INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Chennai regional office

Mine file No: TN/TNL/LST-38.MDS Mine code: 38TMN29002

(i) Name of the Inspecting : G039) G.C.Sethi

Officer and ID No.

(ii) Designation : Regional Controller Mines

(iii) Accompaning mine : Mr Sendilkumar,

Official with Designation

(iv) Date of Inspection : 22/08/2022
(v) Prev.inspection date : 06/09/2021

PART-I : GENERAL INFORMATION

. (a) Mine Name : MELVENKATESWARAPURAM

(b) Registration NO. : IBM/638/2011

(c) Category : A Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : TAMIL NADU

District : THOOTHUKUDI (TUTICORIN)

Village : SENNAYAMPATTI Taluka : VILATHIKULAM

Post office : PUDUR

Pin Code

FAX No. : 04562 - 256268

E-mail : adminrn@madrascements.co.ii Phone : 04562 - 256201, 202 & 203

(f) Police Station : Vilathikulam

(g) First opening date : 27/06/1985

(h) Weekly day of rest : SUN

2. Address for : MADRAS CEMENTS LIMITED

correspondance RAMASAMYRAJA NAGAR

VIRUDUNAGAR - 626204

3. (a) Lease Number : TMN1199

(b) Lease area : 103.54

(c) Period of lease : 20

(d) Date of Expiry : 28/07/2003

4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : MADRAS CEMENTS LIMITED

Auras Corporate Center Vth Floor, 98 A Dr.Radha Krishnan salai, Mylapore CHENNAI CITY TAMIL NADU

Phone: 044-28478666 FAX: 044-28478676

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 : R.DINESH, Full Time

Qualification : B.E., MINING Appointment/ : 23/06/2015

Termination date

Geologist

Name : R.RENGARAJAN, Full Time

Qualification : MSC(GEO)
Appointment/ : 09/06/2017

Termination date

Geologist

Name : C.KARUNAKARAN, Full Time

Qualification : MSc GEOLOGY Appointment/ : 16/08/2019

Termination date

Manager

Name : R.DINESH
Qualification : BE(MINING)
Appointment/ : 23/06/2015

Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 25/09/1990 Renewal under rule 22 MCR1960 18/02/2003 Mining Scheme rule 12 MCDR1988 26/09/2008 Mining Scheme rule 12 MCDR1988 06/06/2013

MP modif under MCR 1960 18/05/2015 MP review under 17(1) MCR 2016 03/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil.	Nil.	No proposal for the yeaR 2021-22.
1b	Exploration over lease area for geological axis 1 or 2		G1	Nil.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil.	Nil.	Nil.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil.	Nil.	Nil.
1e	Balance reserve as on 01/04/20	5.572Million Tonnes	5.572Million Tonnes	As on 1.4.2022.
1f	General remarks of inspecting officers on geology, exploration etc		Entire lease area drilled upto ultimate depth upto 75m to 80m depth with 100m interval.	Nil.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	ML - 15 to 21	ML - 15 to 21	Nil.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)			Separate benches are maintained in OB and Mineral.
2c	Stripping ratio or ore to OB ratio	1:1.44	1:1.40	Nil.
2d	Quantity of topsoil generation in m3	Nil.	No generation of top soil.	Nil.
2e	Quantity of overburden generation in m3	3,60,385	2,25,631	The variation is due to lithological disturbances.

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

The western block/pit of mine as envisaged in the approved document.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 No. of Pit ML - 15 to 21 (Western Block)	1 No. of Pit ML - 15 to 21	Nil.
3b	Quantity of ROM mineral production proposed	714,781 Ts	460,932 Ts	Nil.
3c	Recovery of sailable/usable mineral from ROM production	70%	70%	Nil.
3d	Quantity of mineral reject generation	214,434Ts	Nil.	Violation of rule 11(1)of MCDR-2017 has been communicated.
3e	Grade of mineral rejects generation and threshold value declared.	<35 CaO.	<35 CaO.	Nil.
3f	Quantity of sub grade mineral generation.	Nil.	Nil.	Nil.
3g	Grade of sub grade mineral generation	Nil.	No generation of sub grade mineral.	Nil.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised.	Mechanised.	Nil.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil.	Nil.	No beneficiation activities are involved within the lease .

3j	Provision of drilling and blasting in mineral benches	Yes.	Deep hole drilling and blasting is practiced. Holes are drilled upto 10 m depth with a spacing of 3.5-4 m .	Controlled blasting by using STD, NTD & Electronic detonators being used as recommended by study conducted through Anna University.
3k	Provision of mining machineries in mineral benches	9m hight and width.	Bench width maintained as 9m.	As proposed.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	9m.	9m.	suitable for mining.
3m	Total area covered under excavation/pits	22.80 На	22.80 На	Nil.
3n	Ore to OB ratio for the pit/mine during the year.	1:1.44	1:1.40	Due less production.
30	Total area put in use under different heads at the end of year	64.13На	64.13На	Nil.
3р	Production of ROM mineral during the last five year period as applicable	2017- 18=7,26,950Ts 2018- 19=7,14,250Ts 2019- 20=7,14,544Ts 2020- 21=7,13,000Ts 2021- 22=7,14,781Ts	2017-18=1,00,827Ts 2018-19=1,00,462Ts 2019-20=4,98,845 Ts 2020-21=2,18,632Ts 2021-22=4,60,932Ts	Actual production is lower side against the proposed, for which violation of rule 11(1) has been pointed out.
3q	General remarks of inspecting officers on method of mining etc.		Adapted controlled blasting by using STD, NTD & Electronic Detonators .	Nil.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Sepate dumps proposed.	Dumping carried out separately .	Nil.
4b	Location of topsoil, OB and mineral reject dumps	ML-3 to ML-10 Location: N 90 17' 43" E 780 10' 30"		Nil.
4c	Number of dumps within lease area and outside of lease area	5 Nos.	5 Nos.	Out of 5 dumps, 1 Dump is in Partly Outside ML.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of Ultimate Pit Limit.	Outside of Ultimate Pit Limit.	Nil.
4e	Number of active and alive dumps.	2Nos.	2Nos.	Nil.
4f	Number of dead dumps.	3Nos.	3Nos.	Nil.
4g	Number of dumps established.	1 dump.	1 dump.	Nil.
4h	Whether Retaining wall or garland drain all along dumps are there.	Nil.	Inactive sides of dump area covered by Garland drain and earthen bund.	Dimension of Garland drain 1200 m x 2 m x 2 m.
4i	Length of Retaining wall or garland drain all along dumps	Nil.	Garland drain 1200 m x 2 m x 2 m.	Garland drain 1200 m x 2 m x 2 m.
4j	Number of settling ponds	-	Settling Pond dimensions are: 1 - 90 m x 50 m x 3 m 2 - 60 m x 40 m x 3 m 3 - 60 m x 40 m x 3 m	Nil.
4k	Specific comments of inspecting officer on waste dump management			Properly dumped and stablised.

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 proposal	Nil.

5b	Area under backfilling of mined out area	Nil.	No proposal	Nil.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil.	No proposal	Nil.
5d	Total area fully reclaimed and rehabilitated	Nil.	No proposal	Nil.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No back filling proposed for the year 2021-22.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes.	Yes.	Report for the year 2021-22 has been submitted.
6b	Area available for rehabilitation (ha).	Nil.	Nil.	Nil.
6c	afforestation done (ha).	1На	1На	Nil.
6d	No. of saplings planted during the year	1000nos.	1350nos.	Nil.
6e	Cumulative no .of plants		26750 no of plantation.	Nil.
6f	Any other method of rehabilitation	Nil.	Nil.	Nil.
6g	Cost incurred on watch and care during the year	Not specified.	Nil.	Nil.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal.	Nil.	Nil.

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal.	Nil.	Nil.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No proposal.	Nil.	Nil.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal.	Nil.	Nil.
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal.	Nil.	Nil.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal.	Nil.	Nil.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal.	Nil.	Nil.
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal.	Nil.	Nil.
6р	Compliance of environmental monitoring (core zone and buffer zone)	Yes.	Periodical Monitoring.	Parameters of Air, water and noise are within limits.

6q General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.

There was no proposal for reclamation and rehabilitation for 2021-22 for mined out area.

Nil.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM is being transported.	ROM is being transported.	No mineral sorting at pit level. Entire ROM is being transported.
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No proposal.	Nil.	As per plan.
7c	Different grade of mineral sorted out at mines.	No.	Consumption of entire ROM.	As per plan.
7d	Any beneficiation process at mines .	Nil.	Nil.	As per plan.Beneficiation plant located outside ML area ,at Pandalgudi.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Beneficiation plant located outside ML area ,at Pandalgudi.	3%-4% of Clay contaminants and weathered gneissic material 15mm-40mm removed by reject belt. About 6-7% of black stone removed by Optoical sorters.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal.	No generation.	Nil.
d8	Concurrent use or storage of topsoil	No Proposal.	No concurrent use of Topsoil.	Nil.

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposal.	No generation of top soil .	Nil.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal.	Nil.	Nil.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Nil.	Nil.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1000plantation .	1350plantation.	26760 No. of Saplings Planted by covering 21.19 Ha.
8g	Survival rate		90%	Nil.
8h	Water sprinkling on roads to control airborne dust	sprinkling on	10 KL Water Tanker used for water sprinkling on haul roads and transit points.	Nil.
8i 	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation has been done in and around the lease area and easthatic beauty of the mine.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and	Submitted regularly.	Monthly returns are being submitted within due time. AR for 2021-22	NIL.
	Annual returns		has also been submitted	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	<pre>Mr R.Dinesh ,Mining Engineer;Mr R.Dinesh,Manag er(Mines); Mr C.Karunakaran, Geologist;</pre>	Accompained during inspection.	Appointed as per statutory notice.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	abandoned by opencast (O/C) mining-	Furnished under Part-I of sl.no.12.	Nil.
9d	Scrutiny of Annual return on afforestation	Plantation carriedout- 1350Nos.	Furnished under Part-V of para 4.2.	Nil.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil.	Furnished under Part-V of section 4.	Nil.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	460931.74Ts	Furnished inn Part-VI at sl no.1	Nil.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value- 00/- and 545.29	Furnished inn Part-VI at sl no.2 .	Nil.
9h	Scrutiny of Annual return on fixed assets	Rs.9090100/-	Furnished in Part-IIA.	Nil.

9k	Scrutiny of Annual return on mining machineries		Furnished in Part-V section 5.	of	Nil.
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Details of violations observed during current inspection and compliance position of violation pointed out

Violation	n observed	Show co	ouse position
Rule NO.	Issued on Compliance or	n Rule NO.	Issued on Compliance on
MCDR17 Rule 11(1)	05/09/2022		

Date :
(G.C.Sethi)

Indian Bureau of Mines