#### INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR inspection REPORT

#### Chennai regional office

Mine file No : TN/ALR/LST-45.MDS Mine code: 38TMN38029

Name of the Inspecting : S011 ) SALIL SANDIP KUJUR

Officer and ID No.

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine : P RAMASAMY, AVP-MINES J PRIESTY MACAULAY-DGM-MINES

Official with

Designation

(iv) Date of Inspection : 24-FEB-20 (v) Prev.inspection date : 20-JUN-19

PART-I : GENERAL INFORMATION

1. (a) Mine Name : ADANAKURICHI, ALATHIYUR &

Registration NO. (b) : 613/2011

(C) Category : A Fully Mechanised

(d) Type of Working Opencast

Postal address (e)

> State : TAMIL NADU District : ARIYALUR Village : ADANAKURICHI Taluka SENDURAI Post office : CEMENTNAGAR

Pin Code : 621730

FAX No. : 04329-248248

E-mail : dal\_planthead@indiacement.

: 04329248201 TO 203 Phone

(f) Police Station

First opening date : 16-OCT-06 (g)

Weekly day of rest (h) : SUN

Address for : DHUN BUILDING,

correspondance NO:827, ANNA SALAI,

CHENNAI

3. : TMN1033 Lease Number (a) (b) Lease area : 80.26 Period of lease : 20 (C)

> (d) Date of Expiry : 28-FEB-25

4. Mineral worked : LIMESTONE Main 5. Name and Address of the

Lessee : THE INDIA CEMENTS LIMITED

DHUN BUILDING 827, ANNA SALAI CHENNAI CITY TAMIL

NADU

Phone: 044-28521526, 28521527, 28572100, 28572400

FAX :044-28526311

Owner : INDIA CEMENTS LTD

INDIA CEMENT LTD, SANKAR NAGAR POST, TIRUNELVELI DISTRICT. TIRUNELVELI TAMIL

NADU Phone: FAX:

Agent : Shri.T.BALASUBRAMANIAN

dalavoi works, cement nagar

POST, SENDURAI

TALUK, ARIYALUR DISTRICT ARIYALUR TAMIL NADU Phone: 04329 248206

FAX :

Mining Engineer

Name : J.PRIESTLY MACAULAY, Full Time

Qualification : BE MINING Appointment/ : 15-SEP-03

Termination date

Geologist

Name : P.Ramasamy, Full Time

Qualification : MSC (GEO)
Appointment/ : 02-JUL-98

Termination date

Manager

Name : J.PRIESTLY MACAULAY

Qualification : BE(MINING)
Appointment/ : 15-SEP-03

Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 24-JUN-94
Plan/Scheme of Mining MP modif under MCR 1960 21-AUG-98
Mining Scheme rule 12 MCDR1988 26-JUL-02
PMCP under 23R(1) for Fresh 26-MAY-05

Mining Scheme rule 12 MCDR1988 26-JUL-02
PMCP under 23B(1) for Fresh 26-MAY-05
Mining Scheme rule 12 MCDR1988 15-FEB-07
Mining Scheme rule 12 MCDR1988 10-MAY-12
MP review under 17(1) MCR 2016 23-NOV-16
MP modif under 17(3) MCR 2016 27-NOV-18

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

# Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No propsal for the year 2018-19	Nil	The total mining lease area has already been explored and the requirement of G1 level has been met.
1b	Exploration over lease area for geological axis 1 or 2		G1	35 exploration boreholes were drilled with total merage of 1130m with 200m*200m & 100m * 100m grid interval.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NA	Exploration carried out by The India cements Limited.
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	Not required
1e	Balance reserve as on 01/04/20	8.386 Million tonnes	8.386 Million tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Satisfactory

# Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	<del>-</del>	of working	Actual area of working Site of mining between strip ML-2 to ML-10, 900-1100 E	As per proposal
2b	in topsoil, overburden and	for Top		as per plan

2c	Stripping ratio or ore to OB ratio	1:0.38	1:0.07	nil
2d	Quantity of topsoil generation in m3	2018-19=0.00 2019-20=0.00"		nil
2e	overburden	16=100120.00 ,2016-	"2015-16=11796.83, 2016-17=127234.74, 2017-18=44882.90, 2018-19=11540.63, 2019-20=0.00"	within limit
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Satisfactory

### Exploitation:

-1				
Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one	one	One pit is planned for mining operation
3b	Quantity of ROM mineral production proposed	590324	409582.55	within limit
3с	Recovery of sailable/usable mineral from ROM production	452371	399175.79	as per plan
3d	Quantity of mineral reject generation	137953	10406.76	within limit
3e	Grade of mineral rejects generation and threshold value declared.	SiO2 >18.0%	SiO2 >18.0%	As per proposal
3f	Quantity of sub grade mineral generation.	nil	nil	nil
3g	Grade of sub grade mineral generation	nil	nil	nil

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized method	as per plan SM is used
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No	No	Beneficiation study done in Initial period.
3j	Provision of drilling and blasting in mineral benches	No	No	Mining is being carried out by Non-Conventional method.
3k	Provision of mining machineries in mineral benches	"Rock Breaker- 1, Shovel-1, Tipper-2, Water Tanker-1	"Rock Breaker-1, Shovel- 1, Tipper-2, Water Tanker-1	nil
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Overburden-5m, Limestone-5m	Overburden-5m, Limestone-5m	As proposed.
3m	Total area covered under excavation/pits	56.16.5 HA.	56.16.5 HA.	nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.38	1:0.07	One pit is planned for mining operation since requirement of limestone is less during the year fresh are has not been openned
30	Total area put in use under different heads at the end of year	"2015-16 =995892 Ts 2016-17=986167 Ts 2017- 18=503767 Ts 2018-19=452371 Ts 2019-20=503734 Ts"	"2015-16=476925.90 Ts 2016-17=446147.90 Ts 2017-18=349139.75 Ts 2018-19=399175.79 Ts 2019-20=245116.74 Ts *"	Limestone production is within limit

Production of "2015-16 "2015-16=476925.90 Ts 3р Limestone =995892 Ts 2016-17=446147.90 Ts production is ROM mineral during the last 2017-18=349139.75 Ts within limit five year period 2016-17=986167 2018-19=399175.79 Ts 2019-20=245116.74 Ts \*" as applicable 2017-18=503767 Ts 2018-19=452371 2019-20=503734 Satisfactory General remarks of inspecting officers on method of mining etc.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)		NA	nil
4b	Location of topsoil, OB and mineral reject dumps	Northern side of ML	Northern side of ML	as per plan
4c	Number of dumps within lease area and outside of lease area	One Dump within ML & Back filled	One Dump within ML & Back filled	as per plan
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside Ultimate Pit Limit (UPL).	Outside Ultimate Pit Limit (UPL).	as per plan
4e	Number of active and alive dumps.		No active dump & One dead dump	Backfilling is being done
4f	Number of dead dumps.	One	One	nil
4g	Number of dumps established.	One	One	nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil	Garland drain existed for 1500m.

4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	Garland drain existed for 1500m.
<b>4</b> j	Number of settling ponds		Pit is used as water settling pond.	2 Nos of Settling pond exists
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.	Back filled in Mined out area	Back filled in Mined out area	backfilling is in progress
5b	Area under backfilling of mined out area	0.50.0	0.10.0	backfilling is in progress
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	topsoil is spread partly
5d	Total area fully reclaimed and rehabilitated	0.35.0	0.35.0	Rehabilitated by plantations.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Satisfactory

# Progressive Mine Clousre Plan:

SI.No. Item Propasals Actual work Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Yes	Submitted on 17.06.2019 for the year 2018-19.
6b	Area available for rehabilitation (ha).	0.50.0	0.10.0	nil
6c	afforestation done (ha).	0.35.0	0.35.0	as per plan
6d	No. of saplings planted during the year	400 nos	400 nos	as per plan
6e	Cumulative no .of plants	-	15830 nos	as per plan
6f	Any other method of rehabilitation	-	-	Water Harvesting
6g	Cost incurred on watch and care during the year	Rs 0.2 lakhs	Rs 0.44 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	120m*30m*14m	80m*15m*14m	backfilling is in progress
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.50.0	0.10.0	backfilling is in progress
бј	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area		0.35.0	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	-	_	water harvesting is formed in mined out area

61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	-	_	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	available	No waste land available	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No waste land available	No waste land available	Nil
бо	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Complied. Environment monitoring is being done quarterly.	Environmental monitoring is being done season wise.
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	Dispatch of ROM Limestone and beneficiation by mobile screen	Dispatch of ROM Limestone and beneficiation by mobile screen	as per plan
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.		Mechanized Method	as per plan

7c	Different grade of mineral sorted out at mines.	Yes	Yes	nil
7d	Any beneficiation process at mines .	Screening by Mobile screen	5 1	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)		No proposal	No topsoil removal	Nil
8b	Concurrent use or storage of topsoil	No Proposal	No Proposal	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Yes	nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes	Nil

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	-	15830 nos of plants planted cumulatively	Nil
8g	Survival rate	90%	90%	Nil
8h	Water sprinkling on roads to control airborne dust		Yes	Water sprinkling is being done by water tanker.
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	NA
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Provided in part-I	"Mining Engineer: Shri.J.Priestly Macaulay, Geologist: Shri.P.Ramasami"
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	"Provided in part-I, S1.No-12 Covered under current (O/C) Workings-56.16.5, Occupied by plant, buildings, residential, welfare buildings & roads- 6.08.0, Other Purpose (Green belt, Periphery bund)- 9.15.5"	Nil
9d	Scrutiny of Annual return on afforestation	Yes	"Provided in part-V, Para-4.4 400 Nos."	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	Provided in part-V, of 4.2 (B)	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	Provided in part-VI, Para-2	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Provided in part VI and Part-VII.	Nil
9h	Scrutiny of Annual return on fixed assets	Yes	"Provided in part -II (A) 1107206379"	This FA is for 7 Mining Leases of M/s The India Cements Limited, Dalavoi.
9k	Scrutiny of Annual return on mining machineries	Yes	Mentioned in part -V, Sec-5/6/8/9.	No comments

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Details of violations	observed	during	current	inspection	and	compliance	position	of
violation pointed out								
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	Violation observed				puse position
Rule NO.	Issued on	Compliance of	on	Rule NO.	Issued on Compliance on

#### Date :

(SALIL SANDIP KUJUR)

Indian Bureau of Mines