

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/PBR/LST-22.Mds

Mine code : 38TMN24054

- (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) , MINES MANAGER, MR BHASK
Official with
Designation
- (iv) Date of Inspection : 03-SEP-19
- (v) Prev.inspection date : 20-FEB-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : ALTHIYUR-160.73(GO.103)
- (b) **Registration NO.** : IBM/613/2011.
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : TAMIL NADU
- District : PERAMBALUR
- Village :
- Taluka :
- Post office :
- Pin Code :
- FAX No. : -
- E-mail : mines@indiacement.co.in
- Phone : 044-28521526.
- (f) **Police Station** : ALATHIYUR
- (g) **First opening date** : 10-OCT-01
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : INDIA CEMENTS LTD
CORamandal Towers
R A Puram, Chennai
3. (a) **Lease Number** : TMN0992
- (b) **Lease area** : 160.73
- (c) **Period of lease** : 30
- (d) **Date of Expiry** : 11-APR-36
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 : Sri R.K.Das,M/s India Cements Ltd.,
 DHUN BUILDING IV th Floor,
 827, ANNA SALAI CHENNAI
 CITY TAMIL NADU
 Phone:
 FAX :

Mining Engineer

Name : K.ANANDKUMAR,Full Time
 Qualification : AMIE(MINING ENGINEERING)
 Appointment/ : 29-MAR-19
 Termination date

Geologist

Name : Sri.BASKAR,Full Time
 Qualification : MSC (GEOLOGIST)
 Appointment/ : 07-JUL-97
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	17-FEB-05
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06-JAN-12
		Mining Scheme rule 12 MCDR1988	22-MAR-16

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal for the year 2018-19	NO WORK AS, No proposal for the year 2018-19	No proposal for the year 2018-19
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	116 exploration boreholes were drilled with total merage of 5917.75m.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	NA	Exploration carried out by India cements team.
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	-	39.224 Million tonnes	39.224 Million tonnes RESERVE BALANCE.
1f	General remarks of inspecting officers on geology, exploration etc	-	-	SATISFACTORY

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	"Planned in between 500 to 1100N & 600-1200E-56.0 to 25.0m &15.0 to 10.0m & 26.0 to 20.0m RL & 1200 to 1700N (100E-200E)- 27.0 to 17.0m RL"	Actual worked area 500 to 1100N & 600-1200E-56.0 to 25.0m & 15.0 to 10.0m & 16.0 to 13.0m RL	Working within the proposal

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes , one topsoil bench, Five overburden bench, Three ore benches.	Yes , one topsoil bench, Five overburden bench, Three ore benches.	Separate bench for topsoil and overburden are being maintained.
2c	Stripping ratio or ore to OB ratio	1:3.17	1:5.54	Production is less than the planned hence Stripping ration is more.
2d	Quantity of topsoil generation in m3	" 2014-15 =59780.00 2015-16 =91140.00 2016-17=171690.00 2017-18=131160.00 2018-19=238245.00 Total=692015.00"	" 2014-15 =10300.00 2015-16 =90037.50 2016-17=154787.50 2017-18=63600.00 2018-19=208250.00 Total=526975.00"	within limit.
2e	Quantity of overburden generation in m3	" 2014-15 =242435.65 2015-16 =425992.17 2016-17=1535565.22 2017-18=825000.00 2018-19=1359619.57 Total=4388612.61"	" 2014-15 =550963.02 2015-16 =958357.83 2016-17=1077642.18 2017-18=985731.16 2018-19=674471.43 Total=4247165.62"	all 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
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3a	Number of pit proposed for production	"Three Pits, Westernside: 440m*250m*22m & 250m*180m*12m Easternside: 600m*470m*44m"	"Two Pits, Westernside: 440m*250m*15m Easternside: 560m*560m*44m"	less production hence only two pits were in operation.
3b	Quantity of ROM mineral production proposed	1285947 Ts	368363.56 Ts	Within limit
3c	Recovery of sailable/usable mineral from ROM production	1057100 Ts	293443.56 Ts	As per approval within limit
3d	Quantity of mineral reject generation	228847 Ts	74920.00 Ts	Within limit
3e	Grade of mineral rejects generation and threshold value declared.	SiO2 >18.0%	SiO2 >18.0%	SiO2 >18.0% is taken as rejects.
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil no subgrade is generated.
3g	Grade of sub grade mineral generation	na	na	nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical	Mechanical	Mechanical surface miner are used with shovel combination.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	nil	nil	Beneficiation study done in Initial period.
3j	Provision of drilling and blasting in mineral benches	nil	no	Drilling and blasting not carried out.
3k	Provision of mining machineries in mineral benches	yes, Surface Miner-1, Shovel-2, Tipper-15, water tanker-1 & Dozer-1	Surface Miner-1, Shovel-2, Tipper-15, water tanker-1 & Dozer-1	Surface Miner-1, Shovel-2, Tipper-15, water tanker-1 & Dozer-1 are used.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yes Top soil-5m, Overburden-5m, Limestone-5m	Top soil-5m, Overburden-5m, Limestone-5m are maintained	as per plan the height & width area maintained
3m	Total area covered under excavation/pits	54.99.0 ha	54.30.0 ha	within approved limit
3n	Ore to OB ratio for the pit/mine during the year.	`1:3.17	`1:5.54	the S.R is more as the production is very less as compared to the proposed.
3o	Total area put in use under different heads at the end of year	"Area under mining-54.99.0, Overburden dump-5.34.0, Mineral storage-6.31.0, Roads-2.20.0, Protective---, Greenbelt-5.40.0"	"Area under mining-54.30.0, Overburden dump-5.34.0, Mineral storage-6.31.0, Roads-2.20.0, Protective---, Greenbelt-9.69.0"	as per plan all are within limit.
3p	Production of ROM mineral during the last five year period as applicable	" 2014-15 =1180904 Ts 2015-16 =1177301 Ts 2016-17=1305592 Ts 2017-18=1228409 Ts 2018-19=1285947 Ts "	"2014-15 =351271.02 Ts 2015-16=328383.72Ts 2016-17=326775.56 Ts 2017-18=309191.69 Ts 2018-19= 368363.56 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
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top soil and overburden is planned for backfilling and stabilised with plantations.	Top soil and overburden is worked for backfilling and stabilised with plantations.	aa per plan.
4b	Location of topsoil, OB and mineral reject dumps	South Eastern side of ML	South Eastern side of ML	na
4c	Number of dumps within lease area and outside of lease area	One Dump within ML, &Back filled	One Dump within ML, &Back filled	nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side of UPL	Out side of UPL	Out side of UPL Back filling South eastern side of ML.
4e	Number of active and alive dumps.	Active dump- Nil, Alive- Back filling in westernside of the pit	Active dump- Nil, Alive- Back filling in westernside of the pit	As per proposal
4f	Number of dead dumps.	1	1	Plantation completed.
4g	Number of dumps established.	1	1	Stabilised 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	Garland drain made all along the existing dump made earlier.	Garland drain exists	Garland drain existed for 2250 m.
4j	Number of settling ponds	1	1	Pit two act as a settling tank.
4k	Specific comments of inspecting officer on waste dump management	-	-	satisfactory.

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	Back filled in Mined out area after full mineral is extracted.
5b	Area under backfilling of mined out area	1.75.0	0.70.0	Mineral is taken before back fillng.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	yes,Southern side of mining lease area.	Southern side of mining lease area.	Southern side of mining lease area.
5d	Total area fully reclaimed and rehabilitated	0.50.0	0.50.0	Rehabilitated by plantations total extent of 1.50.0 ha.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	satisfactory.

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	submitted within time.
6b	Area available for rehabilitation (ha) .	12.18.0 ha	12.18.0 ha	nil
6c	afforestation done (ha).	0.50.0	0.50.0	As proposed in Scheme of mining.
6d	No. of saplings planted during the year	1000 nos	1000 nos	As per proposal
6e	Cumulative no .of plants	-	25825 nos	satisfactory.
6f	Any other method of rehabilitation	Backfilling & Afforestation	Backfilling & Afforestation	Backfilling & Afforestation

6g	Cost incurred on watch and care during the year	Rs 2.00 Lakhs	Rs 2.00 Lakhs	Rs 2.00 Lakhs as proposed.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	440m*110m*22m	85m*80m*22m	As per proposal within the same area.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	3737164 Ts	3737164 Ts	3737164 Ts are backfilled
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	1000 nos	1000 nos	1000 nos as per proposal.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Water reservoir will be formed after mineral exhausted	Water reservoir will be formed after mineral exhausted	Water reservoir will be formed after mineral exhausted as per plan.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	not applicable	nil	not applicable.
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	No waste land available	No waste land available	No waste land available
6p	Compliance of environmental monitoring (core zone and buffer zone)	yes	Complied. Env.monitoring is being done quarterly.	Complied. Env.monitoring is being done quarterly. As proposed in Scheme of mining.
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	Yes	Yes by surface miner	nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized Method	Mechanized Method	nil
7c	Different grade of mineral sorted out at mines.	No	Not required	Not required
7d	Any beneficiation process at mines	Not applicable	Not applicable	Not applicable
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	ok.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separately removed & utilized	Separately removed & utilized	As per plan
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	Not required
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Yes, as proposed in Western side	as proposed in Western side work is going on.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	yes	Yes, as proposed in Western side	Yes, as proposed in Western side work is in progress.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	25825	25825	as per plan.
8g	Survival rate	90%	90%	na
8h	Water sprinkling on roads to control airborne dust	yes	yes, Water sprinkling is being done by water tanker.	Water sprinkling is being done by water tanker to suppress dust.
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
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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	Provided in part-I	"Mining Engineer: Shri.K.Anandkumar Geologist: Shri.G.Balu"
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	correctly mentioned.
9d	Scrutiny of Annual return on afforestation	yes mentioned	Provided in part-V, Para-4.4	as per plan plantation is carried out.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	nil	Provided in part-V, of 4.2 (B)	ok
9f	Scrutiny of Annual return on ROM stock and/or graded ore	yes	Provided in part-VI, Para-2	ok
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	yes	" Provided in part VI and Part-VII. Ex.Mine Price=Rs 288.32 Production Cost=Rs 288.32"	ok
9h	Scrutiny of Annual return on fixed assets	yes given	1107206379	Provided in part - II (A)
9k	Scrutiny of Annual return on mining machineries	mentioned	"Mentioned in part -V, Sec-5/6/8/9. Surface Miner-1, Shovel-2, Tipper-15, water tanker-1 & Dozer-1"	no comments.

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