INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-34.MDS **Mine code : 38TMN38054**

(i) Name of the Inspecting Officer and ID No. : **M017) Matiul Islam**

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine Official with Designation : S.RAMESH,DGM(MINES), R.BALAMURUGAN, CHIEF MANAGER(MIN

(iv) Date of Inspection : 22/09/2020

(v) Prev.inspection date : 08/11/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PERIYATHIRUKONAM LST-74.81 HA.**

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

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : TAMIL NADU

District : ARIYALUR

Village :

Taluka :

Post office :

Pin Code :

FAX No. :

E-mail : dal_planthead@indiacements

Phone : 04329-248201

(f) Police Station : Sendurai

(g) First opening date : 11/07/2018

(h) Weekly day of rest : SUN

2. Address for correspondance : Cement nagarf post,Sendurai taluk, Ariyalur district Pin:621730

3. (a) Lease Number :

(b) Lease area :

(c) Period of lease :

(d) Date of Expiry :

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	:	R K DAS, THE INDIA CEMENT LTD Coramandel Tower, 93,Karpagam Avenue Sandome high road, R.A.Puram CHENNAI CITY TAMIL NADU Phone: 044-28521526,28 FAX : 04428526311, 04

Mining Engineer

Name	:	K.ANANDKUMAR,Full Time
Qualification	:	AMIE(MINING ENGINEERING)
Appointment/ Termination date	:	29/03/2019

Geologist

Name	:	Sri.BASKAR,Full Time
Qualification	:	MSC (GEOLOGIST)
Appointment/ Termination date	:	07/07/2018

6. Date of approval of Mining Plan/Scheme of Mining	:	MP under 16(1) of MCR 2016	12/04/2017
		MP modif under 17(3) MCR 2016	04/04/2019

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 2019-20.	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	G1	29 exploratory boreholes were drilled with a total meterage of 907.30m with 200m*200m & 150m*100m grid interval, during the year 2016.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	Not Applicable	Exploration carried out by Dept. of Geology & Mining, Govt.of Tamilnadu, Guindy, Chennai.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Nil
1e	Balance reserve as on 01/04/20	11.43 Million tonnes	11.43 Million tonnes	Nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Satisfactory

Development :

Sl.No.	Item	Propasals	Actual work	Remarks

2a	Location of development w.r.t.lease area	Proposed area of mining between section lines 200N-800N & 0 to 600E and RL=30.0 to 20.0 m and 36.0 to 25.0m	Actual area of working between section lines 200N-800N & 0 to 600E and RL= 30.0 to 25.0 m & 36.0 to 33.5m	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, One Top Soil Bench, One overburden bench, Three ore benches.	Yes, One Top Soil Bench, One overburden bench, Two ore benches.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.43	1:0.51	Higher Stripping Ratio than planned due to less production
2d	Quantity of topsoil generation in m3	2016-17=0.00 2017-18=0.00 2018-19=199408.00 2019-20=213040.00	2016-17=0.00 2017-18=0.00 2018-19=186600.00 2019-20=137000.00	Nil
2e	Quantity of overburden generation in m3	2016-17=0.00 2017-18=0.00 2018-19=63183 2019-20=109810.00	2016-17=0.00 2017-18=0.00 2018-19=175824.00 2019-20=100785.07	Nil
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, 480m*480*17m	One, 460m*350m*17m	Only one pit
3b	Quantity of ROM mineral production proposed	1333880 Ts	804875.44 Ts	Within limit

3c	Recovery of sailable/usable mineral from ROM production	1200492.00 Ts	778266.14Ts	Within limit
3d	Quantity of mineral reject generation	133388.00 Ts	26609.30Ts	Within limit
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	No subgrade
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method	Mechanized method	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No	No	NA
3j	Provision of drilling and blasting in mineral benches	No	No	Mining by Non-Conventional method
3k	Provision of mining machineries in mineral benches	Back Hoe-1, Shovel(Hydraulic)-1, Rock Breaker-1, Xcentric Ripper-1, Tipper-5, Front End Loader-1, Dozer-1 & Water Tanker-1	Back Hoe-1, Shovel(Hydraulic)-1, Rock Breaker-1, Xcentric Ripper-1, Tipper-5, Front End Loader-1, Dozer-1 & Water Tanker-1	As per plan
3l	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	14.93.0 ha	10.45.0 ha	Within proposal.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.43	1:0.51	Higher SR due to low production
3o	Total area put in use under different heads at the end of year	Area under mining-14.93.0 Roads-2.74.5 Infrastructure -0.10.0 Protective Bund-3.47.0	Area under mining-10.45.0 Roads-1.50.0 Infrastructure- 0.10.0 Protective Bund-3.00.0	Nil
3p	Production of ROM mineral during the last five year period as applicable	2016-17 =0.00 2017-18 =0.00 2018-19 =1333580 Ts 2019-20=1333880.00 Ts	2016-17=0.00 2017-18=0.00 2018-19= 432574.54 Ts 2019-20=804875.44	Less production than proposed due to delay in getting EC. Mine opened on 11.07.2018. & production commenced on 31.08.2018.
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)	Overburden is planned for back filling	Overburden utilised for back filling	As proposed
4b	Location of topsoil, OB and mineral reject dumps	Overburden,Top soil and mineral reject are planned for back filling	Overburden,Topsoil and mineral reject are used for back filling	As proposed
4c	Number of dumps within lease area and outside of lease area	No dump within or outside the lease	No dump within or outside the lease	Nil

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	NA	Nil
4e	Number of active and alive dumps.	NIL	NIL	NIL
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	NA	NA	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal during the year	No construction during the year	Garland drain already constructed
4i	Length of Retaining wall or garland drain all along dumps	No proposal during the year	No construction during the year	4060 m (Already Constructed)
4j	Number of settling ponds	No proposal during the year	No construction during the year	Four settling pits already made
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.	Backfilling proposed in mined out area	Backfilling being done in mined out area	As proposed
5b	Area under backfilling of mined out area	3.72 Ha	1.50 Ha	Less area backfilled due to less generation of waste/rejects
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Yes	Backfilling under progress

5d	Total area fully reclaimed and rehabilitated	No proposal during the year	NA	Nil
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 on 01.06.2020 for the year 2019-20.
6b	Area available for rehabilitation (ha) .	3.72 Ha	1.50 Ha	Less area available because less area could be backfilled due to less generation of waste/rejects
6c	afforestation done (ha).	4.17 Ha	3.00 Ha	Nil
6d	No. of saplings planted during the year	6800 + 1100 = 7900	5800	Violation Letter No 12112 issued.
6e	Cumulative no .of plants	10400	8300	Nil
6f	Any other method of rehabilitation	Not Proposed	NA	Nil
6g	Cost incurred on watch and care during the year	Rs 3.00 Lakhs	Rs 3.00 Lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed	NA	Nil

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	1,00,785 Tonnes of Waste/Rejects Backfilled	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal during the year	NA	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NA	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	NA	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	Nil	Nil
6o	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	Environmental monitoring is being done season wise	Complied

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	No	NA	Not Required
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	Nil
7c	Different grade of mineral sorted out at mines.	NA	NA	Nil
7d	Any beneficiation process at mines .	No	NA	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	Satisafactory

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed for removal and concurrent use at back filled area.	Top soil removed and concurrently used for back filling.	As per proposal

8b	Concurrent use or storage of topsoil	Proposed for removal and concurrent use at back filled area.	Top soil removed and concurrently used for back filling.	As per proposal
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No external dumps proposed as all waste/rejects are proposed to be backfilled	No external dumps	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling Proposed	Backfilling bieng done	As proposed
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling Proposed	Backfilling bieng done	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2500+7900	2500+5800	Nil
8g	Survival rate	90%	92.60%	Nil
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Permanent Water Sprinkler made for a total length of 600m. Water Tankers are also deployed.
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	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Provided in Part-I	Mine Manager: Shri.R.Balamurugan, Mining Engineer: Shri.R.Balamurugan, Geologist: Shri.K.Bhaskar	As given in AR
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Provided in part-I, Sl.No-12	Covered under current (O/C) Workings-8.95.0 Ha Reclaimed/Rehabilitated-1.50 Ha Occupied by plant, buildings, residential, welfare buildings & roads-1.60.0 Ha, Other Purpose (Green belt, Periphery bund)-4.10.0 Ha	Nil
9d	Scrutiny of Annual return on afforestation	Provided in part-V, Para-4.4	No.of Saplings Planted-5800	Violation Letter No 12112 issued
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Provided in part-V, of 4.2 (B)	Mineral Reject - 26609 Ts	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Provided in part-VI, Para-2	Provided	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Provided in part VI and Part-VII	Ex.Mine Price=Rs 226.00 Production Cost=Rs 226.00	Nil
9h	Scrutiny of Annual return on fixed assets	Provided in part -II (A)	Rs 126,26,96,903/-	Nil
9k	Scrutiny of Annual return on mining machineries	Mentioned in part -V, Sec-5/6/8/9	Back Hoe-1, Shovel(Hydraulic)-1, Tipper-1, Front End Loader-1, Dozer-1, OTHER HEM MACHINERY-2	Nil

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
MCDR17 Rule 11(1)	10/12/2020				

Date :

(**Matiul Islam**)

Indian Bureau of Mines