

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

Mining Plan Modification REPORT

Chennai regional office

Mine file No : TN/ALR/LST-43/MDS

Mine code : 38TMN24043

- (i) Name of the Inspecting : **K08**) **G.SORNADURAI KANNAN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Thiru. J.B.Reddy, GM-Mines
Official with
Designation
- (iv) Date of Inspection : 17/06/2023
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PUDUPALAYAM(29.295HA)**
- (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 : PUDUPALAYAM
- Taluka : ARIYALUR
- Post office : REDDIPALAYAM
- Pin Code : 621704
- FAX No. : 04329-248248
- E-mail : mines@indiacements.co.in
- Phone : 04329-248248
- (f) Police Station :
- (g) First opening date :
- (h) Weekly day of rest : SUN
2. Address for :
correspondance
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked :

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 : T.BALASUBRAMANIAN
 The India cements Ltd, dhun
 Building ,827,Anna
 salai,Chennai-2 ARIYALUR
 TAMIL NADU
 Phone:
 FAX :

Mining Engineer

Name : N. Jayabharath Reddy,Full Time
 Qualification : B.E., MINING
 Appointment/ : 23/08/2022
 Termination date

Geologist

Name : S.Nirmalkalam,Full Time
 Qualification : MSc Geology
 Appointment/ : 10/05/2023
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : MP modif under 17(3) MCR 2016 07/12/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Boreholes has been proposed during 2022-2023.	No Boreholes has drilled during 2022-2023.	No Proposal has been given for 2022-2023
1b	Exploration over lease area for geological axis 1 or 2	No additional exploration was proposed during 2022-2023 in the lease area for Geological axis - 1.	No additional exploration was carried out in the lease area for Geological axis - 1 during 2022-2023.	Entire lease area 29.295 hectares are under G-1 category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal for exploration during 2022-2023.	No Exploration during 2022-2023.	So far 33 boreholes have been drilled with 456 meterage in the lease upto 2022-2023.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration was not proposed during 2022-2023.	No Exploration has been carried out during 2022-2023.	Entire area has been explored under G-1 category with 100m X 100m grid interval.
1e	Balance reserve as on 01/04/20	Limestone as on 01.04.2023 Proved Mineral Reserves (111) = Nil Pre-Feasibility Mineral Resources (221) = 164000 tons	Limestone as on 01.04.2023 Proved Mineral Reserves (111) = 124040 tons Pre-Feasibility Mineral Resources (221) = 205300 tons	The available grade of Limestone in this lease area is Cement Grade. It is proposed to exhaust the reserves during 2022-2023, whereas due to less production the reserve remains.
1f	General remarks of inspecting officers on geology, exploration etc	It is part of Cretaceous formations	Limestone deposits are of sedimentary origin of marine transgressional series of Maestrichtian age.	Shell Limestone is yellowish colour with predominant well preserved Gryphaea shells and highly fossiliferous.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	During 2022-2023, it is proposed to work on Western side of Pit-1.	Development is not carried out as per proposal.	Mining plan is Modified for the remaining year.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil & OB - 1 bench, & Minerals - 2 Benches proposed.	OB & Mineral benches are formed as per proposal.	Mining plan is Modified for the remaining year.
2c	Stripping ratio or ore to OB ratio	1 : 0.31	1 : 0.00	Due to no development quantity the Stripping Ratio is zero.
2d	Quantity of topsoil generation in m3	There is proposal of 1023 cu.m of Topsoil generation during 2022-2023	No topsoil has generated during 2022-2023.	Mining plan is Modified for not achieving proposal.
2e	Quantity of overburden generation in m3	There is proposal of 1559 cu.m of OB generation during 2022-2023	No OB has been generated during 2022-2023.	Mining plan is Modified for not achieving proposal.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	During 2022-2023, it is proposed to work on Western side of Pit-1.	No OB & topsoil has been generated against the proposal.	Mining plan is Modified for not achieving proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	During 2022-2023, it is proposed to work on Western side of Pit-1.	Productions are not carried out as per proposal in Lease.	Mining plan is Modified for not achieving proposal.
3b	Quantity of ROM mineral production proposed	The total target of Limestone production proposed was 98204 tons during 2022-2023.	Achieved Limestone Production is 66860 tons during 2022- 2023.	Mining plan is Modified for not achieving proposal.

3c	Recovery of sailable/usable mineral from ROM production	80% Recovery	95% Recovery	Due to selective mining recovery is increased.
3d	Quantity of mineral reject generation	There is proposal of Mineral Reject generation during 2022-2023 is 10820 cu.m.	567 cu.m of Mineral Reject generated during 2022- 2023.	Mining plan is Modified for not achieving proposal.
3e	Grade of mineral rejects generation and threshold value declared.	High silica is considered as mineral rejects.	High silica is considered as mineral rejects.	Nil
3f	Quantity of sub grade mineral generation.	No Sub Grade Generation	No Sub Grade Generation	Nil
3g	Grade of sub grade mineral generation	There is No Generation of Subgrade Mineral	There is No Generation of Subgrade Mineral	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Beneficiation Study is Proposed	Nil	Outside the lease area beneficiation plant is present.
3j	Provision of drilling and blasting in mineral benches	No Drilling & Blasting are proposal.	Drilling & Blasting are not done.	Rock breakers are used for production.
3k	Provision of mining machineries in mineral benches	Excavators Tippers Rock Breakers Dozer	As per proposal the machineries are there during inspection.	Available machinery are shown in Annual Returns
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	In 2022-2023, Bench height of 5m was proposed in Mineral.	As per proposal benches are formed.	Nil

3m	Total area covered under excavation/pits	18.00 hect area is proposed for Pit during 2022-2023	17.62 hect areas are under Pit only.	Due to less development proposed area is not achieved.
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.31	1 : 0.00	Due to no development quantity the Stripping Ratio is zero.
3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2023. Mines = 18.0 hect Dump = 4.115 hect Road = 0.65 hect	Land use Pattern as on 01.04.2023. Mines = 17.62 hect Dump = 4.115 hect Road = 0.65 hect	Mining plan is Modified for not achieving proposal
3p	Production of ROM mineral during the last five year period as applicable	2022-2023 = 98204 tons 2021-2022 = 122588 tons 2020-2021 = 104448 tons 2019-2020 = 187020 tons 2018-2019 = 187487 tons	2022-2023 = 66860 tons 2021-2022 = 17250 tons 2020-2021 = Nil 2019-2020 = 64216 tons 2018-2019 = 179586 tons	Mining plan is Modified for not achieving proposal.
3q	General remarks of inspecting officers on method of mining etc.	During 2022-2023, it is proposed to work on Western side of Pit-1.	Achieved ROM Production is 66860 tons during 2022- 2023 against proposal of 98204 tons.	Mining plan is Modified for not achieving proposal.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is no proposal for dumping during 2022-2023.	As per proposal the dumping was not carried out during 2022-2023.	Nil
4b	Location of topsoil, OB and mineral reject dumps	There is no proposal for dumping during 2022-2023.	As per proposal the dumping was not carried out during 2022-2023.	Existing dump is located on South western side of lease area.
4c	Number of dumps within lease area and outside of lease area	Lease area = 1 Non Lease area = Nil	Lease area = 1 Non Lease area = Nil	Existing dump is located on South western side of lease area.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	Nil
4e	Number of active and alive dumps.	Active Dump= Nil Alive Dump = Nil	Active Dump= Nil Alive Dump = Nil	Nil
4f	Number of dead dumps.	No Proposal	Nil	Nil
4g	Number of dumps established.	No Dumps have been established.	No Dumps have been established.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	Nil	Nil
4j	Number of settling ponds	No Proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	There is no proposal for dumping during 2022-2023.	As per proposal the dumping was not carried out during 2022-2023.	Existing dump is located on South western side of lease area.

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 has been proposed on Western side of Pit-1 during 2022-2023	No Backfilling has done during 2022-2023	Mining plan is Modified for not achieving proposal.
5b	Area under backfilling of mined out area	0.20 hectares has been proposed during 2022-2023 in Lease area.	Only 0.01 hectare has been Backfilled in lease area.	Mining plan is Modified for not achieving proposal.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Rehabilitation use of topsoil	No topsoil has been generated.	Mining plan is Modified for not achieving proposal.

5d	Total area fully reclaimed and rehabilitated	2.10 hectares has been proposed during 2022-2023 in Lease area.	2.50 hectares has been achieved during 2022-2023	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Backfilling has been proposed on Western side of Pit-1 during 2022-2023	0.01 hectare has been Backfilled in lease area against the proposal of 0.20 hectares.	Mining plan is Modified for not achieving proposal.

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).	It should be on or before 1st July every year.	Submitted for the year 2022-2023.	Till time is there for submission.
6b	Area available for rehabilitation (ha) .	No Proposal	Nil	Nil
6c	afforestation done (ha).	No Proposal	Nil	Nil
6d	No. of saplings planted during the year	No Proposal	Nil	Nil
6e	Cumulative no .of plants	No Proposal	Nil	Nil
6f	Any other method of rehabilitation	No Proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	No Proposal	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	13m x 150m x 7m	10m x 10m x 7m	Mining plan is Modified for not achieving proposal.

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	25771 tons	1135 tons	Mining plan is Modified for not achieving proposal.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	2250 saplings	1000 saplings	Mining plan is Modified for not achieving proposal.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No Proposal	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No Proposal	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposal	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Bi-Annually Survey	Environment monitoring is carried out through Government as well as private agency.	Lessee is conducting Environmental monitoring and all are within permissible limit

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	1000 saplings have been planted against the proposal of 2250 saplings for 2022-2023.	1135 tons has been used for backfilling against the proposal of 25771 tons during 2022-2023.	Mining plan is Modified for not achieving proposal.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	The total target of Limestone production proposed was 98204 tons during 2022-2023.	Achieved Limestone Production is 66860 tons during 2022- 2023.	Mining plan is Modified for not achieving proposal.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	There is no proposal for grade wise mineral sorting in the lease area.	No Grade wise sorting	The available grade of Limestone in this lease area is cement grade.
7c	Different grade of mineral sorted out at mines.	The Limestone of the lease area varies from 35% CaO.	The Limestone of the lease area is 35% CaO	Nil
7d	Any beneficiation process at mines .	Crushing & Screening process at outside the lease area	Inside the lease area there is no beneficiation process.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The available grade of Limestone in this lease area is cement grade.	Achieved ROM Production is 66860 tons during 2022- 2023 against proposal of 98204 tons.	Mining plan is Modified for not achieving proposal.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	1023 cu.m of topsoil is Proposed to generate during 2022-2023	No topsoil has generated during 2022-2023.	Mining plan is Modified for not achieving proposal.

8b	Concurrent use or storage of topsoil	Concurrent use Nil		Mining plan is Modified for not achieving proposal.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is no proposal for dumping during 2022-2023.	As per proposal the dumping was not carried out during 2022-2023.	Existing dump is located on South western side of lease area.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling has been proposed on Western side of Pit-1 during 2022-2023	No Backfilling has done during 2022-2023	Mining plan is Modified for not achieving proposal.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling has been proposed on Western side of Pit-1 during 2022-2023	No Backfilling has done during 2022-2023	Mining plan is Modified for not achieving proposal.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2250 saplings proposed in safety zone for 2022-2023.	Total 1000 saplings has achieved during 2022-2023 along safety zone.	Mining plan is Modified for not achieving proposal.
8g	Survival rate	No Proposal in the document.	97%	Cumulatively 7750 saplings have been Planted in the lease area.
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for water sprinkling on haul roads.	Daily Water tanker is spraying water on mines roads side to control airborne dust.	During Inspection, water sprinkling on mines roads has been noticed.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Scanty vegetation, bushes, neem are observed in lease area	There is no prominent river or stream running in this area.	Outside lease area, River, seasonal nalla is running.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	MR Submitted up to = May 2023 AR Submitted up to = 2022-2023.	Returns are submitted within time limit.	Both Annual & Monthly returns are submitted in online.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Full time Mining Engineer & Mining Geologist has shown	During inspection Mining Engineer & Geologist are present.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use Pattern as on 01.04.2022. Current Working = 4.36 hect Dump = 4.115 hect Road = 0.65 hect	Landuse Pattern is filled as per approved Mining Plan	Nil
9d	Scrutiny of Annual return on afforestation	Lessee has planted 1000 saplings during 2021-2022.	Plantation has been done on backfilled area and waste area.	Cumulatively 7750 saplings have been Planted in the lease area.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	567 cu.m of mineral reject has been generated.	High silica is considered as mineral rejects.	Mining plan is Modified for not achieving proposal.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Limestone stock as on 01.04.2023 ROM opening stock = Nil ROM closing stock = Nil	Mine has produced 66860 tons of ROM and 65725 tons as dispatches during 2022-2023.	It is captive mine of M/s. The India Cements Ltd.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production & Ex. Mine price has shown	It is captive mine of M/s. The India Cements Ltd.	Nil
9h	Scrutiny of Annual return on fixed assets	Fixed Assets is given	Fixed Assets is filled	Nil
9k	Scrutiny of Annual return on mining machineries	Machineries details given	As available in field	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

Date :

(G.SORNADURAI KANNAN)

Indian Bureau of Mines