

**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 : **T028**) **T.PHALTHURAJHEN**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : **SRI.BASKAR-MANAGER-Geology,Sri.SS.KUJUR,DYCOM.**
Official with
Designation
- (iv) Date of Inspection : 20/02/2019
- (v) Prev.inspection date : 22/08/2017

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 : -
- Phone : 044-28521526.
- (f) Police Station : ALATHIYUR
- (g) First opening date : 10/10/2001
- (h) Weekly day of rest : SUN
2. Address for : INDIA CEMENTS LTD
correspondance : 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 : 11/04/2036
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/ : 29/03/2019
 Termination date

Geologist

Name : Sri.BASKAR,Full Time
 Qualification : MSC (GEOLOGIST)
 Appointment/ : 07/07/1997
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	17/02/2005
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	06/01/2012
		Mining Scheme rule 12 MCDR1988	22/03/2016

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 2017-18	nil	Entire lease area has been explored.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	G1 AXIS
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	NA	Not required
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	36.891 Million Toness	39.518 million Tones	-
1f	General remarks of inspecting officers on geology, exploration etc	-	depth persistence has been proved upto 31 mts depth.	satisfactory.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	planned in Between ML-12 to 16 (100E-200E)-29.0-26.0 m RL to 20.0m RL & ML-5 to 11 (600 E-1100E) -22-0 to 18.0 m to 17.0 to 13.0 m & 56.0 to 25.0 m RL	ML-5 to 11(600E- 1100E) 56.0 to 25.0 m and 20-0 16.0 m to 13.0	Mine is working,production 309191.69 Ts, less than proposed.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	yes	being maintained	Separate benches maintained.

2c	Stripping ratio or ore to OB ratio	1:1.37	1:1.02	Production lesser than proposed due to market condition, the development has been carried out as per proposal
2d	Quantity of topsoil generation in m3	131160	63600	Actual quantity of top soil is 63600 Ts lesser than proposed quantity
2e	Quantity of overburden generation in m3	759000	806872	Actual quantity of overburden 806872 Ts are higher than the proposed quantity.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	mine developed systematically with separate benches in OB & mineral.	Satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	two	two	mine is working, Total actual production 309191.69 Ts, less than proposed.
3b	Quantity of ROM mineral production proposed	1228409 Ts	309191.69 Ts	Actual production 309191.69 Ts less than proposed quantity.
3c	Recovery of sailable/usable mineral from ROM production	1053473	250146.69	Total actual sailable/usable is 250146.69 lesser than proposed quantity
3d	Quantity of mineral reject generation	174936	59045	less than proposed.
3e	Grade of mineral rejects generation and threshold value declared.	SiO ₂ >18.0 %	SiO ₂ >18.0 %	no comments.
3f	Quantity of sub grade mineral generation.	no generation	Nil	No subgrade mineral.

3g	Grade of sub grade mineral generation	no generation	Nil	no comments.
3h	Manual / Mechanised method adopted for segregating from ROM	Open cast fully mechanised	As proposed	no comments.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NO proposal	Nil	No subgrade minerals.
3j	Provision of drilling and blasting in mineral benches	Yes	Yes	Drilling in mineral benches.
3k	Provision of mining machineries in mineral benches	Surfaceminer, Wheel loader-2, dumper-6, Tipper-10 ,RB-2.	bench width maintained more than 9 mts for effective utilization of rock breaker, shovels & dumper.	mining machaneries utilised in mineral benches.bench width maintained more than 9 mts for effective utilization of rock breaker, shovels & dumper.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	bench height=8-9 mts, width-10 mts	As proposed height and width are maintained	bench height=8-9 mts, width-10 mts.
3m	Total area covered under excavation/pits	36.64.5 ha	35.37.0 ha, Pit no:1. main Pit.20.07.5 =830 X 240 30, Pit no:2. North Pit .10.25.0 =440 X 235X 20 pit:3 East Pit : 89.45.5 =1600X 550X 50	As proposed pits are maintained
3n	Ore to OB ratio for the pit/mine during the year.	1:1.37	1:1.02	Nil
3o	Total area put in use under different heads at the end of year	Area under mining=49.24.0 ,Topsoil=1.60, OB=3.74.0,Infr astructure=0.1 0.0,Roads=2.70 .0,Lowgradedum p=6.31.0	Area under mining=48.35.0,Topsoil=1 .60.0,OB=3.74.0,Infrastr ucture=0.10.0, Roads=2.70.0,Lowgradedum p=6.31.0	made as per plan

3p	Production of ROM mineral during the last five year period as applicable	2013-14=1180460Ts,2 2014-15=1180460Ts,2 2015-16=1177301Ts,2 2016-17=1305592Ts,2 2017-18=1228409Ts,T otal=6072222Ts	2013-14=439755 Ts ,2014-15=298880.ts, 2015-16=262790 Ts ,2016-17=289410Ts ,2017-18=250146 Ts,	Production is within the approved limits.
3q	General remarks of inspecting officers on method of mining etc.	-	-	method of mining is satisfactory.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	YES	YES	separate dumping for Top soil , OB etc.
4b	Location of topsoil, OB and mineral reject dumps	Western side of ML	Asper proposal	No comments.
4c	Number of dumps within lease area and outside of lease area	one dump out side of ML & backfilled area.	one dump out side of ML & backfilled area.	No comments.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside of UPL	As proposed on non mineralised area.	No comments.
4e	Number of active and alive dumps.	one + one	one + one	within the mining lease area.
4f	Number of dead dumps.	one	one	No comments.
4g	Number of dumps established.	1	1	No comments.
4h	Whether Retaining wall or garland drain all along dumps are there.	garland drains made along the dumps	yes ,garland drains made along the dumps	Retainingwall, garland drain maintained .

4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	No comments
4j	Number of settling ponds	NIL	NIL	No comments.
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.	Backfilled in mined out area proposed	Backfilled in mined out area	Top soil used for sapling grow.
5b	Area under backfilling of mined out area	3.52.0	2.90.5	Since the production raised is lowerside now, backfilling is also under lowerside
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	yes	yes	Top soil used for sapling grow.
5d	Total area fully reclaimed and rehabilitated	0.50.0	0.50.0	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	satisfactory.

Progressive Mine Clousre Plan:

Sl.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 to IBM	submitted
6b	Area available for rehabilitation (ha) .	12.09.5	11.15.0	afforestation on periphery of mining lease area.
6c	afforestation done (ha).	0.50.0	1.50.0	No comments.
6d	No. of saplings planted during the year	1000 nos	3000nos	No comments.
6e	Cumulative no .of plants	-	24825 nos	No comments.
6f	Any other method of rehabilitation	backfilling &Afforestation	backfilling &Afforestation	No comments.
6g	Cost incurred on watch and care during the year	Rs2.00 lakhs	Rs2.00 lakhs	care by company official.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	230*145*24*.0m	180m*250m*24.0m	Reclamation/backfilling carriedout satisfactory
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	2282292 ts	2326226.66Ts	No comments.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	1000nos	1000nos	plantation has been carried out in periperal area.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	No area available	no proposal.

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	No area available	No area available
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	No area available	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	No area available	No area available
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	No area available	No area available
6p	Compliance of environmental monitoring (core zone and buffer zone)	yes	complied as per proposal	Complied as per proposal
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	proposal have been carriedout	Complied as per proposal

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Yes	Entire ROM is being utilised.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	manual	manual	No comments.
7c	Different grade of mineral sorted out at mines.	Nil	As proposed all ROM is taken	No comments.

7d	Any beneficiation process at mines	Screening by mobile screen	Screening by mobile screen	Entire ROM is being consumed.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	All Rom is taken	As proposed taken	satisfactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	proposed for removal and concurrent use	removed and concurrently used	No comments
8b	Concurrent use or storage of topsoil	concurrent use	concurrent use	No comments.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	YES	YES	Separate dumps for OB, waste rock & rejects.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	YES	Stacked separately	stacked separately, mixed with ROM for plant feeding
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	YES Proposed	yes proposed	Stacked separately for backfilling
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	NA	1000 nos of plantation and another 24850 nos planted outside ML area.	Afforestation on periphery of ml area.
8g	Survival rate	>90%	>90%	As per proposal

8h	Water sprinkling on roads to control airborne dust	YES, proposed	YES water sprinklings done, haul roads is done	YES water sprinklings done, haul roads is done
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	Plantation observed on the peripheries of ML.	satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	AR submitted for the year 2017 to march 2018, &2018 to 31 march 2019	Being submitted regularly.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	yes	Mining Engineer Sri.Ananda kumar .K, Geologist Sri.Baskar & balu.	no comments.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	-	mining-48.35.0 ha, Roads-2.70 , Infrastru-0.10.0, Top Soil-1.60, OB-3.74, Lowgrade dump-6.31 Ha	As per proposal
9d	Scrutiny of Annual return on afforestation	As per proposal	planted 3000 nos.	Within mining lease area.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	yes	59045 Ts	Furnished under part V of section no.4.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	yes	52988.340 Ts.	nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	yes	Ex.mine price Rs 326/, Selling cost Rs. Nil, production cost Rs.349/.	Ex. mine price and production cost Rs. 349.00.
9h	Scrutiny of Annual return on fixed assets	yes	Rs 240407701/	Depreciasion on fixed assets Rs. 9618140/

9k	Scrutiny of Annual return on mining machineries	-	RS.255844365/ 1.Surface miner,2. Tipper, 3.poclain, 4.open cast pump(Elect)	No comments.
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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 :

(T.PHALTHURAJHEN)

Indian Bureau of Mines