

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT 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) Accompanying mine : PREISLEY MICHALEY, AGM(MINES) & C.MESVIN, MINES MANAGE
Official with
Designation
- (iv) Date of Inspection : 04-SEP-19
- (v) Prev.inspection date : 14-MAR-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : PERIYAKURICHI
- (b) **Registration NO.** : 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
- Phone : 04329-48201 to 48207
- (f) **Police Station** : Sendurai
- (g) **First opening date** : 19-SEP-92
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : The India Cements Ltd.,
Coramandel Towers, 93, Karpagam Avenue,
R.A. Puram, Chennai
3. (a) **Lease Number** : TMN1032
- (b) **Lease area** : 56.55
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 04-MAR-12
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 : 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-DEC-16
 Termination date

Geologist

Name : K.MANI,Full Time
 Qualification : MSC(GEOLOGY)
 Appointment/ : 19-OCT-17
 Termination date

Manager

Name : C.MESVIN
 Qualification : BE(MINING)
 Appointment/ : 01-DEC-16
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	23-FEB-89
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	27-MAR-92
		Mining Scheme rule 12 MCDR1988	09-MAY-02
		Mining Scheme rule 12 MCDR1988	15-FEB-07
		Renewal under rule 24 MCR1960	10-MAY-12
		MP review under 17(1) MCR 2016	23-NOV-16

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NO PROPOSAL	NIL	NIL
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	G1 CATEGORY EXPLORATION IS COMPLETED IN ENTIRE LEASE.
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	G1 AXIS EXPLORATION IS COMPLETED IN ENTIRE LEASE AREA.
1e	Balance reserve as on 01/04/20	1.012 Million tonnes	1.012 Million tonnes	nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	safactory as G1 level exploration is completed in entire lease area.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed area of working Site of mining between section line E-J and 900-1100 E and working RL=69.0 m to 61.0& 59.0m to 51.0 & 71.0 to 66.0 -53.0m	Site of mining between section line E-J and working RL=69.0 m to 61.0& 59.0m to 51.0 & 71.0 to 66.0 -53.0m	As per proposal
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes , Two overburden bench, Three ore benches.	Yes , Two overburden bench, Three ore benches.	Separate bench for topsoil and overburden are being maintained.
2c	Stripping ratio or ore to OB ratio	`1:2.77	1:1.30	the dump proposed is not removed.so S.R is less.

2d	Quantity of topsoil generation in m3	2018-19=12379.38"	2018-19=0.00"	TOPSOIL GENERATION IS NIL AS THEY ARE TAKING LOW GRADE LIMESTONE MATERIAL BY SCREENING THE DUMPS WHICH ARE BACKFILLING IN MINED OUT AREA FOR CONSERVATION OF MINERAL. HENCE THE REMOVAL OF NEW AREA IS NOT REQUIRED IN THE YEAR.
2e	Quantity of overburden generation in m3	" 2014-15 =151674.00 2015-16 =111265.00 2016-17=110025.00 2017-18=257450.00 2018-19=243171.00"	" 2014-15 =85440.00 2015-16 =120910.00 2016-17=98899.68 2017-18=108052.00 2018-19=100775.00"	within limit.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	satisfactory

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	374669.00 Ts	314371.44 Ts	Within limit
3c	Recovery of sailable/usable mineral from ROM production	224801.00 Ts	224615.33 Ts	As per approval
3d	Quantity of mineral reject generation	149868.00 Ts	89756.11 Ts	Within limit

3e	Grade of mineral rejects generation and threshold value declared.	SiO ₂ >18.0%	SiO ₂ >18.0%	nil
3f	Quantity of sub grade mineral generation.	nil	nil	nil
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	Not applicable
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical	Mechanical	Mechanical screen is used for seperation.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Screening is being carriedout for Low grade in 2019-20.Beneficiati on study done in Initial period.	Screening is being carriedout for Low grade in 2019-20.	Screening is being carriedout for Low grade in 2019-20.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	yes,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	Back Hoe-2, Rock Breaker-1, Tipper-3, Front End Loader-1 & water tanker-1 are used.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Top soil-6m, Overburden-6m, Limestone-6m	Top soil-6m, Overburden-6m, Limestone-6m	Height of the benches are 6.0m
3m	Total area covered under excavation/pits	26.08.0 ha	24.15.0 ha	na
3n	Ore to OB ratio for the pit/mine during the year.	`1:2.77	`1:1.30	Minimum development carriedout.

3o	Total area put in use under different heads at the end of year	"Area under mining- 26.08.0, Overburden dump-14.48.5, Mineral storage----, Roads-2.50.0, Protective-0.72.0, "	"Area under mining- 24.15.0, Overburden dump-14.48.5, Mineral storage----, Roads-2.50.0, Protective-0.72.0, "	as per plan the mining is carried out.
3p	Production of ROM mineral during the last five year period as applicable	" 2014-15 =373580 Ts 2015-16 =374080 Ts 2016-17 =357480 Ts 2017-18 =374900 Ts 2018-19 =374669 Ts "	"2014-15 =311917.80 Ts 2015-16=299738.10 Ts 2016-17=350463.90 Ts 2017-18=372986.60 Ts 2018-19= 314371.40 Ts"	within limit
3q	General remarks of inspecting officers on method of mining etc.	-	-	satisfactory.

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 planned for backfilling and stablised with plantations.	Top soil and overburden is planned for backfilling and stablised with plantations.	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Western , Eastern and Northern side of ML	Western , Eastern and Northern side of ML	Area covered 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	5.60.0 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-1	Active dump- Nil, Alive- Back filling-1	As per proposal
4f	Number of dead dumps.	Three	Three	nil
4g	Number of dumps established.	2	2	Stablised with plantations.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes Garland drain are already made	Yes Garland drain are already made	Garland drain are already made
4i	Length of Retaining wall or garland drain all along dumps	Garland drain made all along the existing dump made earlier.	Garland drain exists	Garland drain existed for 1825m.
4j	Number of settling ponds	Settling pit already exists.	Settling pit already exists.	Settling pit already 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.	Planned for backfilling	Back filled in Mined out area in under progress.	Mineral is taken before back fillng.
5b	Area under backfilling of mined out area	2.06.0	0.80 ha	Minimum Development carriedout.

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Yes	Yes, under progress.
5d	Total area fully reclaimed and rehabilitated	0.60.0	0.60.0	0.60.0 is fully reclaimed.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	satisfactory.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	yes	submitted in time.	nil
6b	Area available for rehabilitation (ha) .	4.60.0 ha	4.60.0 ha	as per plan .
6c	afforestation done (ha).	0.60.0	0.60.0	As proposed in Scheme of mining.
6d	No. of saplings planted during the year	650 nos	650 nos	As per proposal
6e	Cumulative no .of plants	-	18356 nos	na
6f	Any other method of rehabilitation	nil	Backfilling & Afforestation	Backfilling & Afforestation is carried out.
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	180m*90m*19.0m	180m*90m*19.0m	As per proposal

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	643608.40 Ts	291306.76 Ts	within limit.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	180m*90m*19.0m & 650 saplings	180m*90m*19.0m & 650 saplings	180m*90m*19.0m & 650 saplings are planted.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	not applicable as mining is not completed at this stage.	not applicable as mining is not completed at this stage.	not applicable as mining is not completed at this stage.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	not applicable as mining is not completed at this stage.	not applicable as mining is not completed at this stage.	not applicable as mining is not completed at this stage.
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No waste land available	No waste land available	No waste land available
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No waste land available	No waste land available	No waste land available
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	not applicable in view of 6(n) above	not applicable in view of 6(n) above	not applicable in view of 6(n).
6p	Compliance of environmental monitoring (core zone and buffer zone)	yes	Complied. Env.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.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Yes by screen.	carried out by onsite screen.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	mechanical by screen	as per plan.
7c	Different grade of mineral sorted out at mines.	no	nil	nil
7d	Any beneficiation process at mines	no	nil	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)	Proposed for removal and concurrent use.	No topsoil removal	No topsoil removal as development is less.
8b	Concurrent use or storage of topsoil	Concurrent usage is proposed	Concurrent usage is proposed and used for old available dumps.	Concurrent usage for old available dumps.

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not applicable	Not required as backfilling is under progress.	nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	yes	Yes, as proposed in excavated area in the westernside (Middle portion of land)	excavated area in the westernside (Middle portion of land)
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes, as proposed in Westernside	as proposed in Westernside work is going on.	proposed in Westernside an work is in progress
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	18356	18356	nil
8g	Survival rate	>90%	>90%	nil
8h	Water sprinkling on roads to control airborne dust	Yes	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	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	Submitted	Submitted

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Provided in part-I	"Mining Engineer: Shri.C.Mesvin, Geologist: Shri.K.Mani"
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Provided in part-I, Sl.No-12	as per plan.
9d	Scrutiny of Annual return on afforestation	yes	Provided in part-V, Para-4.4	provided as observed.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Provided in part-V, of 4.2 (B)	Provided in part-V, of 4.2 (B)	provided as observed.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Provided in part-VI, Para-2	Provided in part-VI, Para-2	ok
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	337.77	" Provided in part VI and Part-VII. Ex.Mine Price=Rs 337.77 Production Cost=Rs 337.77"	ok
9h	Scrutiny of Annual return on fixed assets	-	1107206379	Provided in part - II (A)
9k	Scrutiny of Annual return on mining machineries	"Mentioned in part -V, Sec-5/6/8/9. Back Hoe-2, Rock Breaker-1, Tipper-3, Front End Loader-1 & water tanker-1"	"Mentioned in part -V, Sec-5/6/8/9. Back Hoe-2, Rock Breaker-1, Tipper-3, Front End Loader-1 & water tanker-1"	ok.

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :

(SALIL SANDIP KUJUR)

Indian Bureau of Mines