

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

MCDR inspection REPORT

Chennai regional office

Mine file No : TN/TCR/LST-5(a)/MDS

Mine code : 38TMN24002

- (i) Name of the Inspecting : **K08**) **G.SORNADURAI KANNAN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri. Raja Ranjith (DGM-Mines)
Official with
Designation
- (iv) Date of Inspection : 22/09/2022
- (v) Prev.inspection date : 03/08/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **AMINABAD (KAIRULABAD)**
- (b) **Registration NO.** : **IBM/929/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : TAMIL NADU
- District : ARIYALUR
- Village : AMINABAD,
- Taluka : ARIYALUR
- Post office : ARIYALUR
- Pin Code : 621704
- FAX No. : 04329-235123
- E-mail : s.makesh@dalmiacement.com
- Phone : 04329*235111
- (f) Police Station : ARIYALUR
- (g) First opening date : 03/10/1970
- (h) Weekly day of rest : SUN
2. Address for : DALMIA CEMENT (BHARAT) LIMITED
correspondance Dalmiapuram
3. (a) Lease Number : TMN0934
- (b) Lease area : 2.25
- (c) Period of lease : 30
- (d) Date of Expiry : 13/08/2034
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : DALMIA CEMENT (BHARAT) LIMITED
 TIRUCHIRAPALLI TAMIL
 NADU
 Phone:
 FAX :

Owner : T. VENKATESAN
 Dy. Managing Director
 Dalmia Cement (B) Ltd
 CHENNAI CITY TAMIL NADU
 Phone: 044-28279933, 9
 FAX : 044-28276508

Agent : J. V. GUNGANE
 Executive Director Dalmia
 Cement(B) Ltd Dalmiapuram
 TIRUCHIRAPALLI TAMIL NADU
 Phone: 04329-235123, 9865139444
 FAX : 04329-235111

Mining Engineer

Name : C.Manikandan, Full Time
 Qualification : BEMining Engineering
 Appointment/ : 16/05/2021
 Termination date

Geologist

Name : K.Jayanathan, Full Time
 Qualification : MSc Applied Geology
 Appointment/ : 15/06/2020
 Termination date

Manager

Name : T.C.Gopi Rajesh Kumar
 Qualification : BE (mining)
 Appointment/ : 30/01/2021
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Renewal under rule 22 MCR1960 20/04/2000
 Mining Scheme rule 12 MCDR1988 31/12/2003
 Mining Scheme rule 12 MCDR1988 18/03/2008
 Mining Scheme rule 12 MCDR1988 04/07/2013
 MP review under 17(1) MCR 2016 10/11/2017

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 2020-2021.	No Boreholes has drilled during 2020-2021.	No Boreholes has drilled during 2020-2021.
1b	Exploration over lease area for geological axis 1 or 2	No additional exploration was proposed during 2021-2022 in the lease area for Geological axis - 1	No additional exploration was carried out in the lease area for Geological axis - 1 during 2021-2022	Entire lease area 95.345 hectares are under G-1 category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No Proposal for exploration during 2021-2022	No Exploration during 2021-2022 and 5 boreholes were drilled during previous scheme period. Total Rs. 1.83 lakhs was spent on exploration during 2015-2016.	So far 70 boreholes have been drilled in the lease upto 2021-2022. Total expenditure towards exploration is 9.80 Lakhs
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration was not proposed during 2021-2022.	No Exploration has been carried out during 2021-2022.	Entire area has been explored under G-1 category with 100m X 100m grid interval.
1e	Balance reserve as on 01/04/20	As on 01.04.2022 Proved Mineral Reserves (111) = 2131867 tons Feasibility Mineral Resources (211) = 15012773 tons Inferred Mineral Resources (332) = 2621246 tons.	As on 01.04.2022 Proved Mineral Reserves (111) = 3161532 tons Feasibility Mineral Resources (211) = 15012773 tons Inferred Mineral Resources (332) = 2621246 tons.	The available grade of Limestone in this lease area is Cement Grade.
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.	Limestone is yellowish colour with predominant well preserved Gryphaea shells and highly fossiliferous.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	During 2021-2022, working proposal was from section line K1-K3 to P3-P5.	Working was carried out as per in proposal area and also in un-proposed area.	Violation has been issued under Rule 11(1)
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil - 1 Bench (existing) Minerals - 5 Benches	Topsoil - 1 Bench (existing) Minerals - 5 Benches	There is no proposal of Topsoil & OB benches during approved plan period.
2c	Stripping ratio or ore to OB ratio	1 : 0.00	1 : 0.00	Due to no OB waste, Stripping Ratio is zero.
2d	Quantity of topsoil generation in m3	There is no proposal of Topsoil generation.	No topsoil has generated during 2021-2022.	Old Topsoil has dumped separately.
2e	Quantity of overburden generation in m3	There is no proposal of OB generation.	No OB has generated during 2021-2022.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	During 2021-2022, working proposal was from section line K1-K3 to P3-P5.	No topsoil & OB has generated during 2021-2022.	Due to no OB waste, Stripping Ratio is zero.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Production was proposed in from section line K1-K3 to P3-P5.	Productions are not carried out per in proposal area and also in un-proposed area.	Violation has pointed out under Rule 11(1)
3b	Quantity of ROM mineral production proposed	The total target of Limestone production proposed was 1048184 tons during 2021-2022.	Achieved Limestone Production is 1096000 tons during 2021- 2022.	Violation has been issued under Rule 11(1).
3c	Recovery of sailable/usable mineral from ROM production	95% Recovery	100% Recovery	Violation has been issued under Rule 11(1).
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.	Proposed Sub Grade Generation (High Ferrugenous Limestone) is 936746 tons for 2021-2022	No Sub Grade Generation during 2021-2022.	Violation has been issued under Rule 11(1).
3g	Grade of sub grade mineral generation	Grade of Subgrade Mineral is CaO +42% and Fe2O3 +8%	There is No Generation of Subgrade Mineral	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method	Mechanised method	Sub grade is blended with High grade limestone.
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	Spacing - 3.0 m Burden - 3.0 m It is Proposed to drill by 110mm dia, with wagon drills.	Drilling & Blasting are done as per proposal.	Control Blasting is done for only development. Rock breakers are used for production.
3k	Provision of mining machineries in mineral benches	Excavators Dumpers Dozer Drills Compressor	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 2021-2022, Bench height of 5m was proposed in Mineral.	As per proposal benches are formed.	There are no benches in overburden.
3m	Total area covered under excavation/pits	73.51 hect area is proposed for excavation during 2021-2022	74.17 hect areas are under excavation.	Violation has been issued under Rule 11(1).

3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.00	1 : 0.00	Due to no OB waste, Stripping Ratio is zero.
3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2022. Mines = 73.51 hect Infrastructure = 0.44 hect Road = 0.94 hect	Land use Pattern as on 01.04.2022. Mines = 74.17 hect Infrastructure = 0.44 hect Road = 0.94 hect	Landuse pattern is same as per proposal except mines area. Violation has been issued under Rule 11(1) for mineral stock
3p	Production of ROM mineral during the last five year period as applicable	2021-2022 = 1984930 tons 2020-2021 = 1499030 tons 2019-2020 = 1344485 tons 2018-2019 = 1369238 tons 2017-2018 = 1651113 tons	2021-2022 = 1096000 tons 2020-2021 = 1085200 tons 2019-2020 = 1079100 tons 2018-2019 = 1096000 tons 2017-2018 = 1035300 tons	Achieved ROM Production is 1096000 tons during 2021- 2022.
3q	General remarks of inspecting officers on method of mining etc.	Production was proposed in from section line K1-K3 to P3-P5.	Achieved ROM Production is 1984930 tons during 2021- 2022 against proposal of 109600 tons.	Sub grade is blended with High grade limestone.

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 proposal for dumping of Subgrade in on southern side of lease area during 2021-2022	As per proposal the sub grade dumping are not carried out.	Violation has been issued under Rule 11(1).
4b	Location of topsoil, OB and mineral reject dumps	It is proposed to dump sub grade on south side of lease area during 2021-2022.	As per proposal the sub grade is not stock during 2021-2022.	Violation has been issued under Rule 11(1).
4c	Number of dumps within lease area and outside of lease area	Lease area = Nil Non Lease area = Nil	Lease area = Nil Non Lease area = Nil	2 Sub grade dumps are present
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No Proposal	Nil	Nil

4e	Number of active and alive dumps.	Active Dump= Nil Alive Dump = Nil	Active Dump= Nil Alive Dump = Nil	2 Sub grade dumps are present
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 safety barrier.
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	600m of Garland drainage has been constructed.	Garland drainage has made along the safety barrier.
4j	Number of settling ponds	No proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	There is proposal for dumping of Subgrade in on southern side of lease area during 2021-2022	As per proposal the sub grade is not stock during 2021-2022.	600m of Garland drainage has made along the 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 proposal for backfilling during 2021-2022	No backfilling has done during 2021-2022	The mine was not worked upto the proved depth and no backfilling were proposed during 2021-2022.
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 2021-2022	The mine was not worked upto the proved depth and no backfilling were proposed during 2021-2022.	No backfilling has done during 2021-2022
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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 2021-2022.	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 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	150 saplings proposed in safety zone and waste land for 2021-2022	Total 200 saplings has achieved during 2021-2022 along safety zone.	Cumulatively 8826 saplings have been planted till date in both inside and outside lease area.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Proposed 0.10 hect in safety zone for 2021-2022	0.25 hect achieved in safety zone area during 2021-2022	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.	100 saplings have proposed during 2021-2022 along safety barrier.	Total 200 saplings has achieved during 2021-2022 along safety barrier.	Plantation has been done as per proposal along the safety barrier.

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 1048184 tons during 2021-2022.	Achieved Limestone Production is 1096000 tons during 2021- 2022.	Violation has been issued under Rule 11(1).
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 subgrade is blended with high grade limestone.	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	Grade of Subgrade Mineral is CaO +42% and Fe2O3 +8%
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 useable and subgrade is blended with high grade limestone.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The available grade of Limestone in this lease area is cement grade.	1096000 tons of ROM has been achieved during 2021- 2022 against 1984930 tons of proposal.	Entire ROM is useable and subgrade is blended with high grade limestone to get the desired plant feed materials.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No topsoil is Proposed to generate during 2021-2022	No topsoil has generated during 2021-2022.	Old Topsoil has dumped separately.
8b	Concurrent use or storage of topsoil	Storage of topsoil in past	Storage of topsoil in past	No topsoil has generated during 2021-2022.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There is proposal for dumping of Subgrade in on southern side of lease area during 2021-2022	As per proposal the sub grade dumping are not carried out.	Violation has been issued under Rule 11(1).

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Partly backfilling has proposed in the mineral extracted area during 2021-2022	As per proposal backfilling has not done during 2021-2022	The mine was not worked upto the proved depth and no backfilling were proposed during 2021-2022.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Partly backfilling has proposed in the mineral extracted area during 2021-2022	As per proposal backfilling has not done during 2021-2022	The mine was not worked upto the proved depth and no backfilling were proposed during 2021-2022.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	100 saplings have proposed during 2021-2022 along safety barrier.	Total 200 saplings has achieved during 2021-2022 along safety barrier.	Plantation has been done as per proposal along the safety barrier.
8g	Survival rate	No Proposal in the document.	85%	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, seasonal nalla is running.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR Submitted up to = September 2022 AR Submitted up to = 2021-2022	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. Mines = 74.17 hect Infrastructure / Road = 1.380 hect	Landuse Pattern is filled as per approved Mining Plan	Nil
9d	Scrutiny of Annual return on afforestation	Lessee has planted 200 saplings during 2021-2022.	Plantation has been done as per proposal along the safety zone.	Cumulatively 8826 saplings have been planted till date in both inside and outside lease area.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Rejects (Sub grade) are not shown.	In approved document Mineral rejects (sub grade) has been proposed.	Violation has been issued under Rule 11(1).
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Limestone stock as on 01.04.2022 ROM opening stock = Nil ROM closing stock = Nil	Mine has produced 1096000 tons of production during 2021-2022.	It is captive mine of M/s. Dalmia Cements (Bharat) Limited.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production & Ex. Mineprice has shown	It is captive mine of M/s. Dalmia Cements (Bharat) Limited.	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 cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	30/09/2022			
MCDR17	Rule 33	30/09/2022			

Date :**(G.SORNADURAI KANNAN)**

Indian Bureau of Mines