INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

Mining Plan Modification REPORT

Chennai regional office

Mine file No : TN/ALR/LST-28.MDS **Mine code : 38TMN38046**

(i) Name of the Inspecting Officer and ID No. : **M017) Matiul Islam**

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine Official with Designation : Mr. P. Senthamilselvan, QP

(iv) Date of Inspection : 09/01/2023

(v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KALLANKURICHI 25.105 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 : KALLANKURICHI
Taluka : ARIYALUR
Post office : KALLANKURICHI
Pin Code : 621705
FAX No. : 044-28478676
E-mail : madhusudan.k@ramcocements.
Phone : 044-28478666

(f) Police Station : USENABAD

(g) First opening date : 10/01/2017

(h) Weekly day of rest : SUN

2. Address for correspondance : THE RAMCO CEMENTS LTD
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 98-A,AURAS CORPORATE CENTRE RADHAKRISHNAN SALAI,MYLAPORE CHENNAI CHENNAI CITY TAMIL NADU Phone: FAX :
Agent	:	MADHUSUDAN KULKARNI Govindapuram Works Sendurai Road Ariyalur ARIYALUR TAMIL NADU Phone: 9943300504 FAX : 04329-226005

Mining Engineer

Name	:	K. Maheshkumar,Full Time
Qualification	:	B.Tech. (Mining)
Appointment/ Termination date	:	16/08/2021

Geologist

Name	:	V.C.SHUNMUGAM,Full Time
Qualification	:	M.SC-GEOLOGY
Appointment/ Termination date	:	07/11/2018

Manager

Name	:	Shri.I.Lakshmi Naranaya,
Qualification	:	BTECH MINING WITH FIRST CLASS
Appointment/ Termination date	:	01/07/2019

6. Date of approval of Mining Plan/Scheme of Mining :

Fresh under rule 22 MCR1960	23/05/2016
MP modif under 17(3) MCR 2016	04/04/2018
MP modif under 17(3) MCR 2016	07/02/2020
MP review under 17(1) MCR 2016	10/12/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Entire lease area already fully explored upto G1 level.
1b	Exploration over lease area for geological axis 1 or 2	Nil	Nil	-do-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	-do-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	-do-
1e	Balance reserve as on 01/04/20	2.02 Million Tonnes	2.02 Million Tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Entire lease is already fully explored upto G1 level.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	SL-1-1′ to SL-3-3' - RL-87.00 to 85.50m	SL-1-1′ to SL-3-3' - RL-87.00 to 85.50m	As proposed
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Marl benches-3 L.st benches-2	Marl benches-3 L.st benches- 2	-do-
2c	Stripping ratio or ore to OB ratio	1:0.01	1:0.01	-do-
2d	Quantity of topsoil generation in m3	4,320 cu.m.	4,115 cu.m.	Within limit
2e	Quantity of overburden generation in m3	Nil	Nil	Nil

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	The development of the pit was found satisfactory

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Single pit operation	Single pit operation	As proposed
3b	Quantity of ROM mineral production proposed	9,23,291 tonnes (ROM + Rehandling)	9,23,287.22 tonnes (ROM + Rehandling)	Within limit
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	As proposed
3d	Quantity of mineral reject generation	Nil	Nil	Entire ROM consumed
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	-do-
3f	Quantity of sub grade mineral generation.	Nil	Nil	No sub-grade mineral generation envisaged
3g	Grade of sub grade mineral generation	NA	NA	-do-
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA	Entire ROM is consumed
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Drilling & Blasting proposed as contingency measure	Drilling & Blasting carried out as & when required	Non-conventional mining practiced by engaging X-centric Ripper

3k	Provision of mining machineries in mineral benches	Xcentric Ripper - 1 No Excavator- 1 No Tipper – 23 No’s Water Tanker – 1 No	Xcentric Ripper - 1 No Excavator- 1 No Tipper – 10 No’s Water Tanker – 10000 Liters	As proposed
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 m Bench Height proposed	6 m Bench Height maintained	-do-
3m	Total area covered under excavation/pits	13.21 Ha (by the end of plan period)	10.65.0 Ha	Within limit
3n	Ore to OB ratio for the pit/mine during the year.	1:0.01	1:0.01	As proposed

3o	Total area put in use under different heads at the end of year	Activities Area use at the end of approved plan period (in Ha) Area under mining 13.21.0 Storage for top soil 0.00.0 Overburden / dump 0.00.0 Mineral Storage 0.00.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 0.50.0 Railways 0.00.0 Tailing pond 0.00.0 Effulent treatment plant 0.00.0 Mineral separation plant 0.00.0 Township area 0.00.0 Area Backfilled 0.00.0 Others to be specified (green belt etc.,) 11.19.5 Total 25.10.5	Activities Area use at the end of year 2021-22 (in Ha) Area under mining 10.65.0 Storage for top soil 0.10.0 Overburden / dump 0.00.0 Mineral Storage 1.15.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 0.50.0 Railways 0.00.0 Tailing pond 0.00.0 Effulent treatment plant 0.00.0 Mineral separation plant 0.00.0 Township area 0.00.0 Area Backfilled 0.00.0 Others to be specified (green belt etc.,) 12.50.5 Total 25.10.5	Within limits
3p	Production of ROM mineral during the last five year period as applicable	2019-20 - 999909 Tons 2020-21 - 998070 Tons 2021-22 - 923291 Tons	2019-20 - 982613.94 Tons 2020-21 - 998064.22 Tons 2021-22 - 923287.22 Tons	-do-
3q	General remarks of inspecting officers on method of mining etc.	-	-	The method of mining was 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)	Separate dumping of Top Soil proposed. No OB/MR generation envisaged.	Separate dumping of Top Soil carried out. No OB/MR generated.	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Section Line - 2-2'	Section Line - 2-2'	-do-
4c	Number of dumps within lease area and outside of lease area	1 temporary Top Soil dump within the UPL proposed to be removed during the current year.	1 Top Soil dump within the UPL being rehandled & utilised for afforestation.	-do-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL	Within UPL	Rehandling proposed & being carried out
4e	Number of active and alive dumps.	1	1	As proposed
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	Nil	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Garland drain maintained	Previously constructed
4i	Length of Retaining wall or garland drain all along dumps	No proposal	50 m x 1.5 m x 1.0 m	-do-
4j	Number of settling ponds	No proposal	1 no	-do-
4k	Specific comments of inspecting officer on waste dump management	-	-	Waste dump management of the mine was 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.	No backfilling proposed	No backfilling carried out	Pit is proposed to be converted into a water reservoir after exhaustion of mineral
5b	Area under backfilling of mined out area	NA	NA	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed	Carried out	As proposed
5d	Total area fully reclaimed and rehabilitated	NA	NA	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	No backfilling or reclamation was proposed or carried out during the year.

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	In time
6b	Area available for rehabilitation (ha) .	Nil	Nil	Nil
6c	afforestation done (ha).	0.20 Ha	1.50 Ha	More than proposed
6d	No. of saplings planted during the year	300 nos	1500 nos	-do-
6e	Cumulative no .of plants	1,300 nos	15,750 nos	-do-
6f	Any other method of rehabilitation	Nil	Nil	Nil

6g	Cost incurred on watch and care during the year	No estimate	Rs 2,00,000/-	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	Pit to be converted into water reservoir upon exhaustion of mineral
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NA	NA	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	Water Reservoir envisaged after exhaustion of mineral
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	300 nos	1,500 nos	More than proposed
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.20 Ha	1.50 Ha	-do-

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Afforestation	Afforestation	As proposed
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Carried out on a quarterly basis	All parameters within norms
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	PMCP compliance was found satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No sorting proposed	No sorting carried out	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	Nil
7c	Different grade of mineral sorted out at mines.	NA	NA	Nil
7d	Any beneficiation process at mines .	No beneficiation proposed	No beneficiation carried out	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	No issues were observed with mineral conservation. Entire ROM is consumed & no beneficiation is proposed or carried out.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed	Carried out	As proposed
8b	Concurrent use or storage of topsoil	Proposed	Carried out	-do-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No OB/Waste/Rejects/Fines envisaged during the plan period	No OB/Waste/Rejects/Fines generated	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	No OB/Waste/Rejects/Fines envisaged or generated
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No restoration, reclamation or rehabilitation proposed	No restoration, reclamation or rehabilitation carried out	Pit is proposed to be converted into a water reservoir upon exhaustion of mineral
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	14,250 nos saplings planted before the beginning of the year	1,500 nos saplings planted during the year	15,750 nos saplings cumulatively planted till the end of the year
8g	Survival rate	90%	90%	As proposed
8h	Water sprinkling on roads to control airborne dust	Engagement of Water Tanker proposed for control of airborne dust	10,000 Lt capacity Water Tanker engaged for water sprinkling	-do-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	The aesthetic beauty in and around the mines area was found satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks

9a	Status of submission of Monthly and Annual returns	Given	Submitted in time	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	7. Manager Shri I.LAKSHMI NARANAYA 8. Mining Engineer in charge Shri.KESAMSETTI MAHESHKUMAR 9. Geologist in charge Shri V.C.SHUNMUGAM	Provided in Part-I and para 7,8 & 9	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Activities Area use at the end of year 2021-22 (in Ha) Area under mining 10.65.0 Storage for top soil 0.10.0 Overburden / dump 0.00.0 Mineral Storage 1.15.0 Infrastructure (workshop, administrative building) 0.20.0 Roads 0.50.0 Railways 0.00.0 Tailing pond 0.00.0 Area Backfilled 0.00.0 Others to be specified (green belt etc.,) 12.50.5 Total 25.10.5	Provided in Part-I, para 12	Nil
9d	Scrutiny of Annual return on afforestation	(i) Number of trees planted during the year 1500 (ii) Survival rate in percentage 90.00	Provided in Part-V, para 4.4	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	(ii) Mineral Rejects generated with grades (tonnes) a. Quantity 0 b. Grade 0	Provided in Part-V, para 4.2 (B)	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Category Opening stock (in tonne) Production (in tonne) Closing stock (in tonne) LIMESTONE (a) Open Cast Workings 0.000 217979.740 0.000 MARL (a) Open Cast Workings 0.000 705307.480 0.000	Given in Part VI, Para 1.	Total - 2,17,979.740+7,05,307.480 = 9,23,287.22 tons
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-Mine Price: LIMESTONE - Rs 211.35/- MARL - Rs 191.11/- Cost of Production - Rs 211.35/-	Given in Part VI, Sl 2 For LIMESTONE & For MARL & Part VII	Nil
9h	Scrutiny of Annual return on fixed assets	Net Closing Balance - Rs 3,76,11,916/-	Given in Part II(A)(Capital Structure)	Nil

9k	Scrutiny of Annual return on mining machineries	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) Used in opencast/ underground (specify) BACK HOE 1.600 CUM 1 Non Electrical Opencast BACK HOE 1.800 CUM 1 Non Electrical Opencast TIPPER 10.000 CUM 10 Non Electrical Opencast WATER TANKER 10000.000 LITRE 1 Non Electrical Opencast	Given in Part V, Sec 5/6/8/9	Nil

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 :

(**Matiul Islam**)

Indian Bureau of Mines