

REPORT ON CHECK INSPECTION OF AMINABHAD AND KHAIRULABAD LIMESTONE MINE OF M/s. DALMIA CEMENT BHARAT LIMITED IN ARIYALUR DISTRICT OF TAMILNADU STATE. [PREPARED IN THE FORMAT, PRESCRIBED VIDE CCOM'S LETTER NO. 11013/35/MP/MISC/89-CCOM (Vol. III)]

Name and designation of inspecting officer : G.C.SETHI, Regional Controller of Mines

Date of Inspection : 15.05.2023

1. General information of the mine

(i) Name of the mine : Aminabhad & Khairulabad Limestone Mine
(ii) Owner : M/s. Dalmia Cement Bharat Limited
(iii) Nominated owner : T. Venkatesan
(iv) Mining Engineer : C.P Hariprasad
(v) Agent : K.Vinayagamurthi
(vi) Mine Manager : T.C.Gopi Rajesh kumar
(vii) Lease area : 95.34.5 Ha
(viii) Location : Ariyalur TK & District
03.10.1970 to 31.03.2030
(ix) Lease period : Initial grant from 03.10.1970 to 02.10.1990,
I Renewal from 03.10.1990 to 02.10.2000,
II Renewal from 03.10.2000 to 31.03.2030
(x) Date of Expiry : 31.03.2030
(xi) Date of approval of Mining Plan : TN/PBR/MP/Lst-1170/SZ dated: 20/04/2000
(xii) Date of approval of Review of Mining Plan : TN/ALR/LST/ROMP - 1700.MDS dated: 15.12.2022
(xiii) Period of Mining Plan/ Review of Mining Plan : 2023-24 to 2027- 28
(xiv) Production (Year 2021-22) : 1096000 MT

2. Brief description of the mine:

(a) A brief description of the mine covering location, geology, problems associated with mining of the deposit etc.

(1) Location:


Name of the Mine	Aminabhad & Khairulabad Limestone Mine
GO & Date of Grant of Lease	Initial grant executed on 03.10.1970, I renewal on 02.07.1993 & II renewal on 03.10.2019.
Name of the Lease Holder	M/s Dalmia Cement Bharat Ltd,
Postal address	Periyanagalur Village, Periyanagalur Post, Ariyalur TK & District, Pincode: 621704
Nearest villages	Periyanagalur
Nearest Railway station	Ariyalur Railway Station
Nearest police station	Ariyalur
Nearest Airport	Tiruchirapalli

(2) Geology:

Geology of the Area

The rocks in these region form the part of the marine sedimentary formation of cretaceous age and referred to Kallankurichi formation of Ariyalur stage. The Kallankurichi formation is overlain by Nallamedu formation and under lain by Sillakkudi formation. A massive rudist bivalve carbonate shell bank underlain by conglomerate bed at the base, is approximately aligned in North- South direction with a maximum thickness of 40 m .The limestone are hard and compact having large Gryphea, Terebratulids, Alectryonia and a host of other brachiopod species were identified.


Regional Geology showing the Lithology / age / Succession of formation

SERIES	FORMATION	
Upper Cretaceous	<u>KANKAR / SUB-SOIL</u>	 LIMESTONE
	<u>NALLAMEDU</u>	
	<u>KALLANKURUCHI</u>	
	<u>SILLUKUDI</u>	
	<u>TIRUCHIRAPALLI</u>	
Lower Cretaceous	<u>PARAVI</u>	
	<u>MARUVATHUR CLAY</u>	
	<u>KARAI CLAY</u>	
Arechaen	<u>UPPER GONDAWANA</u>	
	<u>PURE SAND STONE</u>	

PNR area covered under this report, has the limestone deposits of sedimentary origin of Marine Transgression Series placed as MAESTRICHTIAN age in the Upper Cretaceous.

Limestone is yellowish in colour with predominant well-preserved GRYPHAEA shells and is highly fossiliferous with a Kankar top of grayish brown colour. The Gryphaea shells are well preserved and cemented together by a fine matrix of sand and clay. The basement is of pure sandstone which is grey in colour.

Geological Succession of Aminabad & Khairulabad Limestone mines:

Age	Rock type	
Upper Cretaceous	Kankar / Ordinary Clay	 sand-stone
	Shell Limestone	
	Ferruginous Limestone	
	Conglomerate / Calcaareous	
Gondwana	Light Grey sandstone basement	
Archeans		

The strike of the formation in the mining area is NW-SE and dips 2° - 5° towards NE. The above deposit has the thickness raising from South to North.

(3) Problems associated with mining of the deposit etc. – Nil

(b) Description on deployment of mining machinery

Sl. No.	Machineries deployed	Capacity	Number of units	In use	Idle	Percentage of utilization	Brief description	Remarks
1	2	3	4	5	6	7	8	9
1	Back Hoes	2.4 Cum	1	1	0	80%	L&T Komatsu	
		2.1 Cum	1	1	0	80%	L&T Komatsu	
2	Dozer	179 Hp	1	1	-	80%	CAT D6H	-
3	Water Sprinkler	6000 litre	1	1	-	100%	-	
4	Dumpers/ Tipplers	18 CuM	15	15	0	80%		
5	Drills / Blast Holes	169 Hp	1	1	0	70%		115 mm
6	Air Compressor	200 Cum/Min	1	1	0	70%	-	-

3. Implementation of Mining Plan or Review of Mining Plan:

Sl.No.	Proposal in the approved Review of Mining Plan (period from 2018-19 to 2022-23)	Observations regarding implementation of proposals given in approved Mining Plan or Review of Mining Plan.		Remarks/ Reason for deviation
1	2	3		4
(1)	CONSERVATION OF MINERALS			
		Proposed	Actual	
(a)	Exploration	Nil	Nil	Nil
(b)	Utilization of sub-grade mineral	Nil	Nil	Nil
(c)	Any other proposal for monitoring	Nil	Nil	Nil
(2)	SCIENTIFIC MINING			
(a)	Mine Development and method of mining	Conventional Method of Mining		Nil
(b)	Handling of Waste/ sub-grade material	Nil	Nil	Nil
(c)	Area reclamation & restoration	Nil	Nil	Nil
(d)	Any other proposal for monitoring	Nil	Nil	Nil
(3)	PROTECTION OF ENVIRONMENT			
(a)	Afforestation	150 nos of saplings	300 nos of saplings	Nil
(b)	Quality of air	Air Quality standards within the limits.		Nil
(c)	Quality of Water	Water Quality standards within the limits.		Nil
(d)	Noise level	Noise level standards within the limits.		Nil
(e)	Vibration	-		Nil
(f)	Any other proposal for monitoring.	Nil		Nil

4. History of Violations after approval of Mining Plan or Scheme of Mining:

SL No.	Date of Inspection	Name of inspecting officer	Violations of MCDR, 1988 observed and pointed out	Rectification of violations	Remarks
1	2	3	4	5	6
1	22.09.2022	Shri. G.Sornadurai Kannan	Not achieved the proposed quantity	Complied on 28.12.2022	-

5. Socio-Economic Development Plan (2021 -22):

Sl. No.	Proposed Action Plan towards socio-Economic Development	Expenditure proposed (In Rs. Lakh)	Expenditure Incurred (In Rs. Lakh)	Remarks
1	2	3	4	5
(1)	General Development in the area			
	(i) Housing	0	0	
	(ii) Water Supply	2.5	2.2	
	(iii) Sanitation	18	17.3	
	(iv) Health safety and Medical Facilities	0.65	0.59	
(2)	Education and Training	5	4.9	
(3)	Employment to local inhabitants	60	59.5	117 person employed
(4)	Public Transportation and communication	5	4.5	
(5)	Recreation and other sports activities	2	1.12	
(6)	Expenditure for environment management	3.0	3.0	
(7)	Other			
Total		96.15	93.11	

6. Observations/ remarks on the earlier inspection carried out by sub-ordinate officer(s) with specific thrust on systematic and scientific mining, mineral conservation and environmental protection and other sensitive/important aspects pertaining to the mine area or surroundings (CRZ/ Western Ghats/ Wildlife Sanctuaries etc.):

1) Name of inspecting officer: Shri. G.Sornadurai Kannan, SMG

2) Date and Type of inspection: MCDR & Star Rating Inspection – 22.09.2022

3) Observations/ Remarks w.r.t. the inspection carried out by the sub-ordinate officer(s) and shortfalls in the inspection report, if any, thereof:

The Rule 11(1) & 33 of MCDR, 2017 has been pointed out by the inspecting officer and the same were compiled by the lessee.

Name of the Officer: **G.C.Sethi**
Designation: **Regional Controller of Mines**