INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/TCR/LST-50-MdS Mine code: 38TMN14037

(i) Name of the Inspecting : S011) SALIL SANDIP KUJUR

Officer and ID No.

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine : Mining Engineer/MANAGER-Shri.C.Mesvin & Shri.P.Vignes

Official with Designation

(v)

(iv) Date of Inspection : 08/08/2021 Prev.inspection date : 31/01/2021

PART-I : GENERAL INFORMATION

(a) Mine Name : PERIYAKURICHI

Registration NO. (b) : IBM/613/2011

(C) Category : A Mechanised

(d) Type of Working Opencast

(e) Postal address

> State : TAMIL NADU District PERAMBALUR Village PERIYAKURICHI

Taluka SENDURAI

Post office : PERIYAKURICHI

Pin Code : 621719

FAX No. : 04329-48248 E-mail icldal@eth.net

: 04329-48201 to 48207 Phone

Police Station (f) : Sendurai First opening date : 19/09/1992 (g)

Weekly day of rest (h) : SUN

Address for : The India Cements Ltd.,

correspondance Coramandel Towers, 93, Karpagam Avenue,

R.A.Puram, Chennai

3. : TMN1032 Lease Number (a) Lease area : 56.55 (b) Period of lease : 20 (C)

> (d) Date of Expiry : 04/03/2012

Mineral worked 4 : 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 : Lakshmi Aparna Sreekumar

M/S India Cements Ltd., 827,Anna salai,DHUN Building Chennai CHENNAI

CITY TAMIL NADU

Phone: FAX:

Agent : P.Balasubramaniyan

M/S The India Cements Ltd.,

827,Annasalai, DHUN Building Chennai CHENNAI

CITY TAMIL NADU

Phone: FAX :

Mining Engineer

Name : C.MESVIN, Full Time

Qualification : BE (MINING)
Appointment/ : 01/12/2016

Termination date

Geologist

Name : K.MANI, Full Time
Qualification : MSC(GEOLOGY)
Appointment/ : 19/10/2017

Termination date

Manager

Name : C.MESVIN

Qualification : BE(MINING)

Appointment/ : 01/12/2016

Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 23/02/1989 Plan/Scheme of Mining : Mining Scheme rule 12 MCDR1988 27/03/1992

Mining Scheme rule 12 MCDR1988 09/05/2002 Mining Scheme rule 12 MCDR1988 15/02/2007 Renewal under rule 24 MCR1960 10/05/2012 MP review under 17(1) MCR 2016 23/11/2016

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 2020-21	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	36 exploration boreholes were drilled with total merage of 865.23m.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable	Not applicable	Exploration carried out by The India cements team.
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	NIL	NIL
1e	Balance reserve as on 01/04/20	0.607 Million tonnes	0.607 Million tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	_	_	SATISFACTORY IN CASE OF EXPLORATION.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	-	of working Site of mining	area of working Site of mining between section line 400N-700N and 900E-1100 E .	As per proposal
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	overburden bench, Three	Yes , Two overburden bench, Three ore benches.	Separate bench for topsoil and overburden are being maintained.

2c	Stripping ratio or ore to OB ratio	`1:1.59	`1:1.12	VIOLATION POINTED OUT
2d	Quantity of topsoil generation in m3	2017- 18=6350.00 2018- 19=12379.38 2019- 20=4351.88 2020-	" 2016-17=0.00 2017-18=0.00 2018-19=0.00 2019- 20=2512.50 2020-21=14355.44"	all within limit
		21=18644.00"		
2e	Quantity of overburden generation in m3	2017- 18=257450.00 2018- 19=243171.00	" 2016-17=98899.68 2017-18=108052.00 2018-19=100775.00 2019- 20=65763.49 2020-21=123175.50"	less development due to shutdown for Covid-19.
		2019- 20=156702.78 2020- 21=177730.00"		
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	_	satisfactory, devel opment in area planned as per plan.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One , 900m*340m*30m	One , 840m*340m*30m	Only one pit, as proposed.
3b	Quantity of ROM mineral production proposed	373918 Ts	313869.25 Ts	VIOLATION POINTED OUT
3с	Recovery of sailable/usable mineral from ROM production	224351 Ts	224117.24 Ts	NIL
3d	Quantity of mineral reject generation	149567 Ts	89752.01 Ts	VIOLATION POINTED OUT.

3e	Grade of mineral rejects generation and threshold value declared.	SiO2 >18.0%	SiO2 >18.0%	NIL
3f	Quantity of sub grade mineral generation.	Nil	Nil	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	As per plan Mechanised method	NIL
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	Drilling and blasting not carried out.
3k	Provision of mining machineries in mineral benches	Back Hoe-2, Rock Breaker- 1, Tipper-3, Front End Loader-1 & water tanker-1	Back Hoe-2, Rock Breaker-1, Tipper-3, Front End Loader-1 & water tanker-1	NIL
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Top soil &Overburden- 6m, Limestone- 6m	Top soil &Overburden-6m, Limestone-6m	HEIGHT & WIDTH IS MAINTAINED AS 6 MTRS
3m	Total area covered under excavation/pits	27.30.0 ha	25.24.5 ha	Within limit
3n	Ore to OB ratio for the pit/mine during the year.	`1:1.59	`1:1.12	Within limit

30	Total area put in use under different heads at the end of year	"Area under mining- 27.30.0, Overburden dump-14.48.5, Mineral storage, Roads-2.50.0,	"Area under mining- 25.24.5, Overburden dump-14.48.5, Mineral storage, Roads-2.50.0, Protective-0.72.0, "	AS PER PROPOSAL
		Protective- 0.72.0, "		
3p	Production of ROM mineral during the last five year period as applicable	"2016-17 =357480 Ts 2017-18 =374900 Ts 2018-19 =374669 Ts 2019- 20=374013.00 Ts 2020- 21=373918.00 Ts"	" 2016-17=350463.90 Ts 2017-18=372986.60 Ts 2018-19= 314371.40 Ts 2019-20=241406.75 Ts 2020-21=224117.24 Ts"	Within limit
3q	General remarks of inspecting officers on method of mining etc.	-	-	ALL PRODUCTION ARE WITHIN LIMIT.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	-	Top soil and overburden is used for backfilling and stablised with plantations.	As proposed

4b	Location of topsoil, OB and mineral reject dumps	Western , Eastern and Northern side of ML. Top soil-300N to 500N and1000E to 1200E. Overburden On to 0N to 800N AND 0E to 800E, 1000E to 1300E.	Western , Eastern and Northern side of ML. Top soil-300N to 500N and1000E to 1200E. Overburden On to ON to 800N AND OE to 800E, 1000E to 1300E.	Area coverred by waste dump is 12.94.5 hectares and topsoil is 1.54.0 hectares in eastern side.
4c	Number of dumps within lease area and outside of lease area	Three dumps & Back filling area	Three dumps & Back filling area all within mining lease.	7.40.0 hectares of excavated area is backfilled.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are planned out side of UPL	Dumps are planned out side of UPL	Back filling Westernside of ML.
4e	Number of active and alive dumps.		Active dump-Nil, Alive- Back filling	nil
4f	Number of dead dumps.	Three	Three	Stabilized with Plantation
4g	Number of dumps established.	Two	Two	Stablised with plantations.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	Garland drain are already made
4i	Length of Retaining wall or garland drain all along dumps	made all along	Garland drain exists	Garland drain existed for 1825m.
4j	Number of settling ponds	Settling pit already exists.	Settling pit already exists as mined out pits.	settling pits are made in pits.
4k	Specific comments of inspecting officer on waste dump management	-		satisfactory in case of dump management.

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Planned for backfilling	Back filled in Mined out area	Mineral is taken before back fillng.
5b	Area under backfilling of mined out area	1.40.0	1.05.0	Minimum Development carriedout due to less production. and covid lockdown
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Yes	Rehabilitated by plantations.
5d	Total area fully reclaimed and rehabilitated	0.65.0	1.50.0	Rehabilitated by plantations.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	satisfactory backfilling progress and plantation.

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	Yes, submitted to IBM	nil
6b	Area available for rehabilitation (ha) .	3.95.0 ha	3.95.0 ha	as per plan
6c	afforestation done (ha).	0.65.0	1.50.0	as per plan
6d	No. of saplings planted during the year	700 nos	800 nos	as per plan
6e	Cumulative no .of plants	16156+700	16156 +800	nil
6f	Any other method of rehabilitation	Backfilling & Afforestation		nil

6g	Cost incurred on watch and care during the year	Rs 2.00 Lakhs	Rs 2.00 Lakhs	As per proposal
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	140m*100m*12.0 m	140m*70m*12.0m	As per proposal
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	507729.00 Ts	340852.66 Ts	within limit
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	700 nos	800 nos	As per proposal
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	na	na	nil
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	140m*100m*12.0 m	140m*70m*12.0m by backfilling	nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No waste land available	No waste land available	nil
бп	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No waste land available	nil	nil

60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	na	No waste land available	nil
бр	Compliance of environmental monitoring (core zone and buffer zone)	_	Complied. Env.monitoring is being done quarterly.	Environmental monitoring is being done season wise. all data are within limit
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	_	backfilling and plantation are satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	no sorting within mining lease.	nil	nil
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Mechanized Method	Mechanized Method for excavation which sort mineral from waste	nil
7c	Different grade of mineral sorted out at mines.	na	na	nil
7d	Any beneficiation process at mines .	nil	nil	nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-		no sorting in different grades in mining lease boundary.

Environment:

Sl.No.	Tt.em	Dropagala	Actual work	Remarks	
O I - IVO -	11.00	Propasais	ACILUAL WOLK	KEIIGIKS	

8a	Separate removal and utilization of topsoil (Rule 32)	removal and	Concurrently used	nil
8b	Concurrent use or storage of topsoil	Concurrent usage is proposed	Concurrently used	as per plan.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not applicable	Not required	Concurrent use
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes, as proposed in excavated area in the westernside (Middle portion of land)	Yes, as proposed in excavated area in the westernside (Middle portion of land)	backfilling is in progress.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes, as proposed in Westernside work is in progress.	nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	16856	16956	nil
8g	Survival rate	90%	85.8%	nil
8h	Water sprinkling on roads to control airborne dust	Yes	Water sprinkling is being done by water tanker.	Water sprinkling is being done by water tanker.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	satisfactory

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	"Mines Manager: C.Mesvin,(01.1 2.2016) Mining Engineer: C.Mesvin(01.12 .2016), Geologist: P.Vignesh(15.0 7.2020)"	Provided in part-I	nil

nil

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Annual return on (surface area) Sl.No-12
       land use pattern utilisation as
       for area under
                        at the end of
       pits, reclaimed year
       area, dumps etc. (hectares)
                         Under
                         forest
                         Outside
                         forest Total
                         (i) Already
                         exploited &
                         abandoned by
                          opencast
                         (O/C) mining
                         0.000 10.400
                         10.400
                         (ii) Covered
                         under current
                         (O/C)
                          Workings
                         0.000 14.845
                         14.845
                         (iii)
                         Reclaimed/Reha
                         bilitated
                         0.000 7.400
                         7.400
                         (iv) Used for
                         waste disposal
                         0.000 12.945
                         12.945
                         (v) Occupied
                         by plant,
                         buildings,
                          residential,
                         welfare
                         buildings &
                         roads 0.000
                         3.000 3.000
                         (vi) Other
                         Purpose (0)
                         0.000 9.260
                         9.260
                         (vii) Work
                         done unde
9d
                         4.4 (a) Within Provided in part-I,
       Scrutiny of
                                                               nil
       Annual return on lease area (b) Sl.No-12
       afforestation
                         Outside lease
                         area
                         (i) Number of
                         trees planted
                         during the
                         year 800 0
                         (ii) Survival
                         rate in
                         percentage
                         92.50 0
```

. Lease area Provided in part-I,

9c

Scrutiny of

9e Scrutiny of 4.2(B) (ii) provided in Sec 4. nil Annual return on Mineral Mineral Rejects for mineral reject Rejects Limestone generation generated with grades (Grade and quantity) (tonnes) a. Quantity 89752 b. Grade 45 4.3 Underground 4.3(i) Mineral Rejects generated with grades (tonnes)

a. Quantity 0b. Grade 0

9f	Scrutiny of Annual return on ROM stock and/or graded ore			stock=1000 stock=1000		nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	rs 269.29	rs 269.2	29		nil
9h	Scrutiny of Annual return on fixed assets	1329686955	Provided	d in part -:	II (A)	nil

9k Scrutiny of "Mentioned in provided in sce-5/6/8/9 nil Annual return on part -V, Secmining 5/6/8/9.

machineries Back Hoe-2,
Rock Breaker1, Tipper-3,
Front End
Loader-1 & water tanker-

1"

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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:

(SALIL SANDIP KUJUR)

Indian Bureau of Mines