017-18=3,04,602 2018-19=2,99,736 2019-20=2,64,892 (upto Feb'2020)	Less Production due to Plant Requirement.
3q	General remarks of inspecting officers on method of mining etc.	--	--	Satisfactory

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Existing Dump to be used	Dumping carried out separately on existing OB dump.	Nil
4b	Location of topsoil, OB and mineral reject dumps	OB Dump ML-40 to ML-42	As per Proposal	Nil
4c	Number of dumps within lease area and outside of lease area	15 Nos	Dumps were existing. Old dump stabilization and terracing is noticed during inspection.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	OB Dump ML-40 to ML-42	OB Dump ML-40 to ML-42	Nil
4e	Number of active and alive dumps.	2	2	Nil
4f	Number of dead dumps.	10	10	Nil
4g	Number of dumps established.	3	3	Stabilized
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	900mX3mX1m	Inactive Sides of the Dump area covered by Garland Drains and earthen bunds.
4i	Length of Retaining wall or garland drain all along dumps	Nil	900mX3mX1m	Inactive Sides of the Dump area covered by Garland Drains with earthen bunds.
4j	Number of settling ponds	2 Nos	2 Nos	Settling Pond Dimension (2. Nos) 50 m x 30 m x 3 m
4k	Specific comments of inspecting officer on waste dump management	--	--	Satisfactory

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.	Nil	No backfilling proposal during the plan period 2018-2019	No proposal

5b	Area under backfilling of mined out area	Nil	Na	No proposal
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	NA	No topsoil generation
5d	Total area fully reclaimed and rehabilitated	Nil	NA	Already 6.20 Ha of Miens out Area Refilled & Reclaimed
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Satisfactory

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).	Periodically Submitted	Periodically Submitted	All Benches are still active
6b	Area available for rehabilitation (ha) .	Nil	NA	All Benches are Still Active
6c	afforestation done (ha).	Nil	NA	All Benches are Still Active
6d	No. of saplings planted during the year	Nil	NA	All Benches are Still Active
6e	Cumulative no .of plants	Nil	NA	All Benches are Still Active
6f	Any other method of rehabilitation	Nil	NA	All Benches are Still Active
6g	Cost incurred on watch and care during the year	Nil	NA	All Benches are Still Active
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	NA	All Benches are Still Active

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	NA	All Benches are Still Active
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Nil	NA	All Benches are Still Active
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	NA	All Benches are Still Active
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Nil	NA	All Benches are Still Active
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	3200 Nos	5500 Nos	Location of the Afforested area as follows Lat: N 9* 21' 46'' Long: E78* 06' 50''
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	2.90 Ha	4.58 Ha	Location of the Afforested area as follows Lat: N 9* 21' 46'' Long: E78* 06' 50''
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation with 3200 nos of Saplings	Plantation with 5500 Nos of Neem, Pungai & Vagai	So far 35,500 No. of Saplings (as on Feb-2020) Planted in the ML area
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodically Monitored	Periodically Monitored by M/s Creative Engineers & Consultants Chennai	Environmental Monitoring Report Periodically submitted to Indian Bureau of Mines.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	--	--	Satisfactory
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting of ROM grade wise at pit head.	Entire Rom is transported to primary crusher outside the ML and then to cement pant	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No separation at mine head.	Mechanical methods adopted.	ROM transported to crusher located outside ML, having Color based sorting technology is being used for beneficiation of Limestone.
7c	Different grade of mineral sorted out at mines.	Nil	Nil	Nil
7d	Any beneficiation process at mines .	Nil	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Satisfactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	NA	Top soil is not utilized during the Year 2018-2019
8b	Concurrent use or storage of topsoil	Nil	NA	Nil

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB Dump Provided OB Dump ML-40 to 42	As per Proposal	Separate dumps are provided as per Mining Plan
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	NA	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	2.90 Ha	4.58 Ha	Old dumps being terraced for stabilization
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	3200 Nos	5500 Nos	So far 35,500 No. of Saplings (as on Feb-2020) Planted in the ML area
8g	Survival rate	Ni-	80%	Nil
8h	Water sprinkling on roads to control airborne dust	10 KL Water Tanker	As per Proposal	Water Tanker is being used for Dust Suppression
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	Submitted	Submitted	Nil

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri. J.Kannan (Mining Engineer) & Shri. R.Senthil Kumaran (Geologist)	Shri. J.Kannan (Mining Engineer) & Shri. R.Senthil Kumaran (Geologist)	Shri.R.Rengaraj (Geologist) appointed on 16-08-2019
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR 2018-19	Checked and found satisfactory.	Nil
9d	Scrutiny of Annual return on afforestation	5500 Sapplings were planted	As per filled Return	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Details furnished in the Annual Return 2018-19	299736 Tonnes of ROM Production during 2018-19	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details furnished	Ex-mine price and cost of production checked and found reasonable.	Satisfactory.
9h	Scrutiny of Annual return on fixed assets	Details given	48816700 was shown as value of Fixed assets.	Satisfactory.
9k	Scrutiny of Annual return on mining machineries	FRONT END LOADER 3.300 CUM- 1, 3.200 CUM- 1 BACK HOE 0.900 CUM - 1, TIPPER 12.000 CUM -7, BLAST HOLE DRILL 115 MM - 1, AIR COMPRESSOR 400 CUM/min-1 & WATER TANKER 10KL-1	The deployment of machinery was found during the inspection.	Nil

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

Date :

(S. THIRUNAVUKKARASU)

Indian Bureau of Mines