INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT 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 Officer and ID No. : **T003) S.THIRUNAVUKKARASU**

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine Official with Designation : Mr.L.Venkatarama Subramanian DGM (Geology) & Mr.S.Ksa

(iv) Date of Inspection : 28/08/2019

(v) Prev.inspection date : 12/03/2019

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.i
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/ Termination date : 25/07/2018

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

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

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

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	Not applicable	Mine fully explored under G1 Level, about 7379 mts of DDH drilled so far
1b	Exploration over lease area for geological axis 1 or 2	NIL	NA	The Area fully Explored by TRCL & ACC
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NA	The Area fully Explored by TRCL & ACC
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NA	Total mineralized area 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	----	-----	The area fully geologicaly examined and the mineralised area fully explored.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Between ML - 40 to 44 of pit No 5	Between ML - 40 to 47 (pit No-5&5A)	Deviation of approved plan violation poited out
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed	Separate benches are maintained in Topsoil & OB	As per the proposal
2c	Stripping ratio or ore to OB ratio	1:2.45	1:2.10	The Ratio Nearer to the proposals.
2d	Quantity of topsoil generation in m3	NIL	Not applicable	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	----	----	The development of the mine is found as per the proposal

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 Nos for plan perios	2 Nos for plan perios	NIL
3b	Quantity of ROM mineral production proposed	305438 Tonnes	299736 Tonnes	Production with in the limite
3c	Recovery of sailable/usable mineral from ROM production	90 %	90 %	NIL
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	Mechanized methods	Mechanized methods	Mechanized methods of mineral segregation/beneficiation techniques adopted at crushing plant situated outside ML.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NA	No proposal given

3j	Provision of drilling and blasting in mineral benches	Deep hole drilling and blasting is proposed and blasting with delay detonators	As per proposal	As per proposal
3k	Provision of mining machineries in mineral benches	Yes	mining machineries in mineral benches are avilable	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed	Suitable bench heights maintained as proposed	As per the proposal
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	Due to less developoment
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	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	Lesss poduction
3q	General remarks of inspecting officers on method of mining etc.	---	----	method of mining found satisfactory

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Existing Dump proposed to used	As per the proposal	NIL

4b	Location of topsoil, OB and mineral reject dumps	OB Dump ML-40 to ML-42	OB Dump ML-40 to ML-42	NIL
4c	Number of dumps within lease area and outside of lease area	15 Nos	15 Nos	Dumps were exist. Old dump stabilization and terracing
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Yes	Yes	NIL
4e	Number of active and alive dumps.	TWO	TWO	NIL
4f	Number of dead dumps.	10 Nos	10 Nos	NIL
4g	Number of dumps established.	3 Nos	3 Nos	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	NIL	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 No	2 No	Settling Pond Dimension (2. Nos) 50 m x 30 m x 3 m
4k	Specific comments of inspecting officer on waste dump management	----	-----	waste dump management found 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	NA	No backfilling proposal during the plan period 2018-19.
5b	Area under backfilling of mined out area	NIL	NA	backfilling not inthe stage mineral not exhasted.

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NA	restoration or rehabilitation not at the stage
5d	Total area fully reclaimed and rehabilitated	NIL	NA	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.	____	____	No backfilling, reclamation propoded.

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	Yes Submitted	NIL
6b	Area available for rehabilitation (ha) .	NIL	NA	No Area available for rehabilitation
6c	afforestation done (ha).	2.90 Ha	4.58 Ha	NIl
6d	No. of saplings planted during the year	3200 Nos	5500 Nos	NIL
6e	Cumulative no .of plants	---	Sofar 20500	NIL
6f	Any other method of rehabilitation	NIL	NA	No Any other specific method of rehabilitation
6g	Cost incurred on watch and care during the year	NIL	NA	NIL
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NA	NIL

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NA	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NIL	NA	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NA	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NIL	NA	NIL
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	3200 No	5500 Nos of Neem, Pungai & Vagai	So far 20500 No. of Saplings Planted in the ML area
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed for Periodically Monitoring	Periodically Monitored by M/s Creative Engineers & Consultants Chennai	Environmental Monitoring Report Periodically

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	----	----	PMCP compliance & progressive closure operations is found satisfactory

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NIl	NA	Entire Rom is transported to primary crusher outside the ML and then to cement pant
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NIL	NA	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	NA	NA
7d	Any beneficiation process at mines .	NIL	NA	No beneficiation process at mines
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	---	----	Mineral conservation & beneficiation issues is found satisfactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIl	NA	No Top soil is removal
8b	Concurrent use or storage of topsoil	NIL	NA	No Top soil is removal

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB Dump Provided OB Dump ML-40 to 42	OB Dump Provided OB Dump ML-40 to 42	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	Not At this Stage
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	2.90 Ha	4.58 Ha	NIL
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	3200 Nos	5500 Nos	NIL
8g	Survival rate	80 %	80 %	niL
8h	Water sprinkling on roads to control airborne dust	10 KL Water Tanker	10 KL Water Tanker used	10 KL Water Tanker used for Water sprinkling on roads to control airborne dust
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	----	----	aesthetic beauty in and around mines area is found good

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Submitted in time	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)	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	given	Details given in AR 2018-19	NIL
9d	Scrutiny of Annual return on afforestation	Given	5500 Sapplings were planted	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NA	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL	NA	NIL
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Production caste Rs 529.85/-	Given in part -VII if AR
9h	Scrutiny of Annual return on fixed assets	Given	Rs.48816700 /-	Given in Part-IIA of AR
9k	Scrutiny of Annual return on mining machineries	Given	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	Given in para 4.4 of AR

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 :

(**S.THIRUNAVUKKARASU**)

Indian Bureau of Mines