

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/ALR/LST-32.MDS

Mine code : 38TMN38043

- (i) Name of the Inspecting : **K08**) **G.SORNADURAI KANNAN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Thiru. S.Basha, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 23/12/2023
- (v) Prev.inspection date : 08/02/2023

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **OTTAKOIL-74.38HA**
- (b) **Registration NO.** : **IBM/441/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : ARIYALUR
- Village : Ottakovil
- Taluka : Ariyalur
- Post office : Ottakovil
- Pin Code : 621705
- FAX No. : 04329-249217
- E-mail : Manoharan.singaraja@adityb:
- Phone : 04329249240
- (f) Police Station : Ariyalur
- (g) First opening date : 10/01/2017
- (h) Weekly day of rest : SUN
2. Address for : REDDIPALAYAM CEMENT WORKS
correspondance REDDIPALAYAM PO
ARIYALUR DT.-621704.
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 : M/S ULTRATECH CEMENT LIMITED
 Reddipalayam Works
 Reddipalayam Post Ariyalur
 ARIYALUR TAMIL NADU
 Phone:04329-249240
 FAX :04329-249253

Owner : K.C.Jhanwar
 Ultra Tech Cement Limited,
 Aditya Birala
 Cement,S.K.Ahire Marg
 Worli,Mumbai MUMBAI
 (SUBURBAN) MAHARASHTRA
 Phone:
 FAX : 04329-249253

Agent : Sivaraj Varadharajan
 Ultra tech cements
 Reddipalayam works
 Reddipalayam,Ariyalur Dt.
 ARIYALUR TAMIL NADU
 Phone: 04329-249240
 FAX : 04329-249253

Geologist

Name : SRIDHAR,Full Time
 Qualification : M.SC (GEOLOGY)
 Appointment/ : 02/04/2019
 Termination date

Manager

Name : KAMARAJ.R
 Qualification : B.E Mining,MBA
 Appointment/ : 01/03/2022
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	30/07/2014
Plan/Scheme of Mining	:	MP modif under 17(3) MCR 2016	18/08/2017
	:	MP review under 17(1) MCR 2016	06/01/2021

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 Boreholes has drilled during 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.	No additional exploration was carried out in the lease area during 2022-2023	Entire lease area 74.38 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 29 boreholes have been drilled with 1008 meterage in the lease by private agency.
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 200m X 200m grid interval.
1e	Balance reserve as on 01/04/20	Limestone as on 01.04.2023 Proved Mineral Reserves (111) = 3695145 tons Pre-Feasibility Mineral Resources (221) = 3791000 tons	Limestone as on 01.04.2023 Proved Mineral Reserves (111) = 3695145 tons Pre-Feasibility Mineral Resources (221) = 3791000 tons	The available grade of Limestone in this lease area is CaO=+34% Grade. Reserves update based on approved MMP.
1f	General remarks of inspecting officers on geology, exploration etc	It is part of Cretaceous formations	The formation is belongs to Ariyalur stage. The deposit is un-conformably overlain by Cuddalore sandstone.	Limestone beds carry inclusions of marl, clay & sand stone.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	During 2022-2023, working proposal was in Pit-III.	Working was not carried out as per proposal. Worked in unproposed area.	Violation has been issued under Rule 11(1)

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil - 1 Bench Overburden - 1 Benches Minerals - 1 Benches	Topsoil - 1 Bench Overburden - 1 Benches Minerals - 1 Benches	Nil
2c	Stripping ratio or ore to OB ratio	1 : 0.37	1 : 0.44	Stripping Ratio deviation is due to higher development.
2d	Quantity of topsoil generation in m3	1108 m3 of topsoil has proposed during 2022-2023	1333 m3 of topsoil has generated.	Worked in unproposed area. Violation has been issued under Rule 11(1)
2e	Quantity of overburden generation in m3	During 2022-2023 it is proposed to remove 258 m3.	261 m3 of waste generation in 2022-2023	Worked in unproposed area. Violation has been issued under Rule 11(1)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	1333 m3 of Topsoil has generated against 1108 m3 tons of proposal during 2022-2023	261 m3 of waste has generated against 258 m3 of proposal during 2022-2023	Worked in unproposed area. Violation has been issued under Rule 11(1)

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Production was proposed in Pit-III during 2022-2023.	Productions are not carried out as per proposal and worked in Pit-II	Violation has pointed out under Rule 11(1)
3b	Quantity of ROM mineral production proposed	The total target of ROM Production proposed was 5692 tons during 2022-2023.	Achieved ROM Production is 5582 tons during 2022- 2023.	Nil
3c	Recovery of sailable/usable mineral from ROM production	100% Recovery	100% Recovery	Entire ROM is useable and sent to crusher.
3d	Quantity of mineral reject generation	There is no Mineral Reject generation	There is no Mineral Reject generation	Nil

3e	Grade of mineral rejects generation and threshold value declared.	No Proposal	Nil	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	Entire ROM is useable and sent to crusher.
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.	Surface miner & Rock breakers are used for production.
3k	Provision of mining machineries in mineral benches	Excavators Rock Breakers Tippers Shovel 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 6m was proposed in Mineral.	As per proposal benches are formed.	Nil
3m	Total area covered under excavation/pits	9.33 hect area is proposed for Pit during 2022-2023	9.11 hect areas are under Pit only.	Working are not carried out as per proposal
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.37	1 : 0.44	Stripping Ratio deviation is due to higher development.

3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2023. Mines = 9.33 hect OB Dump = 0.20 hect	Land use Pattern as on 01.04.2023. Mines = 9.11 hect OB Dump = 0.20 hect	Working are not carried out as per proposal
3p	Production of ROM mineral during the last five year period as applicable	2022-2023 = 5692 tons 2021-2022 = 70218 tons 2020-2021 = 156350 tons 2019-2020 = 105879 tons 2018-2019 = 45440 tons	2022-2023 = 5582 tons 2021-2022 = 57038 tons 2020-2021 = 156369 tons 2019-2020 = 81949 tons 2018-2019 = 45438 tons	Nil
3q	General remarks of inspecting officers on method of mining etc.	Production was proposed in Pit-III during 2022-2023.	Achieved ROM Production is 5582 tons during 2022- 2023 against proposal of 5692 tons.	Entire ROM is useable and sent to crusher.

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 of Topsoil, OB in during 2022-2023	No dumping is carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	No Proposal	Nil	Nil
4c	Number of dumps within lease area and outside of lease area	Lease area = 3 Non Lease area = Nil	Lease area = 3 Non Lease area = Nil	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within the UPL (Temporary dumps)	Within the UPL (Temporary dumps)	Two Topsoil dump and one OB dump.
4e	Number of active and alive dumps.	Active Dump = 3 Alive Dump = Nil	As per proposal 3 active dumps are present within lease area.	1 Topsoil dump and 2 OB dumps
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	Garland drains are constructed.	Garland drainage has made along the dump toe & safety barrier.
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	680m of Garland drainage has been constructed.	Garland drainage has made along the dump toe & safety barrier. 1600m fencing has made along the lease boundary.
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 of Topsoil, OB in during 2022-2023	Existing settling ponds are desilted.	680m of Garland drainage has made along the dump toe & safety barrier.

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.	No backfilling has proposed in the mineral extracted area during 2022-2023	As per proposal backfilling has not done during 2022-2023	Nil
5b	Area under backfilling of mined out area	No Proposal	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	No Proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	There is no proposal for backfilling during 2022-2023	The mine was not worked upto the proved depth and no backfilling were proposed during 2022-2023.	No backfilling has done during 2022-2023

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.	Submitted within time limit.
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	No Proposal	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No Proposal	Nil	Nil
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	4000 saplings proposed in safety zone and waste land for 2022-2023	Total 4000 saplings has achieved during 2022-2023 along safety zone and waste area.	Cumulatively 12200 saplings have been planted upto 2022-2023.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Proposed 2.50 hect in safety zone and waste land for 2022-2023	2.50 hect achieved in safety zone and waste land area during 2022-2023	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Green Belt development along 7.5m safety barrier.	Plantation has been done as per proposal along the safety barrier.	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.	4000 saplings have proposed during 2022-2023 along dump and waste area.	Total 4000 saplings has achieved during 2022-2023 along dump and waste area.	Plantation has been done as per proposal along the safety barrier and waste area.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	The total target of ROM Production proposed was 5692 tons during 2022-2023.	Achieved ROM Production is 5582 tons during 2022- 2023.	Nil
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.	Entire ROM is useable and sent to outside lease area crusher.	The available grade of Limestone in this lease area is +34% CaO.

7c	Different grade of mineral sorted out at mines.	The Limestone of the lease area varies from +34% CaO.	The Limestone of the lease area is +34% CaO	Entire ROM is sent to outside lease area crusher to get the desired plant feed materials.
7d	Any beneficiation process at mines .	Crushing & Screening process at outside the lease area	Inside the lease area there is no beneficiation process.	Entire ROM is transported to crusher installed outside lease area.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Entire ROM is transported to crusher installed outside lease area.	5582 tons of ROM has been achieved during 2022- 2023 against 5692 tons of proposal.	Entire ROM is sent to outside lease area crusher to get the desired plant feed materials.

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	1108 m3 of topsoil has proposed during 2022-2023	1333 m3 of topsoil has generated.	Separate topsoil dump is there for storage only.
8b	Concurrent use or storage of topsoil	Storage of topsoil	Storage of topsoil	1333 m3 of topsoil has been removed and separately utilised during 2022-2023.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is No proposal for dumping of Topsoil, OB in during 2022-2023	No dumping is carried out.	Topsoil utilized for afforestation and OB for making Road and other allied activities.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Nil	Nil

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	There is no proposal for backfilling during 2022-2023	The mine was not worked upto the proved depth and no backfilling were proposed during 2022-2023.	No backfilling has done during 2022-2023
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	4000 saplings have proposed during 2022-2023 along dump and waste area.	Total 4000 saplings has achieved during 2022-2023 along dump and waste area.	Plantation has been done as per proposal along the safety barrier and waste area
8g	Survival rate	95%	95%	Same has shown in annual return
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, agriculture is done with rainfed.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR Submitted up to = November 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 01.04.2023. Mines = 9.11 hect OB & Topsoil Dump = 3.080 hect	Landuse Pattern is filled as per approved Mining Plan	Nil
9d	Scrutiny of Annual return on afforestation	Lessee has planted 4000 saplings during 2022-2023.	Plantation has been done as per proposal along the safety zone and waste area.	Cumulatively 12200 saplings have been planted upto 2022-2023.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	There is no Mineral Rejects Generation	There is no Mineral Rejects Generation	Nil
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 5582 tons of ROM and same tons as dispatches during 2022-2023.	It is captive mine of M/s. The UltraTech Cements Limited.
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 UltraTech Cements Limited.	Nil
9h	Scrutiny of Annual return on fixed assets	Fixed Assets is given	Filed as per market conditions.	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
MCDR17	Rule 11(1)	28/12/2023			

Date :

(G.SORNADURAI KANNAN)

Indian Bureau of Mines