

DRAFT EIA / EMP REPORT

FOR

MOTHAIYANUR LIMESTONE MINES

GO.No.	G.O. 211	G.O.1086	G.O.76
Extent	50.84 Ha	4.865 Ha	8.005
Location	Chinnagoundanur Village, Sankari District, Salem District Tamil Nadu		
Production	0.5 MTPA	0.012 MTPA	0.61 LTPA
Depth	75m	75m	40m
ToR	SEIAA- TN/F.No.6733/SEAC/ ToR-632/2019 dated 12.07.2019	SEIAA- TN/F.No.6567/SEAC/To R-630/2019 dated 12.07.2019	SEIAA- TN/F.No.6856/SEAC/To R-847/2019 dated 17.02.2021
ToR validity Extension	TO24B0000TN547637 8A dated 16.07.2024	TO24B0000TN5791761A dated 16.07.2024	TO24B0000TN5779670A dated 25.06.2024
Baseline Monitoring	Winter Season (Dec 2023 – Feb 2024)		

PROJECT PROPONENT



THE INDIA CEMENTS LTD.

**Coromandal Towers, No.93 Santhome High Road,
Karpagam Avenua, R.A.Puram, Chennai**

CONSULTANT

CREATIVE ENGINEERS & CONSULTANTS

NABET ACCREDITED CONSULTANCY, NABL ACCREDITED TESTING LAB

9B/4, Bharathwajar Street, East Tambaram, Chennai-600059.

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REVISIONS OF EIA/EMP REPORT

Revision number	Report Status	Date of submission
00/JUL/24	Draft EIA /EMP Report	20.07.2024

Environmental Impact Assessment & Environmental Management Plan Report for **Mothaiyanur Limestone Mines of The India Cements Limited (G.O.No.211, G.O.No.1086 and G.O.No.76)** located in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu.was prepared by Creative Engineers & Consultants and authorized for submission by Mr. P.Giri, CEO, of Creative Engineers & Consultants on 20.07.2024 after due review by the personnel and consultation with the proponent. Current Revision number of the EIA/EMP report is 00/JUL/24, signifying as per the revision mentioned in the above table that this is a draft EIA/EMP report.

Signature: 

Date: 20.07.2024





THE INDIA CEMENTS LIMITED SANKARI WORKS

Sankari West P.O., Salem District, Pin : 637 303, Tamil Nadu.
Phone / Fax : 04283-240387 www.indiacements.co.in
CIN : L26942TN1946PLC000931



Ref :

PROJECT PROPONENT DECLARATION

Date :

We, M/s. The India Cements Limited were issued Terms of Reference from SEIAA, Tamil Nadu for our Mothaiyanur Limestone Mines (G.O.211, G.O.1086 and G.O.76) of The India Cements Limited in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu.

We have entrusted the EIA study to M/s. Creative Engineers & Consultants (CEC), Chennai who have been accredited by the National Accreditation Board for Education & Training (NABET), Quality Council of India with their accreditation valid upto 23.12.2026.

The Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) have been prepared as per the generic structure proposed in the EIA notification 2006, ToR issued by SEIAA, Tamil Nadu. The prescribed ToR along with compliance is also incorporated in the EIA/EMP Report.

This report is prepared based on the information and data obtained from the Mining Plan and other records and the field study carried out by the consultant. The data given in the EIA/EMP report are factually correct to the best of my knowledge.

For The India Cements Limited.

(A.VEERABAGU)
VICE PRESIDENT (MFG)

Date: 17.07.2024.





CREATIVE ENGINEERS & CONSULTANTS

(NABET ACCREDITED, NABL ACCREDITED TESTING LABORATORY,
DEPARTMENT OF INDUSTRIES AND COMMERCE REGISTERED COMPANY)

EIA Consultant Undertaking

[In compliance with MoEF Office Memorandum No. J-11013/41/2006-IA.II (I) dated 04.08.2009]

Creative Engineers & Consultants (CEC) is an NABL accredited testing Laboratory, and also NABET accredited Category–A environment consultancy organization for preparing EIA/EMP reports for the sectors Mining of minerals, Thermal power plants, Mineral Beneficiation & Cement plants.

CEC has been accredited by the National Accreditation Board for Education & Training (NABET), Quality Council of India for empanelment of EIA Consultants with accreditation valid upto 23.12.2026

M/s. The India Cements Limited were issued Terms of Reference from SEIAA, Tamil Nadu for our Mothaiyanur Limestone Mines (G.O.211, G.O.1086 and G.O.76) of The India Cements Limited in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu.

The prescribed TOR is complied with and incorporated in the EIA Report and submitted. This report is based on the information and data obtained from Approved Mining Plan, other records and data from the field study by CEC. The data generated and given in the EIA/EMP Report are factually correct. The sample analyses are carried out through CEC's laboratory.

(P. Giri)

Chief Executive & EIA Coordinator

Creative Engineers & Consultants

Date: 17.07.2024

Annexure – VII

Declaration by Experts contributing to the EIA Report for

Mothaiyanur Limestone Mines (G.O.211, G.O.1086 and G.O.76) of M/s. The India Cements Ltd. in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu.

I, hereby, certify that I was a part of the EIA team in the following capacity that developed the above EIA.

EIA coordinator:

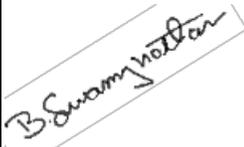
Name: **P.Giri**

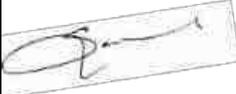
Signature and Date: 

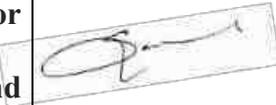
Period of involvement: **June 2019 onwards**

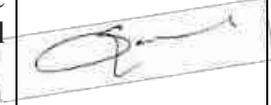
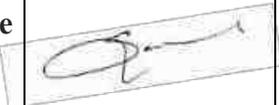
Contact information: **09444133619**

Functional area experts:

S. No.	Functional areas	Name of the expert/s	Involvement (period and task**)	Signature and date
1	AP*	P.Giri	<ul style="list-style-type: none"> • Identification of baseline monitoring stations and study of the monitored data with respect to the applicable standards. • Identification of sources of air pollution comprising dust, gaseous emission due to mining & other activities • Identification of Impacts & suggestion of mitigation measures Period: June 2019 onwards	
		B.Swamynathan	<ul style="list-style-type: none"> • Data interpretation of Micro meteorological data for wind rose. • Identification of polluting source and suggestion of suitable mitigation measures. Period: July 2019 onwards	

2	WP*	G.Sandhya	<ul style="list-style-type: none"> • Study of the monitored data with respect to the applicable standards. • Identification of Water requirement & Source • Preparation of water balance diagram • Identification of Water polluting sources • Impact of the project on the water quality, both surface and groundwater • Suggestion of Mitigation measures to control water pollution <p>Period: July 2019 onwards</p>	
3	SHW*	P.Giri	<ul style="list-style-type: none"> • Quantification of mineral & waste from mining operation • Waste disposal method evaluation • Providing dump management plan • Providing Surface Runoff Management Structure Requirements. • Identification of Hazardous waste and its details of disposal <p>Period: June 2019 onwards</p>	
4	SE*	R.Baburaj	<ul style="list-style-type: none"> • Identification of villages in the study area and finalization of demographic profile of the villages within the study area. • Preparation of sections relevant to SE functional area in the EIA/EMP report <p>Period: July 2019 onwards</p>	
5	EB*	B.Swamynathan	<ul style="list-style-type: none"> • Perusal of existing data relevant to this project. • Studying the details of flora and fauna, separately for core, buffer zone and forest area based on primary field survey. • Identification of species , Indicating the Schedule of the fauna present in the study area • Assessment of impact on Biological environment and suggestion of mitigative measures • Collecting & providing details of existing and proposed Green belt development /plantation in the core zone <p>Period: July 2019 onwards</p>	
6	HG*	K.Shankar	<ul style="list-style-type: none"> • Study of existing surface drainage arrangements in the core and buffer zone, impact due to mining on these drainage courses and suggestion of mitigative measures 	

			<ul style="list-style-type: none"> • Perusal of site specific ground water table details for the core zone and the study area. • Studied the hydrological aspects of surface and groundwater in study area • Study about impact on the hydrology due to mining operation • Suggesting mitigative measures like RWH for enhancement of ground water level <p>Period: July 2019 onwards</p>	
7	GEO*	K.Shankar	<ul style="list-style-type: none"> • Study of geology of the ML area and the surrounding areas. • Provide details about Mineral composition <p>Period: July 2019 onwards</p>	
8	SC*	B.Swamynathan	<ul style="list-style-type: none"> • Study of soil profile • Assessment of Impact on soil and suggesting plantation scheme. <p>Period: July 2019 onwards</p>	
9	AQ*	G.Sandhya	<ul style="list-style-type: none"> • Quantification of emission particulars • Air quality modelling for post project impact on the air quality prediction of the study area. <p>Analysis of the Isopleth generated</p> <ul style="list-style-type: none"> • Arriving at the post project concentration at the AAQ monitoring locations • Preparation of meteorological data in suitable form for input into the model • Simulation of model for generation of Isopleth and data interpretation. • Studying the impact on AAQ monitoring locations due to the generated emissions. • Preparation of sections relevant to AQ functional area in the EIA/EMP report. <p>Period: July 2019 onwards</p>	
10	NV*	P.Giri	<ul style="list-style-type: none"> • Identification of baseline monitoring stations and study of the monitored data with respect to the applicable standards. • Predict the noise level and vibration level due to proposed mining operation based on scientific evaluation. • Suggesting the Mitigation measures to control noise pollution, Suggesting the Mitigation measures to 	

			<p>control ground vibration Period: June 2019 onwards</p>	
11	LU	<p>B.Swamynathan</p>	<ul style="list-style-type: none"> • Collection of Remote sensing satellite data to study the land use pattern. • Primary field survey and limited field verification • Preparation of Land use map using Satellite data of the project area separately for the core zone and the buffer zone and providing the land use pattern. <p>Period: July 2019 onwards</p>	
		<p>G.Sandhya – Team Member</p>	<p>Assisting the Expert in preparation of Land use map using Satellite data of the project area separately for the core zone and the buffer zone and providing the land use pattern.</p> <p>Period: February 2024 onwards</p>	
12	RH*	<p>K.Shankar</p>	<ul style="list-style-type: none"> • Identified Major risks involved in the project Mitigation measures suggested to avoid risk. • Preparation of onsite and offsite emergency management plan <p>Period: July 2019 onwards</p>	
		<p>G.Sandhya – Team Member</p>	<p>Assisting the Expert in identification of major risks involved in the project and mitigation measures for the same.</p> <p>Period: February 2024 onwards</p>	

*One TM against each FAE may be shown

**Please attach additional sheet if required

Declaration by the Head of the accredited consultant organization/ authorized person

I, **P.Giri** hereby,confirm that the above mentioned experts prepared the EIA report for **Mothaiyanur Limestone Mines (G.O.211, G.O.1086 and G.O.76) of M/s. The India Cements Ltd. in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu.**

I also confirm that EIA Coordinator (EC) has gone through the report, and the consultant organization shall be fully accountable for any misleading information. It is certified that no unethical practices, plagiarism involved in carrying out the work and external data / text has not been used without proper acknowledgement while preparing this EIA report.

Signature: 

Name: **P.Giri**

Designation: **Chief Executive**

Name of the EIA consultant organization: **Creative Engineers & Consultants, Chennai – 59**

NABET Certificate No. & Issue Date: **NABET/EIA/23-26/RA 0331 issued on 24.05.2024**

National Accreditation Board for Education and Training

Certificate of Accreditation

Creative Engineers and Consultants, Chennai

9B/4, Bharathwajar street, East Tambaram, Chennai, Tamil Nadu

The organization is accredited as **Category-A** under the QCI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3: for preparing EIA/EMP reports in the following Sectors-

S. No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1.	Mining of minerals- opencast mining only	1	1 (a) (i)	A
2.	Thermal power plants	4	1 (d)	A
3.	Mineral beneficiation	7	2 (b)	A
4.	Cement plants	9	3 (b)	A

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated May 03, 2024, posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no QCI/NABET/ENV/ACO/24/3250 dated May 24, 2024. The accreditation needs to be renewed before the expiry date by Creative Engineers and Consultants, Chennai following due process of assessment.

Issue Date
May 24, 2024

Valid up to
December 23, 2026




Mr. Ajay Kumar Jha
(Sr. Director, NABET)

Certificate No.
NABET/EIA/23-26/RA 0331


Prof (Dr) Varinder S Kanwar
(CEO-NABET)

CONTENTS



CONTENTS

S.No	PARTICULARS	PG NO.
TERMS OF REFERENCE & ITS COMPLIANCE		
A.	COPY OF TOR	--
B.	COMPLIANCE TO TOR POINTS	T-1
EIA/ EMP REPORT- CHAPTERS		
I	INTRODUCTION	1-1
II	PROJECT DESCRIPTION	2-1
III	DESCRIPTION OF ENVIRONMENT	3-1
IV	ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES	4-1
V	ANALYSIS OF ALTERNATIVES	5-1
VI	ENVIRONMENTAL MONITORING PROGRAMME	6-1
VII	ADDITIONAL STUDIES	7-1
VIII	PROJECT BENEFITS	8-1
IX	ENVIRONMENTAL COST BENEFIT ANALYSIS	9-1
X	ENVIRONMENTAL MANAGEMENT PLAN	10-1
XI	SUMMARY & CONCLUSION	11-1
XII	DISCLOSURE OF CONSULTANTS ENGAGED	12-1
XIII	ASSESSMENT OF ECOLOGICAL DAMAGE, REMEDIATION PLAN AND NATURAL AND COMMUNITY RESOURCE AUGMENTATION PLAN	13-1
ADDITIONAL ENCLOSURES WITH EIA/EMP REPORT CHAPTERS		
	ANNEXURES	A-1





CHAPTER-WISE CONTENTS

CHAPTER 1 INTRODUCTION	1-1
1.1 PURPOSE OF THE REPORT:	1-1
1.2 IDENTIFICATION OF PROJECT & PROJECT PROPONENT:	1-2
1.3 BRIEF DESCRIPTION OF NATURE, SIZE, LOCATION & PROJECT IMPORTANCE	1-6
1.4 SCOPE OF THE STUDY:	1-7
1.5 LEGAL AND REGULATORY FRAMEWORK:	1-9
1.6 STRUCTURE OF THE EIA/EMP REPORT:	1-9
CHAPTER 2 PROJECT DESCRIPTION	2-6
2.1 TYPE OF PROJECT:	2-6
2.2 NEED & JUSTIFICATION FOR THE PROJECT:	2-6
2.3 LOCATION:	2-7
2.4 GEOLOGY:	2-13
2.5 SIZE AND MAGNITUDE OF THE OPERATION:	2-23
2.6.1 RESERVES:	2-23
2.6.2 MINING METHOD:	2-23
2.6 PROPOSED SCHEDULE FOR APPROVAL AND IMPLEMENTATION:	2-24
2.7 TECHNOLOGY AND PROCESS DESCRIPTION:	2-24
2.8 PROJECT DESCRIPTION:	2-25
2.9 PLAN PERIOD-PRODUCTION & WASTE DISPOSAL:	2-25
2.10 DESCRIPTION OF MITIGATION MEASURES:	2-40
2.11 ASSESSMENT OF NEW & UNTESTED TECHNOLOGY:	2-40
2.12 CONCLUSION:	2-40
CHAPTER 3 DESCRIPTION OF ENVIRONMENT	3-1
3.1 GENERAL:	3-1
3.2 SOCIO-ECONOMIC CONFIGURATIONS OF THE AREA:	3-4
3.3 EXISTING ENVIRONMENTAL QUALITY	3-10
3.4 LAND ENVIRONMENT - LANDUSE & LAND COVER	3-29





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

3.5	BIOLOGICAL ENVIRONMENT:	3-36
3.6	HYDROGEOLOGICAL STUDY:	3-44

CHAPTER 4 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION

MEASURES 4-1

4.1	GENERAL	4-1
4.2	AIR ENVIRONMENT:	4-3
4.3	WATER ENVIRONMENT:	4-19
4.4	NOISE AND VIBRATION:	4-28
4.5	LAND ENVIRONMENT:	4-32
4.6	BIOLOGICAL ENVIRONMENT:	4-33

B) AVENUE TREES: 4-37

4.7	SOCIO ECONOMIC ENVIRONMENT:	4-45
4.8	OCCUPATIONAL HEALTH AND SAFETY:	4-65
4.9	LOGISTICAL SYSTEM:	4-69
4.10	WASTE MANAGEMENT:	4-70

CHAPTER 5 ANALYSIS OF ALTERNATIVES 5-1

5.1	ALTERNATE TECHNOLOGY:	5-1
5.2	ALTERNATE SITE:	5-1

CHAPTER 6 ENVIRONMENTAL MONITORING PROGRAMME 6-1

6.1	GENERAL	6-1
6.2	MONITORING SCHEDULES FOR VARIOUS PARAMETERS	6-1
6.3	LEGISLATIVE AND REGULATORY FRAME WORK:	6-2
6.4	ENVIRONMENTAL MONITORING COST:	6-8

CHAPTER 7 ADDITIONAL STUDIES 7-1

7.1	GENERAL:	7-1
7.2	PUBLIC HEARING:	7-1
7.3	RISK ASSESSMENT:	7-1





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

7.4	REHABILITATION AND RESETTLEMENT (R & R) PLAN:	7-9
7.5	MINE CLOSURE PLAN:	7-9
CHAPTER 8 PROJECT BENEFITS		8-1
CHAPTER 9 ENVIRONMENTAL COST BENEFIT ANALYSIS		9-1
CHAPTER 10 ENVIRONMENTAL MANAGEMENT PLAN		10-1
10.1	INTRODUCTION:	10-1
10.2	COMPONENTS OF THE ENVIRONMENTAL MANAGEMENT PLAN:	10-1
10.3	ENVIRONMENTAL POLLUTION CONTROL COST:	10-10
10.4	CONCLUSION:	10-11
CHAPTER 11 SUMMARY & CONCLUSION		11-1
11.1	INTRODUCTION:	11-1
11.2	SALIENT FEATURES OF THE PROJECT:	11-3
11.3	EXISTING ENVIRONMENTAL SCENARIO:	11-5
11.4	ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES:	11-10
11.5	ENVIRONMENTAL MONITORING PROGRAMME:	11-17
11.6	ADDITIONAL STUDIES:	11-17
11.7	REMEDICATION PLAN, NATURAL AND COMMUNITY RESOURCE AUGMENTATION PLAN:	11-18
11.8	CONCLUSION:	11-18
CHAPTER 12 DISCLOSURE OF CONSULTANTS ENGAGED		12-1
CHAPTER 13 ASSESSMENT OF ECOLOGICAL DAMAGE, REMEDIATION PLAN AND NATURAL AND COMMUNITY RESOURCE AUGMENTATION PLAN		13-1

LIST OF FIGURES

Figure 1.1:	Site Vicinity Map	1-2
Figure 1.2:	Lease Plan	1-3
Figure 2.1:	Location Map	2-7





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Figure 2.2: Approachability Map	2-8
Figure 2.3:Satellite Imagery Showing Corner Coordinates	2-9
Figure 2.4: Combined Village Map	2-10
Figure 2.5: Contour Map of 1Km Radius	2-12
Figure 2.6: Geological Plan & Cross Section	2-14
Figure 2.7: Geological Cross Section – G.O.211	2-15
Figure 2.8: Geological Plan – G.O.1086	2-16
Figure 2.9: Geological Cross Section – G.O.1086	2-17
Figure 2.10: Geological Plan – G.O.76	2-18
Figure 2.11: Geological Cross Section – G.O.76	2-19
Figure 2.12: Surface Plan – G.O.211	2-20
Figure 2.13: Surface Plan – G.O.1086	2-21
Figure 2.14: Surface Plan – G.O.76	2-22
Figure 2.15: Mining Flowsheet	2-24
Figure 2.16: Mine Position at the end of Plan Period - G.O.211	2-28
Figure 2.17: Mine Position at the end of Plan Period - G.O.1086	2-29
Figure 2.18: Mine Position at the end of Plan Period - G.O.76	2-30
Figure 2.19: Mine Position at the end of Plan Period Cross Section- G.O.211	2-31
Figure 2.20: Mine Position at the end of Plan Period Cross Section- G.O.1086	2-32
Figure 2.21: Mine Position at the end of Plan Period Cross Section- G.O.76	2-33
Figure 2.22: Conceptual Plan - G.O.211	2-34
Figure 2.23: Conceptual Cross Section – G.O.211	2-35
Figure 2.24: Conceptual Plan - G.O.1086	2-36
Figure 2.25: Conceptual Cross Section – G.O.1086	2-37
Figure 2.26: Conceptual Plan - G.O.76	2-38
Figure 2.27: Conceptual Cross Section – G.O.76	2-38
Figure 3.1: Study Area Map	3-2
Figure 3.2: Demographic Structure in Buffer Zone	3-6
Figure 3.3: History of Cyclonic Storms	3-11





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Figure 3.4: Seismic Zone Map of India	3-12
Figure 3.5: Monthly Average Rainfall	3-14
Figure 3.6: Average Annual Rainfall	3-14
Figure 3.7: Average Wind Rose	3-16
Figure 3.8: Ambient Air Quality Study Stations	3-18
Figure 3.9: Ambient Air Quality Data	3-19
Figure 3.10: Location of Water Sampling Stations	3-23
Figure 3.11: Location of Noise Sampling Stations	3-25
Figure 3.12: Noise Level Data	3-26
Figure 3.13: Location of Soil Sampling Stations	3-28
Figure 3.14 : Landsat 9 Satellite Data of the Study Area	3-30
Figure 3.15: Map Showing Land Use Categories around 10km Buffer	3-31
Figure 3.16: Landuse within Buffer Zone Area	3-36
Figure 3.17: Contour Map	3-46
Figure 3.18: Drainage Map	3-47
Figure 3.19: Soil Map	3-48
Figure 3.20: Geology Map	3-49
Figure 3.21: Geomorphology Map	3-50
Figure 3.22: Water Table With Reference To Mean Sea Level	3-52
Figure 3.23: Spatial Distribution of Water Table	3-52
Figure 3.24: VES Locations and Profile Map	3-53
Figure 3.25: VES Curves at Locations 1 to 7	3-54
Figure 3.26: VES Results	3-55
Figure 3.27: Pumping Data Polotted in Semi Log	3-58
Figure 4.1: Isopleth of GLC Prediction for PM ₁₀ - G.O.211	4-10
Figure 4.2: Isopleth of GLC Prediction for PM _{2.5} - G.O.211	4-11
Figure 4.3: Isopleth of GLC Prediction for PM ₁₀ . G.O.1086	4-12
Figure 4.4: Isopleth of GLC Prediction for PM _{2.5} - G.O.1086	4-13
Figure 4.5: Isopleth of GLC Prediction for PM ₁₀ . G.O.76	4-14





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Figure 4.6: Isopleth of GLC Prediction for PM _{2.5} - G.O.76	4-15
Figure 4.7: Isopleth of GLC Prediction for PM ₁₀ . Cumulative	4-16
Figure 4.8: Isopleth of GLC Prediction for PM _{2.5} - Cumulative	4-17
Figure 4.9: Water Balance Diagram	4-19
Figure 4.10: Oil and Grease Removal Arrangement	4-22
Figure 4.11: Surface Runoff Management Structures	4-24
Figure 4.12: Combined Plantation Plan	4-44
Figure 4.13: Transport Road from Mine Lease to Cement Plant	4-70
Figure 10.1: ISO 9001:2015	10-3
Figure 10.2: ISO 14001:2015	10-4
Figure 10.3: ISO 18001:2007	10-5
Figure 10.4: Environmental Management Cell	10-6

LIST OF TABLES

Table 1.1: Screening of Schedule 1(a) Projects	1-1
Table 1.2: Details of Mothaiyanur Limestone Mines	1-2
Table 1.3: Identification of project – Salient Details	1-4
Table 1.4: Mining Lease Details	1-4
Table 1.5: Review of Mining Plan Approval Details	1-4
Table 1.6: Identification of Project Proponent	1-6
Table 1.7: Brief Description of Nature of project	1-6
Table 1.8: Location of the project	1-7
Table 1.9: Online Proposal Details	1-7
Table 2.1: Summary of Limestone Reserves & Resources	2-23
Table 2.2: Details of Equipments	2-24
Table 2.3: Existing Pit Configuration – G.O.211	2-25
Table 2.4: Existing Pit Configuration – G.O.1086	2-25
Table 2.5: Existing Pit Configuration - G.O.76	2-25





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Table 2.6: Yearwise Production– G.O.211	2-25
Table 2.7: Yearwise Production– G.O.1086	2-26
Table 2.8: Yearwise Production – G.O.76	2-26
Table 2.9: Waste Material Handling during the Plan Period - G.O.211	2-26
Table 2.10: Waste Material Handling during the Plan Period - G.O.1086	2-26
Table 2.11: Waste Material Handling during the Plan Period - G.O.76	2-27
Table 2.13: Land Degradation Utilization	2-39
Table 2.14: Project Requirements	2-39
Table 3.1: Type of Baseline Data	3-1
Table 3.2: Environmental Setting of the Study Area	3-3
Table 3.3: Population in Buffer Zone	3-4
Table 3.4: Caste Wise Population Distribution	3-5
Table 3.5: Literacy Details	3-5
Table 3.6: Occupational Structure In The Buffer Zone	3-5
Table 3.7: Primary Schools in the Buffer Zone Rural Villages	3-7
Table 3.8: Education Facility Availability	3-7
Table 3.9: Healthcare Amenities Availability	3-8
Table 3.10: Infrastructure Facilities	3-8
Table 3.11: Average Annual Rainfall Data (2011-20)	3-13
Table 3.12: Meteorological Data	3-15
Table 3.13: Air Quality Monitoring	3-17
Table 3.14: Air Quality Monitoring Locations	3-18
Table 3.15: Ambient Air Quality Data	3-19
Table 3.16: Water Quality Monitoring	3-22
Table 3.17: Summary of Water Quality Data	3-24
Table 3.18: Noise Level Monitoring	3-25
Table 3.19: Ambient Noise Level in dB (A)	3-26
Table 3.20: Soil Quality Monitoring	3-27
Table 3.21: Soil Quality Data	3-28





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Table 3.22: RS satellite image used for the present study	3-29
Table 3.23: Major Landuse Units of the Study Area	3-30
Table 3.24: Area Estimation of Landuse Categories in Buffer Zone	3-33
Table 3.25: Land Use Pattern of the Study Area Falling Within 10 Km Area in (Ha)	3-34
Table 3.26: Village Wise Landuse Pattern	3-34
Table 3.27: List of Plants in the Core Zone	3-40
Table 3.28: List of Plant Species in the Buffer Zone	3-41
Table 3.29: List of Fauna in the Buffer Zone	3-44
Table 3.30: Details of the Study Area	3-45
Table 4.1: Tamil Nadu Mines Safety Association –Mines Safety Observation Week-2023, Salem Zone	4-1
Table 4.2: MEMC Week 2023-24 (North Zone)	4-2
Table 4.3: Impact and Mitigation Measures – Air Environment	4-4
Table 4.4: Emission Sources	4-7
Table 4.5: Emission Factors	4-8
Table 4.6: Quantity used for Emission Rate Calculation	4-8
Table 4.7: Emission Rate (g/sec)	4-8
Table 4.8: Peak Incremental Concentration	4-9
Table 4.9: Concentrations Of PM ₁₀ after Project Implementation	4-18
Table 4.10: Concentrations Of PM _{2.5} after Project Implementation	4-18
Table 4.11: Control Measures – Water Environment	4-20
Table 4.12: Surface Runoff Management Structures	4-23
Table 4.13: Range of Categorization as per GWREC Norms – 1997	4-25
Table 4.14: Stage of Groundwater Development	4-25
Table 4.15: Main Sources of Noise	4-28
Table 4.16: Impact of Noise Levels	4-28
Table 4.17: Post Project Noise Levels	4-29
Table 4.18: Permissible Peak Particle Velocity (PPV) In Mining Areas	4-31
Table 4.19: Land Use Table – G.O.211	4-32





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Table 4.20: Land Use Table – G.O.1086	4-32
Table 4.21: Land Use Table – G.O.76	4-33
Table 4.22: Impact on Biological Environment	4-34
Table 4.23: Plantation carried out (In all lease hold areas)	4-38
Table 4.24: Species Planted	4-38
Table 4.25: Avenue Plantation	4-39
Table 4.26: Community Developmental Activities Carried out by ICL in the past	4-46
Table 4.27: Details of Medical Camp	4-66
Table 4.28: Details of Transportation	4-69
Table 6.1: Environmental Monitoring Schedule	6-2
Table 6.2: Environmental Standards	6-3
Table 6.3: National Ambient Air Quality Standards	6-3
Table 6.4: IS – 10500 :2012 Standards	6-5
Table 6.5: Noise Level Standards	6-7
Table 6.6: Permissible Noise For Industrial Workers As Laid Down By CPCB	6-7
Table 6.7: Permissible Peak Particle Velocity (PPV) In Mining Areas	6-8
Table 10.1: Environmental Control Cost	10-10
Table 11.1: Site Details	11-3
Table 11.2: Environment Setting of The Study Area	11-3
Table 11.3: Technical Description	11-4
Table 11.4: Details of Buffer Zone	11-5
Table 11.5: Social, Economic And Demographic Profile of the Study Area	11-5
Table 11.6: Baseline Data	11-6
Table 11.7: Land Use in 10Km Buffer Zone	11-8
Table 11.8: Mitigation Measures – Air Environment	11-10
Table 11.9: Mitigation Measures – Water Pollution	11-12
Table 12.1: List of People Involved	12-1





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

LIST OF ANNEXURES

Annexure 1A:	Mining Lease – G.O.211	A-1
Annexure 1B:	Mining Lease – G.O.1086	A-56
Annexure 1C:	Mining Lease – G.O.76	A-96
Annexure 2A:	Review of Mining Plan Approval - G.O.211	A-101
Annexure 2B:	Review of Mining Plan Approval - G.O.1086	A-103
Annexure 2C:	Review of Mining Plan Approval - G.O.76	A-106
Annexure 3A:	NOC from Commissionerate of Geology & Mining- G.O.211	A-108
Annexure 3B:	NOC from Commissionerate of Geology & Mining- G.O.1086	A-110
Annexure 3C:	NOC from Commissionerate of Geology & Mining- G.O.76	A-112
Annexure 4:	Population Breakup and Literacy Levels in the Buffer Zone	A-114
Annexure 5:	Occupational Structure in the Buffer Zone	A-115
Annexure 6:	Educational Facilities in the Buffer Zone	A-116
Annexure 7:	Medical Facilities in the Buffer Zone	A-117
Annexure 8:	Infrastructural Facilities in the Buffer Zone	A-118
Annexure 9:	Ambient Air Quality Data	A-119
Annexure 10:	Water Quality Data	A-125
Annexure 11:	Flora and Fauna in Suriyamalai R.F	A-127
Annexure 12:	Undertaking Affidavit	A-128
Annexure 13:	FMB and A-Register of G.O.211	A-130
Annexure 14A:	Past Production- G.O.211	A-183
Annexure 14B:	Past Production- G.O.1086	A-185
Annexure 14C:	Past Production- G.O.76	A-181
Annexure 15:	Judgement Copy – G.O.211	A-187
Annexure 16:	Payment Receipt – G.O.211	A-201
Annexure 17:	Collection of ambient air, water, noise and soil samples	A-202

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TERMS OF REFERENCE & ITS COMPLIANCE



Dr. JAYANTHI. M, I.F.S
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY – TAMIL NADU

3rd Floor, Panagāl Maaligai,
No.1 Jeenis Road, Saidapet,
Chennai-15.

Phone No.044-24359973

Fax No. 044-24359975

TERMS OF REFERENCE (ToR)

Lr No.SEIAA-TN/F.No.6733/SEAC/TOR- 632/2019 Dated: 12.07.2019

To

M/s. The India Cements Limited
Sankari Works
Sankari West P.O.
Salem - 637 303

Sir / Madam,

Sub: SEIAA, Tamil Nadu – Terms of Reference (ToR) under violation for the existing Mothaiyur Limestone Mine - GO-211 with an extent of 50.84 Ha, production capacity of 0.50 MTPA by M/s. The India Cements Limited at S.F. No. 15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 21, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4, 32, 33/1A, 34/1, 34/5, 37/1, 37/3, 37/4, 50/8, 50/9, 50/10, 51/2B, 51/3, 52/6B, 52/7B, 54/3B, 55/4, 62/4, 62/5, 64/4A, 67/1A, 68/1, 1654/1, 154/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu under project category – B and Schedule S.No. 1(a) – TOR issued for the preparation of EIA report, EMP report, ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation –Regarding.

- Ref:**
1. MoEF & CC Notification S.O. 804 (E) dated 14.03.2017
 2. MoEF & CC Notification S.O.1030 (E) dated 08.03.2018
 3. Your Online application No. IA/TN/MIN/65645/2017, dated: 23.06.2017, (Under Violation) by MoEF & CC
 4. File transferred from MoEF & CC to SEIAA-TN application SIA/TN/MIN/30390/2018 dated 19.12.2018.
 5. Minutes of the 129th SEAC Meeting held on 18.05.2019



Jayanti
MEMBER SECRETARY
SEIAA-TN

6. Minutes of the 347th SEIAA Meeting held on 21.06.2019
7. Proponent reply dated: 28.06.2019
8. Minutes of the 349th SEIAA Meeting held on 12.07.2019

Kindly refer to your proposal submitted to the State Level Impact Assessment Authority for Terms of Reference.

The proponent of M/s. The India Cements Limited submitted application for Terms of Reference on 19.12.2018, in Form-I, Pre- Feasibility report for the existing Mothaiyur Limestone Mine - GO-211 with an extent of 50.84 Ha, production capacity of 0.50 MTPA at S.F. No. 15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 21, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4, 32, 33/1A, 34/1, 34/5, 37/1, 37/3, 37/4, 50/8, 50/9, 50/10, 51/2B, 51/3, 52/6B, 52/7B, 54/3B, 55/4, 62/4, 62/5, 64/4A, 67/1A, 68/1, 1654/1, 154/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu seeking ToR under the MoEF & CC Notification cited under reference 1nd & 2nd.

The proposal seeking ToR was placed before the 129th SEAC meeting held on 18.05.2019. Based on the presentation made by the proponent and the documents furnished, the committee decided to recommend for the grant of Standard ToR for mining projects as specified by MoEF & CC subject to the normal Terms of Reference in addition to TOR specified (Annexure-I) with Public Hearing as per the Hon'ble High Court of Madras in its order dated 13.10.2017 in W.P.No.11189 of 2017 by the SEAC to deal with the violation aspects of the mining projects.

Based on the document furnished, the Committee observed that the project falls under the category B and schedule 1(a) of the EIA Notification, 2006. The SEAC recommends the Terms of Reference for the project for assessment of Ecological damage, remediation plan and natural & community resource augmentation plan to be prepared as an independent chapter in the Environment Impact Assessment report by the Accredited consultant and also with collection and analysis of data for the assessment of ecological damage, preparation of remediation plan and natural & community resource augmentation plan to be done by an Environmental laboratory duly notified under the Environment (Protection) Act, 1986, accredited by NABET or a laboratory of council of Scientific and Industrial research Institutions working in the field of Environment. Three months data relating to the ecological parameters is to be submitted with analysis.



The project proponent besides above has to also submit the No Objection certificate (NOC) from State Mines and Geology Department. The NOC should also indicate whether the mine was operated.

- Without Environmental Clearance (EC) or in excess of quantity approved in EC.
- Without consent to Operate (CTO) or in excess of quantity approved in CTO.
- Without mining plan/scheme of mining or in excess of quantity approved in mining plan/scheme of mining.
- Without Forest clearance
- Any other violation such as excess quantity mined during the mining period to assess the ecological and other damages.

The proposal was considered as recommended by SEAC in the 349th SEIAA meeting held on 12.07.2019. The Authority decided to recommend the proposal for the grant of issue ToR with public hearing for the preparation of EIA Report with additional ToR as recommended by SEAC in addition to the following:

1. The proponent furnish in affidavit undertaking inter-alia includes commitment of the Project Proponent not to repeat any such violation in future as follows as per MoEF & CC, Office Memorandum No. F.No.3-50/2017-IA.III(Pt.) dated:30.05.2018
"I/We, the applicant / the Project Proponent, commit to comply with all the statutory requirements and judgments of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No.114 of 2014 in the matter of the common cause versus Union of India and Ors. Before grant of ToR/ EC and I am also to commit, not to repeat any such violation in future. In case of any violation of the above the ToR/Environmental Clearances shall be liable to be terminated forthwith".
2. The Environment Clearances will not be operational till such time the project proponent complies with all the statutory requirements and the judgment of Hon'ble Supreme Court dated the 2nd August 2017 in writ Petition (Civil) NO .144 of 2014 in the matter of common cause versus Union of India and Ors.
3. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the project proponent through their respective Department of Mining & Geology in strict compliance of



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SEIAA-TN

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judgment of Hon'ble Supreme Court dated 02.08.2017 in the Writ Petition (Civil) No.114 of 2014 in the matter of common Cause Versus Union of India and Ors.

4. The impact of mining operation on the suryamalai Reserved forest, which is located at a distance of 200 m from the quarry site shall be studied and the details should be furnished. In addition to that the Remarks/ recommendation of the DFO, salem shall be obtained based on the above points.
5. Impact of noise on the wild life needs to be analysed and necessary mitigation measures to be proposed for reduce the same.
6. Points raised in the public hearing shall be covered in the EIA report.
7. The report for green belt developed with necessary photographs.
8. The proponent shall furnish the photographs for fencing around the project site.
9. The proponent shall furnish the proposal for CER.
10. A detailed mine closure plan shall be prepared and the same shall be got approved by the Geology of mining, Department and the same shall be submitted along with EIA report.
11. Contour map for 1 km radius surrounding the site, village map, FMB & A Register may be furnished.
12. The details of annual rate of replenishment and timeframe for replenishment after mining closure in the area shall be furnished.
13. The Comprehensive study shall be carried out to evaluate the impact of mining operations on the environment through experts in the field of hydrogeology, ecology, mining and environment.
14. Conduct Hydro geological study and furnish the report along with EIA.
15. Issue of ToR is considered for the mining period 2019-23 onwards only.
16. Excess quantity mined during the mining period shall be furnished to assess the ecological and other damages from the Department of Mining & Geology.
17. The EIA study report shall provide details of proposed and actual mined quantity for the entire mining plan period from the competent Authority.
18. EIA study shall match proposed mining scheme.
19. Details of EMP compliance for the existing activities shall be furnished.
20. Copy of the consent for establishment, consent to operate and latest renewal obtained from the TNPCB.
21. Details of study on social impact, including livelihood of local people.
22. EIA report should strictly follow the EIA mining manual.



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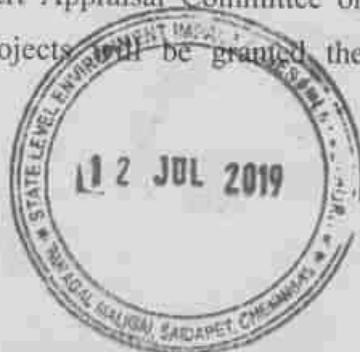
23. Detail plan on rehabilitation and reclamation carried out for the stabilization and restoration of the mined areas.
24. The EIA study report shall include the surrounding mining activity
25. Modelling study for Air, Water and noise shall be carried out and incremental increase in the above study shall be substantiated with mitigation measures.
26. A study on the geological resources available shall be carried out and reported.
27. A specific study should include impact on flora & fauna, disturbance to migratory pattern of animals, adjoining reserve forest.
28. Reserve funds should be earmarked for proper closure plan existing areas near the forest or other areas.
29. A specific study on agriculture & livelihood shall be carried out and reported.
30. Impact on ponds, rivers and other water bodies to be elaborated
31. Impact of soil erosion, soil physical chemical and biological property changes may be assumed.

Additional TOR specified by the SEAC to deal with the violation aspects of the mining projects

SECTION A

As per the MoEF & CC Notification S.O. 1030 (E) dated: 08.03.2018,

1. "The cases of violations will be appraised by the Expert Appraisal Committee at the Central level or State or Union territory level Expert Appraisal Committee constituted under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 with a view to assess that the project has been constructed at a site which under prevailing laws is permissible and expansion has been done which can run sustainably under compliance of environmental norms with adequate environmental safeguards, and in case, where the findings of Expert Appraisal Committee for projects under category A or State or Union territory level Expert Appraisal Committee for projects under category B is negative, closure of the project will be recommended along with other actions under the law.
2. In case, where the findings of the Expert Appraisal Committee or State or Union territory level Expert Appraisal Committee on point at sub-paragraph (4) above are affirmative, the projects shall be granted the appropriate Terms of Reference for



Jayanti
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SEIAA-TN

undertaking Environment Impact Assessment and preparation of Environment Management Plan and the Expert Appraisal Committee or State or Union territory level Expert Appraisal Committee, will prescribe specific Terms of Reference for the project on assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter in the environment impact assessment report by the accredited consultants, and the collection and analysis of data for assessment of ecological damage, preparation of remediation plan and natural and community resource augmentation plan shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or a environmental laboratory accredited by the National Accreditation Board for Testing and Calibration Laboratories, or a laboratory of the Council of Scientific and Industrial Research institution working in the field of environment.”

After the appraisal of the project, the SEAC decided that the Para No.2 stated above is applicable to the project. Hence, the proponent is directed to prepare appropriate reports as contained in the Para 2.

While complying with the specific aspects of the MoEF & CC directions as stated in the Para 2 above, the following steps should be followed:

Step 1: Enumerate the aspects of Violation:

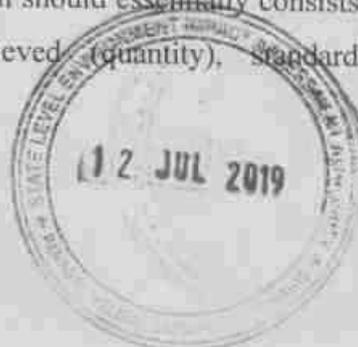
- a) The proponent should enumerate the violations as applicable to the project.
- b) Furnish a description of each violation with quantitative and qualitative data.
- c) Violation categories are to be decided taking into consideration the stage at which the project execution stands.

Step 2: Ecological Damage Assessment:

- a) For each aspect of violation enumerated in step (1), identify the resultant environmental damage that may have been caused.
- b) Furnish a description of the environmental damages with quantitative and qualitative data.

Step 3: Remediation Plan:

- a) For the Environmental damage(s) identified in the step (2) above, prepare the remediation plan for the each or combination of damages.
- b) The remediation plan should essentially consists of problem statement, target to be achieved (quantity), standards, technology/ procedure for



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remediation, equipment and machinery to be used, time schedule and remediation cost(direct and indirect cost, capital as well as O&M costs).

SECTION B

1. Natural resource Augmentation:

- a) The resources that should be considered for augmentation should essentially consist of land, biota, air, water and other resources as applicable.
- b) Proponent may choose one or more of the resource augmentation as applicable and provide a description of the augmentation proposal in detail for each resource.
- c) The proponent should also furnish the cost for each augmentation scheme.

2. Community resource Augmentation:

- a) The proponent should prepare a plan of action for addressing the needs of the community in terms of resources in the sectors of education, health and sports primarily and other such resources as applicable to the community in the vicinity of the project.
- b) The community resource augmentation plan should consist of rehabilitation of houses and people, budget allocation and time schedule for completing the activity.

SECTION C

The proponent should prepare content for the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation separately in a chapter and include in the EIA / EMP report.

SECTION D

- a) After the appraisal of the EIA / EMP report submitted by the proponent, the SEAC will make a judgement of the quality of the content in the EIA / EMP report specifically with reference to the chapter covering the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation.



T. Jayaraj
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- b) In the judgement of SEAC, if the quality of the content in the chapter is not satisfactory, the SEAC may direct the proponent to further revise the chapter and resubmit the EIA/EMP report.
- c) If SEAC concludes that the technical part is satisfactory and the costing aspect is not satisfactory then the SEAC may revert to legal provisions, MoEF & CC guidelines and similar expert committee recommendations for finalizing the cost aspects or the SEAC may use its own expertise and experience in finalizing the cost.

SECTION E

The proponent is directed to furnish data as per the questionnaire appended in Annexure I. It will help the SEAC in arriving the ecological damage and the associated cost.

SECTION F

In compliance with the Supreme Court order stated in MoEF & CC letter F.No. 3-50/2017 IA.III-pt dated: 05th January 2018, the proponent is required to submit the No Objection Certificate obtained from the Department of Geology and Mining, Government of Tamil Nadu regarding payment of 100% cost of illegally mined mineral under section 21(5) of MMDR Act 1957 which would account for mining operations in violation of the following:

- a) Without Environmental Clearance (EC), or in excess of the quantity approved in EC
- b) Without Consent to Operate (CTO) or in excess of the quantity approved in CTO and
- c) Without mining plan/scheme of mining or in excess of the quantity approved in mining plan / scheme of mining
- d) Without Forest Clearance
- e) Any other violation

List out the details of reserve forest and wildlife sanctuary nearby the project site (the details should also include other districts which are nearby the project site) and also furnish the detail of distance between the project site and reserve forests/wildlife sanctuary.



Jayas
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Whether the project site attracts the HACA clearance? If so, also furnish the HACA clearance for the mining from the competent authority.

The proponent is instructed to fill in the form contained in Annexure 1 to work out the details of the ecological damage during the violation period.

A. STANDARD TERMS OF REFERENCE

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with



the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.

- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the



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SEIAA-TN

- study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
 - 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
 - 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
 - 20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
 - 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should



be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

- 22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be



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SEIAA-TN

- assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
 - 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
 - 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
 - 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
 - 32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
 - 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
 - 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas



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- (with plans and with adequate number of sections) should be given in the EIA report.
- 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
 - 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
 - 37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
 - 38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
 - 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
 - 40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
 - 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
 - 42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
 - 43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
 - 44) Besides the above, the below mentioned general points are also to be followed:-
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the



data were collected and the sources should be indicated.

- d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
- e) Where the documents provided are in a language other than English, an English translation should be provided.
- f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
- g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
- h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

In addition to the above, the following shall be furnished:-

The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information on following points:

- 1) Project name and location (Village, District, State, Industrial Estate (if applicable).
- 2) Products and capacities: If expansion proposal then existing products with capacities and



- reference to earlier EC.
- 3) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
 - 4) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
 - 5) Measures for mitigating the impact on the environment and mode of discharge or disposal.
 - 6) Capital cost of the project, estimated time of completion.
 - 7) Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./ private land, status of its acquisition, nearby (in 2-3 km.) water body, population, within 10km other industries, forest, eco-sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)
 - 8) Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
 - 9) Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
 - 10) Likely impact of the project on air, water, land, flora-fauna and nearby population
 - 11) Emergency preparedness plan in case of natural or in plant emergencies
 - 12) Issues raised during public hearing (if applicable) and response given
 - 13) CER plan with proposed expenditure.
 - 14) Occupational Health Measures
 - 15) Post project monitoring plan

Besides the above, the below mentioned general points should also be followed:-

- a. A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.
- b. All documents may be properly referenced with index, page numbers and continuous page numbering.
- c. Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
- d. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.



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e. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. In this regard circular no F. No.J -11013/77/2004-IA-II(I) dated 2nd December, 2009, 18th March 2010, 28th May 2010, 28th June 2010, 31st December 2010 & 30th September 2011 posted on the Ministry's website <http://www.moef.nic.in/> may be referred.

- After preparing the EIA (as per the generic structure prescribed in Appendix-III of the EIA Notification, 2006) covering the above mentioned points, the proponent will take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
- The final EIA report shall be submitted to the SEIAA, Tamil Nadu for obtaining Environmental Clearance
- The TORs prescribed shall be **valid for a period of three years** from the date of issue, for submission of the EIA/EMP report as per OMNo.J-11013/41/2006-IA-II(I)(part) dated 29th August, 2017.

The receipt of this letter may be acknowledged.

Jayaram
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12/07/19

Copy to:

1. The Principal Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032.
4. The APCCF (C), Regional Office, Ministry of Environment Forest & CC (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai -34.
5. Monitoring Cell, I A Division, Ministry of Environment Forest & CC, Paryavaran Bhavan, CGO Complex, New Delhi 110003
6. Stock File.



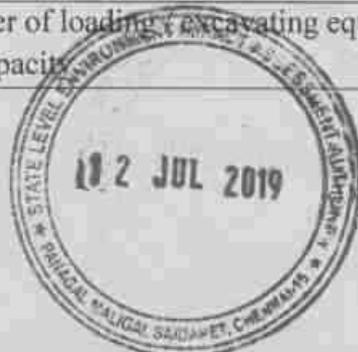
Annexure 1Additional information for considering EC for mining projects

S.No.	Details to be provided	Page no.																																		
1)	Name of the project lease & owner																																			
2)	Lease Extent																																			
3)	Lease Validity																																			
4)	Approved Mining Plan/Scheme – Review a) Specify whether DSR is provided (applicable in case of minor minerals only)																																			
5)	Specify - Nature and type of violation I. Without EC or in excess of quantity approved in EC II. Without CTO or in excess of quantity approved in CTO III. Without mining plan/Scheme of mining or in excess of quantity approved in Mining plan/Scheme of mining. IV. Without forest Clearance V. Any other violation																																			
6)	Violation period I. Number of months II. Number of Years																																			
7)	Exploitation/Excavation quantity- Reserves proved through exploration by drilling																																			
8)	Give details of production from the date of execution of the lease deed / since 1994 <table border="1"> <thead> <tr> <th rowspan="2">Year and quantity</th> <th colspan="2">2010-11*</th> <th colspan="2">2011-12*</th> <th colspan="2">2012-13*</th> </tr> <tr> <th>Planned</th> <th>Actual</th> <th>Planned</th> <th>Actual</th> <th>Planned</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>Ore/mineral/g granite blocks (tonnes)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Waste (tonnes/cu.m)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="7">* year of mining operation</td> </tr> </tbody> </table>	Year and quantity	2010-11*		2011-12*		2012-13*		Planned	Actual	Planned	Actual	Planned	Actual	Ore/mineral/g granite blocks (tonnes)							Waste (tonnes/cu.m)							* year of mining operation							
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Waste (tonnes/cu.m)																																				
* year of mining operation																																				



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9)	Quantity mined out during the violation period & if, yes indicate the violated quantity, in term of % of consented quantity.						
	Year and quantity mined out during the violation period	2010-11		2011-12		2012-13	
		Planned	Actual	Planned	Actual	Planned	Actual
	Ore/mineral/g granite blocks (tonnes)						
Waste excavation (tonnes/cu.m)							
10)	State illegal mining/encroachments outside the lease boundary? Percentage of quantity mined out outside the lease boundary.						
11)	Method of working						
	I. Category type: (a) Mechanised (b) Semi – Mechanised (c) Manual						
	II. Construction and design of haul roads						
	a) Dimension as per the statutory requirements which were followed or otherwise						
	b) Number of vehicles plying on the main haul roads inside the mine and the approach road to the pit located outside the mine, if any.						
c) Are any measures taken to minimise fugitive dust generated form mine haul roads? Does it comply with the CPCB/PCB Guidelines?							
d) Is there a possibility that air pollutants emitted from the project area that do not comply with air quality standards as per CPCB/PCB?							
12)	Mechanized / Semi – Mechanized Method of Mining						
	(i) Number of loading / excavating equipments as per approved mining plan and capacity.						
	(ii) Number of loading / excavating equipments actually being deployed and capacity.						



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	(iii) Type and number of transporting equipments.									
	(iv) Type of transporting system used – (a) trucks (b) Any other mode									
	(v) Capacity and Number of trucks used as per approved mining plan									
	(vi) Capacity and Number of trucks used actually in the mine.									
	(vii) Number and capacity of loading equipments and trucks used not in line with approved mining plan.									
	<table border="1"> <thead> <tr> <th></th> <th>Capacity (m³)</th> <th>Numbers</th> </tr> </thead> <tbody> <tr> <td>Excavator</td> <td></td> <td></td> </tr> <tr> <td>Trucks</td> <td></td> <td></td> </tr> </tbody> </table>		Capacity (m ³)	Numbers	Excavator			Trucks		
	Capacity (m ³)	Numbers								
Excavator										
Trucks										
	(viii) Impact of excess deployment of loading equipments (excavators) and transporting equipments on environment. (a) Air pollutants (b) Water Quality (c) Land Quality (d) Noise level									
	(ix) Does the deployment of loading equipments (excavators) and trucks fulfil the statutory requirements as per MMR 1961, with respect to the site conditions?									
13)	Method of Rock Breaking/Material preparation for the excavation:									
	(i) Methodology adopted –									
	a) Drilling and blasting									
	b) Rock breakers									
	c) Rippers									
	d) Surface miners									
	e) Direct mucking by excavators									
	f) Manual means									
	g) Any other methods or combination of above									
	(ii) In case of drilling and blasting method:									
	(a) Type of blasting: short hole or deep hole									
	(b) Whether controlled blasting technique adopted? If yes, specify the technique with details of study, year of study									
	(c) Impacts due to blasting defined as per the studies, if any carried out previously as indicated									



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	(d) Dust pollution	
	(e) Noise level (dB(A))	
	(f) Ground vibration studies and Fly rock projection	
	(iii) Impact of preparation of Ore and waste on environment-	
	a) Air Pollution	
	b) Noise Pollution	
	c) Water Pollution	
	d) Safety standards	
	e) Traffic density	
	f) Road Condition (vulnerability)	
14)	Construction and Design of Dumps.	
	a) Place/Location	
	b) Approach to Dump form the mine distance and safety standards.	
	c) Area of extent occupied	
	d) Dimension of Dump and No. of terrace with heights (benches)	
	e) Vegetation covered ; If yes, specify the details of plants	
15)	Construction and Design of Waste Dumps	
	(i) Numbers and Location of Dumps as per approved Mining Plan	
	(ii) Specify whether reject dumps are located within or outside mining lease	
	(iii) Area occupied in excess of the approval mining plan.	
	(iv) Dimension of Terracing, Light, shapes, etc., Dump as per approved Mining Plan	
	(v) Fresh/Existing Dimension Height, shape, width, etc., of Dumps in the mine.	
	(vi) Volume/Quantity added to Waste/Dump during the violated period.	
	(vii) Approach to the Dump-Dimension, distance.	
	(viii) Number of and type of equipments deployed in Dump.	
	(ix) Provision of Garland drains around the Dumps.	
	(x) Any vegetation made on the slopes.	
	(xi) Provision of safety standards.	
	(xii) Impact of Waste/Dumps on environment.	
	a) Air pollution	
	b) Water pollution	
	c) Dust pollution	
	d) Noise pollution	
	(xiii) Tetracing	



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16)	Construction and Design of Ore and sub grade ore/mineral Stacks:-
	(i) Number and Location of Ore stacks.
	(ii) Dimension of Ore/sub grade Stacks as per the Approved Mining Plan
	(iii) Volume/Quantity added during the violation period.
	(iv) Any Screening plant or any other loading equipment engaged during the violated period.
	(v) Approach to Ore / sub grade stack –Distance, hazards.
	(vi) Safety standards adopted while operation.
	(vii) Impact of ore/sub grade on environment
	a. Air pollution
	b. Water pollution
	c. Dust pollution
d. Noise pollution	
17)	Mine Pit Water
	(i) Intersection of Ground water table, specify the measures taken.
	(ii) Ground water table as per hydro geological Studies (Pumping test).
	(iii) Provision of Garland drains around pit and dumps
	(iv) Water pollution
	(v) Management of mine water.
(vi) Ultimate pit limit, w.r.t Ground water intersection and management of drainage of ground water.	
18)	Diversion of General Drainage/River/Nallah course for mining
19)	Clearing of vegetation before the commencement of mining operation- Number of trees (species wise)
20)	Man Power
	(a) Statutory management
	(b) Regular (Non –statutory) Manpower
21)	Occupational Health and Safety.
	(a) Periodical monitoring of health standards of persons employed as per Mine Act, 1952
	(b) Failure to inform Statutory bodies periodically, if any



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22)	Population (Nearby Habitation)	
	(i) Population/Significant Population/Dense Population within the buffer zone of 10 Kms.	
	(ii) People displacement due to mining activities	
	(iii) Location/ Existence of habitation near the river or any other historical/sensitive/ forest distance.	
	(iv) Impact of mining on Surrounding and habitation-Air, Water, Noise, Pollution.	
	(v) Socio Economic aspects of mining.	
23)	CSR	
	(a) Field ground Activities or studies. Actual amount spent towards CSR and the future proposal.	
24)	NOC from DMG for quantity clarification in respect of settlement of all the amount payable against identified violation.	
25)	For the Clearance of EC, Public Hearing is mandated as per MoEF & CC Notification.	
26)	Conceptual post mining land use/restoration	
27)	Litigation/court cases, if any pending	
28)	Disaster management plan for the mine	

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12/07/19





THIRU.DEEPAK S.BILGI, I.F.S.
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY-TAMILNADU
3rd Floor, Panagal Maaligai,
No.1, Jeenis Road, Saidapet,
Chennai - 600 015.
Phone No. 044-24359973
Fax No. 044-24359975

TERMS OF REFERENCE-EXTENSION

Lr. No.SEIAA-TN/F.No.6733/SEAC/TOR- 632/Ext/ dated:26.09.2022

To

M/s. The India Cements Limited
Mr. Palaniappan, Sr. Vice President,
Sankari West P.O.
Salem - 637 303

Sir/Madam,

Sub: SEIAA-TN – Proposed Limestone mine lease over an Extent of 50.84 Ha in S.F. No. 15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 21, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4,32, 33/1A, 34/1, 34/5, 37/1, 37/3, 37/4, 50/8, 50/9, 50/10, 51/2B, 51/3, 52/6B, 52/7B,54/3B, 55/4, 62/4, 62/5, 64/4A, 67/1A, 68/1, 1654/1, 154/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by M/s. The India Cements Limited –Terms of Reference issued- issue of Extension Validity for TOR under Violation – Regarding.

- Ref:**
1. Earlier ToR issued vide Lr.No. SEIAA-TN/F.No.6733/ SEAC /TOR- 632/2019 Dated: 12.07.2019.
 2. MoEF&CC Notification S.O. 221(E) 18.01.2021.
 3. Online Proposal No. SIA/TN/MIN/ 272958/2022 dated 15.05.2022.
 4. Your Application for Extension of Validity of Terms of Reference dated: 16.05.2022.
 5. Minutes of the 309th SEAC meeting held on 02.09.2022.
 6. Minutes of the 554th SEIAA meeting held on 26.09.2022.


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In the reference 1st cited above, the Terms of Reference was accorded to M/s. The India Cements Limited for the Proposed Limestone mine lease over an Extent of 50.84 Ha in S.F. No. 15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 21, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4,32, 33/1A, 34/1, 34/5, 37/1, 37/3, 37/4, 50/8, 50/9, 50/10, 51/2B, 51/3, 52/6B, 52/7B,54/3B, 55/4, 62/4, 62/5, 64/4A, 67/1A, 68/1, 1654/1, 154/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu vide T.O. Lr.No. SEIAA-TN/F.No. 6733/ SEAC /TOR- 632/2019 Dated: 12.07.2019.

Now the Project Proponent, M/s. The India Cements Limited has applied for extension of validity of Terms of Reference vide online application No. SIA/TN/MIN/272958/2022 dated 15.05.2022.

Discussion by SEAC and the Remarks:-

Proposed Limestone mine lease over an Extent of 50.84 Ha in S.F. No. 15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 21, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4,32,33/1A, 34/1,34/5, 37/1, 37/3,37/4,50/8,50/9,50/10,51/2B,51/3,52/6B,52/7B,54/3B, 55/4, 62/4, 62/5, 64/4A, 67/1A, 68/1, 1654/1, 154/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by M/s. The India Cements Limited for Extension of validity for the Terms of References "Under Violation".

(SIA/TN/MIN/ 272958/2022 dated: 15.05.2022)

The proposal was placed in this 309th Meeting of SEAC held on 02.09.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, M/s. The India Cements Limited as applied for Extension of validity for the Terms of References for the proposed Limestone mine lease over an Extent of 50.84 Ha in S.F. No. 15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 21, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4, 32, 33/1A, 34/1, 34/5, 37/1, 37/3, 37/4, 50/8, 50/9, 50/10, 51/2B, 51/3, 52/6B, 52/7B, 54/3B, 55/4, 62/4, 62/5, 64/4A, 67/1A, 68/1, 1654/1, 154/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B" – "Under Violation" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.


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3. The PP had applied for ToR to carry out the EIA study under violation vide Online Application No.SIA/TN/MIN/30390/2018, dated. 19.12.2018.
4. The ToR for carrying out the EIA study under violation was issued vide SEIAA. Lr. No.SEIAA-TN/F.No. 6733/SEAC/TOR-632/2019 Dated: 12.07.2019.
5. As per MoEF&CC O.M Dt: 29.08.2017, the validity of ToR shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects.
6. Now the PP has applied online through Parivesh portal vide Proposal No. SIA/TN/MIN/ 272958/2022 dated: 15.05.2022 for the extension of validity of ToR with all required documents.
7. The PP had cited the reasons of the outbreak of the Corona virus (covid-19) and subsequent lockdowns which had put the studies initiated as a part of EIA on hold and they were unable to proceed further to submit the final EIA report in time.

The SEAC had observed the MoEF&CC Notification S.O. 1247(E), dated the 18 March, 2021, stating that *".....the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the Environmental Clearance granted shall be treated as valid..."*

Hence, the SEAC after detailed discussions confirmed that the validity of the ToR issued is valid (deemed to be) up to 11.07.2024 as per the aforesaid MoEF Notification dated 18.01.2021.

Therefore, the project proponent is requested to submit Public Hearing minutes, EIA/EMP report along with required details on the following –(i) facets of violation, (ii) assessment of ecological damage, remediation plan and natural and community resource augmentation plan which shall be prepared as an independent chapter in the environment impact assessment report (iii) the compliance report on the violation ToR issued earlier.

Details of SEIAA Remarks:

The proposal was placed in the 554th Authority meeting held on 26.09.2022. The Authority after detailed discussion accepts the recommendation of 309th SEAC meeting Dt: 02.09.2022 and the Authority has decided to grant Extension of validity for Terms of Reference (ToR) issued vide


MEMBER SECRETARY
SEIAA-TN

SEIAA. Lr. No. SEIAA-TN/F.No.6733/SEAC/ToR-632/2019, dated: 12.07.2019 (Deemed to be) valid up to 11.07.2024 subject to the additional specific ToRs as follows,

1. The project proponent shall submit valid mining lease and scheme of mining plan obtained from the competent authority.
2. The project proponent shall submit excess mined out quantity during the violation period after 15.01.2016 along with details of existing pit within the proposed mining area and the copy of remittance of fine levied for the same from the concerned AD/DD, Geology & Mining Dept.
3. The project proponent shall submit details of case filed against the project proponent under Section 19 of the Environment (Protection) Act, 1986.
4. The limestone quarry involves raw material extraction, transportation and comminution. Therefore, large quantity of diesel and electricity are supposed to be consumed in the production. The diesel fuel and electricity to be consumed to be furnished.
5. What are the green mining technologies to be adopted for reducing GHG/CO₂ emissions and lowering the carbon footprint in the limestone mining.
6. Strategies adopted for safety and healthy mining operations.
7. What are the transparency and accountability system in place during the operation and post-operation period of the project.
8. What are the In-House environmental performance and evaluation tools to understand negative impacts of mining.
9. Detailed study to be made on material flow analysis and Life Cycle Assessment (LCA) in the process of production.
10. Through a chart illustration, clarify the cradle to grave approach for extraction of limestone and anticipated emissions, environmental threats in every stage and mitigation strategy at every stage.
11. Project Proponent to study impacts on human health viz respiratory impacts, toxicity impacts and radiation impacts.
12. Study to be made on aquatic, terrestrial toxicity, aquatic eutrophication including detailed terrestrial toxicity and their impacts of wildlife and biodiversity.
13. What is the total water withdrawal consumption, likely temperature rises and climate change impacts.


MEMBER SECRETARY
SEIAA-TN

14. What are the chemical exposures in the limestone mining and risks anticipated to environmental and human health.

All other conditions imposed in ToR Letter No. . SEIAA-TN/F.No.6733/ SEAC /TOR- 632/2019 Dated: 12.07.2019 remains unaltered.


MEMBER SECRETARY
SEIAA-TN

Copy to:

1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. The Principal Secretary to Government, Environment and Forests Department, Tamil Nadu.
3. The Principal Secretary to Government, Industries Department, Tamil Nadu.
4. The Additional Principal Chief Conservator of Forests, Regional Office (SZ), 34, HEPC Building, 1st& 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
6. The Chairman, TNPC Board,76, Mount Salai, Guindy, Chennai-32
7. The District Collector, Salem District
8. The Commissioner of Geology and Mines,Guindy,Chennai-32
9. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
10. Spare.



File No.: 6733
Government of India

Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA),
TAMIL NADU)



Dated 16/07/2024



To,

Veerabagu A
THE INDIA CEMENTS LTD
The India Cements Limited, Coromandel Towers, 93, Santhome high Road, Karpagam Avenue,
R.A.Puram, Chennai, CHENNAI, TAMIL NADU, 600028
ygl_gmoffice@indiacements.co.in

Subject: TOR Extension For the Terms of Reference (ToR) with Public Hearing granted to the project under the provision of the EIA Notification 2006 and as amended thereof regarding.

Sir/Madam,

This is in reference to your application submitted to SEIAA vide proposal number SIA/TN/MIN/480351/2024 dated 10/06/2024 for grant of an Terms of Reference (ToR) Extension with Public Hearing to the project Proposed Limestone mine lease over an Extent of 50.84 Ha in S.F. No. 15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 21, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4, 32, 33/1A, 34/1, 34/5, 37/1, 37/3, 37/4, 50/8, 50/9, 50/10, 51/2B, 51/3, 52/6B, 52/7B, 54/3B, 55/4, 62/4, 62/5, 64/4A, 67/1A, 68/1, 1654/1, 154/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by **M/s. The India Cements Limited** under the provision of the EIA Notification 2006 and as amended thereof.

Ref:

1. MoEF&CC Office Memorandum dated: 29.08.2017.
2. MoEF&CC Notification S.O. 221(E), dated: 18.01.2021.
3. MoEF&CC Notification S.O. 1247(E), dated: 18.03.2021.
4. Earlier ToR issued by SEIAA-TN vide Lr. No.SEIAA-TN/F.No. 6733/SEAC/TOR-632/2019 Dated: 12.07.2019.
5. ToR Extension of Validity issued by SEIAA-TN vide Lr. No.SEIAA-TN/T.No.6733/5EAC/TOR-632/Ext/ dated:26.09.2022.
6. Online Proposal No. SIA/TN/MIN/480351/2024, dated:11.06.2024.
7. Proponent application for extension of validity of ToR dated: 20.06.2024

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO24B0000TN5476378A
(ii) File No.	6733
(iii) Clearance Type	Amendment in TOR

(iv) Category	B1
(v) Schedule No./ Project Activity	1(a) Mining of minerals
(vii) Name of Project	Mothaniyanur Limestone Mine (G.O.211) of The India Cements Limited
(ix) Location of Project (District, State)	SALEM, TAMIL NADU
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	No

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the SEIAA for an appraisal by the SEAC under the provision of EIA notification 2006 and its subsequent amendments.
4. The above-mentioned proposal has been considered by (SEIAA) Appraisal Committee of SEIAA in the meeting held on 10/07/2024. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B,)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.
5. The State Expert Appraisal Committee (SEAC), based on the information & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and public hearing issues and compliance thereto furnished by the Project Proponent, recommended the proposal for grant of Terms of Reference under the provision of EIA Notification, 2006 and as amended thereof subject to the stipulation of specific and general conditions as detailed in Annexure (2).
6. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the SEAC hereby decided to grant Terms of Reference Extension for instant proposal of M/S.THE INDIA CEMENTS LTD Granites under the provisions of EIA Notification, 2006 and as amended thereof.
7. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.
8. The Terms of Reference to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
9. This issues with the approval of the Competent Authority.
10. All other conditions issued vide SEIAA. Lr. No. SEIAA-TN/F.No. 6733/SEAC/TOR-632/2019 Dated: 12.07.2019 should remain unchanged.
11. No further extension in the ToR validity shall be entertained.

Copy
To

1. The Principal Secretary to Government, Environment, Climate Change and Forests Department, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
3. The Chairperson, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai - 600 032.
4. The APCCF (C), Regional Office, MoEF & CC (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai - 34.
5. Monitoring Cell, IA Division, Ministry of Environment, Forests & CC, Paryavaran Bhavan, CGO Complex, New Delhi - 110 003.
6. The District Collector, Salem District.
7. Stock File.

Specific Terms of Reference for (Mining Of Minerals)

1. Seiaa Specific Conditions

S. No	Terms of Reference
1.1	<p>SEIAA agrees to SEAC provided, the Project proponent ought to conduct the ToR Study within 04.10.2024 in addition to the following conditions:</p> <ol style="list-style-type: none"> 1. All other conditions issued vide SEIAA. Lr. No. SEIAA-TN/F.No. 6733/SEAC/TOR-632/2019 Dated: 12.07.2019 should remain unchanged. 2. No further extension in the ToR validity shall be entertained.



The SEAC noted the following:

1. The Project Proponent, M/s. The India Cements Limited as applied for Extension of validity for the Terms of References for the proposed Limestone mine lease over an Extent of 50.84 Ha in S.F. No. 15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 21, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4, 32, 33/1A, 34/1, 34/5, 37/1, 37/3, 37/4, 50/8, 50/9, 50/10, 51/2B, 51/3, 52/6B, 52/7B, 54/3B, 55/4, 62/4, 62/5, 64/4A, 67/1A, 68/1, 1654/1, 154/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu .
2. The proposed quarry/activity is covered under Category “B” – “Under Violation” of Item 1(a) “Mining Projects” of the Schedule to the EIA Notification, 2006.
3. The PP had applied for ToR to carry out the EIA study under violation vide Online Application No.SIA/TN/MIN/30390/2018, dated. 19.12.2018.
4. The ToR for carrying out the EIA study under violation was issued vide SEIAA. Lr. No.SEIAA-TN/F.No. 6733/SEAC/TOR-632/2019 Dated: 12.07.2019.
5. As per MoEF&CC O.M Dt: 29.08.2017, the validity of ToR shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects.
6. Now the PP has applied online through Parivesh portal vide Proposal No. SIA/TN/MIN/ 272958/2022 dated: 15.05.2022 for the extension of validity of ToR with all required documents.
7. The PP had cited the reasons of the outbreak of the Corona virus (covid-19) and subsequent lockdowns which had put the studies initiated as a part of EIA on hold and they were unable to proceed further to submit the final EIA report in time.

The SEAC had observed the MoEF&CC Notification S.O. 1247(E), dated the 18 March, 2021, stating that “.....the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the Environmental Clearance granted shall be treated as valid... ”.

Hence, the SEAC after detailed discussions confirmed that the validity of the ToR issued is valid (deemed to be) up to 11.07.2024 as per the aforesaid MoEF Notification dated 18.01.2021.

Therefore, the project proponent is requested to submit Public Hearing minutes,

EIA/EMP report along with required details on the following –(i) facets of violation, (ii) assessment of ecological damage, remediation plan and natural and community resource augmentation plan which shall be prepared as an independent chapter in the environment impact assessment report (iii) the compliance report on the violation ToR issued earlier

Now the proposal was placed in the 478th Meeting of SEAC held on 21.06.2024.

The SEAC Noted that the TOR was issued vide SEIAA. Lr. No.SEIAA-TN/F.No. 6733/SEAC/TOR-632/2019 Dated: 12.07.2019. Subsequently TOR validity was extended vide MoEF&CC O.M Dt: 29.08.2017, It is hereby directed that.

“The validity of ToR shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects”.

As per the S.O. 221(E) MoEF&CC, New Delhi, the 18th January, 2021,

It is hereby directed that,...

“(ix). Notwithstanding anything contained above, the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Terms of Reference granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the said Terms of Reference shall be treated as valid.”;

SEAC has allowed the period between 01.04.2020 and 31.03.2021 which need not to be taken into account for validity. Considering all the aspects, the validity of TOR is available upto 11.07.2024. The PP pleaded that **due to intervening period of code of conduct** imposed for the Lok Sabha elections from **16.03.2024 to 06.06.2024**, the District Administration could not conduct the Public Hearing process.

As a result, the PP is unable to complete the process of the public hearing within the validity period. Hence, the PP has requested that the period of 83 days which was lost due to the ‘Model Code of Conduct’ may be provided for conducting the public hearing by accommodating the ‘extension’ for the validity of the TOR by 83 days (Date: 04.10.2024).

After the deliberations, the SEAC considered the request of the PP and considering the genuineness of the request made by PP, decided to not to count the 83 days lost due to the enforcement of MCC and as a result the validity would stand extended.

special case. All other conditions issued vide SEIAA. Lr. No. SEIAA-TN/F.No. 6733/SEAC/TOR-632/2019 Dated: 12.07.2019. should remain unchanged.

Signature Not Verified

Digitally Signed by: A R Ranu, Member Secretary, SEIAA

Date: 17/07/2024

Received on 31/07/19
8/31/07



Dr. JAYANTHI. M, I.F.S
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY – TAMIL NADU

3rd Floor, Panagal Maaligai,
No.1 Jeenis Road, Saidapet,
Chennai-15.

Phone No.044-24359973

Fax No. 044-24359975

TERMS OF REFERENCE (ToR)

Lr No.SEIAA-TN/F.No.6567/SEAC/TOR- 630/2019 Dated: 12.07.2019

To

M/s. The India Cements Limited
Sankari Works
Sankari West P.O.
Salem - 637 303

Sir / Madam,

Sub: SEIAA, Tamil Nadu – Terms of Reference (ToR) for the proposed Mothaiyanur Limestone Mine –G.O.No.1086 over an extent of 4.86.5 Ha in S. F. No. 17, 23/1, 24/1, 25/1, 33/1B (P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by M/s. The India Cements Limited under project category – Category “B1” and Schedule S.No. 1(a) – ToR issued along with Public Hearing- preparation of EIA report – Regarding.

- Ref:**
1. Your application submitted Terms of Reference dated: 14.03.2019
 2. Minutes of the 129th SEAC Meeting held on 18.05.2019
 3. Minutes of the 347th SEIAA Meeting held on 21.06.2019
 4. Proponent reply dated: 28.06.2019
 5. Minutes of the 349th SEIAA Meeting held on 12.07.2019

Kindly refer to your proposal submitted to the State Level Impact Assessment Authority for Terms of Reference.



Jayanti
MEMBER SECRETARY
SEIAA-TN

S.H.
12/07/19

The proponent M/s. The India Cements Limited, submitted application for ToR on 14.03.2019, in Form-I, Pre- Feasibility report for the proposed Mothaiyanur Limestone Mine – G.O.No.1086 over an extent of 4.86.5 Ha in S. F. No. 17, 23/1, 24/1, 25/1, 33/1B (P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2 in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu.

The project proposal was placed in the 129th meeting of the SEAC held on 18.05.2019 Based on the presentation made by the proponent and the documents furnished, the committee decided to recommend for the grant of ToR with public hearing subject to the standard ToR in addition to the following Additional TOR.

1. Impact of noise on the wild life needs to be analyzed and necessary mitigation measures to be proposed for reduce the same.
2. The impact of mining operation on the suryamalai Reserved forest, which is located at a distance of 200 m from the quarry site shall be studied and the details should be furnished. In addition to that the Remarks/ recommendation of the DFO, salem shall be obtained based on the above points.
3. The report for green belt developed with necessary photographs.
4. The proponent shall furnish the proposal for CER.
5. Contour map for the 1 km radius surrounding the site, village map, FMB & A Register may be furnished.
6. The comprehensive study shall be carried out to evaluate the impact of mining operations on the environment through expertise in the field of hydrogeology, ecology, mining and environment.
7. The approved mining plan submitted by the project proponent was expired for the period 2018. Hence, the project proponent has to submit the approved mining plan for the proposed year.
8. Conduct Hydro geological study and furnish the report along with EIA.
9. A detailed mining closure plan shall be submitted with the approval of Dept. of mining and Geology.

The proposal was placed before the 349th Authority meeting held on 12.07.2019. The Authority decided to recommend the proposal for the grant of ToR along with public hearing for the preparation of EIA Report with additional ToR as recommended by SEAC in addition to the following:



Jayashree
MEMBER SECRETARY
SEIAA-TN

1. Issue of ToR is considered for the mining period 2019-23 onwards only.
2. The EIA study report shall provide details of proposed and actual mined quantity for the entire mining plan period from the competent Authority.
3. EIA study shall match proposed mining scheme.
4. Copy of the consent for establishment, consent to operate and latest renewal obtained from the TNPCB.
5. Details of study on social impact, including livelihood of local people.
6. EIA report should strictly follow the EIA mining manual.
7. Detail plan on rehabilitation and reclamation carried out for the stabilization and restoration of the mined areas.
8. The EIA study report shall include the surrounding mining activity.
9. Modelling study for Air, Water and noise shall be carried out and incremental increase in the above study shall be substantiated with mitigation measures.
10. A study on the geological resources available shall be carried out and reported.
11. A specific study should include impact on flora & fauna, disturbance to migratory pattern of animals, adjoining reserve forest.
12. A specific study on agriculture & livelihood shall be carried out and reported.
13. Impact on ponds, rivers and other water bodies to be elaborated
14. Impact of soil erosion, soil physical chemical and biological property changes may be assumed.
15. The details of annual rate of replenishment and timeframe for replenishment after mining closure in the area shall be furnished.
16. The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throw away plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.

A. STANDARD TERMS OF REFERENCE

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of



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SEIAA-TN

the mine should be given.

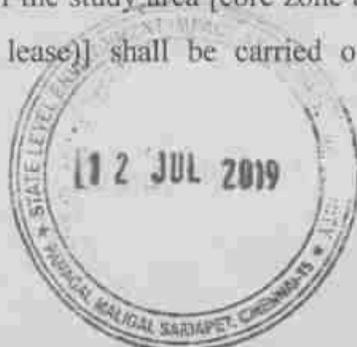
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area denoting forest area, agricultural land, grazing land, wildlife



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SEIAA-TN

sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna,



Jayanti
MEMBER SECRETARY
SEIAA-TN

endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

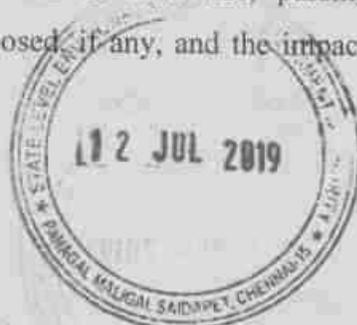
- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- 22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of



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MEMBER SECRETARY
SEIAA-TN

the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.



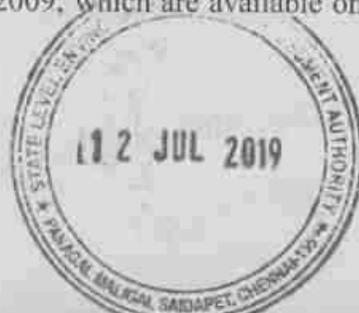
Jayal
MEMBER SECRETARY
SEIAA-TN

- 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
- 32) Impact on local transport infrastructure due to the Project should be indicated, Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
- 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible,



quantitative dimensions may be given with time frames for implementation.

- 38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 44) Besides the above, the below mentioned general points are also to be followed:-
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should



Jayaraj
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SEIAA-TN

be followed.

- h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

In addition to the above, the following shall be furnished:-

The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information on following points:

- 1) Project name and location (Village, District, State, Industrial Estate (if applicable).
- 2) Products and capacities. If expansion proposal then existing products with capacities and reference to earlier EC.
- 3) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- 4) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
- 5) Measures for mitigating the impact on the environment and mode of discharge or disposal.
- 6) Capital cost of the project, estimated time of completion.
- 7) Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./ private land, status of its acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, sensitive zones, accessibility, (note - in case of



industrial estate this information may not be necessary)

- 8) Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
- 9) Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- 10) Likely impact of the project on air, water, land, flora-fauna and nearby population
- 11) Emergency preparedness plan in case of natural or in plant emergencies
- 12) Issues raised during public hearing (if applicable) and response given
- 13) CER plan with proposed expenditure.
- 14) Occupational Health Measures
- 15) Post project monitoring plan

Besides the above, the below mentioned **general points** should also be followed:-

- a. A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.
- b. All documents may be properly referenced with index, page numbers and continuous page numbering.
- c. Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
- d. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF & CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
- e. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. In this regard circular no F, No.J -11013/77/2004-IA-II(I) dated 2nd December, 2009, 18th March 2010, 28th May 2010, 28th June 2010, 31st December 2010 & 30th September 2011 posted on the Ministry's website <http://www.moef.nic.in/> may be referred.
 - After preparing the EIA (as per the generic structure prescribed in Appendix-III of the EIA Notification, 2006) covering the above mentioned points, the



Jayasri
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SEIAA-TN

C. A.

proponent will take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

- The final EIA report shall be submitted to the SEIAA, Tamil Nadu for obtaining Environmental Clearance
- The TORs prescribed shall be **valid for a period of three years** from the date of issue, for submission of the EIA/EMP report as per OMNo.J-11013/41/2006-IA-II(l)(part) dated 29th August, 2017.

The receipt of this letter may be acknowledged.

Jayaraj
MEMBER SECRETARY
SEIAA-TN

S.A.
12/07/19

Copy to:

1. The Principal Secretary to Government, Environment & Forests Dept. Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Pariveshi Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032.
4. The APCCF (C), Regional Office, Ministry of Environment Forest & CC (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai -34.
5. Monitoring Cell, I A Division, Ministry of Environment Forest & CC, Paryavaran Bhavan, CGO Complex, New Delhi 110003
6. Stock File.





THIRU.DEEPAK S.BILGI, I.F.S.,
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY – TAMIL NADU

3rd Floor, Panagal Maaligai,
No.1, Jeenis Road, Saidapet,

Chennai-15.

Phone No. 044-24359973

Fax No. 044-24359975

CORRIGENDUM OF TERMS OF REFERENCE

Lr.No. SEIAA-TN/F.No.6567/SEAC/TOR-630/CORRIGENDUM/2023 Dated:28.07.2023.

To

M/s.The India Cements Limited
Coromandal Towers
No.93, Santhome high road, Karpagam Avenue
R.A Puram
Chennai-600028.

Sir/Madam,

Sub: SEIAA, TN – Proposal seeking Corrigendum for Terms of Reference – Existing Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F.Nos.17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2of Chinnagoundanur Village, Sankari Taluk and Salem District Tamil Nadu by M/s.The India Cements Limited - under Category 'B' and Schedule S.No.8(a) under the Environment Impact Assessment Notification, 2006, as amended - Corrigendum of Terms of Reference (ToR) requested – Order issued - Regarding.

Ref: 1. Earlier ToR issued by SEIAA-TN vide Letter No. SEIAA-TN/F.No.6567/SEAC/TOR- 630 /2019, Dated: 12.07.2019.
2. Extension of validity for ToR issued vide SEIAA Lr No. SEIAA-TN/F.No.6567/SEAC/TOR- 630./Extn/2019, Dated: 26.09.2022
3. online proposal seeking Corrigendum ToR vide proposal No. SIA/TN/MIN/302061/2023 dated: 09.07.2023).
4. Application seeking corrigendum of ToR submitted vide Lr. Dt: 09.07.2023.


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SEIAA-TN

5. Minutes of the 391st SEAC Meeting held on 13.07.2023
6. Minutes of the 641th Authority meeting held on 27.07.2023 & 28.07.2023.

Terms of Reference (ToR) was issued to M/s.The India Cements Limited vide this office reference 1st & 2nd cited above for the Existing Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F.Nos.17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2of Chinnagoundanur Village, Sankari Taluk and Salem District, Tamil Nadu.

Now, the Project Proponent, M/s. The India Cements Limited as applied for Corrigendum in Terms of Reference (Form-9) regarding Extension of validity (deemed to be) upto 11.07.2024 which was inadvertently issued up to 11.07.2023 vide reference 3rd cited.

SEAC Remarks:

Existing Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F.Nos.17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2of Chinnagoundanur Village, Sankari Taluk and Salem District Tamil Nadu by M/s.The India Cements Limited - for Corrigendum in Terms of Reference (Form-9) regarding Extension of validity.

(SIA/TN/MIN/302061/2023 dated: 09.07.2023)

The proposal was placed in 391st SEAC Meeting held on 13.07.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). **The SEAC noted the following:**

1. Earlier, the ToR for carrying out the EIA study issued vide SEIAA Lr No. SEIAA-TN/F.No.6567/SEAC/TOR- 630 /2019, Dated: 12.07.2019.
2. Extension of validity for ToR issued vide SEIAA Lr No. SEIAA-TN/F.No.6567/SEAC/TOR- 630 /Extn./2019, Dated: 26.09.2022 valid up to 11.07.2023 as per MoEF&CC O.M Dt:29.08.2017, the validity of ToR shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects & as per MoEF&CC notification Dt:18.01.2023 ".....the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the Environmental Clearance granted shall be treated as valid...".


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SEIAA-TN

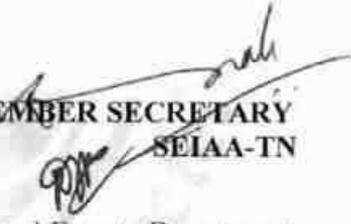
3. Now, the Project Proponent, M/s. The India Cements Limited as applied for Corrigendum in Terms of Reference (Form-9) regarding Extension of validity (deemed to be) upto 11.07.2024 which was inadvertently issued up to 11.07.2023.

Based on the presentation and documents furnished by the project proponent, SEAC decided to confirm that the ToR issued is valid (deemed to be) up to 11.07.2024 considering the Covid extensions.

SEIAA Remarks:

The proposal was placed in the 641th Authority meeting held on 27.07.2023 & 28.07.2023. The authority noted that the subject was appraised in 391st meeting of SEAC held on 13.07.2023. SEAC decided to confirm that the ToR issued is valid (deemed to be) up to 11.07.2024 considering the Covid extensions.

In this connection, the authority after detailed discussion has decided to grant corrigendum in Terms of Reference (ToR) in regard to validity of ToR and the validity of ToR shall be substituted as "11.07.2024" subject to all the conditions stipulated vide ToR issued vide SEIAA Lr. No. SEIAA-TN/F.No.6567/SEAC/TOR- 630/Extn. /2019, Dated: 26.09.2022 remains unchanged.


MEMBER SECRETARY
SEIAA-TN

Copy to:

1. The Additional Chief Secretary to Government, Environment and Forests Department, Tamil Nadu.
2. The Additional Chief Secretary to Government, Industries Department, Tamil Nadu.
3. The Additional Principal Chief Conservator of Forests, Regional Office (SZ), 34, HEPC Building, 1st& 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai – 34.
4. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
5. The Chairman, TNPC Board, 76, Mount Salai, Guindy, Chennai-32
6. The Commissioner, Salem District.
7. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi Spare.
8. File Copy



THIRU.DEEPAK S.BILGI, I.F.S.,
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY – TAMIL NADU

3rd Floor, Panagal Maaligai,
No.1, Jeenis Road, Saidapet,
Chennai-15.

Phone No. 044-24359973

Fax No. 044-24359975

TERM OF REFERENCE-EXTENSION

Lr. No.SEIAA-TN/F.No.6567/ToR- 630/Extn./2019 dated:26.09.2022.

To

The India Cements Limited
Coromandal Towers
No.93, Santhome high road , Karpagam Avenue
R.A Puram
Chennai-600028

Sir/Madam,

Sub: SEIAA-TN – Proposed Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F.Nos.17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2 of Chinnagoundanur Village, Sankari Taluk and Salem District Tamil Nadu by M/s. The India Cements Limited –Terms of Reference issued- Extension of ToR validity requested - Orders issued – Regarding.

Ref:

1. Earlier ToR issued by SEIAA-TN vide - Lr No. SEIAA- TN/F.No.6567/ SEAC/ TOR- 630/2019, Dated: 12.07.2019.
2. MoEF&CC Notification S.O. 221(E) 18.01.2021.
3. Online Proposal No. SIA/TN/MIN/273010/2022 dated: 15.05.2022.
4. Your Application for Extension of Validity of Terms of Reference dated: 16.05.2022.
5. Minutes of the 309th Meeting of SEAC held on 02.09.2022.
6. Minutes of the 554th Meeting of SEIAA held on 26.09.2022.


MEMBER SECRETARY
SEIAA-TN

In the reference 1st cited above, the Terms of Reference was accorded to M/s. The India Cements Limited for the Proposed Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F.Nos.17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2 of Chinnagoundanur Village, Sankari Taluk and Salem District, Tamil Nadu.

Now the Project Proponent, M/s. The India Cements Limited has applied for extension of validity of Terms of Reference vide reference 3rd & 4th cited.

Details of SEAC Remarks:

Proposed Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F.Nos.17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2 of Chinnagoundanur Village, Sankari Taluk and Salem District Tamil Nadu by M/s. The India Cements Limited (SIA/TN/MIN/273010/2022 dated: 15.05.2022)

The proposal was placed in this 309th Meeting of SEAC held on 02.09.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

1. The Project Proponent, M/s. The India Cements Limited as applied for Extension of validity for the Terms of References for the proposed Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F. Nos. 17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2 of Chinnagoundanur Village Sankari Taluk and Salem District Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The PP had applied for ToR to carry out the EIA study vide application dated: 14.03.2019.
4. The ToR for carrying out the EIA study issued vide SEIAA Lr No. SEIAA-TN/F.No.6567/SEAC/TOR-630/2019, Dated: 12.07.2019.
5. As per MoEF&CC O.M Dt:29.08.2017, the validity of ToR shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects.
6. Now the PP has applied online through Parivesh portal vide Proposal No. SIA/TN/MIN/273010/2022 dated: 15.05.2022, for the extension of validity of ToR with all required documents.
7. The PP had cited the reasons of the outbreak of the Corono virus (covid-19) and subsequent lockdowns which had put the studies initiated as a part of EIA on hold and they were unable to proceed further to submit the final EIA report in time.


MEMBER SECRETARY
SEIAA-TN

The SEAC had observed the MoEF&CC Notification S.O. 221(E), dated the 18th January, 2021, stating that "...the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the Environmental Clearance granted shall be treated as valid...".

Hence, the SEAC after detailed discussions confirmed that the validity of the ToR issued is valid (deemed to be) up to 11.07.2023 as per the aforesaid MoEF Notification dated 18.01.2021.

Details of SEIAA Remarks:

The proposal was placed in the 554th Authority meeting held on 26.09.2022. The Authority after detailed discussion accepts the recommendation of 309th SEAC meeting Dt: 02.09.2022 and the Authority has decided to grant Extension of validity for Terms of Reference (ToR) issued vide SEIAA. Lr No. SEIAA- TN/F.No.6567/SEAC/TOR-630/2019, Dated: 12.07.2019 (Deemed to be) valid up to 11.07.2023 subject to the additional specific ToRs as follows

1. The project proponent shall submit valid mining lease and scheme of mining plan obtained from the competent authority.
2. The limestone quarry involves raw material extraction, transportation and comminution. Therefore, large quantity of diesel and electricity are supposed to be consumed in the production. The diesel fuel and electricity to be consumed to be furnished.
3. What are the green mining technologies to be adopted for reducing GHG/CO₂ emissions and lowering the carbon footprint in the limestone mining.
4. Strategies adopted for safety and healthy mining operations.
5. What are the transparency and accountability system in place during the operation and post-operation period of the project.
6. What are the In-House environmental performance and evolution tools to understand negative impacts of mining.
7. Detailed study to be made on material flow analysis and Life Cycle Assessment (LCA) in the process of production.
8. Through a chart illustration, clarify the cradle to grave approach for extraction of limestone and anticipated emissions, environmental threats in every stage and mitigation strategy at every stage.


MEMBER SECRETARY
SEIAA-TN

9. Project Proponent to study impacts on human health viz respiratory impacts, toxicity impacts and radiation impacts.
10. Study to be made on aquatic, terrestrial toxicity, aquatic eutrophication including detailed terrestrial toxicity and their impacts of wildlife and biodiversity.
11. What is the total water withdrawal consumption, likely temperature rises and climate change impacts.
12. What are the chemical exposures in the limestone mining and risks anticipated to environmental and human health.

In view of the above, the Authority decided to extend the validity of ToR for a further period of one year (valid up to 11.07.2023) and all other conditions imposed vide reference 1st cited remains unaltered.


MEMBER SECRETARY
SEIAA-TN

Copy to:

1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. The Additional Chief Secretary to Government, Environment and Forests Department, Tamil Nadu.
3. The Principal Secretary to Government, Industries Department, Tamil Nadu.
4. The Additional Principal Chief Conservator of Forests, Regional Office (SZ), 34, HEPC Building, 1st& 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
6. The Chairman, TNPC Board, 76, Mount Salai, Guindy, Chennai-32
7. The District Collector, Salem District
8. The Commissioner of Geology and Mines, Guindy, Chennai-32
9. EIA Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
10. Spare.



सत्यमेव जयते

File No.: 6567
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority (SEIAA),
TAMIL NADU)



Dated 16/07/2024

To,

Veerabagu A
THE INDIA CEMENTS LTD
The India Cements Limited, Coromandel Towers, 93, Santhome high Road, Karpagam Avenue,
R.A.Puram, Chennai, SALEM, TAMIL NADU, 600028
ygl_gmoffice@indiacements.co.in

Subject: TOR Extension For the Terms of Reference (ToR) with Public Hearing granted to the project under the provision of the EIA Notification 2006 and as amended thereof regarding.

Sir/Madam,

This is in reference to your application submitted to SEIAA vide proposal number SIA/TN/MIN/480201/2024 dated 10/06/2024 for grant of an Terms of Reference (ToR) Extension with Public Hearing to the project Proposed Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F.Nos. 17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2 of Chinnagoundanur Village, Sankari Taluk and Salem District Tamil Nadu by **M/s. The India Cements Limited** under the provision of the EIA Notification 2006-and as amended thereof.

Ref:

1. MoEF&CC Office Memorandum dated: 29.08.2017.
2. MoEF&CC Notification S.O. 221(E), dated: 18.01.2021.
3. MoEF&CC Notification S.O. 1247(E), dated: 18.03.2021.
4. Earlier ToR issued by SEIAA-TN vide Lr. No. SEIAA-TN/F.No. 6567/SEAC/TOR-630/2019 Dated: 12.07.2019.
5. ToR Extension of Validity issued by SEIAA-TN vide Lr. No. SEIAA-TN/F.No. 6567/SEAC/TOR-630/Extn/2019 Dated: 26.09.2022.
6. Online Proposal No. SIA/TN/MIN/480201/2022 dated: 10.06.2024.
7. Proponent application for extension of validity of ToR dated: 20.06.2024

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO24B0000TN5791761A
(ii) File No.	6567
(iii) Clearance Type	Amendment in TOR
(iv) Category	B1

(v) Schedule No./ Project Activity	1(a) Mining of minerals
(vii) Name of Project	Mothaiyanur Limestone Mine -G.O.1086 of The India Cements Limited
(ix) Location of Project (District, State)	SALEM, TAMIL NADU
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	No

1.In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the SEIAA for an appraisal by the SEAC under the provision of EIA notification 2006 and its subsequent amendments.

2.The above-mentioned proposal has been considered by (SEIAA) Appraisal Committee of SEIAA in the meeting held on 10/07/2024. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B,)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.

3.The State Expert Appraisal Committee (SEAC), based on the information & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and public hearing issues and compliance thereto furnished by the Project Proponent, recommended the proposal for grant of Terms of Reference under the provision of EIA Notification, 2006 and as amended thereof subject to the stipulation of specific and general conditions as detailed in Annexure (2).

4.The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the SEAC hereby decided to grant Terms of Reference Extension for instant proposal of M/S.THE INDIA CEMENTS LTD under the provisions of EIA Notification, 2006 and as amended thereof.

5.The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.

6.The Terms of Reference to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

7.This issues with the approval of the Competent Authority.

8.All other conditions issued vide SEIAA. Lr. No. SEIAA-TN/F.No. 6567/SEAC/TOR-630/Extn/2019 Dated: 26.09.2022 should remain unchanged.

9.No further extension in the ToR validity shall be entertained.

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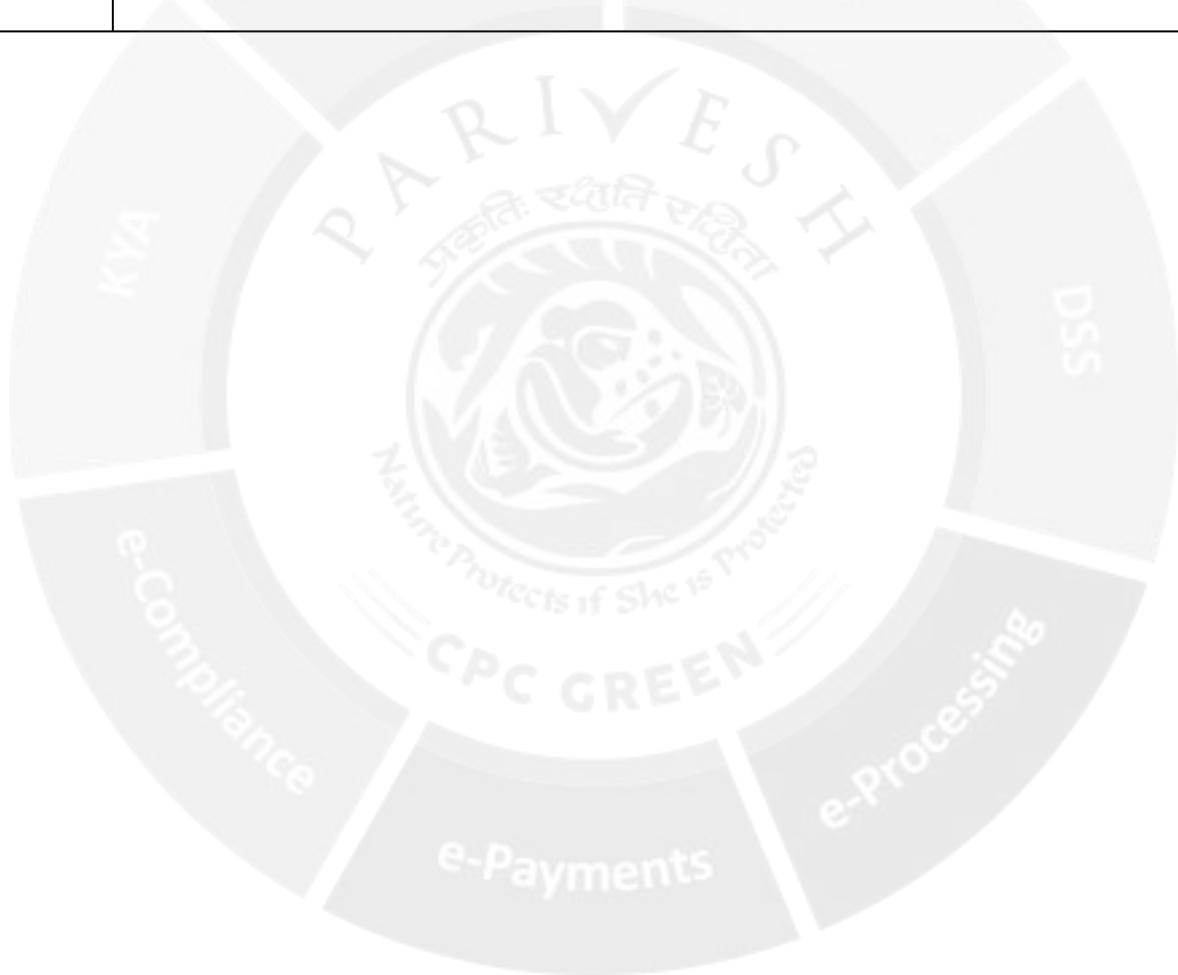
1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. The Additional Chief Secretary to Government, Environment, Climate Change and Forests Department, Tamil Nadu.
3. The Additional Chief Secretary to Government, Natural Resources Department, Tamil Nadu.
4. The Additional Principal Chief Conservator of Forests, Regional Office (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai - 34.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
6. The Chairperson, TNPC Board, 76, Mount Salai, Guindy, Chennai - 32.
7. The District Collector, Salem District.
8. The Commissioner of Geology and Mines, Guindy, Chennai - 32.
9. Assistant Director, Department of Geology & Mining, Salem District.
10. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
11. File Copy.

Annexure 1

Specific Terms of Reference for (Mining Of Minerals)

1. Seiaa Specific Conditions:

S. No	Terms of Reference
1.1	<p>SEIAA noted that SEAC considered PP's request, decided to not to count the 83 days lost due to the enforcement of Model Code of Conduct (MCC) and as a result, the validity would stand extended upto 04.10.2024, as a special case.</p> <p>SEIAA agrees to SEAC provided, the Project proponent ought to conduct the ToR Study within 04.10.2024 in addition to the following conditions:</p> <ol style="list-style-type: none">1. All other conditions issued vide SEIAA. Lr. No. SEIAA-TN/F.No. 6567/SEAC/TOR-630/Extn/2019 Dated: 26.09.2022 should remain unchanged.2. No further extension in the ToR validity shall be entertained



The SEAC noted the following:

1. The Project Proponent, M/s. The India Cements Limited as applied for Extension of validity for the Terms of References for the Proposed Lime Stone Mine Quarry over an extent of 4.86.5 ha comprising S.F.Nos. 17, 23/1, 24/1, 25/1, 33/1B(P), 33/2, 33/3, 33/4, 51/2B (P), 52/5(P), 153/2 of Chinnagoundanur Village, Sankari Taluk and Salem District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category “B” – Item 1(a) “Mining Projects” of the Schedule to the EIA Notification, 2006.
3. The PP had applied for ToR to carry out the EIA study under violation vide Online Application No. SIA/TN/MIN/30390/2018, dated. 19.12.2018.
4. The ToR for carrying out the EIA study under violation was issued vide SEIAA. Lr. No. SEIAA-TN/F.No. 6567/SEAC/TOR-630/2019 Dated: 12.07.2019 & ToR validity extension issued by SEIAA-TN vide SEIAA. Lr. No. SEIAA-TN/F.No. 6567/SEAC/TOR-630/Extn/2019 Dated: 26.09.2022.
5. As per MoEF&CC O.M Dt: 29.08.2017, the validity of ToR shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects.
6. Now the PP has applied online through Parivesh portal vide Proposal No. SIA/TN/MIN/ 480201/2022 dated: 10.06.2024 for the extension of validity of ToR with all required documents.
7. The PP had cited the reasons of the outbreak of the Corona virus (covid-19) and subsequent lockdowns which had put the studies initiated as a part of EIA on hold and they were unable to proceed further to submit the final EIA report in time.

The SEAC had observed the MoEF&CC Notification S.O. 1247(E), dated the 18 March, 2021, stating that “.....the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the Environmental Clearance granted shall be treated as valid”.

Hence, the SEAC after detailed discussions confirmed that the validity of the ToR issued is valid (deemed to be) up to 11.07.2024 as per the aforesaid MoEF Notification dated 18.01.2021.

Therefore, the project proponent is requested to submit Public Hearing minutes, EIA/EMP report along with required details

Now, the project proponent has requested **Extension of time vide its letter dated 20.06.2024**. Based on the PP's request, **the proposal was placed in the 478th Meeting of SEAC held on 21.06.2024**.

Based on the presentation and documents furnished by the project proponent, the committee recommended the following:

SEAC has allowed the period between 01.04.2020 and 31.03.2021 which need not to be taken into account for validity. Considering all the aspects, the validity of TOR is available upto 11.07.2024. The PP pleaded that **due to intervening period of code of conduct** imposed for the Lok Sabha elections from **16.03.2024 to 06.06.2024**, the District Administration could not conduct the Public Hearing process.

As a result, the PP is unable to complete the process of the Public hearing within the validity period. Hence, the PP has requested that the period of 83 days which was lost due to the 'Model Code of Conduct' may be provided for conducting the Public hearing by accommodating the 'extension' for the validity of the TOR by 83 days (Date: 04.10.2024).

After the deliberations, the SEAC considered the request of the PP and considering the genuineness of the request made by PP, decided to not to count the 83 days lost due to the enforcement of MCC and as a result the validity would stand extended **upto 04.10.2024, as a special case. All other conditions issued vide SEIAA. Lr. No. SEIAA-TN/F.No. 6567/SEAC/TOR-630/Extn/2019 Dated: 26.09.2022 should remain unchanged.**



Thiru. K.V. GIRIDHAR, I.F.S.,
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY – TAMIL NADU

3rd Floor, Panagal Maaligai,
No.1, Jeenis Road, Saidapet,
Chennai-15.

Phone No. 044-24359973

Fax No. 044-24359975

TERMS OF REFERENCE (ToR)

Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021

To

M/s.The India Cements Limited
Coromandal Towers
No.93, Santhome high road ,
Karpagam Avenue
R.A.Puram
Chennai

Sir / Madam,

Sub: SEIAA, Tamil Nadu – Terms of Reference (TOR) with Public Hearing under violation for the existing Chinnagoundanur Lime Stone quarry over an Extent of 8.00.5Ha in SF.No.48,63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu under project category – B and Schedule S.No. 1(a) – TOR issued with public hearing for the preparation of EIA report, EMP report, ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation –Regarding.

- Ref:**
1. MoEF & CC Notification S.O. 804 (E) dated 14.03.2017
 2. MoEF & CC Notification S.O.1030 (E) dated 08.03.2018
 3. ToR Application No:IA/TN/MIN/66860/2017 dated: 21.07.2017 submitted to MoEF&CC through online.
 4. Your Online application No. SIA/TN/MIN/27389/2018, dated: 06.02.2018, transferred from MoEF&CC (Under Violation)
 5. Your request letter dated: 07.06.2019
 6. Minutes of the 191st SEAC Meeting held on 30.12.2020




MEMBER SECRETARY
SEIAA-TN

7. Minutes of the 420th SEIAA Meeting held on 04.02.2021

Kindly refer to your proposal submitted to the State Level Impact Assessment Authority for Terms of Reference (Under Violation).

The proponent of M/s.The India Cements Limited submitted application for Terms of Reference with Public Hearing (Under Violation) on 07.06.2019, in Form-I, Pre- Feasibility report for the existing Chinnagoundanur Lime Stone quarry over an Extent of 8.00.5Ha in SF.No. 48, 63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu seeking TOR under the MoEF & CC Notification cited under reference 1st & 2nd.

The proposal seeking TOR was placed before the 191st SEAC meeting held on 30.12.2020. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of standard Terms of Reference with public hearing for undertaking Environment Impact Assessment and preparation of Environment Management Plan subject to the following specific conditions in addition to the points mentioned in the standard terms of reference for EIA study for non-coal mining projects and details issued by the MoEF& CC to be included in EIA/EMP report:

1. Restricting the depth of mining to ultimate depth of 27.0 m and quantity of 9,91,715 m³ of Rough stone, 60,708 m³ of weathered formation and 80,944 m³ of Gravel for a period of five years leaving the last bench height of 5m as per the approved mining plan considering the hydro geological regime of the surrounding area.
2. The Project Proponent shall furnish the contour map of the water table detailing the number of wells located around the site and its impacts on the wells due to mining activity.
3. The Project Proponent shall conduct the hydro-geological study to evaluate the impact of proposed mining activity on the groundwater table, agriculture activity, and water bodies such as rivers, tanks, canals, ponds etc. located nearby by the proposed mining area.
4. The Project Proponent shall furnish the details on number of groundwater pumping and open wells within 1 km (radius) along with the water levels in both monsoon and non-monsoon seasons. The proponent also shall collect the data of water table level from the PWD / TWAD in this area in both monsoon and non-monsoon seasons.
5. The Proponent shall carry out the Cumulative impact study on the Agricultural area due to Mining, Crushers and other activities around the site area.



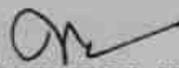

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6. The details of surrounding well and the cumulative impact on the ground water shall be part of EIA study.
7. The Socio economic studies should be carried out within 10 km buffer zone from the mines.
8. A tree survey study shall be carried out (nos. name of the species, age) in the mining lease applied area and its management during mining activity.
9. CER activities should be carried out taking into consideration the requirement of the local habitants available within the buffer zone as per Office Memorandum of MoEF& CC dated 01.05.2018.
10. A Detailed mining closure plan for the proposed project shall be submitted.
11. A detail report on the safety and health aspects of the workers and for the surrounding habitants during operation of mining for drilling and blasting shall be submitted.
12. The recommendation for the issue Terms of Reference is subject to the outcome of the Hon'ble NGT, Principal Bench, New Delhi in O.A No.186 of 2016 (M.A.No.350/2016) and O.A. No.200/2016 and O.A.No.580/2016 (M.A.No.1182/2016) and O.A.No.102/2017 and O.A.No.404/2016 (M.A.No.758/2016, M.A.No.920/2016, M.A.No.1122/2016, M.A.No.12/2017 & M.A. No. 843/2017) and O.A.No.405/2016 and O.A.No.520 of 2016 (M.A.No.981 /2016, M.A.No.982/2016 & M.A.No.384/2017).
13. A detailed study of the lithology of the mining lease area shall be furnished.
14. The proponent shall carryout fugitive emission survey due to this quarry operation and furnish its mitigation measures in the EMP
15. The proponent shall provide fencing along the boundary of the mining lease area.
16. The proponent has to furnish the actual mining quantity carried year wise from the date of commissioning of quarry.

The proposal was placed before the 420th Authority meeting held on 04.02.2021. After detailed discussion, the Authority noted as follows.

1. The Project Proponent, M/s. The India Cements Limited has applied seeking Terms of Reference for the Mothaiyanur Limestone mine (South) (G.O 76) over an extent of 8.00.5 Ha at S.F.No.48, 63 and 66 of Chinnagoundanur Village, Sankari Taluk, Salem district.
2. The proponent has also submitted the proposal through online proposal No. SIA/TN/MIN/27389/2018 dated 06.02.2018. But in the minutes of 191st SEAC meeting




MEMBER SECRETARY
SEIAA-TN

- (Agenda No.191-27), the online proposal number is mentioned as SIA/TN/MIN/66860/2017 dated 21.07.2017 inadvertently.
3. The proponent has reported that **it is a violation case** and application is being submitted under Notification No. S.O.804 (E) dated 14.03.2017 and read with amendment vide notification dated 08.03.2018.
 4. Further the proponent has reported they have started the work onsite without prior EC under EIA notification, 2006. It is a Pre-existing mine prior to EIA notification 1994. No increase in production from this lease after 1994 notification. **Operated the mine without EC after 4th April 2011 MOEF notification necessitating EC at the time of lease renewal.**
 5. As per the minutes of 191st SEAC meeting (Agenda No.191-11), the Project activity is covered under Category "B1" of item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
 6. As per the EIA Notification, 2006 as amended, all the activity which comes under Category "B1" of item 1(a) "Mining Projects" of the Schedule to the EIA Notification' 2006 attracts public Hearing.
 7. The SEAC in its 191st appraisal meeting held on 30.12.2020 has recommended the proposal to SEIAA for the grant of standard **Terms of Reference with public hearing** for undertaking Environment Impact Assessment and preparation of Environment Management Plan subject to the following specific conditions in addition to the points mentioned in the standard terms of reference for EIA study for non-coal mining projects and details issued by the MoEF& CC to be included in EIA/EMP report subject to certain special conditions and one such is
 - a) "Restricting the depth of mining to ultimate depth of 27.0 m and quantity of 9,91,715 m³ of Rough stone, 60,708 m³ of weathered formation and 80,944 m³ of Gravel for a period of five years leaving the last bench height of 5m as per the approved mining plan considering the hydro geological regime of the surrounding area"
 8. On verifying the documents & records, it is a Limestone mine (South) (G.O 76) over an extent of 8.00.5 Ha at S.F.No. 48, 63 and 66 of Chinnagoundanur Village, Sankari Taluk, Salem district. hence in the SEAC minutes, the condition of "Restricting the depth of mining to ultimate depth of 27.0 m and quantity of 991715 m³ of Rough stone, 60,708 m³



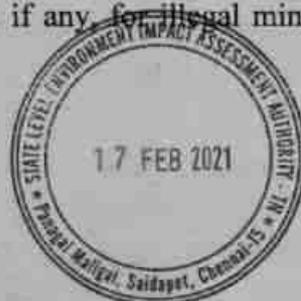

MEMBER SECRETARY
SEIAA-TN

of weathered formation and 80944 m³ of Gravel for a period of five years leaving the last bench height of 5m as per the approved mining plan considering the hydro geological regime of the surrounding area" has been included in the minutes **inadvertently**.

9. The Hon'ble Supreme Court in their judgment dated 2nd August, 2017 in WP No 114/2014 in the matter of "Common Cause Vs UoI" has interpreted the section 21(5) of the Mines and Minerals (Development and Regulation) [MMDR] Act, 1957, and held that wherever violations were carried out with regard to the Water (P&CP) Act 1974, the Forest (Conservation) Act 1980, the Air (P&CP) Act, 1981 and the Environment (Protection) Act, 1986, 100% cost/value of the illegally mined mineral needs to be compensated by the mining entity/project proponent.

In view of the above, the Authority unanimously accepts the recommendation of SEAC and decided to grant **Terms of Reference with public hearing** for undertaking Environment Impact Assessment and preparation of Environment Management Plan **with specific Terms of Reference** for assessment of ecological damage, remediation plan and natural and community resource augmentation plan as an independent chapter in the Environment Impact Assessment report for the Mothaiyanur Limestone mine (South) (G.O 76) over an extent of 8.00.5 Ha at S.F.No. 48, 63 and 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu subject to the conditions as recommended by SEAC & normal condition in addition to the following condition, in compliance with MoEF&CC OM dated 30.05.2018.

1. The project proponent shall give an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No 114 of 2014 in the matter of Common Cause-versus Union of India and Ors, before grant of ToR/EC. The undertaking inter-alia includes commitment of the project proponent not to repeat any such violation in future.
2. In case of violation of above undertaking, the ToR/Environmental Clearance shall be liable to be terminated forthwith.
3. The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No, 114 of 2014 in the matter of Common use versus Union of India and Ors.
4. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through




MEMBER SECRETARY
SEIAA-TN

their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

5. As per the MoEF & CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall address the concerns raised during the public consultation and all the activities proposed shall be part of the Environment Management Plan
6. The decision of SEIAA shall be communicated to SEAC for information

Additional TOR specified by the SEAC to deal with the violation aspects of the mining projects

SECTION A

As per the MoEF & CC Notification S.O. 1030 (E) dated: 08.03.2018,

1. "The cases of violations will be appraised by the Expert Appraisal Committee at the Central level or State or Union territory level Expert Appraisal Committee constituted under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 with a view to assess that the project has been constructed at a site which under prevailing laws is permissible and expansion has been done which can run sustainably under compliance of environmental norms with adequate environmental safeguards, and in case, where the findings of Expert Appraisal Committee for projects under category A or State or Union territory level Expert Appraisal Committee for projects under category B is negative, closure of the project will be recommended along with other actions under the law.
2. In case, where the findings of the Expert Appraisal Committee or State or Union territory level Expert Appraisal Committee on point at sub-paragraph (4) above are affirmative, the projects will be granted the appropriate Terms of Reference for undertaking Environment Impact Assessment and preparation of Environment Management Plan and the Expert Appraisal Committee or State or Union territory level Expert Appraisal Committee, will prescribe specific Terms of Reference for the project on assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter in the environment impact assessment report by the accredited consultants, and the collection and analysis of data for assessment of ecological damage, preparation of remediation plan and natural and community resource augmentation plan shall be done by an environmental laboratory duly notified under the




MEMBER SECRETARY
SEIAA-TN

Environment (Protection) Act, 1986, or a environmental laboratory accredited by the National Accreditation Board for Testing and Calibration Laboratories, or a laboratory of the Council of Scientific and Industrial Research institution working in the field of environment.”

After the appraisal of the project, the SEAC decided that the Para No.2 stated above is applicable to the project. Hence, the proponent is directed to prepare appropriate reports as contained in the Para 2.

While complying with the specific aspects of the MoEF & CC directions as stated in the Para 2 above, the following steps should be followed:

Step 1: Enumerate the aspects of Violation:

- a) The proponent should enumerate the violations as applicable to the project.
- b) Furnish a description of each violation with quantitative and qualitative data.
- c) Violation categories are to be decided taking into consideration the stage at which the project execution stands.

Step 2: Ecological Damage Assessment:

- a) For each aspect of violation enumerated in step (1), identify the resultant environmental damage that may have been caused.
- b) Furnish a description of the environmental damages with quantitative and qualitative data.

Step 3: Remediation Plan:

- a) For the Environmental damage(s) identified in the step (2) above, prepare the remediation plan for the each or combination of damages.
- b) The remediation plan should essentially consists of problem statement, target to be achieved (quantity), standards, technology/ procedure for remediation, equipment and machinery to be used, time schedule and remediation cost(direct and indirect cost, capital as well as O&M costs).

SECTION B

1. Natural resource Augmentation:

- a) The resources that should be considered for augmentation should essentially consist of land, biota, air, water and other resources as applicable.




MEMBER SECRETARY
SEIAA-TN

- b) Proponent may choose one or more of the resource augmentation as applicable and provide a description of the augmentation proposal in detail for each resource.
 - c) The proponent should also furnish the cost for each augmentation scheme.
2. Community resource Augmentation:
- a) The proponent should prepare a plan of action for addressing the needs of the community in terms of resources in the sectors of education, health and sports primarily and other such resources as applicable to the community in the vicinity of the project.
 - b) The community resource augmentation plan should consist of rehabilitation of houses and people, budget allocation and time schedule for completing the activity.

SECTION C

The proponent should prepare content for the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation separately in a chapter and include in the EIA / EMP report.

SECTION D

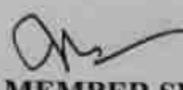
- a) After the appraisal of the EIA / EMP report submitted by the proponent, the SEAC will make a judgement of the quality of the content in the EIA / EMP report specifically with reference to the chapter covering the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation.
- b) In the judgement of SEAC, if the quality of the content in the chapter is not satisfactory, the SEAC may direct the proponent to further revise the chapter and resubmit the EIA/EMP report.
- c) If SEAC concludes that the technical part is satisfactory and the costing aspect is not satisfactory then the SEAC may revert to legal provisions, MoEF & CC guidelines and similar expert committee recommendations for finalizing the cost aspects or the SEAC may use its own expertise and experience in finalizing the cost.

SECTION E

The proponent is directed to furnish data as per the questionnaire appended in Annexure I. It will help the SEAC in arriving the ecological damage and the associated cost.

SECTION F




MEMBER SECRETARY
SEIAA-TN

In compliance with the Supreme Court order stated in MoEF & CC letter F.No. 3-50/2017 IA.III-pt dated: 05th January 2018, the proponent is required to submit the No Objection Certificate obtained from the Department of Geology and Mining, Government of Tamil Nadu regarding payment of 100% cost of illegally mined mineral under section 21(5) of MMDR Act 1957 which would account for mining operations in violation of the following:

- a) Without Environmental Clearance (EC), or in excess of the quantity approved in EC
- b) Without Consent to Operate (CTO) or in excess of the quantity approved in CTO and
- c) Without mining plan/scheme of mining or in excess of the quantity approved in mining plan / scheme of mining
- d) Without Forest Clearance
- e) Any other violation

List out the details of reserve forest and wildlife sanctuary nearby the project site (the details should also include other districts which are nearby the project site) and also furnish the detail of distance between the project site and reserve forests/wildlife sanctuary.

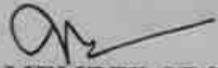
Whether the project site attracts the HACA clearance? If so, also furnish the HACA clearance for the mining from the competent authority.

The proponent is instructed to fill in the form contained in **Annexure 1** to work out the details of the ecological damage during the violation period.

A. STANDARD TERMS OF REFERENCE

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/




MEMBER SECRETARY
SEIAA-TN

topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).

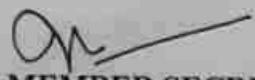
- 5) Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.




MEMBER SECRETARY
SEIAA-TN

- 12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under

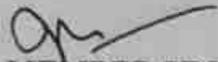



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the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.

- 20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- 22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for

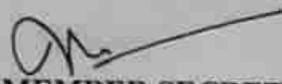



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modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local




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population with emphasis on local and native species and the species which are tolerant to pollution.

- 32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
- 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 40) Details of litigation pending against the project, if any, with direction /order passed by any




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Court of Law against the Project should be given.

- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 44) Besides the above, the below mentioned general points are also to be followed:-
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
 - i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.




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- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

In addition to the above, the following shall be furnished:-

The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information on following points:

- 1) Project name and location (Village, District, State, Industrial Estate (if applicable).
- 2) Products and capacities. If expansion proposal then existing products with capacities and reference to earlier EC.
- 3) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- 4) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
- 5) Measures for mitigating the impact on the environment and mode of discharge or disposal.
- 6) Capital cost of the project, estimated time of completion.
- 7) Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./ private land, status of its acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, eco-sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)
- 8) Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
- 9) Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- 10) Likely impact of the project on air, water, land, flora-fauna and nearby population
- 11) Emergency preparedness plan in case of natural or in plant emergencies
- 12) Issues raised during public hearing (if applicable) and response given
- 13) CER plan with proposed expenditure.
- 14) Occupational Health Measures
- 15) Post project monitoring plan




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Besides the above, the below mentioned general points should also be followed:-

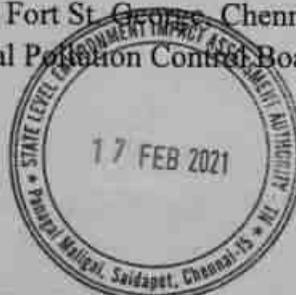
- a. A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.
- b. All documents may be properly referenced with index, page numbers and continuous page numbering.
- c. Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
- d. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
- e. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. In this regard circular no F. No.J -11013/77/2004-IA-II(I) dated 2nd December, 2009, 18th March 2010, 28th May 2010, 28th June 2010, 31st December 2010 & 30th September 2011 posted on the Ministry's website <http://www.moef.nic.in/> may be referred.
 - After preparing the EIA (as per the generic structure prescribed in Appendix-III of the EIA Notification, 2006) covering the above mentioned points, the proponent will take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
 - The final EIA report shall be submitted to the SEIAA, Tamil Nadu for obtaining Environmental Clearance
 - The TORs prescribed shall be **valid for a period of three years** from the date of issue, for submission of the EIA/EMP report as per OMNo.J-11013/41/2006-IA-II(I)(part) dated 29th August, 2017.

The receipt of this letter may be acknowledged.


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Copy to:

1. The Additional Chief Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan,



- CBD Cum-Office Complex, East Arjun Nagar, New Delhi 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board,
76, Mount Salai, Guindy, Chennai-600 032.
 4. The APCCF (C), Regional Office, Ministry of Environment Forest & CC (SZ),
34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam,
Chennai -34.
 5. Monitoring Cell, I A Division, Ministry of Environment Forest & CC,
Paryavaran Bhavan, CGO Complex, New Delhi 110003
 6. The District Collector, Salem District.
 7. Stock File.



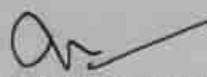
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Annexure 1Additional information for considering EC for mining projects

S.No.	Details to be provided	Page no.																											
1)	Name of the project lease & owner																												
2)	Lease Extent																												
3)	Lease Validity																												
4)	Approved Mining Plan/Scheme – Review a) Specify whether DSR is provided (applicable in case of minor minerals only)																												
5)	Specify - Nature and type of violation I. Without EC or in excess of quantity approved in EC II. Without CTO or in excess of quantity approved in CTO III. Without mining plan/Scheme of mining or in excess of quantity approved in Mining plan/Scheme of mining. IV. Without forest Clearance V. Any other violation																												
6)	Violation period I. Number of months II. Number of Years																												
7)	Exploitation/Excavation quantity- Reserves proved through exploration by drilling																												
8)	Give details of production from the date of execution of the lease deed / since 1994 <table border="1"> <thead> <tr> <th rowspan="2">Year and quantity</th> <th colspan="2">2010-11*</th> <th colspan="2">2011-12*</th> <th colspan="2">2012-13*</th> </tr> <tr> <th>Planned</th> <th>Actual</th> <th>Planned</th> <th>Actual</th> <th>Planned</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>Ore/mineral/g granite blocks (tonnes)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Waste (tonnes/cu.m)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>* year of mining operation</p>	Year and quantity	2010-11*		2011-12*		2012-13*		Planned	Actual	Planned	Actual	Planned	Actual	Ore/mineral/g granite blocks (tonnes)							Waste (tonnes/cu.m)							
Year and quantity	2010-11*		2011-12*		2012-13*																								
	Planned	Actual	Planned	Actual	Planned	Actual																							
Ore/mineral/g granite blocks (tonnes)																													
Waste (tonnes/cu.m)																													




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9)	Quantity mined out during the violation period & if, yes indicate the violated quantity, in term of % of consented quantity.						
	Year and quantity mined out during the violation period	2010-11		2011-12		2012-13	
		Planned	Actual	Planned	Actual	Planned	Actual
	Ore/mineral/ granite blocks (tonnes)						
Waste excavation (tonnes/cu.m)							
10)	State illegal mining/encroachments outside the lease boundary? Percentage of quantity mined out outside the lease boundary.						
11)	Method of working						
	I. Category type: (a) Mechanised (b) Semi – Mechanised (c) Manual						
	II. Construction and design of haul roads						
	a) Dimension as per the statutory requirements which were followed or otherwise						
	b) Number of vehicles plying on the main haul roads inside the mine and the approach road to the pit located outside the mine, if any.						
	c) Are any measures taken to minimise fugitive dust generated from mine haul roads? Does it comply with the CPCB/PCB Guidelines?						
	d) Is there a possibility that air pollutants emitted from the project area that do not comply with air quality standards as per CPCB/PCB?						
12)	Mechanized / Semi – Mechanized Method of Mining						
	(i) Number of loading / excavating equipments as per approved mining plan and capacity.						
	(ii) Number of loading / excavating equipments actually being deployed and capacity.						



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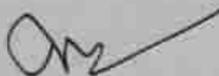
	(iii) Type and number of transporting equipments.										
	(iv) Type of transporting system used – (a) trucks (b) Any other mode										
	(v) Capacity and Number of trucks used as per approved mining plan										
	(vi) Capacity and Number of trucks used actually in the mine.										
	(vii) Number and capacity of loading equipments and trucks used not in line with approved mining plan.										
	<table border="1"> <thead> <tr> <th></th> <th>Capacity (m³)</th> <th>Numbers</th> </tr> </thead> <tbody> <tr> <td>Excavator</td> <td></td> <td></td> </tr> <tr> <td>Trucks</td> <td></td> <td></td> </tr> </tbody> </table>		Capacity (m ³)	Numbers	Excavator			Trucks			
	Capacity (m ³)	Numbers									
Excavator											
Trucks											
	(viii) Impact of excess deployment of loading equipments (excavators) and transporting equipments on environment. (a) Air pollutants (b) Water Quality (c) Land Quality (d) Noise level										
	(ix) Does the deployment of loading equipments (excavators) and trucks fulfil the statutory requirements as per MMR 1961, with respect to the site conditions?										
13)	Method of Rock Breaking/Material preparation for the excavation:										
	(i) Methodology adopted –										
	a) Drilling and blasting										
	b) Rock breakers										
	c) Rippers										
	d) Surface miners										
	e) Direct mucking by excavators										
	f) Manual means										
	g) Any other methods or combination of above										
	(ii) In case of drilling and blasting method:										
	(a) Type of blasting: short hole or deep hole										
	(b) Whether controlled blasting technique adopted? If yes, specify the technique with details of study, year of study										
	(c) Impacts due to blasting defined as per the studies, if any carried out previously as indicated										



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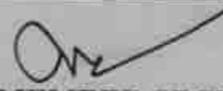
	(d) Dust pollution	
	(e) Noise level (dB(A))	
	(f) Ground vibration studies and Fly rock projection	
	(iii) Impact of preparation of Ore and waste on environment-	
	a) Air Pollution	
	b) Noise Pollution	
	c) Water Pollution	
	d) Safety standards	
	e) Traffic density	
	f) Road Condition (vulnerability)	
14)	Construction and Design of Dumps.	
	a) Place/Location	
	b) Approach to Dump form the mine distance and safety standards.	
	c) Area of extent occupied	
	d) Dimension of Dump and No. of terrace with heights (benches)	
	e) Vegetation covered ; If yes, specify the details of plants	
15)	Construction and Design of Waste Dumps	
	(i) Numbers and Location of Dumps as per approved Mining Plan	
	(ii) Specify whether reject dumps are located within or outside mining lease	
	(iii) Area occupied in excess of the approval mining plan.	
	(iv) Dimension of Terracing, Light, shapes, etc., Dump as per approved Mining Plan	
	(v) Fresh/Existing Dimension Height, shape, width. etc., of Dumps in the mine.	
	(vi) Volume/Quantity added to Waste/Dump during the violated period.	
	(vii) Approach to the Dump-Dimension, distance.	
	(viii) Number of and type of equipments deployed in Dump.	
	(ix) Provision of Garland drains around the Dumps.	
	(x) Any vegetation made on the slopes.	
	(xi) Provision of safety standards.	
	(xii) Impact of Waste/Dumps on environment.	
	a) Air pollution	
	b) Water pollution	
	c) Dust pollution	
	d) Noise pollution	
	(xiii) Terracing	




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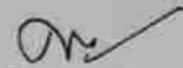
16)	Construction and Design of Ore and sub grade ore/mineral Stacks:-	
	(i) Number and Location of Ore stacks.	
	(ii) Dimension of Ore/sub grade Stacks as per the Approved Mining Plan	
	(iii) Volume/Quantity added during the violation period.	
	(iv) Any Screening plant or any other loading equipment engaged during the violated period.	
	(v) Approach to Ore / sub grade stack –Distance, hazards.	
	(vi) Safety standards adopted while operation.	
	(vii) Impact of ore/sub grade on environment	
	a. Air pollution	
	b. Water pollution	
	c. Dust pollution	
	d. Noise pollution	
17)	Mine Pit Water	
	(i) Intersection of Ground water table, specify the measures taken.	
	(ii) Ground water table as per hydro geological Studies (Pumping test).	
	(iii) Provision of Garland drains around pit and dumps	
	(iv) Water pollution	
	(v) Management of mine water.	
	(vi) Ultimate pit limit, w.r.t Ground water intersection and management of drainage of ground water.	
18)	Diversion of General Drainage/River/Nallah course for mining	
19)	Clearing of vegetation before the commencement of mining operation- Number of trees (species wise)	
20)	Man Power	
	(a) Statutory management	
	(b) Regular (Non –statutory) Manpower	
21)	Occupational Health and Safety.	
	(a) Periodical monitoring of health standards of persons employed as per Mine Act, 1952.	
	(b) Failure to inform statutory bodies periodically, if any	




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22)	Population (Nearby Habitation)	
	(i) Population/Significant Population/Dense Population within the buffer zone of 10 Kms.	
	(ii) People displacement due to mining activities	
	(iii) Location/ Existence of habitation near the river or any other historical/sensitive/ forest distance.	
	(iv) Impact of mining on Surrounding and habitation-Air, Water, Noise, Pollution.	
	(v) Socio Economic aspects of mining.	
23)	CSR	
	(a) Field ground Activities or studies. Actual amount spent towards CSR and the future proposal.	
24)	NOC from DMG for quantity clarification in respect of settlement of all the amount payable against identified violation.	
25)	For the Clearance of EC, Public Hearing is mandated as per MoEF & CC Notification.	
26)	Conceptual post mining land use/restoration	
27)	Litigation/court cases, if any pending	
28)	Disaster management plan for the mine	

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THIRU. DEEPAK S. BILGI, I.F.S.
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY-TAMILNADU

3rd Floor, Panagal Maaligai,
No.1, Jeenis Road, Saidapet,
Chennai - 600 015.
Phone No. 044-24359973
Fax No. 044-24359975

AMENDMENT -TERMS OF REFERENCE (ToR)

Letter No.SEIAA-TN/F.No.6856/1(a)/ ToR-847/2019/Amendment/ Dated: 28.11.2022

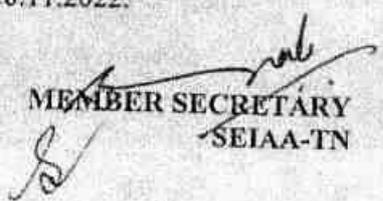
To ✓

M/s. The India Cements Limited
Coromandal Towers
No.93, Santhome high road , Karpagam Avenue
R.A.Puram
Chennai

Sir/Madam,

Sub: SEIAA, Tamil Nadu –Terms of Reference with Public Hearing already Issued “Under Violation” for the Existing Mothaiyanur Limestone mine (South) over an Extent of 8.00.5 Ha in SF.No.48,63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by M/s.The India Cements Limited under Violation category - “B” and Schedule S.No. 1(a) – Amendment to the TOR issued with public hearing for the preparation of EIA report, EMP report, ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation – Regarding.

- Ref:**
1. Earlier ToR issued by SEIAA-TN vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021
 2. Online Proposal No. SIA/TN/MIN/221131/2021 dated 22.07.2021.
 3. Minutes of the 309th meeting of SEAC held on 02.09.2022
 4. Minutes of the 554th meeting of Authority held on 26.09.2022
 5. Minutes of the 328th meeting of SEAC held on 11.11.2022
 6. Minutes of the 573rd meeting of Authority held on 28.11.2022.


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In the reference 1st cited above, the Terms of Reference with Public Hearing already Issued "Under Violation" was accorded to M/s.The India Cements Limited for the Existing Mothaiyanur Limestone mine (South) over an Extent of 8.00.5Ha in SF.No.48,63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu.

The project proponent has submitted form-3 (Application for Amendment in Terms of Reference) seeking ToR Amendment through Online Proposal No. SIA/TN/MIN/221131/2021 dated 22.07.2021 and requested SEIAA-TN to amend the ToR issued vide reference 1st cited.

SEAC Remarks:

Existing Mothaiyanur Limestone mine (south) over an Extent of 8.00.5Ha in SF.No.48,63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by M/s.The India Cements Limited - for Amendment to the Terms of Reference already Issued "Under Violation". (SIA/TN/MIN/221131/2021 dated 22.07.2021)

The proposal was earlier placed in the 30th meeting of SEAC held on 02.09.2022. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, M/s.The India Cements Limited has applied seeking Amendment to the Terms of References already Issued under Violation Category for the Existing Mothaiyanur Limestone mine (south) over an Extent of 8.00.5Ha in SF.No.48,63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu State.
2. The proposed quarry/activity is covered under Category "B" – "Under Violation" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. ToR for carrying out the EIA study under violation was issued vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021.

Now, the proponent was applied seeking amendment to the Terms of Reference already Issued vide Online Proposal No.SIA/TN/MIN/221131/2021 dated 22.07.2021, stating as follows:

(1) Page number 2 of 24 of the ToR, point no.1:

"Restricting the depth of mining to ultimate depth of 27.0m and quantity of 9,91,715m³ of


MEMBER SECRETARY
SEIAA-TN

Rough stone, 60,708m³ of weathered formation and 80,944m³ of gravel for a period of five years leaving the last bench height of 5m as per the approved mining plan considering the hydro geological regime of the surrounding area." to be replaced with

"This project involves the peak production capacity of 0.61 lakh tones of limestone with the expected life of the mine being about 14 years and the ultimate pit limit being 40m depth"

(2) Page number 2 of 24 6th line

Chinnagoundar lime stone quarry to be changed as Mothaiyanur limestone mine (south)
(G.O.No.76)

(3) Page number 4 of 24 of the ToR, Point no.7(a):

"Restricting the depth of mining to ultimate depth of 27.0m and quantity of 9,91,715m³ of rough stone, 60,708m³ of weathered formation and 80,944m³ of gravel for a period of five years leaving the last bench height of 5m as per the approved mining plan considering the hydro geological regime of the surrounding area."

To be replaced with

This project involves the peak production capacity of 0.61lakh tones of limestone with the expected life of the mine being about 14 years and the ultimate pit limit being 40m depth.

(4) Page number 4 of 24 Point No.8- Point No.8 to be deleted

Besides, the name of the project in the subject of the ToR has been mentioned as 'Chinnagoundanur limestone quarry' however the ToR application was made with the project name 'Mothaiynur Limestone Mine (south) (G.O.No.76)

Based on the presentation & documents furnished by the project proponent, SEAC decided to recommend for grant of amendment to Terms of Reference issued dated: 17.02.2021 subject to the condition that the other conditions mentioned in the ToR vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 remain unaltered.

Subsequently the subject was placed in the 554th meeting of Authority held on 26.09.2022. The Authority noted that SEAC has recommended for the issue of amendment to ToR (Violation) Lr No.SEIAA-TN/F.No.6856/SEAC/ToR-847/2019 Dated:17.02.2021 subject to the conditions stated therein. The Authority, after detailed deliberations, decided to request the Member Secretary, SEIAA


MEMBER SECRETARY
SEIAA-TN

TN to refer back the subject to SEAC after the receipt of the following additional particulars from the Proponent:

1. As the present scheme of mining has been approved only for the period upto 2021-2022, the proponent shall furnish valid scheme of mining obtained from Competent Authority along with the approval letter.
2. The proponent is directed to furnish the exact period of mining, which is currently stated as "about 14 years".

Hence the subject was placed in this 328th meeting of SEAC held on 11.11.2022 and the Proponent furnished the copy of approved mining plan for the period 2022-2023 to 2026-27 to the Committee issued by IBM vide Lr. No. TN/SLM/LST/ROMP-1678.MDS dated 07.12.2021 and informed that the life of mine as per the present review of mining plan is 14.5 years.

Based on the documents furnished and the presentation made by the Proponent, the Committee decided to reiterate the recommendations already made in the 309th meeting of SEAC held on 02.09.2022 and the life of mine is estimated as 14.5 years. All the other conditions mentioned in the ToR vide Lr No. SEIAA-TN/F.No.6856/SEAC/ToR-847/2019 Dated:17.02.2021 remain unaltered.

SEIAA Remarks:

The subject was placed in the 573rd meeting of Authority held on 28.11.2022. The Authority noted that SEAC has recommended for the issue of amendment to the Terms of Reference issued vide T.O Lr. No. SEIAA-TN/F.No.6856/SEAC/ToR-847/2019 Dated:17.02.2021 subject to the conditions stated therein. After detailed discussion, the Authority decided to accept the recommendations of SEAC and decided to issue the following amendment to the Terms of Reference.

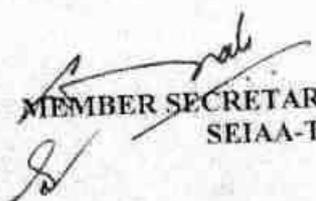
(1) Page number 2 of 24 of the ToR, Point no.1:

EIA study shall match the proposed scheme of mining.

(2) Page number 2 of 24 6th line

Chinnagoundar lime stone quarry changed as Mothaiyanur limestone mine (south)

(3) Page number 4 of 24 of the ToR, Point no.7(a):

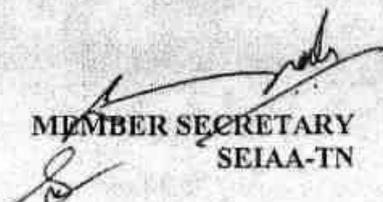

MEMBER SECRETARY
SEIAA-TN

EIA study shall match the proposed scheme of mining.

(4) Page number 4 of 24 Point No.8

The name of the project in the subject of the ToR replaced as 'Mothaiynur Limestone Mine (south)

All the other conditions mentioned in the ToR vide Lr No.SEIAA-TN/F.No.6856/SEAC/ToR-847/2019 Dated:17.02.2021 remain unaltered.


MEMBER SECRETARY
SEIAA-TN

Copy to:

1. The Additional Chief Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Saiai, Guindy, Chennai - 600 032.
4. The APCCF (C), Regional Office, MoEF & CC (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai -34.
5. Monitoring Cell, IA Division, Ministry of Environment, Forests & CC, Paryavaran Bhavan, CGO Complex, New Delhi - 110 003.
6. The District Collector, Salem District.
7. Stock file

LT.No: SEIAA-TN/F.No: 6856/1(A) / TOR-847/2019/Amendment/dt:28.11.2

Mines

Registered Post



From

24359973

State Level Environment Impact Assessment Authority
Third Floor, Panagal Mallai,
Saidapet, Chennai-600 015

To, The Indiacements & ID
Commanded To users
No: 93, Santhome high Road,
Karpagam Avenue,
R.A.Puram,
Chennai -





9 - 25 Rs



RT095897053H

Counter No: 1, 02/02/2023, 15:50

Amt: 0.00 Amt: 1.50
SS: 25.00

From: SAJIBHFFI S-JI (2484861) (600015)
From: Hub
To: Hub



सत्यमेव जयते

File No.: 10731
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority (SEIAA),
TAMIL NADU)



Dated 25/06/2024

To,

Veerabagu A
THE INDIA CEMENTS LTD
The India Cements Limited, Coromandel Towers, 93, Santhome high Road, Karpagam Avenue,
R.A.Puram, Chennai, SALEM, TAMIL NADU, 600028
ygl_gmoffice@indiacements.co.in

Subject: Amendment in prior Terms of Reference (ToR) granted to the project under the provision of the EIA Notification 2006 and as amended thereof regarding.

Sir/Madam,

This is in reference to your application submitted to SEIAA-TN vide proposal number SIA/TN/MIN/463153/2024 dated 16/02/2024 for grant of an Extension of validity of Terms of Reference with Public Hearing for the Existing Lime Stone Quarry over an extent of 8.00.5 Ha at S.F.No. 48, 63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by M/s. The India Cements Limited under the provision of the EIA Notification 2006-and as amended thereof.
Ref:

1. MoEF&CC Office Memorandum dated: 08.06.2022
2. Earlier ToR issued by SEIAA-TN vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021.
3. Online Proposal No. SIA/TN/MIN/463153/2024 dated 16.02.2024.
4. Proponent application for extension of validity of ToR dated: 06.03.2024.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO24B0000TN5779670A
(ii) File No.	10731
(iii) Clearance Type	Amendment in TOR

(iv) Category	B1
(v) Schedule No./ Project Activity	1(a) Mining of minerals
(vii) Name of Project	Chinnagoundanur Limestone Quarry (G.O.76) of The India Cements Limited
(ix) Location of Project (District, State)	SALEM, TAMIL NADU
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	No

3. In view of the particulars given in the Para 1 above, the project proposal inter alia including Form-1 (Part A and B) were submitted to the Ministry for an appraisal by the State Expert Appraisal Committee (SEIAA) in the Ministry under the provision of EIA notification 2006 and its subsequent amendments.

4. The SEAC, based on information submitted viz: Form 1 (Part A, B) report etc., & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and compliance thereto furnished by the Project Proponent, recommended the proposal for grant of Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of Specific and Standard EC conditions as detailed in the point below.

The SEAC noted the following:

1. The project proponent, M/s. The India Cements Limited has applied seeking Amendment to the Terms of References already Issued under Violation Category for the Existing Lime Stone quarry over an Extent of 8.00.5Ha in SF.No.48,63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu State.

2. The proposed quarry/activity is covered under Category "B" – "Under Violation category" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

3. As per MoEF&CC O.M Dt:29.08.2017, the validity of ToR shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects.

4. ToR under violation category issued vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 with validity of three years.

5. Earlier the proposal was placed in 460th SEAC meeting held on 24.04.2024. Now, the proponent has applied seeking extension of the Terms of Reference already issued vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 for one more year i.e upto 16.02.2025. Based on the presentation & documents furnished by the project proponent, SEAC decided to recommend for grant of extension of Terms of Reference issued dated: 17.02.2021 for one more year i.e. upto 16.02.2025 as per the aforesaid MoEF&CC O.M dated 29.08.2017. All the other conditions mentioned in the ToR vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 remain unaltered.

Further, the project proponent is requested to submit E C Application, Public Hearing minutes, EIA/EMP report along with required details on the following –

(i) Whether there is violation of Environment Act read with various decisions of Courts and Tribunals.

(ii) If yes, EIA coordinator shall include 'assessment of ecological damage, remediation plan and natural and community resource augmentation plan' chapter in the environment impact assessment report.

ToR under violation category has been issued vide Lr. No. SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021, However, now the SEAC has instructed the PP to furnish EIA/EMP report along with required details on the following: –

(i) Whether there is violation of Environment Act read with various decisions of Courts and Tribunals.

(ii) If yes, EIA coordinator shall include 'assessment of ecological damage, remediation plan and natural and community resource augmentation plan' chapter in the environment impact assessment report.

Based on the above, the proposal was again placed in 472nd SEAC meeting.

The committee decided to modify the earlier condition imposed in addition to the recommendation made as under:

Based on the presentation & documents furnished by the project proponent, SEAC decided to recommend for grant of extension of Terms of Reference issued dated: 17.02.2021 for one more year i.e. up to 16.02.2025 as per the aforesaid MoEF&CC O.M dated 29.08.2017.

All the other conditions mentioned in the ToR vide Lr No. SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 remain unaltered.

5.The SEIAA, in its meeting held on 19/06/2024, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of amendment in Terms of Reference under the provision of EIA Notification, 2006 and as amended thereof.

The SEIAA decided to accept the recommendations of SEAC and decided to grant of extension of Terms of Reference issued dated: 17.02.2021 for one more year i.e. up to 16.02.2025 as per the aforesaid MoEF&CC O.M dated 29.08.2017.

All the other conditions mentioned in the ToR vide Lr No. SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 remain unaltered.

6.This issues with the approval of the Competent Authority

Copy

To

1. The Additional Chief Secretary to Government, Environment, Climate Change and Forests Department, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
3. The Chair person, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai - 600 032.
4. The APCCF (C), Regional Office, MoEF & CC (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai - 34.
5. Monitoring Cell, IA Division, Ministry of Environment, Forests & CC, Paryavaran Bhavan, CGO Complex, New Delhi - 110 003.
6. The District Collector, Salem District.
7. Stock File.

Annexure 1

Specific Terms of Reference for (Mining Of Minerals)

1. Seiaa Specific Condition

S. No	Terms of Reference
1.1	All the other conditions mentioned in the ToR vide Lr No. SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 remain unaltered.



TOR COMPLIANCE

MOTHAIYANUR LIMESTONE MINE – G.O.211

1. Terms of Reference issued by SEIAA vide Lr.No.SEIAA-TN/F.No.6733/SEAC/ToR-632/2019 dated 12.07.2019.

S.No	ToR Points	Reply	Pg. No
A. ToR in Addition to Standard ToR			
1	<p>The proponent furnish in affidavit undertaking inter-alia includes commitment of the Project Proponent not to repeat any such violation in future as follows as per MoEF & CC, Office Memorandum No. F.No.3-50/2017-IA.III(Pt.) dated: 30.05.2018</p> <p>"I/We, the applicant / the Project Proponent, commit to comply with all the statutory requirements and judgments of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No.114 of 2014 in the matter of the common cause versus Union of India and Ors. Before grant of ToR/ EC and I am also to commit, not to repeat any such violation in future. In case of any violation of the above the ToR/Environmental Clearances shall be liable to be terminated forthwith"</p>	<p>Affidavit regarding the same is enclosed as Annexure-12.</p>	A-128
2	<p>The Environment Clearances will not be operational till such time the project proponent complies with all the statutory requirements and the judgment of Hon'ble Supreme Court dated the 2nd August 2017 in writ Petition (Civil) NO .144 of 2014 in the matter of common cause versus Union of India and Ors</p>	<ul style="list-style-type: none">• Presuming that Environmental Clearance is to be obtained at the stage of lease renewal only, application for obtaining EC was initially submitted to MoEFCC in 2014 and subsequently mining operations were stopped as per MoEFCC directions, Terms of Reference under violation category was applied.• However, in compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess	13-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		<p>limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.</p> <ul style="list-style-type: none">• NOC has been issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and the same is enclosed as Annexure-3A	A-108
3	<p>State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the project proponent through their respective. Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated 02.08.2017 in the Writ Petition (Civil) No.114 of 2014 in the matter of common Cause Versus Union of India and Ors</p>	<p>Replied above in ToR Point No.2</p>	--
4	<p>The impact of mining operation on the suryamalai Reserved forest, which is located at a distance of 200 m from the quarry site shall be studied and the dei furnished. In addition to that the Remarks/ recommendation of the DFO. obtained based on the above points</p>	<ul style="list-style-type: none">• Suriyamalai Reserve Forest is located north of GO 211. From the air quality modelling studies carried out, it is noted that in the RF area, the incremental concentration is <1 µg/m³ only. In order to further prevent dust propogation, it is proposed to erect a green net / tin sheet along the northern side of the lease area for a length of 300m. By carrying out various dust control measures within such as water sprinkling. Wet drilling, etc. during mining operations, no adverse impact on air quality due to mining operations is expected.• With regards to the noise levels, the expected post project noise levels due to this project at various locations were studied. It is seen that near the	4-34





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		<p>Suriyamalai R.F., the post project noise levels will be well within the stipulated limits of 55 dB(A). To further prevent the impact due to noise, it is proposed to carry out good greenbelt cover in the safety zone areas in the mine periphery including the northern side of the lease area.</p> <ul style="list-style-type: none">• Hence, by following these measures, no adverse impact on suriyamalai reserve forest due to mining operations is expected. Regular periodic monitoring near the RF area will be carried out to ensure the same.• Towards conservation of Schedule-I species, Rs.20.0 Lakhs will be spent on a combined basis for all the leases of ICL and its cement plant. The various measures will be undertaken in consultation with the DFO.	
5	Impact of noise on the wild life needs to be analyzed and necessary mitigation measures to be proposed for reduce the same	Replied above in ToR Point No.4	--
6	Points raised in the public hearing shall be covered in the EIA report.	<p>This draft EIA/EMP report will be submitted for public hearing as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.</p>	7-1
7	The report for green belt developed with necessary photographs	About 33,705 plants have already been planted so far since the commencement of	4-37





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		the mining operations covering a total area of 25.77Ha in G.O. 211, 1086 and other mining leases of ICL. Besides, outside the lease area also plantation is carried out over an area of 9.6Ha with a total of 13,100 plants. Details regarding the same has been provided under Section 4.6.4, Chapter-IV.	
8	The proponent shall furnish the photographs for fencing around the project	Site photographs are provided in Chapter-II.	2-11
9	The proponent shall furnish the proposal for CER	<ul style="list-style-type: none">• The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.25, Chapter-IV.• In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community. It will be decided based on the need and priority of the locals.	4-44
10	A detailed mine closure plan shall be prepared and the same shall be got approved by the Geology of mining, Department and the same shall be submitted along with EIA report	Review of Mining Plan along with PMCP was approved by Regional Controller of Mines, IBM, Chennai vide NO TN/SLM/LST/ROMP-1727.MDS dated 15.12.2023. (Annexure-2A)	A-101
11	Contour map for 1 km radius surrounding the site, village map, FMB & A Register may be furnished	<ul style="list-style-type: none">• Combined village map is provided in Figure No.2.4, Chapter-II.• Contour Map is provided in Figure 3.17, Chapter-III.• This is an existing mine under operation since decafes, lease is already executed.• FMB and A-Register are provided as Annexure-13.	2-10 3-45 A-130
12	The details of annual rate of replenishment and timeframe for replenishment after mining closure in	Not applicable since this is a limestone mine.	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	the area shall be furnished		
13	The Comprehensive study shall be carried out to evaluate the impact of mining operations on the environment through experts in the field of hydrogeology, ecology, mining and environment	Hydrogeological study was conducted by the Climate and Environmental Research Group (CEREG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
14	Conduct Hydro geological study and furnish the report along with EIA	Replied above in point no.13	--
15	Issue of ToR is considered for the mining period 2019-23 onwards only	The validity of Terms of Reference has been extended upto 11.07.2024 vide Lr.No.SEIAA-TN/F.No.6733/SEAC/ToR-632/Ext dated 26.09.2022	--
16	Excess quantity mined during the mining period shall be furnished to assess the ecological and other damages from the Department of Mining & Geology	Replied above in Point No.2	--
17	The EIA study report shall provide details of proposed and actual mined quantity for the entire mining plan period from the competent Authority	<ul style="list-style-type: none">• However, in compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.• NOC has been issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and the same is enclosed as Annexure-3A	13-1
18	EIA study shall match proposed mining scheme	Agreed	--
19	Details of EMP compliance for the existing activities shall be furnished	The mine is not in operation since March 2014.	--
20	Copy of the consent for establishment, consent to operate and latest renewal obtained from the TNPCB	Will be renewed after grant of EC	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
21	Details of study on social impact, including livelihood of local people	The India Cements Limited has implemented good community developmental activities around their project site. The project proponent has carried out beneficial social welfare activities to improve the social and physical infrastructure of the local area. They have conducted community need assessment surveys around the project site to identify the areas which need development and improvement under community developmental activities. ICL is having a full-fledged CSR coordinator at corporate office to take care of all the developmental activities of their group. The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.25, Chapter-IV.	4-44
22	EIA report should strictly follow the EIA mining manual	Agreed	--
23	Detail plan on rehabilitation and reclamation carried out for the stabilization and restoration of the mined areas	Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area . Infrastructures will be dismantled and reclaimed. Post Mining Land Use Table is provided as Table 4.19, Chapter-IV.	4-32
24	The EIA study report shall include the surrounding mining activity	• Mothaiyanur Limestone Mines of The India Cements Limited comprises of 3	1-1





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
		<p>mining leases namely G.O.No.211, G.O No.76 and G.O.No.1086 located in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu.</p> <ul style="list-style-type: none"> As such this combined draft EIA report with separate EMP measures is prepared for these 3 leases based on standard and additional Terms of Reference issued by SEIAA, Tamil Nadu 	
25	Modelling study for Air, Water and noise shall be carried out and incremental increase in the above study shall be substantiated with mitigation measures	<ul style="list-style-type: none"> Air quality modeling details are furnished in para 4.2.2 and its continuous sub paras in Chapter-IV of EIA report. It can be seen that the resultant added concentrations with baseline figures even at worst scenario, show that the values of ambient air quality with respect to PM10 are in the range of 53.8 µg/m³ to 62.1 µg/m³ and with respect to PM2.5 are in the range of 26.2 µg/m³ to 30.9 µg/m³ which are within the statutory stipulations in each case. Mitigation measures are provide in Table 4.3, Chapter-IV. 	4-3 4-18
26	A study on the geological resources available shall be carried out and reported	Summary of Limestone Reserves and Resources as on 01.04.2023 are provided in Table 2.1, Chapter-II.	2-23
27	A specific study should include impact on flora & fauna, disturbance pattern to migratory of animals, adjoining reserve forest	The impact on biological environment is provided in Table 4.22, Chapter-IV.	4-34
28	Reserve funds should be earmarked for proper closure plan existing areas or near the forest other areas	Progressive Mine Closure Plan for the 3 leases are submitted as per the Rule 23 under MCDR 2017. Plans and sections for this plan have been given in the review of mining plan. As per Mineral Conservation and Development (Amendment) Rules – 2017 under Rule 27(1), the lessee has already submitted the Bank guarantee at the IBM regional office, Chennai.	7-9
29	A specific study on agriculture & livelihood shall be carried out and report	<ul style="list-style-type: none"> The major source of irrigation in this region is through wells. The agricultural 	3-48





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		<p>practice around the mining lease area is moderate to less due to rocky terrain, meager rainfall this type soil cover not supporting for any major cultivation. Most of lands in that are classified as dry lands.</p> <ul style="list-style-type: none">• Major crops cultivated around the villages of mining area are paddy, millets, pulses, oilseeds, cotton, sugarcane, mango, banana, tapioca, tumeric, vegetables and flower crops	
30	Impact on ponds, rivers and other water bodies to be elaborated	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
31	Impact of soil erosion, soil physical chemical and biological property changes may be assumed	Soil samples were collected in 5 locations in the core and buffer zone during Winter Season (Dec 2023- Feb 2024) . The details regarding the same is provided in Section 3.3.5, Chapter-III.	3-27
B. Additional ToR specified by SEAC to deal with violation aspects of mining projects.			
SECTION-A			
1	"The cases of violations will be appraised by the Expert Appraisal Committee at the Central level or State or Union territory level Expert Appraisal Committee constituted under sub-section (3) of section 3 of the Environment (Protection) Act, 19E6 with a view to assess that the project has been constructed at a site which under prevailing laws is permissible and expansion has been done which can run sustainably under compliance of environmental norms with adequate environmental safeguards, and incase, where the findings of Expert Appraisal Committee for projects under category A State or Union territory level Expert	<ul style="list-style-type: none">• Presuming that Environmental Clearance is to be obtained at the stage of lease renewal only, application for obtaining EC was initially submitted to MoEFCC in 2014 and subsequently mining operations were stopped as per MoEFCC directions, Terms of Reference under violation category was applied.• However, in compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without	13-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	Appraisal Committee for projects under category is negative closure of the project will be recommended along with other actions under the law.	environmental clearance. <ul style="list-style-type: none">• NOC has been issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and the same is enclosed as Annexure-3A• Hence , no separate remediation plan and natural & community resource augmentation plan is provided	A-108
2	In case, where the findings of the Expert Appraisal Committee or State pr union territory level Expert Appraisal Committee on point at sub – paragraph (4) above are affirmative the projects will be granted the appropriate Terms of Reference for undertaking Environment Impact Assessment and preparation of Environment Management Plan and the Expert Appraisal Committee or State or Union territory level Expert Appraisal Committee, will prescribe specific Terms of Reference for the project on assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter in the environment impact assessment report by the accredited consultants, and the collection and analysis of data for assessment of ecological damage, preparation of remediation plan and natural and community resource augmentation plan shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or a environmental laboratory accredited by the National Accreditation Board for Testing and Calibration Laboratories, or a laboratory of the Council of Scientific and Industrial Research institution working in the field	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	of environment		
	Step 1: Enumerate the aspects of Violation: a) The proponent should enumerate the violations as applicable to the project. b) Furnish a description of each violation with quantitative and qualitative data. c) Violation categories are to be decided taking into consideration the stage at which the project execution stands.	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--
	Step 2: Ecological Damage Assessment a) For each aspect of violation enumerated in step (1), identify the resultant environmental damage that may have been caused. b) Furnish a description of the environmental damages with quantitative and qualitative data.	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--
	Step 3: Remediation Plan a) For the Environmental damage(s) identified in the step (2) above, prepare the remediation plan for the beach or combination of damages. b) The remediation plan should essentially consists of problem statement, target to be achieved (quantity), standards, technology/ procedure for remediation, equipment and machinery to be used, time schedule and remediation cost(direct and indirect cost, capital as well as O&M costs).	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--
SECTION-B			
1	Natural resource Augmentation: a) The resources that should be considered for augmentation	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	<p>should essentially consist of land, biota, air, water and other resources as applicable.</p> <p>b) Proponent may choose one or more of the resource augmentation as applicable and provide a description of the augmentation proposal in detail for each resource.</p> <p>c) The proponent should also furnish the cost for each augmentation scheme.</p>		
2	<p>Community Resource Augmentation:</p> <p>a) The proponent should prepare a plan of action for addressing the needs of the community in terms of resources in the sectors of education, health and sports primarily and other such resources as applicable to the community in the vicinity of the project.</p> <p>b) The community resource augmentation plan should consist of rehabilitation of houses and people, budget allocation and time schedule for completing the activity</p>	<p>Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.</p>	--
SECTION-C			
	<p>The proponent should prepare content for the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation separately in a chapter and include in the EIA / EMP report</p>	<p>Assessment of ecological damage, remediation plan, natural and community resource augmentation plan is provided in Chapter-XIII.</p>	13-1
SECTION-D			
a	<p>After the appraisal of the EIA / EMP report submitted by the proponent, the SEAC will make a judgement of the quality of the content in the EIA / EMP report specifically with reference to the</p>	<p>Will abide by the directions of SEIAA, SEAC.</p>	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	chapter covering the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation.		
b	In the judgement of SEAC, if the quality of the content in the chapter is not satisfactory, the SEAC may direct the proponent to further revise the chapter and resubmit the EIA/EMP report.	Will abide by the directions of SEIAA, SEAC.	--
c	If SEAC concludes that the technical part is satisfactory and the costing aspect is not satisfactory then the SEAC may revert to legal provisions, MoEF & CC guidelines and similar expert committee recommendations for finalizing the cost aspects or the SEAC may use its own expertise and experience in finalizing the cost.	Will abide by the directions of SEIAA, SEAC.	--
SECTION-E			
a	The proponent is directed to furnish data as per the questionnaire appended in Annexure I. It will help the SEAC in arriving the ecological damage and the associated cost.	Details furnished in the questionnaire appended in Annexure-I is given below.	--
SECTION-F			
In compliance with the Supreme Court order stated in MoEF & CC letter F.No. 3750/2017 IA.III-pt dated: 05th January 2018, the proponent is required to submit the No Objection Certificate obtained from the Department of Geology and Mining, Government of Tamil Nadu regarding payment of 100% cost of illegally mined mineral under section 21(5) of MMDR Act 1957 which would account for mining operations in violation of the following:			
a	Without Environmental Clearance (EC), or in excess of the quantity approved in EC	In compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.	13-1
b	Without Consent to Operate (CTO) or in excess of the quantity approved in CTO	--	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
c	Without mining plan/scheme of mining or in excess of the quantity approved in mining plan / scheme of mining	--	--
d	Without Forest Clearance	--	--
e	Any other violation	--	--
	List out the details of reserve forest and wildlife sanctuary nearby the project site (the details should also include other districts which arc nearby the project site) and also furnish the detail of distance between the project site and reserve forests/wildlife sanctuary.	Details regarding the same is provide in Table 3.1, Chapter-III.	3-2
	Whether the project site attracts the HACA clearance? If so, also furnish the HACA clearance for the mining from the competent authority.	Not applicable	--
Standard ToR			
1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.	In compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.	13-1
2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given	Mining lease was renewed vide G.O.211 and subsequently as per MMDR Amendment Act, it has been extended upto 31.03.2030. (Annexure-1A)	A-1
3	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.	The production capacity, quantity of waste, its management and mining technology in mine plan and EIA, etc., are compatible with one another.	--
4	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery / toposheet,	• Satellite imagery with corner coordinates of the project area is provided in Figure	2-9





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).	2.3, Chapter-II. <ul style="list-style-type: none">• Toposheet of the lease area and buffer zone is provided in Figure 3.1, Chapter-III.• Geology, Geomorphology, Lithology map of the lease area and buffer zone is provided in Figure 3.20, 3.21 Chapter-III.	3-2 3-49
5	Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.	Replied in Standard ToR point no.4	--
6	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.	Not Applicable	--
7	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to	<ul style="list-style-type: none">• The proponent has framed a well-planned environmental policy. Its details are provided under Section 10.2.1, Chapter-X.• The Plant Head oversees the environmental administration at the mine through HOD (Mines) who will coordinate with the Manager (Mines) at the mine site who is directly responsible for various environmental activities in the mine. The organizational chart for the same has been provided in Figure No.10.1, Chapter-X.	10-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.		
8	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.	Various risks likely to arise due to mining activities are detailed under section 7.4, Chapter-VII. This being an opencast mine, subsidence is not applicable. The impact due to ground vibrations due to blasting is given in para 4.4.2, Chapter-IV.	7-2 4-30
9	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.	The study area chosen for collecting existing environmental status covers 10 km radial distance from the project periphery (Figure No - 3.1, Chapter-III). Data given in the report is for the life of the mine.	3-2
10	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.	<ul style="list-style-type: none">• The land use of the study area was studied to demarcate various LULC categories and its details are provided under Section 3.4, Chapter-III.• The land use pattern at present and at the end of the quarrying period has been provided under Table 4.19, Chapter-IV.	3-29 4-30
11	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.	No OB dumps outside the lease area is proposed.	--
12	Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the	Not Applicable	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.		
13	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.	Not Applicable	--
14	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.	Not Applicable	--
15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.	Suriyamalai Reserve Forest is located at a distance of more than 60m from the mine workings in the north.	3-2
16	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.	The mining lease area and the 10 km buffer zone from the periphery of the core zone is devoid of declared ecologically sensitive features like national parks, biospheres, sanctuaries, etc.	4-34
17	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors,	Replied in Standard ToR point No.16	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.		
18	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.	A detailed study of flora and fauna composition in the core and buffer zone of the project has been made through primary field surveys. The details are furnished in Section 3.5, Chapter III.	3-37
19	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the	Not Applicable	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	proposed mining activities could be considered.		
20	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).	Not Applicable	--
21	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shilling of village(s) including their R&R and socio-economic aspects should be discussed in the Report.	The mining activities will be carried out within the mine lease areas only. Hence, the question of R& R does not arise.	7-9
22	One season (non-monsoon) (i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season) primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the	<ul style="list-style-type: none">The baseline data on micro-meteorology, ambient air quality, Water quality, noise level, soil and flora & fauna are collected during Winter Season (December 2023 to February 2024) and detailed in para 3.3 to 3.5 of Chapter-III.	3-15





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	<p>AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.</p>	<ul style="list-style-type: none">• Monitoring stations were selected taking into account, wind direction and location of sensitive receptors.• Free silica composition in PM10 sample has been done and the values are found to be Below Detectable Limit (DL 0.05mg/m³) which is well within the prescribed limit of 5mg/m³.	
23	<p>Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.</p>	<ul style="list-style-type: none">• Air quality modeling details are furnished in para 4.2.2 and its continuous sub paras in Chapter-IV of EIA report.• The impact on air quality due to the proposed project is estimated using AERMOD View Gaussian Plume Air Dispersion Model developed by Lakes Environmental Software which is based on steady state Gaussian plume dispersion.• The model simulations are done for the air pollutant arising from the mining operations, namely, PM10, PM2.5. Ground Level Concentration (GLC) have been computed using hourly meteorological data.• The Isopleths of PM10, PM2.5 concentrations for with control measures scenario have also been drawn and these are given in Figure No.4.1 and 4.2.• It can be seen that the resultant added concentrations with baseline figures even at worst scenario, show that the values of ambient air quality with respect to PM10 are within the statutory limits in	4-2





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		each case.	
24	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.	The total cumulative water requirement will be 50.0 KLD. This comprises 2.0 KLD for domestic use, 30.0KLD for dust suppression by water sprinkling, wet drilling and 18 KLD for greenbelt and plantation. The water requirement is met from rainwater collected in the mine pit. The water balance diagram for the same is shown in Figure No 4.2, Chapter-IV.	4-19
25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.	Not Applicable	--
26	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.	<ul style="list-style-type: none">• The rain water falling in the quarry will be harvested in the sump at the lowest level of the quarry. This sump will act as a settling pond to prevent solids escaping along with discharge, before outlet. etc.• Towards surface runoff management, garland drain will be constructed around the quarry and will be connected to a settling pond with silt traps. The supernatant clear water from the settling pond will be flow to the downstream users. The surface runoff management structures diagram is given in Figure No 4.4, Chapter-IV.• The methods for reducing water consumption and rainwater harvesting is provided in Section 4.3.4, Chapter-IV.	4-20
27	Impact of the Project on the water quality, both surface and groundwater. should be assessed and necessary safeguard measures, if any required, should be provided.	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6,	3-44





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		Chapter-III.	
28	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.	Replied above in ToR point no.27	--
29	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.	Replied above in Standard ToR point No.27.	--
30	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.	The ultimate pit depth of mining is 75m. The ground water table in this area is below this level.	2-32
31	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phasc-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the	<ul style="list-style-type: none">• About 33,705 plants have already been planted so far since the commencement of the mining operations covering a total area of 25.77Ha in G.O. 211, 1086 and other mining leases of ICL. Besides, outside the lease area also plantation is carried out over an area of 9.6Ha with a total of 13,100 plants.• Avenue plantation has already been carried out from the mine lease area of the Karumapurathanur Limestone Mines	4-42





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
	species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.	to the factory, the Veerachipalayam limestone Mines and the Mothaiyanur Limestone Mines. <ul style="list-style-type: none"> • During the plan period, totally 7.506 Ha of the lease periphery will be covered with plantation. Besides, the inactive dumps will also be reclaimed and vegetated. Local species like neem, Pungan etc) will be planted. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area. 	
32	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.	From this proposed quarry the entire output will be transported to ICL Sankari Cement Plant. Details of the traffic study is provided under section 4.9, Chapter-IV.	4-61
33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.	As the mine project is in operation for many years i.e. from 1976 onwards, good infrastructural facilities already exist in the area. The entire stretch of approach road to Sankari cement plant is owned by ICL, through which limestone is being transported to the cement manufacturing unit. In addition, good water supply and	2-39





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		power facilities already exist for the present project. All site service facilities are available for smooth uninterrupted mining operations, as per statutory standards. Any further desired improvements will be carried out	
34	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.	Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area. Infrastructures will be dismantled and reclaimed.	4-33
35	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed	Details of occupational health and safety aspects are given under the subsections of Para 4.8, Chapter-IV.	4-57
36	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations	<ul style="list-style-type: none">• Details of the socio economic survey conducted in the buffer zone has been provided in Para 3.2.4, Chapter-III.• Public health facilities will be further aimed to be developed through CER activities wherein periodic health checkups, medical camps for the locals will be conducted.	3-9





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
37	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.	Few villages in the study area such as Mothaiyanur, Reddipalayam, Gopalanur, Nallapalayam, Chinnagoundanur, Pallakkapalayam, etc. were visited to know about socio-economic conditions. Salient details of the study are given in Section 3.2.4, Chapter-III.	3-9
38	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.	Detailed environmental management plan is provided in Chapter-X.	10-1
39	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.	<ul style="list-style-type: none">This draft EIA/EMP report will be submitted for public hearing as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures.The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.	7-1
40	Details of litigation pending against the project, if any, with direction /order paced by any Court of Law against the Project should be given.	There is no litigation pending against the project.	--
41	The cost of the Project (capital cost and recurring cost) as well as the cost	The cost of the project is Rs.99 Lakhs	2-39





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
	towards implementation of EMP should be clearly spelt out.	The capital and recurring cost of the project is provided under Table No.10.1, Chapter-X.	10-1
42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report.	The disaster management plan has been provided under section 7.3.1, Chapter-VII.	7-3
43	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.	<ul style="list-style-type: none"> • ICL's Sankari cement plant and associated Limestone mining activities in the region has brought about transformational prosperity and improvements in physical and social infrastructures in the area like employment, financial gains, improvement in education, living standards, etc. • In short, the working mining projects has benefitted this region directly and indirectly in the fields of potential employment opportunities, improved per capita income for local people, improved social welfare facilities in respect of education, medical healthcare systems, communicational aspects, infrastructural build-up, etc and will continue to do so. • From the above, it can be seen that as the proponent will continue their extensive social welfare activities which they have been doing so far, the villages near the lease area will be benefitted. In addition, locals will be employed for this project once the project operation starts. Hence, overall, this project will be beneficial to the society, and also the state and country as a whole. 	8-1

C. Annexure-I

Additional Information for Considering EC for Mining Projects

1	Name of the project lease & owner	Mothaiyanur Limestone Mines	1-4
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COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

		(G.O.211) of The India Cements Ltd.	
2	Lease Extent	50.84 Ha	1-4
3	Lease Validity	Upto 31.03.2030	1-4
4	Approved Mining Plan/Scheme - Review Specify whether DSR is provided (applicable in case of minor minerals only)	Review of Mining Plan was approved by Regional Controller of Mines, IBM, Chennai vide Lr.No. NO TN/SLM/LST/ROMP-1727.MDS dated 15.12.2023. (Annexure-2A)	A-114
5	Specify - Nature and type of violation:		
	I. Without EC or in excess of quantity approved in EC	<ul style="list-style-type: none">• Presuming that Environmental Clearance is to be obtained at the stage of lease renewal only, application for obtaining EC was initially submitted to MoEFCC in 2014 and subsequently mining operations were stopped as per MoEFCC directions, Terms of Reference under violation category was applied.• However, in compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.• NOC has been issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and the same is enclosed as Annexure-3A	13-1 A-108
	II. Without CTO or in excess of quantity approved in CTO	--	
	III. Without mining plan/Scheme of mining or in excess of quantity approved in Mining plan/Scheme of mining.	--	
	IV. Without forest Clearance	--	





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

	V.Any other violation	--										
6	Violation Period											
	I. Number of months	Replied above in point 5.										
	II. Number of Years	Replied above in point 5.										
7	Exploitation / Excavation quantity Reserves proved through exploration by drilling	Mineable reserves of 8.06 Mil.T of Limestone.	2-23									
8	Give details of production from the date of execution of the lease deed / since 1994 <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Year and quantity</th> <th style="width:20%;">Planned</th> <th style="width:20%;">Actual</th> </tr> </thead> <tbody> <tr> <td>Ore (tonnes)</td> <td></td> <td></td> </tr> <tr> <td>Waste (tonnes)</td> <td></td> <td></td> </tr> </tbody> </table>	Year and quantity	Planned	Actual	Ore (tonnes)			Waste (tonnes)			Past production details are provided in Annexure-14A.	A-183
Year and quantity	Planned	Actual										
Ore (tonnes)												
Waste (tonnes)												
9	Quantity mined out during the violation period & if, yes indicate the violated quantity, in term of % of consented quantity. <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Year and quantity mined out during the violation period</th> <th style="width:20%;">Planned</th> <th style="width:20%;">Actual</th> </tr> </thead> <tbody> <tr> <td>Ore (tonnes)</td> <td></td> <td></td> </tr> <tr> <td>Waste excavation(tons/cum)</td> <td></td> <td></td> </tr> </tbody> </table>	Year and quantity mined out during the violation period	Planned	Actual	Ore (tonnes)			Waste excavation(tons/cum)			Replied above in point 5.	--
Year and quantity mined out during the violation period	Planned	Actual										
Ore (tonnes)												
Waste excavation(tons/cum)												
10	State illegal mining/encroachments outside the lease boundary? Percentage of quantity mined out outside the -lease boundary.	--										
11	Method of working											
	I. Category type: (a) Mechanised (b) Semi — Mechanised (c) Manual	Opencast Mechanized Mining Method	2-6									
	II. Construction and design of haul roads											
	a) Dimension as per the statutory requirements which were followed or otherwise	Haul roads are laid as per applicable norms	--									
	b) Number of vehicles plying on the main haul roads inside the mine and the approach road to the pit located outside the mine,if any.	10 Tippers of 10T capacity as per approved mining plan.	2-24									
	c) Are any measures taken to minimise fugitive dust generated form mine haul roads? Does it comply with the CPCB/PCB Guidelines?	Water spraying on haul roads and mine roads, mineral dispatch sprinkling will be done regularly on working days.	4-4									
	d) Is there a possibility that air pollutants emitted from the project area that do not comply with air quality standards as per CPCB/PCB?	Baseline studies undertaken during Winter Season (Dec 2023 – Feb 2024) and the air quality modeling carried out to determine the post project	3-1									





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

		scenario, both show that the air quality standards are in line with the NAAQ limits.										
12	Mechanized / Semi — Mechanized Method of Mining											
	i. Number of loading / excavating equipments as per approved mining plan and capacity.	As per the approved mine plan, 8 excavators will be used.	2-24									
	ii. Number of loading excavating equipments actually being deployed and capacity.	Once the mining operations commence, the equipment will be deployed in accordance to the mine plan.	--									
	iii. Type and number of transporting equipments	As per approved mine plan, 10 Nos. of 10 T Tippers will be used for transportation of minerals.	2-24									
	iv. Type of transporting system used — (a) trucks (b) Any other mode	a)Trucks/Tippers										
	v. Capacity and Number of trucks used as per approved mining plan	10 Nos. of 10T Tippers										
	vi. Capacity and Number of trucks used actually in the mine.	Once the mining operations commence, the equipment will be deployed in accordance to the mine plan.	--									
	vii. Number and capacity of loading equipments and trucks used not in line with approved mining plan	No deployment of equipments other than those mentioned in the approved mine plan is envisaged.	--									
	<table border="1"> <thead> <tr> <th></th> <th>Capacity</th> <th>Numbers</th> </tr> </thead> <tbody> <tr> <td>Excavator</td> <td>Nil</td> <td>Nil</td> </tr> <tr> <td>Trucks</td> <td>Nil</td> <td>Nil</td> </tr> </tbody> </table>				Capacity	Numbers	Excavator	Nil	Nil	Trucks	Nil	Nil
	Capacity			Numbers								
Excavator	Nil	Nil										
Trucks	Nil	Nil										
	viii. Impact of excess deployment of loading equipments (excavators) and transporting equipments on environment.	No deployment of equipments other than those mentioned in the approved mine plan is envisaged.	--									
	a) Air Pollutants	Nil	--									
	b) Water Quality	Nil	--									
	c) Land Quality	Nil	--									
	d) Noise Quality	Nil	--									
	ix. Does the deployment of loading equipments (excavators) and trucks fulfil the statutory requirements as per MMR 1961, with respect to the site conditions?											





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

13	Method of Rock Breaking/Material preparation for the excavation:		
	i. Methodology adopted		
	a) Drilling and blasting	The mine will continue to be worked as opencast mechinsed mine with excavator, drill, rock breakers in combination with controlled blasting.	2-24
	b) Rock Breakers	Breaking will be carried out with rock breaker appropriately as per requirement.	2-24
	c) Rippers	Not Applicable	--
	d) Surface Miners	Not Applicable	--
	e) Direct Mucking by excavators	Not Applicable	--
	f) Manual Means	Not Applicable	--
	g) Any other methods or combination of above	Nil	--
	ii. In case of drilling and blasting method		
	a) Type of blasting: short hole or deep hole	Deep hole blasting	--
	b) Whether controlled blasting technique adopted? If yes, specify the technique with details of study, year study	Controlled blasting techniques, Delay detonators and will be used.	--
	c) Impacts due to blasting defined as per the studies, if any carried out previously as indicated	The effects of blasting vibration is studied and the expected PPV due to blasting is provided under Section 4.4.2, Chapter-IV.	4-30
	d) Dust pollution	Mitigative measures such as wet drilling, water sprinkling, avoiding blasting during high wind periods, etc. help to ensure that there is no major impact on the dust pollution front.	4-4
	e) Noise level (dB(A))	Plantation, proper maintenance of equipments, etc	4-28
	f) Ground vibration studies and Fly rock projection	The effects of blasting vibration is studied and the expected PPV due to blasting is provided under Section 4.4.2, Chapter-IV.	4-30
	iii. Impact of preparation of Ore and waste on	There is no ancillary process involved	--





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

	environment	such as crushing or screening.	
	a) Air Pollution	Not Applicable	--
	b) Noise Pollution	Not Applicable	--
	c) Water Pollution	Not Applicable	--
	d) Safety Standards	Not Applicable	--
	e) Traffic Density	Not Applicable	--
	f) Road Condition (Vulnerability)	Not Applicable	--
14.	Construction and Design of Dumps.	There is no proposal for storage of minerals. Only waste dumps are present and proposed in the lease area.	--
	a) Place/Location	--	--
	b) Approach to Dump form the mine distance and safety standards.	--	--
	c) Area of extent occupied	--	--
	d) Dimension of Dump and No. of terrace with heights (benches)	--	--
	e) Vegetation covered.; If yes specify the details of plants	--	--
15.	Construction and Design of Waste Dumps		
	i. Numbers and Locations as per approved Mining Plan	3	
	ii. Specify whether reject dumps are located within or outside mining lease	The waste dumps are located within the lease area	--
	iii. Area occupied in excess of the approval mining plan	Dump area is as per approved mine plan only.	--
	iv. Dimension of terracing, light, shapes, etc., Dump as per approved Mining Plan	3 Dumps upto maximum height of 26m during plan period	
	v. Fresh/Existing Dimension height, shape, width. etc., of Dumps in the mine.	Section 2.7, Chapter-II	2-24
	vi. Volume/Quantity added to the waste/Dump during the violated period.	It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.	13-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

	vii. Approach to the Dump-Dimension, distance.	Good approach exists	
	viii. Number of and type of equipments deployed in Dump.	--	--
	ix. Provision of Garland drains around the Dumps.	Surface runoff management structures like garland drain, check dams, retaining walls, settling pond etc. as explained above will be constructed and as such there will not be any appreciable impact on surface water quality which in turn can affect the bio diversity of the area.	4-34
	x. Any vegetation made on the slopes.	As per the approved mine plan, the total dump area at the end of the conceptual period will be stabilized by means of plantation.	4-42
	xi. Provision of safety standards.	Yes. Terracing, dump slopes are provided as per standards	--
	xii. Impact of Waste/Dumps on environment.		
	a) Air Pollution	Wind erosion of dumps is one of the causes of air pollution. In order to prevent this, mitigative measures such as water sprinkling, provision of afforestation in inactive OB dumps, proper maintenance of hauling equipment is carried out.	4-4
	b) Water Pollution	Runoff of waste dumps, during monsoon may carry the silt / ore residues and pollute the nearby water bodies. To prevent this, measures such as Dozing and leveling of inactive present dumps and old dump top, Plantation to arrest and prevent erosion, construction of surface runoff management structures like retaining wall, garland drain along the waste dump etc. will be carried out.	4-20
	c) Dust Pollution	Already replied in sl no (a) above	--
	d) Noise Pollution	Will be felt near the active working area only. Proper maintenance of equipments, plantation are and will be	4-28





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

		carried out.	
	xiii. Terracing	Yes	--
16.	Construction and Design of Ore and sub grade ore/mineral Stacks:-	There is no proposal for mineral stacks or subgrade stacks.	--
	i. Number and Location of Ore stacks.	Not Applicable	--
	ii. Dimension of Ore/sub grade Stacks as per the Approved Mining Plan	Not Applicable	--
	iii. Volume/Quantity added during the violation period.	Not Applicable	--
	iv. Any Screening plant or any other loading equipment engaged during the violated period.	Not Applicable	--
	v. Approach to Ore / sub grade stack — Distance, hazards. Not Applicable	Not Applicable	--
	vi. Safety standards adopted while operation.	Not Applicable	--
	vii. Impact of ore/sub grade on environment		
	a) Air Pollution	Not Applicable	--
	b) Water Pollution	Not Applicable	--
	c) Dust Pollution	Not Applicable	--
	d) Noise Pollution	Not Applicable	--
17	Mine Pit Water		
	i. Intersection of groundwater table, specify the measures taken.	Groundwater intersection is not envisaged	--
	ii. Ground water table as per hydrogeological studies (Pumping test).	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
	iii. Provision of Garland drains around pit and dumps	Garland drains are and will be provided around the pit and dumps suitably.	--
	iv. Water pollution	In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the	4-33





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

		ground water.	
	v. Management of mine water	Replied in point iv above.	--
	vi. Ultimate pit w.r.t Ground water intersection and management of drainage of groundwater	No groundwater intersection is envisaged.	--
18	Diversion of General Drainage/River/Nallah course for Mining	There is no natural water course passing through this area. No diversion envisaged.	--
19	Clearing of vegetation before the commencement of mining operation-Number of trees(species wise)	Major part of the lease area is already mined out. Hence, no major clearance of vegetation is expected.	4-34
20	Man Power		
	a) Statutory Management	8	
	b) Regular (Non-Statutory) Manpower	122	
21	Occupational Health and Safety		
	a) Periodical monitoring of health standards of persons employed as per Mine Act, 1950.	Medical examination of workers at pre-entry level stage of workers, etc., by qualified doctors, with periodical examination of all workers/staff at least once a year, as per DGMS circulars.	4-59
	b) Failure to inform statutory bodies periodically, if any	Nil	--
22	Population (Nearby Habitation)		
	i. Population/Significant Population/Dense Population within the buffer zone of 10 Kms.	Mothaiyanur Village - <0.5Km (W)	3-3
	ii. People displacement due to mining activities	The mining activities will be carried out in the present mine lease area only. As such no R&R is envisaged.	7-9
	iii. Location/ Existence of habitation near the river or any other historical/sensitive/ forest distance.	Environmental setting of study area is provided in Table 3.2, Chapter-III.	3-3
	iv. Impact of mining on Surrounding and habitation-Air, Water, Noise, Pollution.	Impact of mining operations on the environment is provided in Chapter-IV.	4-1
	v. Socio Economic aspects of mining.	• The proponent has spent more than Rs 180 lakhs under various community developmental activities	4-44





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

		<p>in the recent past & its details are given in Table 4.26, Chapter-IV.</p> <ul style="list-style-type: none">• In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community. It will be decided based on the need and priority of the locals.	
23	CSR		
	<p>a) Field ground Activities or studies. Actual amount spent towards CSR and the future proposal.</p>	<ul style="list-style-type: none">• The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.25, Chapter-IV.• In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community. It will be decided based on the need and priority of the locals.	4-44
24	NOC from DMG for quantity clarification in respect of settlement of all the amount payable against identified violation	<p>NOC has been issued by Commissionerate of Geology & Mining, Guindy, Chennai and the same is enclosed as Annexure-3A</p>	A-108
25	For the Clearance of EC, Public Hearing is mandated as per MoEF&CC Notification	<p>This draft EIA/EMP report will be submitted for public hearing as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.</p>	7-1





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

26	Conceptual Post mining land use/restoration	Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area . Infrastructures will be dismantled and reclaimed.	4-33
27	Litigation/Court cases, if any pending	There is no litigation pending against this project.	--
28	Disaster management plan for the mine	Details of Disaster Management Plan is given in Section 7.3.1, Chapter-VII.	7-3

2. Extension in validity of Terms of Reference issued by SEIAA vide Lr.No.SEIAA-TN/F.No.6733/SEAC/ToR-632/Ext dated 26.09.2022.

S.No	ToR Points	Reply	Pg. No
A. Additional Specific ToRs			
1	The project proponent shall submit valid mining lease and scheme of mining plan obtained from the competent authority	<ul style="list-style-type: none"> • Mining lease was renewed vide G.O.211 and subsequently as per MMDR Amendment Act, it has been extended upto 31.03.2030. (Annexure-1A) • Review of Mining Plan along with PMCP was approved by Regional Controller of Mines, IBM, Chennai vide NO TN/SLM/LST/ROMP-1727.MDS dated 15.12.2023. (Annexure-2A) 	A-1 A-101
2	The project proponent shall submit excess mined out quantity during the violation period after 15.01.2016 along with details of existing pit within the	<ul style="list-style-type: none"> • Presuming that Environmental Clearance is to be obtained at the stage of lease renewal only, application for obtaining EC was initially submitted to 	





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		further mediate the carbon emissions, a good greenbelt and plantation plan has been planned.	
6	Strategies adopted for safety and healthy mining operations	A meticulously well planned Environmental Management Plan, with various programme schedules and timely execution objectives, as above, will ensure that the future environmental quality in the area will be maintained within statutory limits. The environmental management strategy as explained above will prove that industrial growth, if properly planned with all environmental concerns and appropriate remedial measures can go a long way to improve life pattern and living conditions of the local community around the project.	10-9
7	What are the transparency and accountability system in place during the operation and post-operation period of the project	A common environment cell is available at ICL Sankari for the cement plant and mines. This cell undertakes effective monitoring, ensure implementation of various environmental control measures effectively and oversee various environmental management schemes for air quality control, water quality status, noise level control, plantation programmes, social development schemes, construction of garland drains, etc., in the mines.	10-6
8	What are the In-House environmental performance and evaluation tools to understand negative impacts of mining	Periodic environmental monitoring will be carried out by the Environmental Management Cell and the environmental management cell will ensure implementation of various environmental control measures effectively and oversee various environmental management schemes.	10-6
9	Detailed study to be made on material flow analysis and Life Cycle Assessment	The yearwise production for this project	2-22





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
	(LCA) in the process of production	has been provided in Table 2.5, Chapter-II.	
10	Through a chart illustration, clarify the cradle to grave approach for extraction of limestone and anticipated emissions, environmental threats in every stage and mitigation strategy at every stage	<ul style="list-style-type: none">• The flowsheet of mining is provided as Figure 2.12, Chapter-II.• Anticipated impacts and mitigation measures are provided in Chapter-IV.	2-21
11	Project Proponent to study impacts on human health viz respiratory impacts, toxicity impacts and radiation impacts	Details regarding Occupational Health and Safety is provided in Section 4.8, Chapter-IV	4-58
12	Study to be made on aquatic, terrestrial toxicity, aquatic eutrophication including detailed terrestrial toxicity and their impacts of wildlife and biodiversity	Considering that there is no discharge involved in this project, no adverse impact on aquatic, terrestrial toxicity, aquatic eutrophication is envisaged.	--
13	What is the total water withdrawal consumption, likely temperature rises and climate change impacts	<ul style="list-style-type: none">• The total cumulative water requirement will be 50.0 KLD. This comprises 2.0 KLD for domestic use, 30.0KLD for dust suppression by water sprinkling, wet drilling and 18 KLD for greenbelt and plantation. The water requirement is met from rainwater collected in the mine pit. The water balance diagram for the same is shown in Figure No 4.7, Chapter-IV.• This being a mining project, no adverse generation of heat is envisaged.	4-17 4-35
14	What are the chemical exposures in the limestone mining and risks anticipated to environmental and human health	Details regarding Occupational Health and Safety is provided in Section 4.8, Chapter-IV	4-58





TOR COMPLIANCE

MOTHAIYANUR LIMESTONE MINE – G.O.1086

1. Terms of Reference issued by SEIAA vide Lr.No.SEIAA-TN/F.No.6567/SEAC/ToR-630/2019 dated 12.07.2019.

S.No	ToR Points	Reply	Pg. No
A. ToR in Addition to Additional ToR			
1	Impact of noise on the wild life needs-to be analyzed and necessary mitigation measures to be proposed for reduce the sate	<ul style="list-style-type: none">• With regards to the noise levels, the expected post project noise levels due to this project at various locations were studied. It is seen that near the Suriyamalai R.F., the post project noise levels will be well within the stipulated limits of 55 dB(A). To further prevent the impact due to noise, it is proposed to carry out good greenbelt cover in the safety zone areas in the mine periphery including the northern side of the lease area.• Hence, by following these measures, no adverse impact on Suriyamalai reserve forest due to mining operations is expected. Regular periodic monitoring near the RF area will be carried out to ensure the same.	4-34
2	The impact of mining operation on the Suriyamalai Reserved Forest, which is located at a distance of 200 m from the quarry site shall be studied and the details should be furnished. In addition to that the remarks and recommendation of the DFO, Salem shall be obtained based on the above points	<ul style="list-style-type: none">• Suriyamalai Reserve Forest is located north of GO 211. From the air quality modelling studies carried out, it is noted that in the RF area, the incremental concentration is <1 µg/m³ only. In order to further prevent dust propogation, it is proposed to erect a green net / tin sheet along the northern side of the lease area for a length of 300m. By carrying out various dust control measures within such as water sprinkling. Wet drilling, etc. during mining operations, no adverse impact on air quality due to	4-34





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		mining operations is expected. <ul style="list-style-type: none">• Impact of mining on noise levels in Suriyamalai R.F. is provided in point no.1	
3	The report for green belt developed with necessary photographs	About 33,705 plants have already been planted so far since the commencement of the mining operations covering a total area of 25.77Ha in G.O. 211, 1086 and other mining leases of ICL. Besides, outside the lease area also plantation is carried out over an area of 9.6Ha with a total of 13,100 plants. Details regarding the same has been provided under Section 4.6.4, Chapter-IV.	4-37
4	The proponent shall furnish the proposal for CER	<ul style="list-style-type: none">• The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.25, Chapter-IV.• In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community. It will be decided based on the need and priority of the locals.	4-44
5	Contour map for 1 km radius surrounding the site, village map, FMB & A Register may be furnished	<ul style="list-style-type: none">• Combined village map is provided in Figure No.2.4, Chapter-II.• This is an existing mine under operation since decades, lease is already executed.	2-10
6	The Comprehensive study shall be carried out to evaluate the impact of mining operations on the environment through experts in the field of hydrogeology, ecology, mining and environment	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
7	The approved mining plan submitted by	Review of Mining Plan was approved for	A-103





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	the project proponent was expired for the period 2018. Hence, the project proponent has to submit the approved mining plan for the proposed year	the period 2023-24 to 2027-28 by Regional Controller of Mines, IBM, Chennai vide Lr.No. NO TN/SLM/LST/ROMP-1698.MDS dated 19.12.2022. (Annexure-2B)	
8	Conduct Hydro geological study and furnish the report along with EIA	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
9	A detailed mining closure plan shall be submitted with the approval of Dept. of mining and Geology	Review of Mining Plan was approved for the period 2023-24 to 2027-28 by Regional Controller of Mines, IBM, Chennai vide Lr.No. NO TN/SLM/LST/ROMP-1698.MDS dated 19.12.2022. (Annexure-2B)	A-103
B. Additional ToR			
1	Issue of ToR is considered for the mining period 2019-23 onwards only	The validity of Terms of Reference has been extended upto 11.07.2024 vide SEIAA/TN/F.No.6567/SEAC/TOR-630/Extn/2019 dated 26.09.2022.	--
2	The EIA study report shall provide details of proposed and actual mined quantity for the entire mining plan period from the competent Authority	<ul style="list-style-type: none">• However, in compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.• NOC has been issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and the same is enclosed as Annexure-3B	13-1
3	EIA study shall match proposed mining	Agreed	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	scheme		
4	Copy of the consent for establishment, consent to operate and latest renewal obtained from the TNPCB	Will be obtained after grant of EC	--
5	Details of study on social impact, including livelihood of local people	The India Cements Limited has implemented good community developmental activities around their project site. The project proponent has carried out beneficial social welfare activities to improve the social and physical infrastructure of the local area. They have conducted community need assessment surveys around the project site to identify the areas which need development and improvement under community developmental activities. ICL is having a full-fledged CSR coordinator at corporate office to take care of all the developmental activities of their group. The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.25, Chapter-IV.	4-45
6	EIA report should strictly follow the EIA mining manual	Agreed	--
7	Detail plan on rehabilitation and reclamation carried out for the stabilization and restoration of the mined areas	Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area . Infrastructures will be dismantled and reclaimed. Post Mining Land Use Table is provided as	4-30





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		Table 4.20, Chapter-IV.	
8	The EIA study report shall include the surrounding mining activity	<ul style="list-style-type: none">• Mothaiyanur Limestone Mines of The India Cements Limited comprises of 3 mining leases namely G.O.No.211, G.O No.76 and G.O.No.1086 located in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu.• As such this combined draft EIA report with separate EMP measures is prepared based on standard and additional Terms of Reference issued by SEIAA, Tamil Nadu for Go-211 & Go-1086	1-1
9	Modelling study for Air, Water and noise shall be carried out and incremental increase in the above study shall be substantiated with mitigation measures	<ul style="list-style-type: none">• Air quality modeling details are furnished in para 4.2.2 and its continuous sub paras in Chapter-IV of EIA report.• It can be seen that the resultant added concentrations with baseline figures even at worst scenario, show that the values of ambient air quality with respect to PM10 are in the range of 53.8 $\mu\text{g}/\text{m}^3$ to 62.1 $\mu\text{g}/\text{m}^3$ and with respect to PM2.5 are in the range of 26.2 $\mu\text{g}/\text{m}^3$ to 30.9 $\mu\text{g}/\text{m}^3$ which are within the statutory stipulations in each case.• Mitigation measures are provide in Table 4.3, Chapter-IV.	4-3 4-18
10	A study on the geological resources available shall be carried out and reported	Summary of Limestone Reserves and Resources as on 01.04.2023 are provided in Table 2.1, Chapter-II.	2-23
11	A specific study should include impact on flora & fauna, disturbance pattern to migratory of animals, adjoining reserve forest	The impact on biological environment is provided in Table 4.21, Chapter-IV.	4-31
12	A specific study on agriculture & livelihood shall be carried out and report	<ul style="list-style-type: none">• The major source of irrigation in this region is through wells. The agricultural practice around the mining lease area is moderate to less due to rocky terrain, meager rainfall this type soil cover not supporting for any major cultivation. Most of lands in that are classified as dry	3-48





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		lands. • Major crops cultivated around the villages of mining area are paddy, millets, pulses, oilseeds, cotton, sugarcane, mango, banana, tapioca, tumeric, vegetables and flower crops	
13	Impact on ponds, rivers and other water bodies to be elaborated	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
14	Impact of soil erosion, soil physical chemical and biological property changes may be assumed	Soil samples were collected in 5 locations in the core and buffer zone during Winter Season (Dec 2023- Feb 2024) . The details regarding the same is provided in Section 3.3.5, Chapter-III.	3-28
15	The details of annual rate of replenishment and timeframe for replenishment after mining closure in the area shall be furnished	Not applicable as this is a limestone mining project.	--
16	The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throw away plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986	Single use plastics/ use and throwaway plastics will be banned in the site as directed by the Tamil Nadu Government vide GO(Ms)No.84 regarding ban on use of plastic products. The employees will be encouraged to use compostable material or reusable material.	4-64
Standard ToR			
1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.	In compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.	13-1
2	A copy of the document in support of the	Mining lease was renewed vide G.O.1086	A-56





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	fact that the Proponent is the rightful lessee of the mine should be given	and subsequently as per MMDR Amendment Act, it has been extended upto 31.03.2030. (Annexure-1B)	
3	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.	The production capacity, quantity of waste, its management and mining technology in mine plan and EIA, etc., are compatible with one another.	--
4	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery / toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).	<ul style="list-style-type: none">• Satellite imagery with corner coordinates of the project area is provided in Figure 2.3, Chapter-II.• Toposheet of the lease area and buffer zone is provided in Figure 3.1, Chapter-III.• Geology, Geomorphology, Lithology map of the lease area and buffer zone is provided in Figure 3.20, 3.21 Chapter-III.	2-9 3-2 3-49
5	Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.	Replied in Standard ToR point no.4	--
6	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.	Not Applicable	--
7	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by	<ul style="list-style-type: none">• The proponent has framed a well-planned environmental policy. Its details	10-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.	are provided under Section 10.2.1, Chapter-X. <ul style="list-style-type: none">• The Plant Head oversees the environmental administration at the mine through HOD (Mines) who will coordinate with the Manager (Mines) at the mine site who is directly responsible for various environmental activities in the mine. The organizational chart for the same has been provided in Figure No.10.1, Chapter-X.	
8	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.	Various risks likely to arise due to mining activities are detailed under section 7.4, Chapter-VII. This being an opencast mine, subsidence is not applicable. The impact due to ground vibrations due to blasting is given in para 4.4.2, Chapter-IV.	7-2 4-30
9	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.	The study area chosen for collecting existing environmental status covers 10 km radial distance from the project periphery (Figure No - 3.1, Chapter-III). Data given in the report is for the life of the mine.	3-2
10	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change	<ul style="list-style-type: none">• The land use of the study area was studied to demarcate various LULC categories and its details are provided under Section 3.4, Chapter-III.• The land use pattern at present and at the end of the quarrying period has been provided under Table 4.20, Chapter-IV.	3-29 4-30





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	of land use should be given.		
11	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.	No OB dumps outside the lease area is proposed.	--
12	Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.	Not Applicable	--
13	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.	Not Applicable	--
14	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.	Not Applicable	--
15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.	Suriyamalai Reserve Forest is located at a distance of more than 60m from the mine	3-2





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		workings in the north.	
16	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.	The mining lease area and the 10 km buffer zone from the periphery of the core zone is devoid of declared ecologically sensitive features like national parks, biospheres, sanctuaries, etc.	4-34
17	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.	Replied in Standard ToR point No.16	--
18	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details	A detailed study of flora and fauna composition in the core and buffer zone of the project has been made through primary field surveys. The details are furnished in Section 3.5, Chapter III.	3-37





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.		
19	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.	Not Applicable	--
20	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).	Not Applicable	--
21	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s)	The mining activities will be carried out within the mine lease areas only. Hence, the question of R& R does not arise.	7-9





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
	located in the mine lease area will be shifted or not. The issues relating to shilling of village(s) including their R&R and socio-economic aspects should be discussed in the Report.		
22	One season (non-monsoon) (i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season) primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality,; noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the predominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the predominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.	<ul style="list-style-type: none"> The baseline data on micro-meteorology, ambient air quality, Water quality, noise level, soil and flora & fauna are collected during Winter Season (December 2023 to February 2024) and detailed in para 3.3 to 3.5 of Chapter-III. Monitoring stations were selected taking into account, wind direction and location of sensitive receptors. Free silica composition in PM10 sample has been done and the values are found to be Below Detectable Limit (DL 0.05mg/m3) which is well within the prescribed limit of 5mg/m3. 	3-15
23	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind	<ul style="list-style-type: none"> Air quality modeling details are furnished in para 4.2.2 and its continuous sub paras in Chapter-IV of EIA report. The impact on air quality due to the proposed project is estimated using AERMOD View Gaussian Plume Air Dispersion Model developed by Lakes Environmental Software which is based on steady state Gaussian plume dispersion. The model simulations are done for the air pollutant arising from the mining 	4-2





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	direction may also be indicated on the map.	<p>operations, namely, PM10, PM2.5. Ground Level Concentration (GLC) have been computed using hourly meteorological data.</p> <ul style="list-style-type: none">• The Isopleths of PM10, PM2.5 concentrations for with control measures scenario have also been drawn and these are given in Figure No.4.1 and 4.2.• It can be seen that the resultant added concentrations with baseline figures even at worst scenario, show that the values of ambient air quality with respect to PM10 are within the statutory limits in each case.	
24	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.	<p>The total cumulative water requirement will be 50.0 KLD. This comprises 2.0 KLD for domestic use, 30.0KLD for dust suppression by water sprinkling, wet drilling and 18 KLD for greenbelt and plantation. The water requirement is met from rainwater collected in the mine pit. The water balance diagram for the same is shown in Figure No 4.2, Chapter-IV.</p>	4-17
25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.	Not Applicable	--
26	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.	<ul style="list-style-type: none">• The rain water falling in the quarry will be harvested in the sump at the lowest level of the quarry. This sump will act as a settling pond to prevent solids escaping along with discharge, before outlet. etc.• Towards surface runoff management, garland drain will be constructed around the quarry and will be connected to a settling pond with silt traps. The supernatant clear water from the settling	4-20





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		pond will be flow to the downstream users. The surface runoff management structures diagram is given in Figure No 4.4, Chapter-IV. <ul style="list-style-type: none">• The methods for reducing water consumption and rainwater harvesting is provided in Section 4.3.4, Chapter-IV.	
27	Impact of the Project on the water quality, both surface and groundwater. should be assessed and necessary safeguard measures, if any required, should be provided.	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
28	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.	Replied above in ToR point no.27	--
29	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.	Replied above in Standard ToR point No.27.	--
30	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A	The ultimate pit depth of mining is 75m. The ground water table in this area is	2-32





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	schematic diagram may also be provided for the same.	below this level.	
31	<p>A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phasc-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.</p>	<ul style="list-style-type: none">• About 33,705 plants have already been planted so far since the commencement of the mining operations covering a total area of 25.77Ha in G.O. 211, 1086 and other mining leases of ICL. Besides, outside the lease area also plantation is carried out over an area of 9.6Ha with a total of 13,100 plants.• Avenue plantation has already been carried out from the mine lease area of the Karumapurathanur Limestone Mines to the factory, the Veerachipalayam limestone Mines and the Mothaiyanur Limestone Mines.• During the plan period, part of the lease periphery will be covered with plantation. Besides, the inactive dumps will also be reclaimed and vegetated. Local species like neem, Pungan etc) will be planted. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area.	4-42
32	<p>Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including</p>	<p>From this proposed quarry the entire output will be transported to ICL Sankari Cement Plant. Details of the traffic study is provided under Section 4.9, Chapter-IV.</p>	4-67





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.		
33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.	As the mine project is in operation for many years i.e. from 1976 onwards, good infrastructural facilities already exist in the area. The entire stretch of approach road to Sankari cement plant is owned by ICL, through which limestone is being transported to the cement manufacturing unit. In addition, good water supply and power facilities already exist for the present project. All site service facilities are available for smooth uninterrupted mining operations, as per statutory standards. Any further desired improvements will be carried out	2-39
34	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.	Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area. Infrastructures will be dismantled and reclaimed.	4-33
35	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project	Details of occupational health and safety aspects are given under the subsections of Para 4.8, Chapter-IV.	4-63





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed		
36	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations	<ul style="list-style-type: none">• Details of the socio economic survey conducted in the buffer zone has been provided in Para 3.2.4, Chapter-III.• Public health facilities will be further aimed to be developed through CER activities wherein periodic health checkups, medical camps for the locals will be conducted.	3-9
37	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.	Few villages in the study area such as Mothaiyanur, Reddipalayam, Gopalanur, Nallapalayam, Chinnagoundanur, Pallakkapalayam, etc. were visited to know about socio-economic conditions. Salient details of the study are given in Section 3.2.4, Chapter-III.	3-9
38	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.	Detailed environmental management plan is provided in Chapter-X.	10-1
39	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.	<ul style="list-style-type: none">• This draft EIA/EMP report will be submitted for public hearing as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures.• The opinions, concerns and objections of stakeholders will be recorded during	7-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.	
40	Details of litigation pending against the project, if any, with direction /order paced by any Court of Law against the Project should be given.	There is no litigation pending against the project.	--
41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.	The cost of the project is Rs.12.95 Lakhs. The capital and recurring cost of the project is provided under Table No.10.1, Chapter-X.	2-33 10-1
42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report.	The disaster management plan has been provided under section 7.3.1, Chapter-VII.	7-3
43	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.	<ul style="list-style-type: none">• ICL's Sankari cement plant and associated Limestone mining activities in the region has brought about transformational prosperity and improvements in physical and social infrastructures in the area like employment, financial gains, improvement in education, living standards,etc.• In short, the working mining projects has benefitted this region directly and indirectly in the fields of potential employment opportunities, improved per capita income for local people, improved social welfare facilities in respect of education, medical healthcare systems, communicational aspects, infrastructural build-up, etc and will continue to do so.• From the above, it can be seen that as the proponent will continue their	8-1





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
		extensive social welfare activities which they have been doing so far, the villages near the lease area will be benefited. In addition, locals will be employed for this project once the project operation starts. Hence, overall, this project will be beneficial to the society, and also the state and country as a whole.	





TOR COMPLIANCE

MOTHAIYANUR LIMESTONE MINE – G.O.76

1. Terms of Reference issued by SEIAA vide Lr.No. SEIAA-TN/F.No.6856/SEAC/ToR-847/2019 dated 17.02.2021

S.No	ToR Points	Reply	Pg. No
A. ToR in Addition to Standard ToR			
1	Restricting the depth of mining to ultimate depth of 27.0 m and quantity of 9,91,715 m ³ of Roughstone, 60,708 m ³ of weathered formation and 80,944 m ³ of Gravel for a period of five years leaving the last bench height of 5m as per the approved mining plan considering the hydro geological regime of the surrounding area	Amendment in Terms of Reference was obtained vide Lr.No.SEIAA-TN/F.No.6856/1(a)/ToR-847/2019/ Amendment dated 28.11.2022 wherein the capacity was changed as follows: <i>“This project involves the peak production capacity of 0.61 Lakh Tones of Limestone with the expected life of the mine being about 14 years and the ultimate pit limit being 40m depth.”</i>	--
2	The Project Proponent shall furnish the contour map of the water table detailing the number of wells located around the site and its impacts on the wells due to mining activity	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
3	The Project Proponent shall conduct the hydro-geological study to evaluate the impact of proposed mining activity on the groundwater table, agriculture activity, and water bodies such as rivers, tanks, canals, ponds etc. located nearby by the proposed mining area	Replied above in ToR Point No.2	--
4	The Project Proponent shall furnish the details on number of groundwater pumping and open wells within 1 km (radius) along with the water levels in both monsoon and non-monsoon seasons. The proponent also shall collect the data of water table level from	Replied above in ToR Point No.2	--





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
	the PWD / TWAD in this area in both monsoon and non-monsoon seasons		
5	The Proponent shall carry out the Cumulative impact study on the Agricultural area due to Mining, Crushers and other activity around the site area	The major source of irrigation in this region is through wells (93%). The agricultural practice around the mining lease area is moderate to less due to rocky terrain, meager rainfall this type soil cover not supporting for any major cultivation. Most of lands in that are classified as dry lands. Major crops cultivated around the villages of mining area are paddy, millets, pulses, oilseeds, cotton, sugarcane, mango, banana, tapioca, tumeric, vegetables and flower crops	3-48
6	The details of surrounding well and the cumulative impact on the ground water shall be part of EIA study	Replied above in ToR Point No.2	--
7	The Socio economic studies should be carried out within 10 km buffer zone from the mines	Few villages in the study area such as Mothaiyanur, Reddipalayam, Gopalanur, Nallapalayam, Chinnagoundanur, Pallakkapalayam, etc. were visited to know about socio-economic conditions. Salient details of the study are given in Section 3.2.4, Chapter-III.	3-9
8	A tree survey study shall be carried out (nos. name of the species, age) in the mining lease applied area and its management during mining activity	A detailed study of flora and fauna composition in the core and buffer zone of the project has been made through primary field surveys. The details are furnished in Section 3.5, Chapter III.	3-37
9	CER activities should be carried out taking into consideration the requirement of the local habitants available within the buffer zone as per Office Memorandum of MoEF& CC dated 01.05.2018	<ul style="list-style-type: none">• The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.26, Chapter-IV.• In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community. It will be decided based on the need and priority of the locals.	4-44
10	A detailed mine closure plan shall be	Review of Mining Plan along with PMCP	A-106





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	prepared and the same shall be got approved by the Geology of mining, Department and the same shall be submitted along with EIA report	was approved by Regional Controller of Mines, IBM, Chennai vide NO TN/SLM/LST/ROMP-1678.MDS dated 15/12/2021. (Annexure-2C)	
11	A detail report on the safety and health aspects of the workers and for the surrounding habitants during operation of mining for drilling and blasting shall be submitted	<ul style="list-style-type: none">Details regarding Occupational Health and Safety is provided in Table 4.8, Chapter-IV	4-58
12	The recommendation for the issue Terms of Reference is subject to the outcome of the Hon'ble NGT, Principal Bench, New Delhi in O.A No.186 of 2016 (M.A.No.350/2016) and O.A. No.200/2016 and O.A.No.580/2016 (M.A.No.1182/2016) and O.A.No.102/2017 and O.A.No.404/2016 (M.A.No.758/2016, M.A.No.920/2016, M.A.No.1122/2016, M.A.No.12/2017 & M.A. No. 843/2017) and O.A.No.405/2016 and O.A.No.520 of 2016 (M.A.No.981 /2016, M.A.No.982/2016 & M.A.No.384/2017)	Agreed	--
13	A detailed study of the lithology of the mining lease area shall be furnished	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
14	The proponent shall carryout fugitive emission survey due to this quarry operation and furnish its mitigation measures in the EMP	Details of the air quality modeling carried out and the mitigation measures provided for fugitive emissions is provided under Section 4.2.2, Chapter-IV.	4-7
15	The proponent shall provide fencing along the boundary of the mining lease area	Photographs of fencing are provided under site photographs.	2-10
16	The proponent has to furnish the actual mining quantity carried year wise from the date of commissioning of quarry	<ul style="list-style-type: none">In compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess	13-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		<p>limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.</p> <ul style="list-style-type: none">• NOC has been issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and the same is enclosed as Annexure-3C	
B. Normal Condition in addition to the following condition in compliance with MoEFCC OM dated 30.05.2018			
1	<p>The project proponent shall give an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No 114 of 2014 in the matter of Common Cause-versus Union of India and Ors, before grant of ToR/EC. The undertaking inter-alia includes commitment of the project proponent not to repeat any such violation in future</p>	<p>Affidavit regarding the same is enclosed as Annexure-12.</p>	A-128
2	<p>In case of violation of above undertaking, the ToR/Environmental Clearance shall be liable to be terminated forthwith</p>	<p>Agreed</p>	--
3	<p>The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No, 114 of 2014 in the matter of Common use versus Union of India and Ors</p>	<p>Agreed</p>	--
4	<p>State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining &</p>	--	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		and natural & community resource augmentation plan is provided	
2	In case, where the findings of the Expert Appraisal Committee or State pr union territory level Expert Appraisal Committee on point at sub – paragraph (4) above are affirmative the projects will be granted the appropriate Terms of Reference for undertaking Environment Impact Assessment and preparation of Environment Management Plan and the Expert Appraisal Committee or State or Union territory level Expert Appraisal Committee, will prescribe specific Terms of Reference for the project on assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter in the environment impact assessment report by the accredited consultants, and the collection and analysis of data for assessment of ecological damage, preparation of remediation plan and natural and community resource augmentation plan shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or a environmental laboratory accredited by the National Accreditation Board for Testing and Calibration Laboratories, or a laboratory of the Council of Scientific and Industrial Research institution working in the field of environment	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--
	Step 1: Enumerate the aspects of Violation: a) The proponent should enumerate the violations as applicable to the project. b) Furnish a description of each	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	violation with quantitative and qualitative data. c) Violation categories are to be decided taking into consideration the stage at which the project execution stands.		
	Step 2: Ecological Damage Assessment a) For each aspect of violation enumerated in step (1), identify the resultant environmental damage that may have been caused. b) Furnish a description of the environmental damages with quantitative and qualitative data.	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--
	Step 3: Remediation Plan a) For the Environmental damage(s) identified in the step (2) above, prepare the remediation plan for the beach or combination of damages. b) The remediation plan should essentially consists of problem statement, target to be achieved (quantity), standards, technology/ procedure for remediation, equipment and machinery to be used, time schedule and remediation cost(direct and indirect cost, capital as well as O&M costs).	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--
SECTION-B			
1	Natural resource Augmentation: a) The resources that should be considered for augmentation should essentially consist of land, biota, air, water and other resources as applicable. b) Proponent may choose one or more of the resource augmentation as applicable and provide a description of the	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	augmentation proposal in detail for each resource. c) The proponent should also furnish the cost for each augmentation scheme.		
2	Community Resource Augmentation: a) The proponent should prepare a plan of action for addressing the needs of the community in terms of resources in the sectors of education, health and sports primarily and other such resources as applicable to the community in the vicinity of the project. b) The community resource augmentation plan should consist of rehabilitation of houses and people, budget allocation and time schedule for completing the activity	Replied above in point no.1 of Additional ToR specified by SEAC to deal with violation aspects of mining projects.	--
SECTION-C			
	The proponent should prepare content for the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation separately in a chapter and include in the EIA / EMP report	Assessment of ecological damage, remediation plan, natural and community resource augmentation plan is provided in Chapter-XIII.	13-1
SECTION-D			
a	After the appraisal of the EIA / EMP report submitted by the proponent, the SEAC will make a judgement of the quality of the content in the EIA / EMP report specifically with reference to the chapter covering the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation.	Will abide by the directions of SEIAA, SEAC.	--
b	In the judgement of SEAC, if the quality of the content in the chapter is not satisfactory, the SEAC may direct the	Will abide by the directions of SEIAA, SEAC.	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	proponent to further revise the chapter and resubmit the EIA/EMP report.		
c	If SEAC concludes that the technical part is satisfactory and the costing aspect is not satisfactory then the SEAC may revert to legal provisions, MoEF & CC guidelines and similar expert committee recommendations for finalizing the cost aspects or the SEAC may use its own expertise and experience in finalizing the cost.	Will abide by the directions of SEIAA, SEAC.	--
SECTION-E			
a	The proponent is directed to furnish data as per the questionnaire appended in Annexure I. It will help the SEAC in arriving the ecological damage and the associated cost.	Details furnished in the questionnaire appended in Annexure-I is given below.	--
SECTION-F			
In compliance with the Supreme Court order stated in MoEF & CC letter F.No. 3-50/2017 IA.III-pt dated: 05th January 2018, the proponent is required to submit the No Objection Certificate obtained from the Department of Geology and Mining, Government of Tamil Nadu regarding payment of 100% cost of illegally mined mineral under section 21(5) of MMDR Act 1957 which would account for mining operations in violation of the following:			
a	Without Environmental Clearance (EC), or in excess of the quantity approved in EC	In compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.	13-1
b	Without Consent to Operate (CTO) or in excess of the quantity approved in CTO	--	--
c	Without mining plan/scheme of mining or in excess of the quantity approved in mining plan / scheme of mining	--	--
d	Without Forest Clearance	--	--
e	Any other violation	--	--
	List out the details of reserve forest and wildlife sanctuary nearby the project site	Details regarding the same is provide in Table 3.1, Chapter-III.	3-2





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	(the details should also include other districts which are nearby the project site) and also furnish the detail of distance between the project site and reserve forests/wildlife sanctuary.		
	Whether the project site attracts the HACA clearance? If so, also furnish the HACA clearance for the mining from the competent authority.	Not applicable	--
Standard ToR			
1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.	In compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.	13-1
2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given	Mining lease was renewed vide G.O.76 and subsequently as per MMDR Amendment Act, it has been extended upto 31.03.2030. (Annexure-1C)	A-96
3	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.	The production capacity, quantity of waste, its management and mining technology in mine plan and EIA, etc., are compatible with one another.	--
4	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery / toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).	<ul style="list-style-type: none">• Satellite imagery with corner coordinates of the project area is provided in Figure 2.3, Chapter-II.• Toposheet of the lease area and buffer zone is provided in Figure 3.1, Chapter-III.• Geology, Geomorphology, Lithology map of the lease area and buffer zone is provided in Figure 3.19, 3.20 Chapter-	2-9 3-2 3-49





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		III.	
5	Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.	Replied in Standard ToR point no.4	--
6	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.	Not Applicable	--
7	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.	<ul style="list-style-type: none">• The proponent has framed a well-planned environmental policy. Its details are provided under Section 10.2.1, Chapter-X.• The Plant Head oversees the environmental administration at the mine through HOD (Mines) who will coordinate with the Manager (Mines) at the mine site who is directly responsible for various environmental activities in the mine. The organizational chart for the same has been provided in Figure No.10.1, Chapter-X.	10-1
8	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in	Various risks likely to arise due to mining activities are detailed under section 7.4, Chapter-VII. This being an opencast mine,	7-2





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.	subsidence is not applicable. The impact due to ground vibrations due to blasting is given in para 4.4.2, Chapter-IV.	4-30
9	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.	The study area chosen for collecting existing environmental status covers 10 km radial distance from the project periphery (Figure No - 3.1, Chapter-III). Data given in the report is for the life of the mine.	3-2
10	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.	<ul style="list-style-type: none">• The land use of the study area was studied to demarcate various LULC categories and its details are provided under Section 3.4, Chapter-III.• The land use pattern at present and at the end of the quarrying period has been provided under Table 4.19, Chapter-IV.	3-29 4-32
11	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.	No OB dumps outside the lease area is proposed.	--
12	Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for	Not Applicable	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	representative of the State Forest Department to assist the Expert Appraisal Committees.		
13	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.	Not Applicable	--
14	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.	Not Applicable	--
15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.	Suriyamalai Reserve Forest is located at a distance of more than 60m from the mine workings in the north.	3-2
16	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.	The mining lease area and the 10 km buffer zone from the periphery of the core zone is devoid of declared ecologically sensitive features like national parks, biospheres, sanctuaries, etc.	4-34
17	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the	Replied in Standard ToR point No.16	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.		
18	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.	A detailed study of flora and fauna composition in the core and buffer zone of the project has been made through primary field surveys. The details are furnished in Section 3.5, Chapter III.	3-37
19	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.	Not Applicable	--
20	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as	Not Applicable	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).		
21	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shilling of village(s) including their R&R and socio-economic aspects should be discussed in the Report.	The mining activities will be carried out within the mine lease areas only. Hence, the question of R& R does not arise.	7-9
22	One season (non-monsoon) (i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season) primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality,; noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the predominant downwind direction and	<ul style="list-style-type: none">• The baseline data on micro-meteorology, ambient air quality, Water quality, noise level, soil and flora & fauna are collected during Winter Season (December 2023 to February 2024) and detailed in para 3.3 to 3.5 of Chapter-III.• Monitoring stations were selected taking into account, wind direction and location of sensitive receptors.• Free silica composition in PM10 sample has been done and the values are found to be Below Detectable Limit (DL 0.05mg/m³) which is well within the	3-15





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.	prescribed limit of 5mg/m ³ .	
23	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.	<ul style="list-style-type: none">• Air quality modeling details are furnished in para 4.2.2 and its continuous sub paras in Chapter-IV of EIA report.• The impact on air quality due to the proposed project is estimated using AERMOD View Gaussian Plume Air Dispersion Model developed by Lakes Environmental Software which is based on steady state Gaussian plume dispersion.• The model simulations are done for the air pollutant arising from the mining operations, namely, PM10, PM2.5. Ground Level Concentration (GLC) have been computed using hourly meteorological data.• The Isopleths of PM10, PM2.5 concentrations for with control measures scenario have also been drawn and these are given in Figure No.4.1 and 4.2.• It can be seen that the resultant added concentrations with baseline figures even at worst scenario, show that the values of ambient air quality with respect to PM10 are within the statutory limits in each case.	4-2
24	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.	The total cumulative water requirement will be 50.0 KLD. This comprises 2.0 KLD for domestic use, 30.0KLD for dust suppression by water sprinkling, wet drilling and 18 KLD for greenbelt and plantation. The water requirement is met	4-19





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		from rainwater collected in the mine pit. The water balance diagram for the same is shown in Figure No 4.2, Chapter-IV.	
25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.	Not Applicable	--
26	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.	<ul style="list-style-type: none">• The rain water falling in the quarry will be harvested in the sump at the lowest level of the quarry. This sump will act as a settling pond to prevent solids escaping along with discharge, before outlet. etc.• Towards surface runoff management, garland drain will be constructed around the quarry and will be connected to a settling pond with silt traps. The supernatant clear water from the settling pond will be flow to the downstream users. The surface runoff management structures diagram is given in Figure No 4.4, Chapter-IV.• The methods for reducing water consumption and rainwater harvesting is provided in Section 4.3.4, Chapter-IV.	4-20
27	Impact of the Project on the water quality, both surface and groundwater. should be assessed and necessary safeguard measures, if any required, should be provided.	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
28	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be	Replied above in ToR point no.27	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.		
29	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.	Replied above in Standard ToR point No.27.	--
30	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.	The ultimate pit depth of mining is 75m. The ground water table in this area is below this level.	2-32
31	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phasc-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.	<ul style="list-style-type: none">• About 33,705 plants have already been planted so far since the commencement of the mining operations covering a total area of 25.77Ha in G.O. 211, 1086 and other mining leases of ICL. Besides, outside the lease area also plantation is carried out over an area of 9.6Ha with a total of 13,100 plants.• Avenue plantation has already been carried out from the mine lease area of the Karumapurathanur Limestone Mines to the factory, the Veerachipalayam limestone Mines and the Mothaiyanur Limestone Mines.• During the plan period, part of the lease periphery will be covered with plantation. Besides, the inactive dumps will also be reclaimed and vegetated. Local species like neem, Pungan etc) will be planted.	4-42





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area.	
32	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.	From this proposed quarry the entire output will be transported to ICL Sankari Cement Plant. Details of the traffic study is provided under section 4.9, Chapter-IV.	4-61
33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.	As the mine project is in operation for many years i.e. from 1976 onwards, good infrastructural facilities already exist in the area. The entire stretch of approach road to Sankari cement plant is owned by ICL, through which limestone is being transported to the cement manufacturing unit. In addition, good water supply and power facilities already exist for the present project. All site service facilities are available for smooth uninterrupted mining operations, as per statutory standards. Any further desired improvements will be carried out	2-39
34	Conceptual post mining land use and Reclamation and Restoration of mined	Progressively the waste dumps will be stabilised with compaction and reclaimed	4-33





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	out areas (with plans and with adequate number of sections) should be given in the EIA report.	with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area. Infrastructures will be dismantled and reclaimed.	
35	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed	Details of occupational health and safety aspects are given under the subsections of Para 4.8, Chapter-IV.	4-57
36	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations	<ul style="list-style-type: none">• Details of the socio economic survey conducted in the buffer zone has been provided in Para 3.2.4, Chapter-III.• Public health facilities will be further aimed to be developed through CER activities wherein periodic health checkups, medical camps for the locals will be conducted.	3-9
37	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.	Few villages in the study area such as Mothaiyanur, Reddipalayam, Gopalanur, Nallapalayam, Chinnagoundanur, Pallakkapalayam, etc. were visited to know about socio-economic conditions. Salient details of the study are given in Section 3.2.4, Chapter-III.	3-9
38	Detailed environmental management	Detailed environmental management plan	10-1





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
	plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.	is provided in Chapter-X.	
39	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.	<ul style="list-style-type: none"> This draft EIA/EMP report will be submitted for public hearing as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu. 	7-1
40	Details of litigation pending against the project, if any, with direction /order paced by any Court of Law against the Project should be given.	There is no litigation pending against the project.	--
41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.	<p>The cost of the project is Rs.4.9 Lakhs</p> <p>The capital and recurring cost of the project is provided under Table No.10.1, Chapter-X.</p>	2-39 10-1
42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report.	The disaster management plan has been provided under section 7.3.1, Chapter-VII.	7-3
43	Benefits of the Project if the Project is implemented should be spelt out. The	<ul style="list-style-type: none"> ICL's Sankari cement plant and 	8-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.	<p>associated Limestone mining activities in the region has brought about transformational prosperity and improvements in physical and social infrastructures in the area like employment, financial gains, improvement in education, living standards, etc.</p> <ul style="list-style-type: none">• In short, the working mining projects has benefitted this region directly and indirectly in the fields of potential employment opportunities, improved per capita income for local people, improved social welfare facilities in respect of education, medical healthcare systems, communicational aspects, infrastructural build-up, etc and will continue to do so.• From the above, it can be seen that as the proponent will continue their extensive social welfare activities which they have been doing so far, the villages near the lease area will be benefited. In addition, locals will be employed for this project once the project operation starts. Hence, overall, this project will be beneficial to the society, and also the state and country as a whole.	

D. Annexure-I

Additional Information for Considering EC for Mining Projects

1	Name of the project lease & owner	Mothaiyanur Limestone Mines (G.O.76) of The India Cements Ltd.	1-4
2	Lease Extent	8.005 Ha	1-4
3	Lease Validity	Upto 31.03.2030	1-4
4	Approved Mining Plan/Scheme - Review Specify whether DSR is provided (applicable in case of minor minerals only)	Review of Mining Plan was approved by Regional Controller of Mines, IBM, Chennai vide Lr.No TN/SLM/LST/ROMP-1678.MDS dated 15/12/2021 (Annexure-2C)	A-106
5	Specify - Nature and type of violation:		





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No									
	execution of the lease deed / since 1994 <table border="1"> <tr> <td>Year and quantity</td> <td>Planned</td> <td>Actual</td> </tr> <tr> <td>Ore (tonnes)</td> <td></td> <td></td> </tr> <tr> <td>Waste (tonnes)</td> <td></td> <td></td> </tr> </table>	Year and quantity	Planned	Actual	Ore (tonnes)			Waste (tonnes)			as Annexure-14C.	
Year and quantity	Planned	Actual										
Ore (tonnes)												
Waste (tonnes)												
9	Quantity mined out during the violation period & if, yes indicate the violated quantity, in term of % of consented quantity. <table border="1"> <tr> <td>Year and quantity mined out during the violation period</td> <td>Planned</td> <td>Actual</td> </tr> <tr> <td>Ore (tonnes)</td> <td></td> <td></td> </tr> <tr> <td>Waste excavation(tons/cum)</td> <td></td> <td></td> </tr> </table>	Year and quantity mined out during the violation period	Planned	Actual	Ore (tonnes)			Waste excavation(tons/cum)			Replied above in point 5.	--
Year and quantity mined out during the violation period	Planned	Actual										
Ore (tonnes)												
Waste excavation(tons/cum)												
10	State illegal mining/encroachments outside the lease boundary? Percentage of quantity mined out outside the -lease boundary.	--										
11	Method of working											
	I. Category type: (a) Mechanised (b) Semi — Mechanised (c) Manual	Opencast Mechanized Mining Method	2-6									
	II. Construction and design of haul roads											
	a) Dimension as per the statutory requirements which were followed or otherwise	Haul roads are laid as per applicable norms	--									
	b) Number of vehicles plying on the main haul roads inside the mine and the approach road to the pit located outside the mine,if any.	10 Tippers of 10T capacity as per approved mining plan.	2-24									
	c) Are any measures taken to minimise fugitive dust generated form mine haul roads? Does it comply with the CPCB/PCB Guidelines?	Water spraying on haul roads and mine roads, mineral dispatch sprinkling will be done regularly on working days.	4-4									
	d) Is there a possibility that air pollutants emitted from the project area that do not comply with air quality standards as per CPCB/PCB?	Baseline studies undertaken during Winter Season (Dec 2023 – Feb 2024) and the air quality modeling carried out to determine the post project scenario, both show that the air quality standards are in line with the NAAQ limits.	3-1									
12	Mechanized / Semi — Mechanized Method of Mining											
	i. Number of loading / excavating equipments	As per the approved mine plan, 8	2-24									





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
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CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No									
	as per approved mining plan and capacity.	excavators will be used.										
	ii. Number of loading excavating equipments actually being deployed and capacity.	Once the mining operations commence, the equipment will be deployed in accordance to the mine plan.	--									
	iii. Type and number of transporting equipments	As per approved mine plan, 10 Nos. of 10 T Tippers will be used for transportation of minerals.	2-24									
	iv. Type of transporting system used — (a) trucks (b) Any other mode	a)Trucks/Tippers										
	v. Capacity and Number of trucks used as per approved mining plan	10 Nos. of 10T Tippers										
	vi. Capacity and Number of trucks used actually in the mine.	Once the mining operations commence, the equipment will be deployed in accordance to the mine plan.	--									
	vii. Number and capacity of loading equipments and trucks used not in line with approved mining plan <table border="1" style="margin-left: 40px;"> <thead> <tr> <th></th> <th>Capacity</th> <th>Numbers</th> </tr> </thead> <tbody> <tr> <td>Excavator</td> <td>Nil</td> <td>Nil</td> </tr> <tr> <td>Trucks</td> <td>Nil</td> <td>Nil</td> </tr> </tbody> </table>		Capacity	Numbers	Excavator	Nil	Nil	Trucks	Nil	Nil	No deployment of equipments other than those mentioned in the approved mine plan is envisaged.	--
	Capacity	Numbers										
Excavator	Nil	Nil										
Trucks	Nil	Nil										
	viii. Impact of excess deployment of loading equipments (excavators) and transporting equipments on environment.	No deployment of equipments other than those mentioned in the approved mine plan is envisaged.	--									
	a) Air Pollutants	Nil	--									
	b) Water Quality	Nil	--									
	c) Land Quality	Nil	--									
	d) Noise Quality	Nil	--									
	ix. Does the deployment of loading equipments (excavators) and trucks fulfil the statutory requirements as per MMR 1961, with respect to the site conditions?	Yes	--									
13	Method of Rock Breaking/Material preparation for the excavation:											
	i. Methodology adopted											





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
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CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
	a) Drilling and blasting	The mine will continue to be worked as opencast mechinsed mine with excavator, drill, rock breakers in combination with controlled blasting.	2-24
	b) Rock Breakers	Breaking will be carried out with rock breaker appropriately as per requirement.	2-24
	c) Rippers	Not Applicable	--
	d) Surface Miners	Not Applicable	--
	e) Direct Mucking by excavators	Not Applicable	--
	f) Manual Means	Not Applicable	--
	g) Any other methods or combination of above	Nil	--
	ii. In case of drilling and blasting method		
	a) Type of blasting: short hole or deep hole	Deep hole blasting	--
	b) Whether controlled blasting technique adopted? If yes, specify the technique with details of study, year study	Controlled blasting techniques, Delay detonators and will be used.	--
	c) Impacts due to blasting defined as per the studies, if any carried out previously as indicated	The effects of blasting vibration is studied and the expected PPV due to blasting is provided under Section 4.4.2, Chapter-IV.	4-30
	d) Dust pollution	Mitigative measures such as wet drilling, water sprinkling, avoiding blasting during high wind periods, etc. help to ensure that there is no major impact on the dust pollution front.	4-4
	e) Noise level (dB(A))	Plantation, proper maintenance of equipments, etc	4-28
	f) Ground vibration studies and Fly rock projection	The effects of blasting vibration is studied and the expected PPV due to blasting is provided under Section 4.4.2, Chapter-IV.	4-30
	iii. Impact of preparation of Ore and waste on environment	There is no ancillary process involved such as crushing or screening.	--





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
	a) Air Pollution	Not Applicable	--
	b) Noise Pollution	Not Applicable	--
	c) Water Pollution	Not Applicable	--
	d) Safety Standards	Not Applicable	--
	e) Traffic Density	Not Applicable	--
	f) Road Condition (Vulnerability)	Not Applicable	--
14.	Construction and Design of Dumps.	There is no proposal for storage of minerals. Only waste dumps are present and proposed in the lease area.	--
	a) Place/Location	--	--
	b) Approach to Dump form the mine distance and safety standards.	--	--
	c) Area of extent occupied	--	--
	d) Dimension of Dump and No. of terrace with heights (benches)	--	--
	e) Vegetation covered.; If yes specify the details of plants	--	--
15.	Construction and Design of Waste Dumps		
	i. Numbers and Locations as per approved Mining Plan	3	
	ii. Specify whether reject dumps are located within or outside mining lease	The waste dumps are located within the lease area	--
	iii. Area occupied in excess of the approval mining plan	Dump area is as per approved mine plan only.	--
	iv. Dimension of terracing, light, shapes, etc., Dump as per approved Mining Plan	3 Dumps upto maximum height of 26m during plan period	
	v. Fresh/Existing Dimension height, shape, width. etc., of Dumps in the mine.	Section 2.7, Chapter-II	2-24
	vi. Volume/Quantity added to the waste/Dump during the violated period.	It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 during the period 2000-01 to 2017-18 without environmental clearance.	13-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	vii. Approach to the Dump-Dimension, distance.	Good approach exists	
	viii. Number of and type of equipments deployed in Dump.	--	--
	ix. Provision of Garland drains around the Dumps.	Surface runoff management structures like garland drain, check dams, retaining walls, settling pond etc. as explained above will be constructed and as such there will not be any appreciable impact on surface water quality which in turn can affect the bio diversity of the area.	4-34
	x. Any vegetation made on the slopes.	As per the approved mine plan, the total dump area at the end of the conceptual period will be stabilized by means of plantation.	4-42
	xi. Provision of safety standards.	Yes. Terracing, dump slopes are provided as per standards	--
	xii. Impact of Waste/Dumps on environment.		
	a) Air Pollution	Wind erosion of dumps is one of the causes of air pollution. In order to prevent this, mitigative measures such as water sprinkling, provision of afforestation in inactive OB dumps, proper maintenance of hauling equipment is carried out.	4-4
	b) Water Pollution	Runoff of waste dumps, during monsoon may carry the silt / ore residues and pollute the nearby water bodies. To prevent this, measures such as Dozing and leveling of inactive present dumps and old dump top, Plantation to arrest and prevent erosion, construction of surface runoff management structures like retaining wall, garland drain along the waste dump etc. will be carried out.	4-20
	c) Dust Pollution	Already replied in sl no (a) above	--
	d) Noise Pollution	Will be felt near the active working	4-28





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	ToR Points	Reply	Pg. No
		area only. Proper maintenance of equipments, plantation are and will be carried out.	
	xiii. Terracing	Yes	--
16.	Construction and Design of Ore and sub grade ore/mineral Stacks:-	There is no proposal for mineral stacks or subgrade stacks.	--
	i. Number and Location of Ore stacks.	Not Applicable	--
	ii. Dimension of Ore/sub grade Stacks as per the Approved Mining Plan	Not Applicable	--
	iii. Volume/Quantity added during the violation period.	Not Applicable	--
	iv. Any Screening plant or any other loading equipment engaged during the violated period.	Not Applicable	--
	v. Approach to Ore / sub grade stack — Distance, hazards. Not Applicable	Not Applicable	--
	vi. Safety standards adopted while operation.	Not Applicable	--
	vii. Impact of ore/sub grade on environment		
	a) Air Pollution	Not Applicable	--
	b) Water Pollution	Not Applicable	--
	c) Dust Pollution	Not Applicable	--
	d) Noise Pollution	Not Applicable	--
17	Mine Pit Water		
	i. Intersection of groundwater table, specify the measures taken.	Groundwater intersection is not envisaged	--
	ii. Ground water table as per hydrogeological studies (Pumping test).	Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu. Details of the same is given under Section 3.6, Chapter-III.	3-44
	iii. Provision of Garland drains around pit and dumps	Garland drains are and will be provided around the pit and dumps suitably.	--





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	iv. Water pollution	In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water.	4-33
	v. Management of mine water	Replied in point iv above.	--
	vi. Ultimate pit w.r.t Ground water intersection and management of drainage of groundwater	No groundwater intersection is envisaged.	--
18	Diversion of General Drainage/River/Nallah course for Mining	There is no natural water course passing through this area. No diversion envisaged.	--
19	Clearing of vegetation before the commencement of mining operation-Number of trees(species wise)	Major part of the lease area is already mined out. Hence, no major clearance of vegetation is expected.	4-34
20	Man Power	16	
	a) Statutory Management	8	
	b) Regular (Non-Statutory) Manpower	8	
21	Occupational Health and Safety		
	a) Periodical monitoring of health standards of persons employed as per Mine Act, 1950.	Medical examination of workers at pre-entry level stage of workers, etc., by qualified doctors, with periodical examination of all workers/staff at least once a year, as per DGMS circulars.	4-59
	b) Failure to inform statutory bodies periodically, if any	Nil	--
22	Population (Nearby Habitation)		
	i. Population/Significant Population/Dense Population within the buffer zone of 10 Kms.	Mothaiyanur Village - <0.5Km (W)	3-3
	ii. People displacement due to mining activities	The mining activities will be carried out in the present mine lease area only. As such no R&R is envisaged.	7-9
	iii. Location/ Existence of habitation near the river or any other historical/sensitive/ forest distance.	Environmental setting of study area is provided in Table 3.2, Chapter-III.	3-3





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
	iv. Impact of mining on Surrounding and habitation-Air, Water, Noise, Pollution.	Impact of mining operations on the environment is provided in Chapter-IV .	4-1
	v. Socio Economic aspects of mining.	<ul style="list-style-type: none">• The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.26, Chapter-IV.• In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community. It will be decided based on the need and priority of the locals.	4-44
23	CSR		
	a) Field ground Activities or studies. Actual amount spent towards CSR and the future proposal.	<ul style="list-style-type: none">• The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.26, Chapter-IV.• In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community. It will be decided based on the need and priority of the locals.	4-44
24	NOC from DMG for quantity clarification in respect of settlement of all the amount payable against identified violation	NOC has been issued by Commissionerate of Geology & Mining, Guindy, Chennai and the same is enclosed as Annexure-3A	A-108
25	For the Clearance of EC, Public Hearing is mandated as per MoEF&CC Notification	This draft EIA/EMP report will be submitted for public hearing as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public	7-1





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	ToR Points	Reply	Pg. No
		hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.	
26	Conceptual Post mining land use/restoration	Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area . Infrastructures will be dismantled and reclaimed.	4-33
27	Litigation/Court cases, if any pending	There is no litigation pending against this project.	--
28	Disaster management plan for the mine	Details of Disaster Management Plan is given in Section 7.3.1, Chapter-VII.	7-3



CHAPTER - I

INTRODUCTION



CHAPTER 1 INTRODUCTION

1.1 PURPOSE OF THE REPORT:

The India Cements Limited (ICL) has initiated action towards obtaining environmental clearance for their Mothaiyanur Limestone Mines namely, G.O.No.211 , G.O.No.1086 and G.O.No.76 located in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu. Since the above mining leases are contiguous and adjacent to each other, the mining operations are planned on a contiguous working basis.

As per MoEF&CC notification vide S.O.1533(E) dated 14.09.2006 and its subsequent amendments, non-coal mining projects are divided into the following categories as mentioned in Table No.1.1.

Table 1.1: Screening of Schedule 1(a) Projects

MoEF&CC Notification reference	Project or Activity		Category with threshold limit		Conditions if any
			A	B	
S.O. 1886(E) dated 20.04.2022	1 (a)	Mining of Minerals	> 250 Ha of mining lease area in respect of non-coal mine lease	All mining lease area in respect of minor minerals leases and \leq 250 Ha mining lease area in respect of major mineral mining lease other than coal.	General condition shall apply

Source: MoEF&CC Notifications S.O.1533(E) dated 14.09.2006, S.O.3977(E) dated 14.08.2018, S.O.3194(E) dated 14.07.2022

Considering that all these projects are limestone mines which is a major mineral with lease area <250Ha, they fall under Sector 1(a) i.e.; Mining of Minerals under Category B1. As per MoEF & CC notification, this proposal necessitates preparation of EIA/EMP report along with public hearing and the PP has initiated action towards the same.

As such this combined draft EIA report with separate EMP measures is prepared for these 3 leases based on standard and additional Terms of Reference issued by SEIAA, Tamil Nadu and is in conformance of the generic structure prescribed by MOEF&CC in their notification of September 2006 and the approved review of mining plan.





1.2 IDENTIFICATION OF PROJECT & PROJECT PROPONENT:

1.2.1 IDENTIFICATION OF THE PROJECT:

G.O.No.211, G.O.No.1086 and G.O.No.76 of Mothaiyanur Limestone Mines is located in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu. Their details are provided below:

Table 1.2: Details of Mothaiyanur Limestone Mines

G.O. No	Village	Survey No	Extent		Type of land
			Acre	Ha	
211	Chinnagoundanur	15/1, 16/2, 18, 25/2 etc	125.57	50.84	Non-forest Patta land
1086	Chinnagoundanur	17, 23/1, 24/1, 25/1, 33/1B part, 33/2, 33/3, 33/4, 51/2B part, 52/5 part, 153/2	12.02	4.865	Non-forest Patta and Revenue land
76	Chinnagoundanur	48, 63, 66	19.77	8.005	Non-forest land

Since the above mining leases are contiguous and adjacent to each other, the mining operations are planned on a contiguous working basis. Site vicinity map has been described in Figure 1.2. The limestone produced from this mine will be transported to the cement plant in Sankari located about 4.5Km on the south eastern side of the mine through dedicated road.

Figure 1.1: Site Vicinity Map

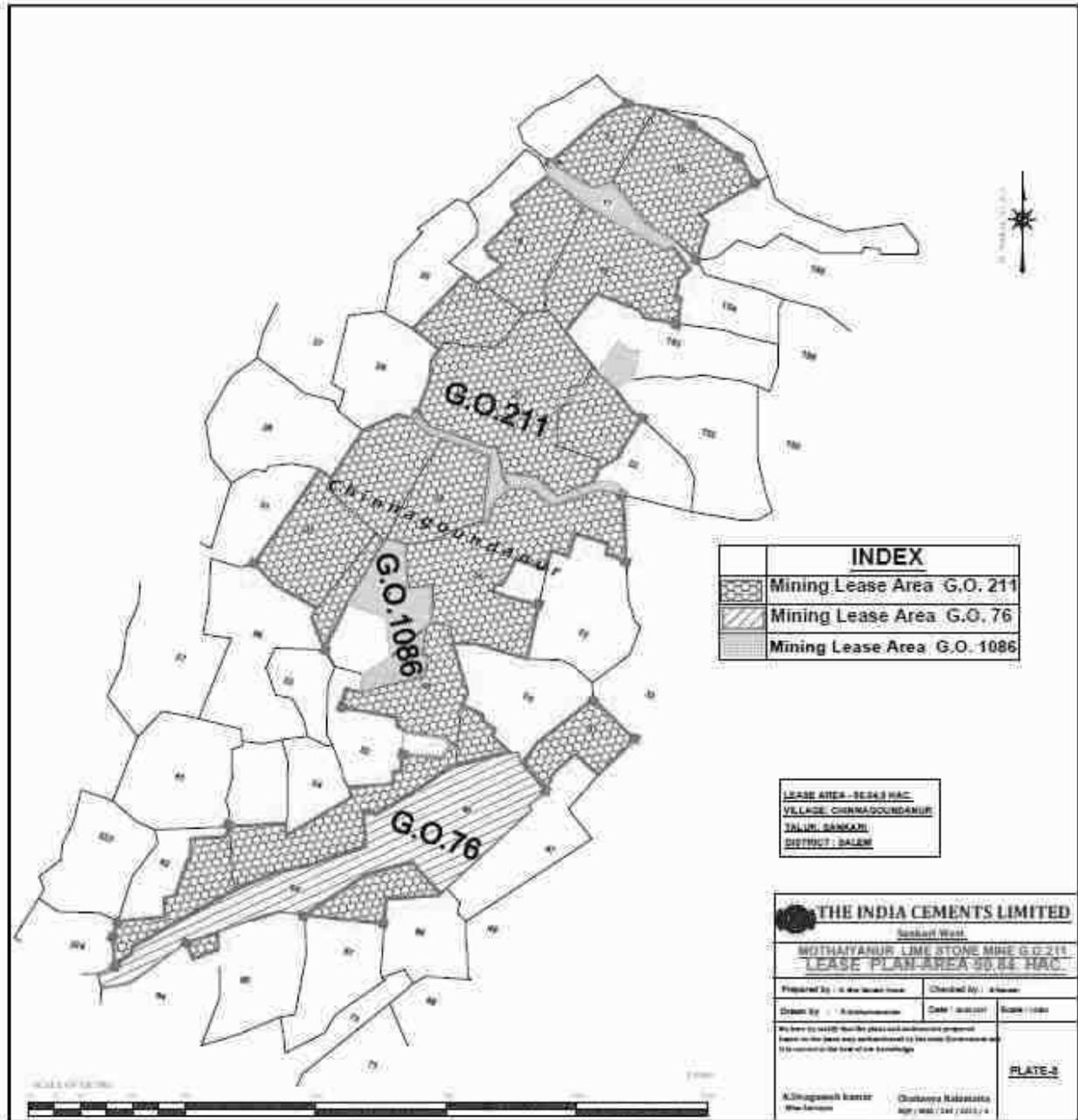


Source: Google Earth





Figure 1.2: Lease Plan





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Table 1.3: Identification of project – Salient Details

Project Name	Mothaiyanur Limestone Mines (G.O.211)	Mothaiyanur Limestone Mines (G.O.1086)	Mothaiyanur Limestone Mines (G.O.76)
Extent	50.84 Ha	4.865 Ha	8.005 Ha
Production	0.5 MTPA	0.012 MTPA	0.61 Lakh TPA
Ultimate Depth	75m	75m	40m

Source: Review of Mining Plan, Approved ToR

1.2.1.1 Statutory Approvals:

Table 1.4: Mining Lease Details

Particulars	GO 211	GO 1086	GO 76
a) Original lease granted as	GO No 3360	GO No.1086	GO No.1504
Lease Period	20 years	20 years	20 years
Valid From	29.12.1964	20.03.1978	10.09.1962
Valid To	28.12.1984	19.03.1998	09.09.1982
b) First renewal	GO No.449	GO No.1086*	GO No: 271
Lease Period	10 years	20 years	6 Years
Valid from	29.12.1984	19.03.1998	09.03.1983
Valid to	28.12.1994	19.03.2018	09.09.1988
c) Second renewal	GO No. 211	Application on 17.02.1997	GO No.76
Lease Period	10 years	--	10 Years
Valid from	29.12.1994	--	08.02.1989
Valid to	28.12.2004	--	09.09.1998
d) Application for Third renewal made on	30.06.2003	--	21.08.1997
As per MMDR Amended Act 2015 extended up to	31.03.2030	31.03.2030	31.03.2030
Mining operation commenced from	1964	1978	1963
Mining operation discontinued on	Prior 2014	Prior 2014	Prior 2014
Lease reference	Annexure – 1A	Annexure – 1B	Annexure – 1C

*It has been considered as renewed on deemed extension as per rule 24A (6) of Mineral Concession Rules 1960.

Table 1.5: Review of Mining Plan Approval Details

Particulars	GO 211	GO 1086	GO 76
Period	2024-25 to 2028-29	2023-24 to 2027-28	2022-23 to 2026-27
Approval authority	Regional Controller of Mines, IBM, Chennai		
Letter no	NO TN/SLM/LST/ROMP-1727.MDS dated 15.12.2023	NO TN/SLM/LST/ROMP-1698.MDS dated 19.12.2022	NO TN/SLM/LST/ROMP-1678.MDS dated 15/12/2021
Reference	Annexure – 2A	Annexure – 2B	Annexure – 2C





1.2.1.2 History of the project:

Presuming that Environmental Clearance is to be obtained at the stage of lease renewal only, application for obtaining EC was initially submitted to MoEFCC in 2014 and subsequently mining operations were stopped as per MoEFCC directions and Terms fo Reference under violation category was applied. Though GO 211 and GO 76 falls under violation category, factually no production violation is involved while considering the base 1993-94 production level. In case of GO 1086 there is no limestone production from year 2014-15 and as such it is not a violation case. NOC is issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and its given vide Annexure-3A and 3C respectively for GO 211 and 76 and Annexure-3B for GO 1086.

1.2.1 IDENTIFICATION OF THE PROJECT PROPONENT:

The India Cements Limited (ICL) was established in 1946 and the first plant was setup at Sankarnagar in Tamilnadu in 1948. Since then it has grown in stature to many plants spread over Tamilnadu, Andhra Pradesh, Telangana, Maharashtra & Rajasthan. ICL is having one of its cement plant at Sankari West, Salem district, Tamilnadu for production of cement with capacity of 1.70 million tonnes per annum. Lime stone requirement of this cement plant is met from various leases of ICL in the region and also from external sources. ICL is one of the market leader in cement technology, cement manufacture and marketing and because of its high quality standards of final product, it has attained a reputed brand acceptability in southern India as well as all over the country.

The Company is the market leader with a market share of 28% in the South. It aims to achieve a 35% market share in the near future. The Company has access to huge limestone resources and plans to expand capacity by de-bottlenecking and optimisation of existing plants as well as by acquisitions. The Company has well established brands- Sankar Super Power, Coromandel King and Raasi Gold. The company has cement plants / grinding units at the following locations and the capacities have reached 16.40 MTPA.

TAMIL NADU

- i.. At Sankarnagar, Tirunelveli District -2.05 MTPA
- ii. At Sankari, Salem District – 1.70MTPA





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

- iii. At Dalavoi, Perambalur District – 1.85 MTPA
- iv. Grinding unit at Ponneri, Tiruvallur District, Chennai- 1.1 MTPA

ANDHRA PRADESH

- i. At Chilamkur, Cuddapah district – 1.46 MTPA
- ii. At Yerraguntala, Cuddapah district – 0.73 MTPA

TELANGANA

- i. At Vishnupuram, Nalgonda district – 2.50MTPA
- ii. At Malkapur, Renga Reddy District - 2.4 MTPA

RAJASTHAN

- i. Banswara, Rajasthan – 1.5 MTPA

MAHARASHTRA

- i. Parli, Maharashtra – 1.1 MTPA

The Sankari Plant was established in the year 1961. It is located at Sankari west which is situated about 40 Km from Salem town in the Salem – Coimbatore National Highway (NH-47).The cement plant has dry process kiln having clinker production capacity of 1600 Ts/ day.

Table 1.6: Identification of Project Proponent

1	Proponent Name	The India Cements Limited
2	Address	Coromandal Towers, No.93 Santhome High Road, Karpagam Avenua, R.A.Puram, Chennai
3	Contact Number	9710911585
4	Email-ID	skd_gmoffice@indiacements.co.in

The Proponent can meet the requirement the financial requirement of this project and will ensure that the mining activities are carried out as per statutory requirements.

1.3 BRIEF DESCRIPTION OF NATURE, SIZE, LOCATION & PROJECT IMPORTANCE

Table 1.7: Brief Description of Nature of project

S.No	Details	GO.No.211	GO 1086	GO 76
1.	Sector	1(a), Non-Coal Mining	1(a), Non-Coal Mining	1(a), Non-Coal Mining
2.	Type	Violation Project	Regular	Violation Project





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

3.	Category	B1	B1	B1
4.	Mineral Mined	Limestone	Limestone	Limestone
5.	Major/Minor Mineral	Major	Major	Major
6.	Mining method	Opencast Semi mechanized Mining	Opencast Semi mechanized Mining	Opencast Semi mechanized Mining

Table 1.8: Location of the project

S.No	Particulars	Details
1.	Location	Chinnagoundanur village, Sankari Taluk of Salem District, Tamil Nadu.
2.	Corner Coordinates	Latitude: 11°29'45.1684"N to 11°28'49.6096"N Longitude: 77°48'04.5933"E 77°47'30.3248"E
3.	Toposheet Number	58E/15

Location details are elaborated in Para 2.3, Chapter-II.

1.3.1 IMPORTANCE TO THE COUNTRY AND REGION:

This is a captive mine of M/s India cements and it meets part of the limestone requirements of Sankari Cement plant. The mining operations by ICL in this area have brought improvement in social, infrastructural and employment sectors in the area. Besides above benefits, financial accruals will be derived by Central, State governments and local Panchayats on account of royalty, cess, duties, etc. Cement being a core infrastructural sector component, limestone supplies for cement manufacture also assumes great importance. In view of the above aspects, it can be seen that the project is a prime need for growth of backward area of the region and for GDP growth in state/central areas. The project will also improve the Human Development Index (HDI) of the area.

1.4 SCOPE OF THE STUDY:

Table 1.9: Online Proposal Details

Particulars	GO.No.211	GO 1086	GO 76
Terms of Reference	SEIAA-TN/F.No.6733/SEAC/ TOR-632/2019 dated 12.07.2019	SEIAA-TN/F.No.6567/SEAC/TOR-630/2019 dated 12.07.2019	SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 dated 17.02.2021
Amendment/ Corrigendum if any	--	SEIAA-TN/F.No.6567/SEAC/TOR-	SEIAA-TN/F.No.6856/SEAC/TOR-





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

		630/CORRIGENDUM/2023 dated 28.07.2023*	847/2019/Amendment dated 28.11.2022#
ToR validity Extension	<ul style="list-style-type: none">• SEIAA-TN/F.No.6733/SEAC/TOR-632/Ext/ dated 26.09.2022• TO24B0000TN5476378A dated 16.07.2024	<ul style="list-style-type: none">• SEIAA/TN/F.No.6567/SEAC/TOR-630/Extn/2019 dated 26.09.2022• TO24B0000TN5791761A dated 16.07.2024	TOR Identification No. TO24B0000TN5779670A dated 25.06.2024
Baseline Data Collection	Winter Season (Dec 2023 – Feb 2024)	Winter Season (Dec 2023 – Feb 2024)	Winter Season (Dec 2023 – Feb 2024)

**ToR validity was inadvertently mentioned as upto 11.07.2023. Hence corrigendum obtained*

The quantity was inadvertently mentioned as 991715m³ of Roughstone, 60708m³ of Weathered Formation and 80944m³ of Gravel for a period of 5 years upto 27m depth. Hence amendement obtained that project involves peak production of 0.61 Lakh TPA Limestone upto 40m depth and life of mine about 14 years.

Based on the terms of reference, data collection, the Environmental Impact Assessment was carried out for the project area (core zone and the buffer zone (10km radius from the core zone) and the following studies were covered:

- Collection of primary and secondary data relevant to the project.
- One-Season baseline monitoring for environmental parameters such as air, water, noise, soil, flora & fauna, etc. Analysis of parameters in in-house laboratory.
- Documentation of EIA/EMP report with inclusion of relevant studies conducted by other bodies into the EIA/EMP report.
- Identification of significant environmental parameters that are prone to get affected due to pollution. Namely, Air, Water, Noise, Soil, Biological and Land Environment.
- Evaluation and determination of suitable mitigation measures to reduce and control the said pollution.
- Prediction of post project concentration (baseline + incremental) with respect to air environment for core zone and buffer zone.
- Formulation of an Environmental Management plan including administrative aspects for proposed implementation of mitigative measures in time.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

This draft EIA/EMP report will be submitted for public consultation, as per rules and procedures in this respect, as per the EIA notification 2006. The opinions, concerns and objections, if any, of the surrounding public and other stake holders connected, will be taken into consideration and compliance report thereon will be submitted to SEIAA, Tamil Nadu in the final EIA/EMP report.

1.5 LEGAL AND REGULATORY FRAMEWORK:

The Ministry of Environment, Forests & Climate Change, State and Central Pollution Control Board are the primary operational agencies/ regulation agencies in India with respect to Environment. The various environmental regulations and subsequent amendments which govern the project have been provided below:

- ❖ Environment Protection Act, 1986
- ❖ EIA Notification, 2006
- ❖ Air (Prevention and Control of Pollution) Act, 1981
- ❖ Water (Prevention and Control of Pollution) Act, 1974
- ❖ Noise Pollution (Prevention & Control) Rules, 2000
- ❖ Solid Waste Management Rules, 2016
- ❖ Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016
- ❖ Mines-Act 1952
- ❖ Mines & Minerals (Regulation and Development) Act, 1957
- ❖ Metalliferous Mines Regulations (MMR), 1961
- ❖ Explosives Rules, 2018

1.6 STRUCTURE OF THE EIA/EMP REPORT:

Chapter-1: Introduction: This chapter provides the background information of the project, brief description of nature, size and location of proposed project, environmental setting of project, importance of project and scope of the study.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Chapter-2: Project Description: This chapter deals with the need for the project, location, project implementation, details of mining activity, other technical and design details.

Chapter-3: Description of the Environment: This chapter presents the methodology and findings of one season field study undertaken to establish the environmental baseline conditions, which is also supplemented by secondary published literature.

Chapter-4: Anticipated Environmental Impact & Mitigation Measures: This chapter cover detailed impact of the proposed project on different environmental components during operation phase of mining project. The chapter will also deal with the measures to be adopted to mitigate the adverse impact of the proposed mine development and underscores the areas of concern, which need mitigation measures.

Chapter-5: Analysis of Alternatives (Technology & Site): This chapter describes the analysis of various alternative sites and the technology considered for the mining activities.

Chapter-6: Environmental Monitoring Program: This chapter presents the environmental monitoring requirements for effective implementation of mitigatory measures during operational phase of the proposed project. The frequency and reporting of monitoring programme is also outlined in this chapter along with its cost.

Chapter-7: Additional Studies: This chapter describes various risks associated during operational stage of the project. A disaster management plan to minimise the risks or to combat the associated risks is also discussed. The public hearing details will be incorporated in this chapter in the final EIA/EMP after the successful completion of public hearing. The summary of additional studies and mine closure plan is also briefed here.

Chapter-8: Project Benefits: This chapter describes various benefits of the project to the community in the vicinity and as well as to the region on the whole.

Chapter-9: Environmental Cost Benefit Analysis: This chapter has to be carried out if specifically required as per scoping stage. As this is not specifically mentioned in scoping, accordingly detailed study in this regard is not carried out.

Chapter-10: Environment Management Plan: This chapter presents the details of institutional arrangements for environment protection and conservation and the capital and recurring cost of implementing the various mitigation measures stated in this EIA/EMP report.





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Chapter-11: Summary and Conclusions: This chapter contains the summary and conclusion of the overall EIA studies.

Chapter-12: Disclosure of Consultants Engaged: This chapter contains the list of various experts engaged in preparing the EIA report along with brief description of the consultancy services.

Chapter-13: Remediation Plan, Natural & Community Resource Augmentation Plan: Enumeration of aspects of violation, Assessment of ecological damage, quantification of damage assessment & remediation plan as applicable.

* * * * *



CHAPTER - II



**PROJECT
DESCRIPTION**



CHAPTER 2

PROJECT DESCRIPTION

2.1 TYPE OF PROJECT:

Mothaiyanur Limestone Mines namely, G.O.No.211, G.O.No.1086 and G.O.No.76 involve the production of 0.5MTPA, 0.012MTPA and 0.61 Lakh TPA of Limestone respectively within their lease areas.

2.2 NEED & JUSTIFICATION FOR THE PROJECT:

Mothaiyanur Limestone Mines of The India Cements Limited are existing for many decades. It has brought about positive environmental and socio-economic impacts to the area. The project will result in further growth with regards to employment and livelihood. Implementation of environmental control measures is envisaged to negate the negative environmental impacts to a suitable amount. This project is proposed to be carried out for the following reasons

A) Availability of good quality proved reserves:

The review of mining plan shows the availability of 4.474 Mil.T of Limestone for GO.No.211, 0.108Mil.T of Limestone for G.O.No.1086 and 0.696Mil.T of Limestone for G.O.No.76. Limestone produced from these mines will meet the part raw material requirement of the captive ICL Sankari cement plant.

B) Growing Demand:

The Sankari Plant was established in the year 1961. It is located at Sankari west which is situated about 40 Km from Salem town in the Salem – Coimbatore National Highway (NH-47).The cement plant has dry process kiln having clinker production capacity of 1600 Ts/ day. The limestone requirement of Sankari plant is mostly met from various working mines of ICL in Sankari area.

C) Techno economic viability of the scheme:

Mechanized opencast method of mining with conventional drilling and blasting is proposed in the mine, which is a proven technology in our country. With good market demand it is economically viable. Under the above circumstances it can be concluded that techno economically this scheme is feasible.





D) Economic and Socio Economic Benefits:

Continual revenue to Government by way of Royalty, DMF, NMET etc., Socio economic benefit to the locals due to CSR/CER activities

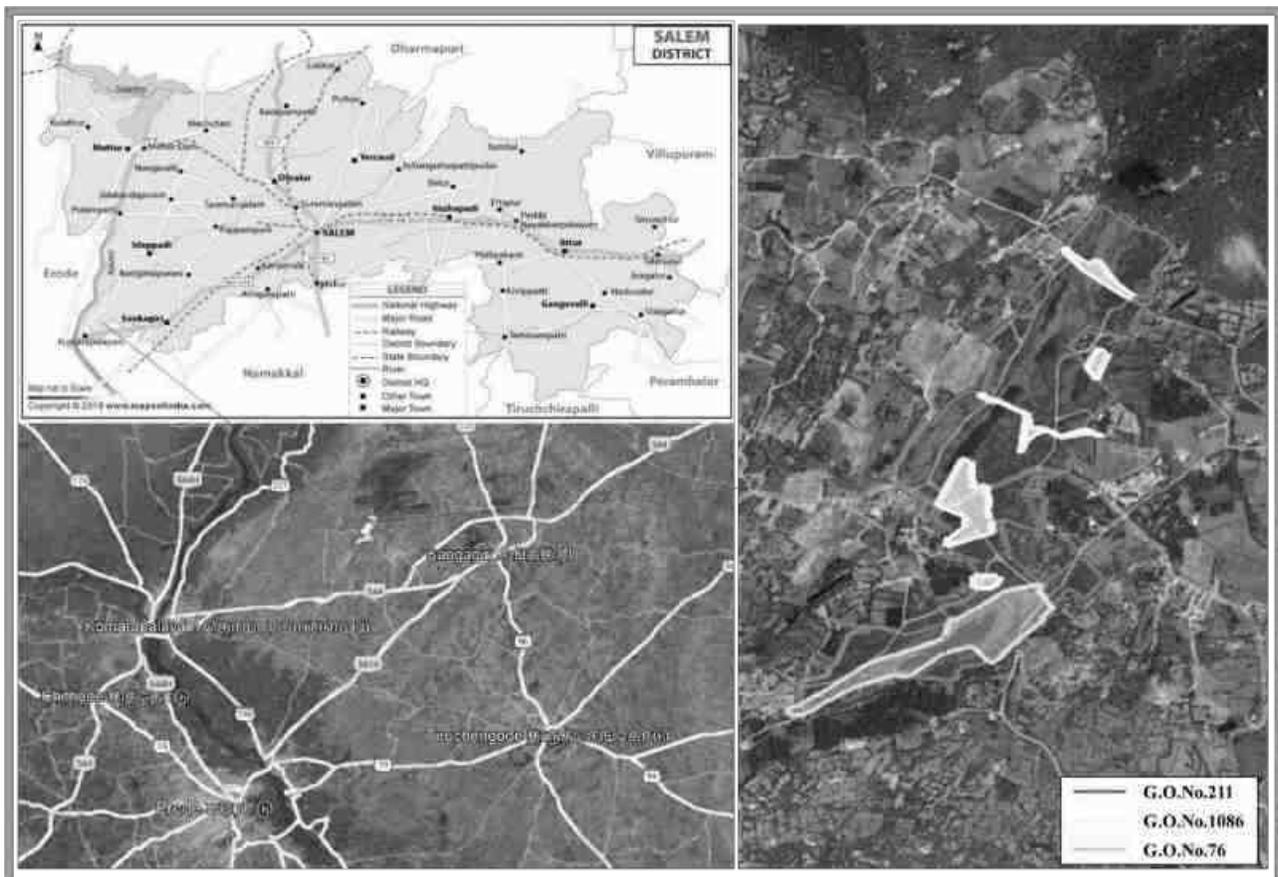
Considering all the above said favorable factors it is practically possible to achieve the proposal within the planned period and this proposal is fully justified.

2.3 LOCATION:

A. Location of the project:

The project site is located in in Chinnagoundanur village, Sankari Taluk, Salem District, Tamil Nadu. The location map has been shown below in Figure 2.1.

Figure 2.1: Location Map



Source: Google Earth





B. Approachability of the lease area:

The limestone mined out from the lease area will be transported to the proponent's own cement plant located at a distance of 4.5Km by road on the south eastern side of the lease area through dedicated road. It is well connected to the NH-544 (Salem-Coimbatore Highway) located at a distance of 3Km on the southern side of the lease area. Approachability is shown in Figure 2.2

Figure 2.2: Approachability Map



Source: Google Earth

Satellite imagery showing corner co-ordinates, Combined village map, of the lease area is shown in Figure 2.3 & 2.4





Figure 2.3:Satellite Imagery Showing Corner Coordinates

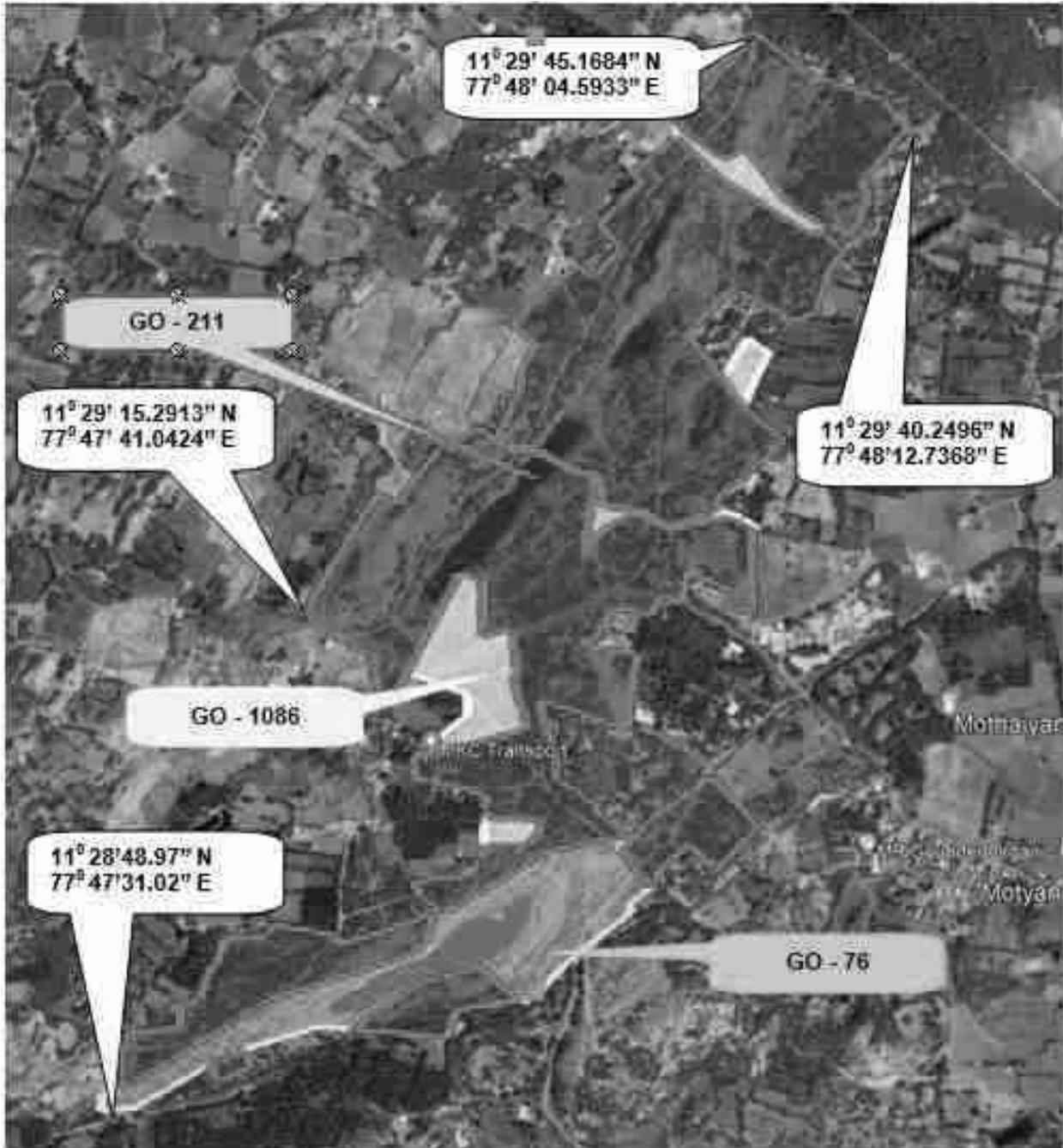
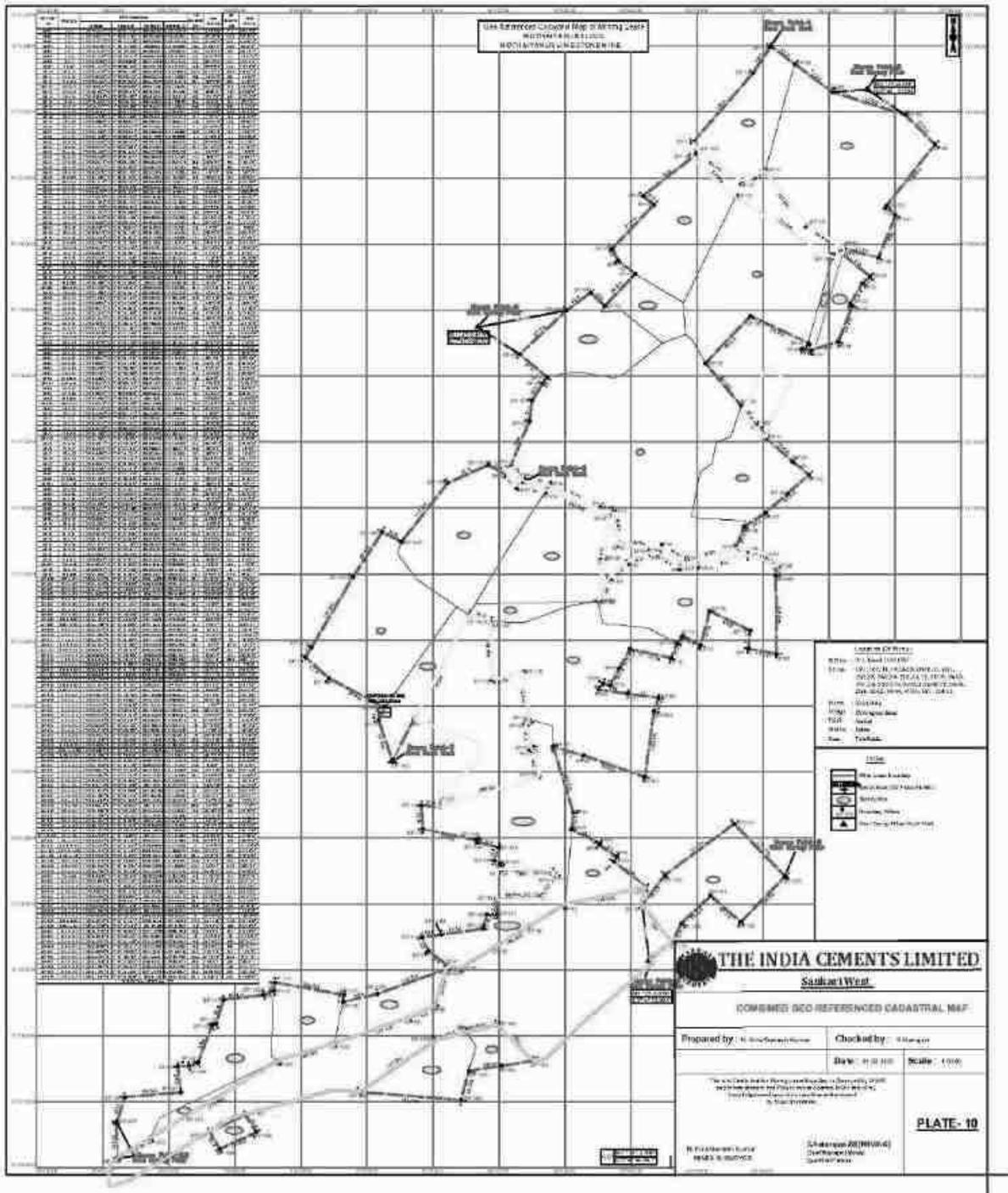




Figure 2.4: Combined Village Map





SITE PHOTOGRAPHS





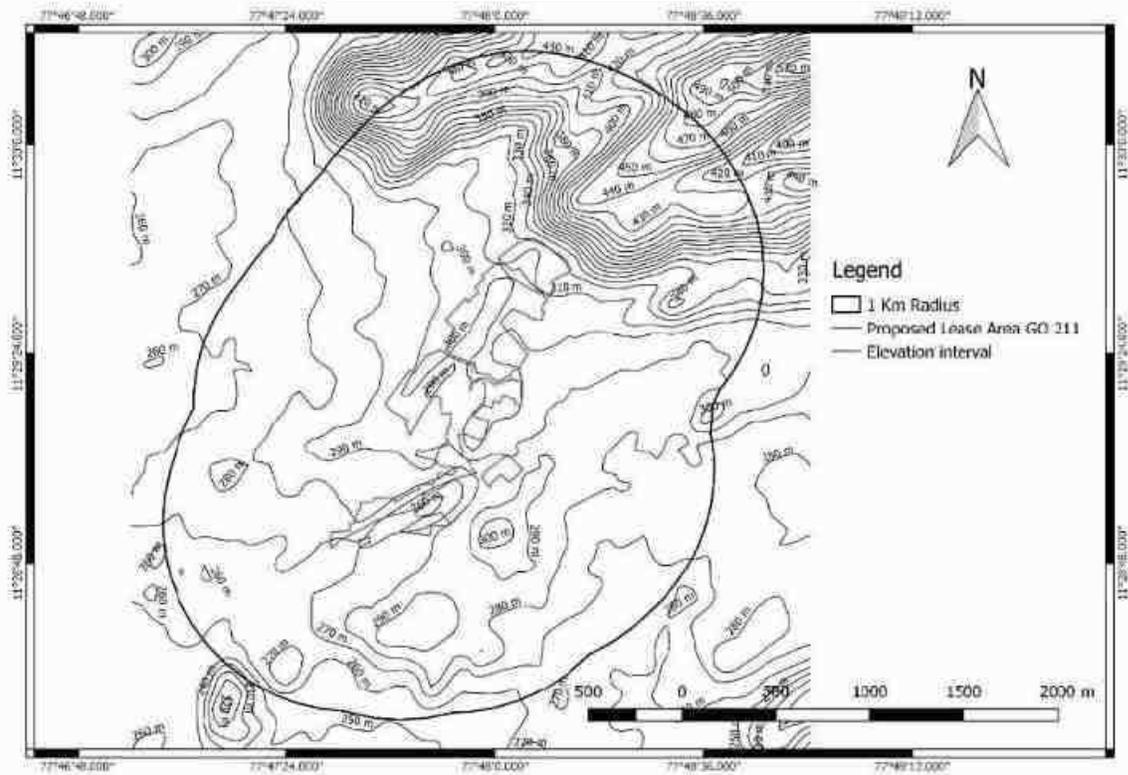
C. Topography and Drainage:

The lease area is gently sloping with surface RL level varying from 271 to 310 RL and sloping towards south.

There are no streams or water bodies within the lease area. In the 10km of buffer zone major water bodies Sarabhanga river – 6.0km – NW, Mettur East bank canal – 4.2 km – NW flows from the lease area. During rainy season water falling in the lease area naturally drains towards lowest RL and connected to small seasonal drains/streams.

The contour map showing the topography and elevations for a radius of 1Km radius is provided in **Figure No.2.5.**

Figure 2.5: Contour Map of 1Km Radius



D. Land Use Details:

The mining lease in the area is under operation by project proponent, since 1964. The entire lease area is in ICL Possession. Mining operations were carried out for decades and almost the entire lease area is already used for mining and allied activities.





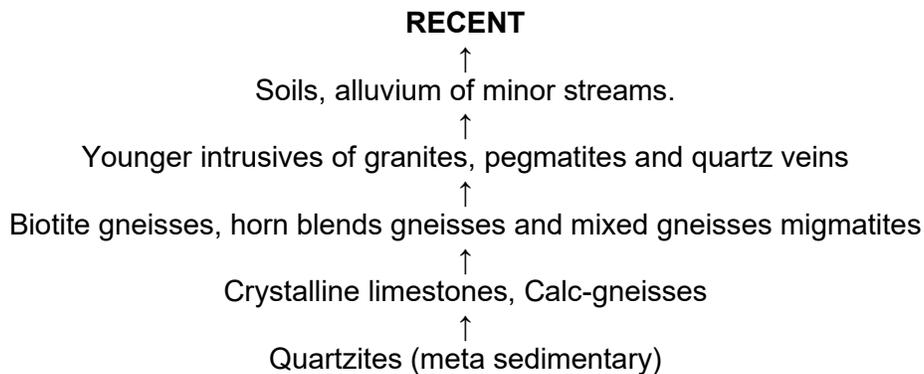
2.4 GEOLOGY:

2.4.1 Regional Geology:

The area around Sankari is a part of the Archaen complex of peninsular India. The geological formations consists of biotite - hornblende gneisses, calc-gneisses and crystalline limestone intruded by younger granites, pegmatites and quartz veins. The calc-gneisses and crystalline limestone represent ancient calcareous sediments which have suffered repeated metamorphism, intrusions by granites and folding during the Archaen age. The harder pink granites which are abundant in the region stand out as hills and knolls resisting erosion. The disposition of the crystalline limestone bands in this region reveals that they maintain a structural conformity with the batholiths, by a pattern of skirting around granitic mass from west to east and continuing southward from Sankari drug to Tiruchengode and beyond.

2.4.2 Geology of the Lease Area:

The rocks occurring in this region are metamorphosed crystalline limestone, associated with biotite gneiss of Archaean. The limestone is medium to coarse grained and also white to pink in colour and Biotite gneiss is a major reject material in the band, The band having a greater number of intrusions of Pegmatite and quartz veins. The limestone band is narrow and linear. The deposit striking N-S NE-SW direction and dipping 55° to 60° 70° towards North-east South-east direction. The general geological succession is given below:



The Geological Plan of the area & Cross Section are given as **Figure No. 2.6 to 2.11. Surface plan is shown in Figure No. 2.12 to 2.14.**





Figure 2.7: Geological Cross Section – G.O.211

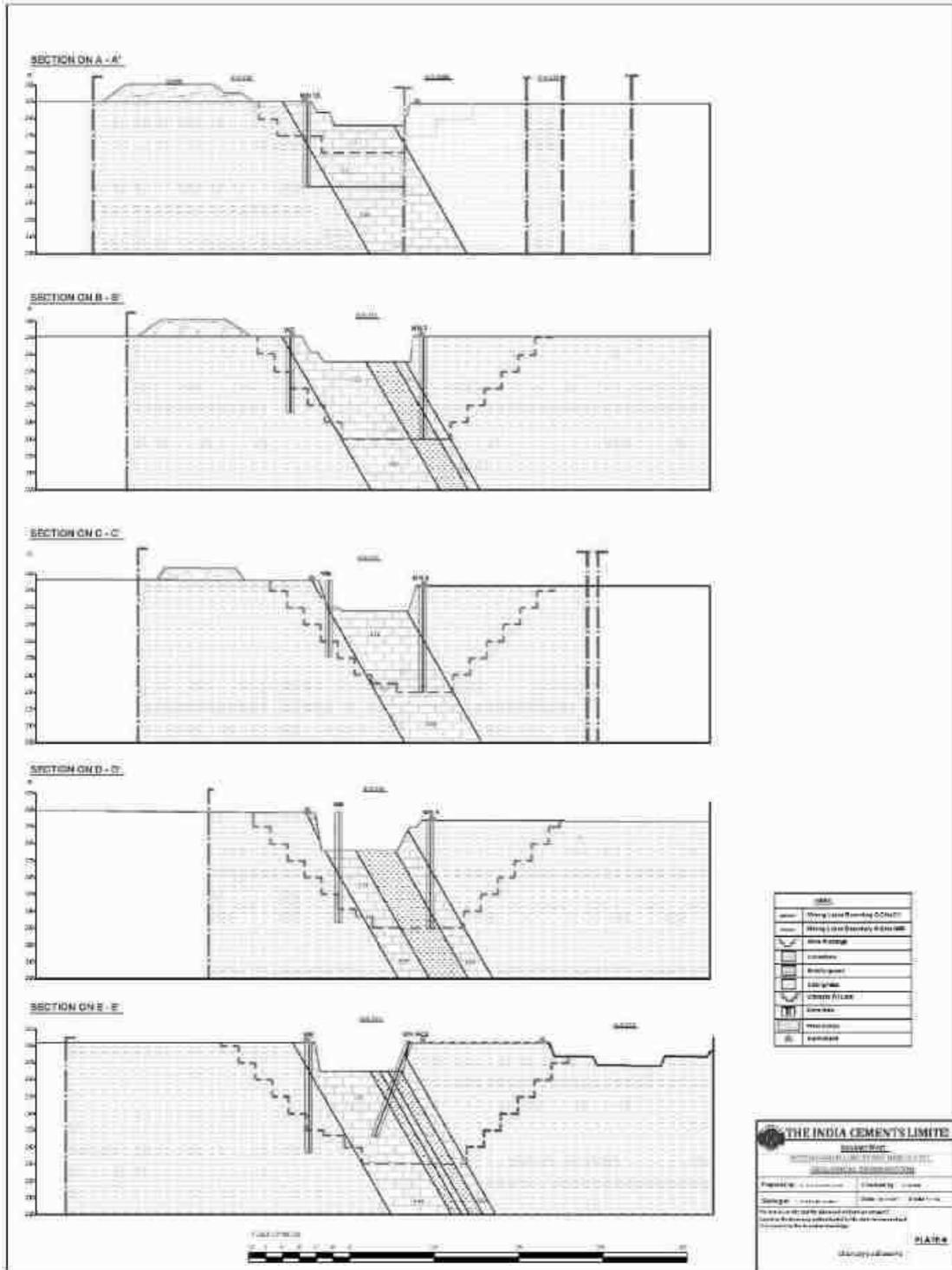




Figure 2.8: Geological Plan – G.O.1086

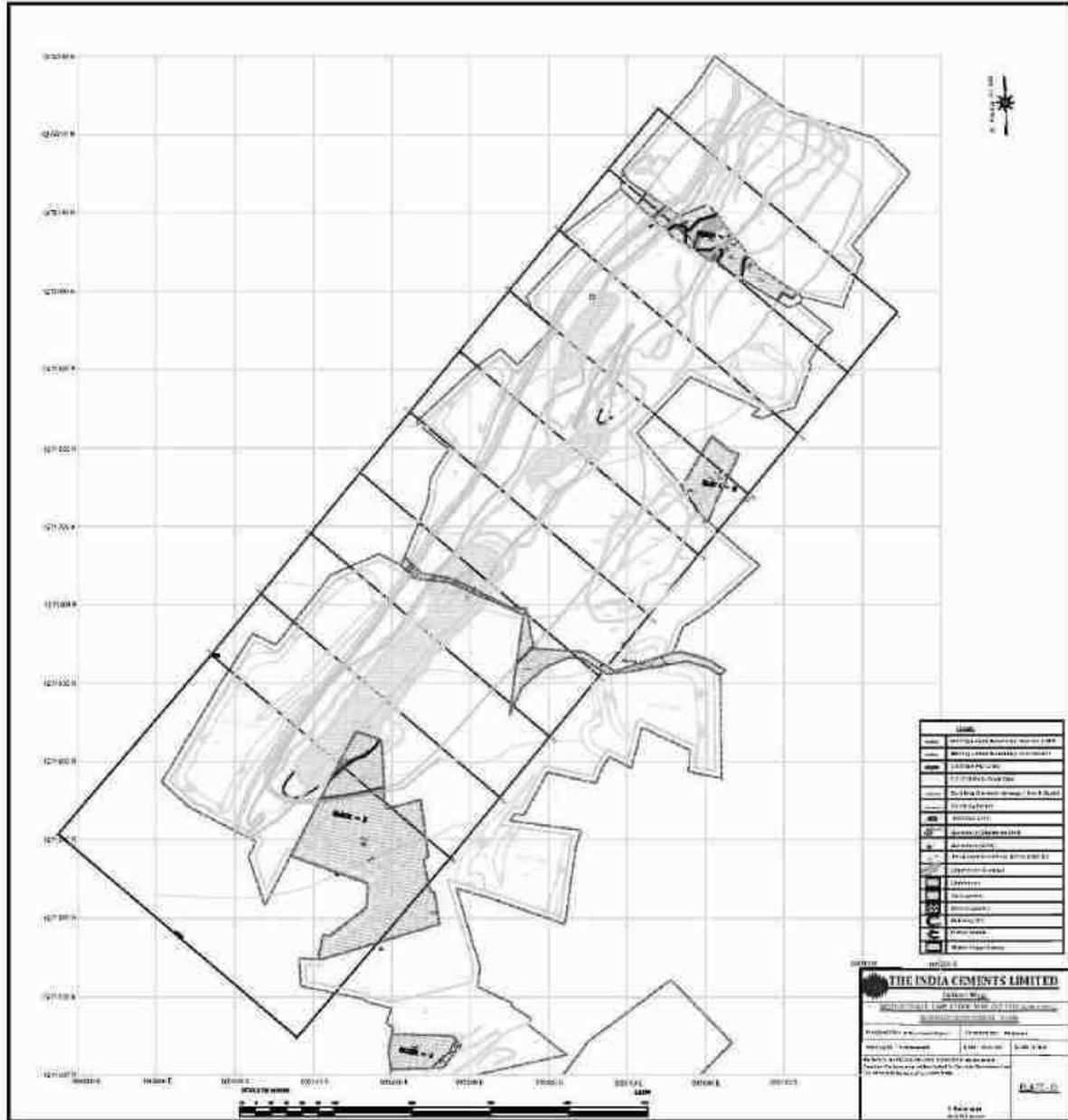




Figure 2.10: Geological Plan – G.O.76

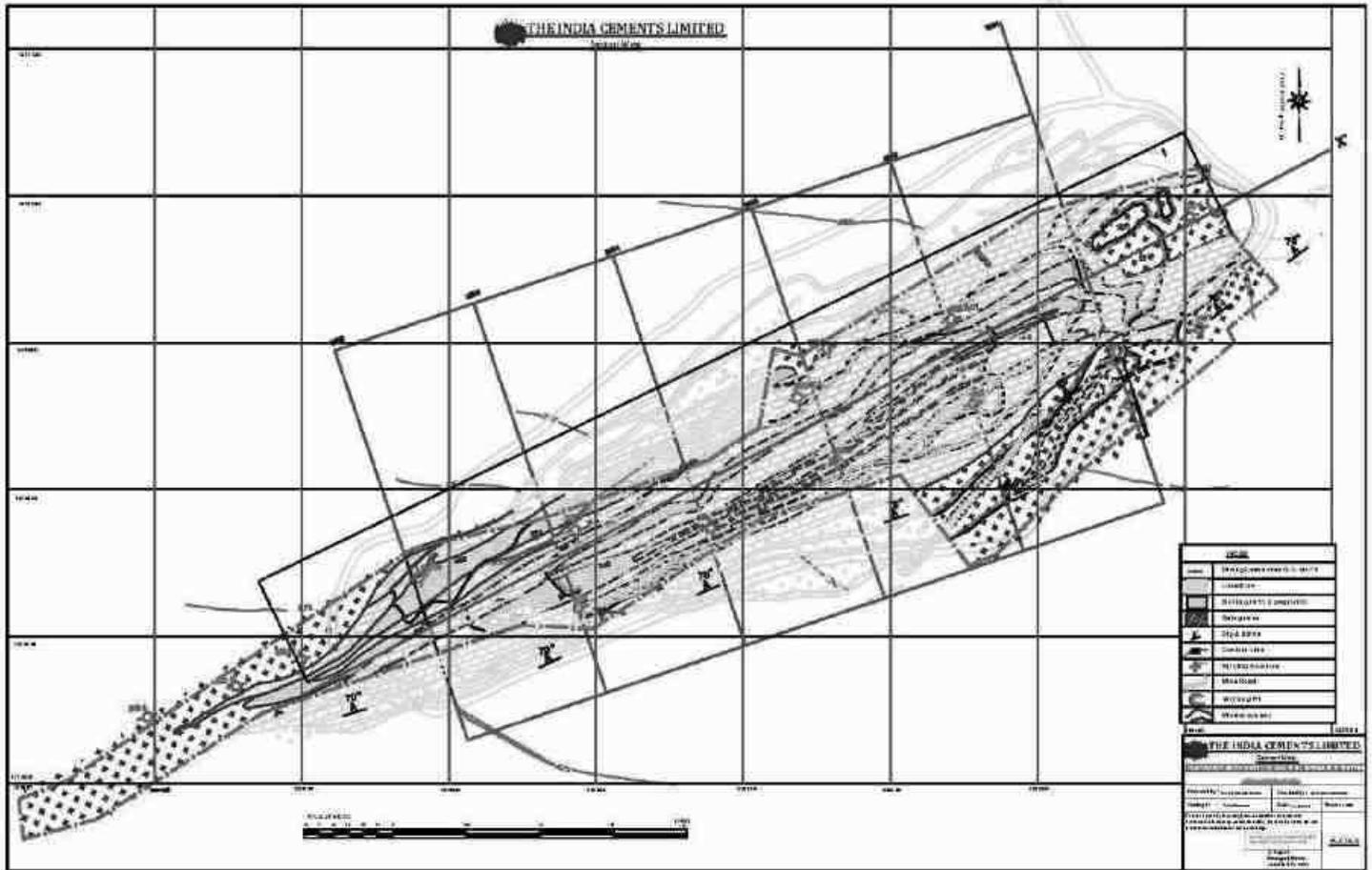




Figure 2.11: Geological Cross Section – G.O.76

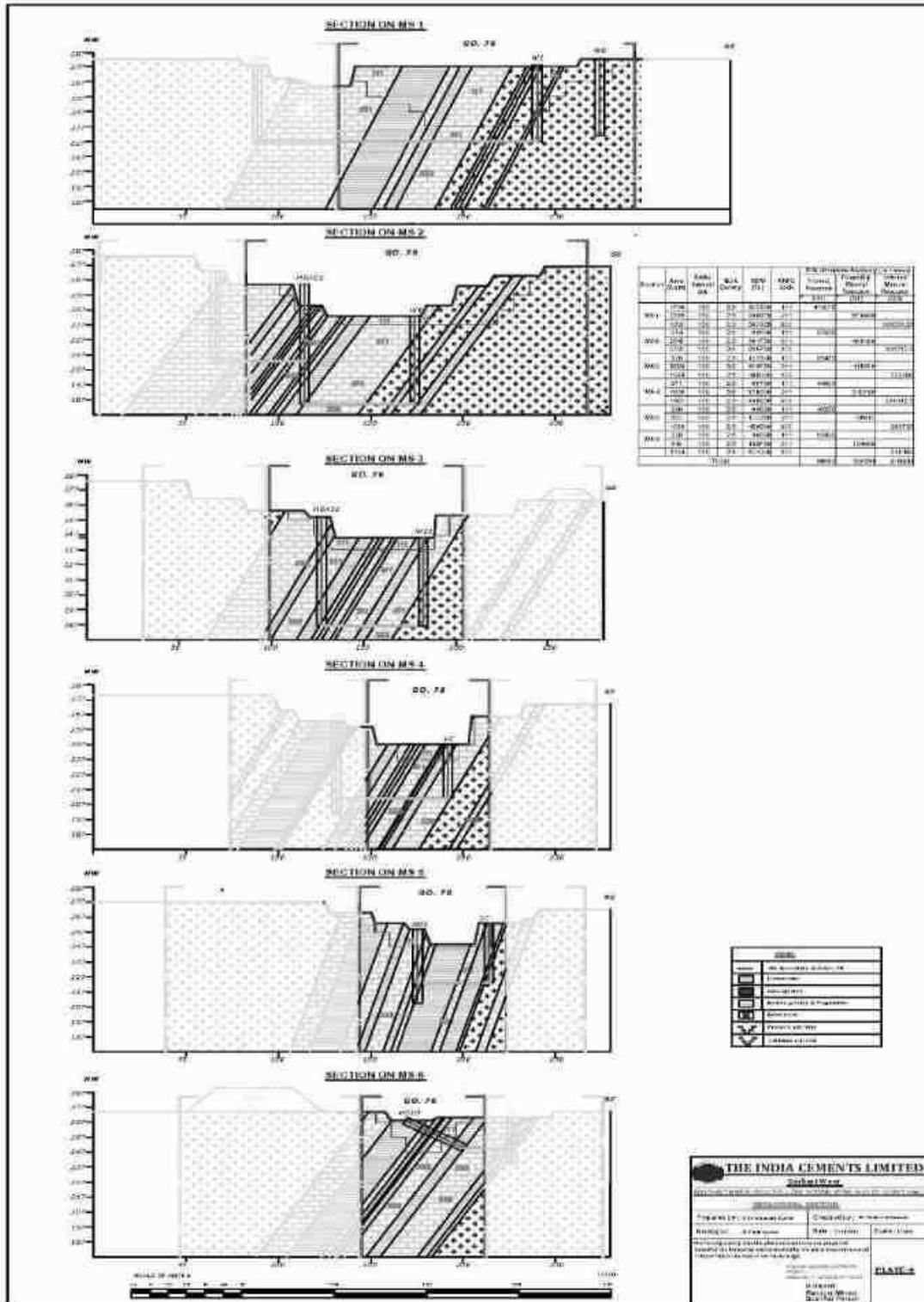
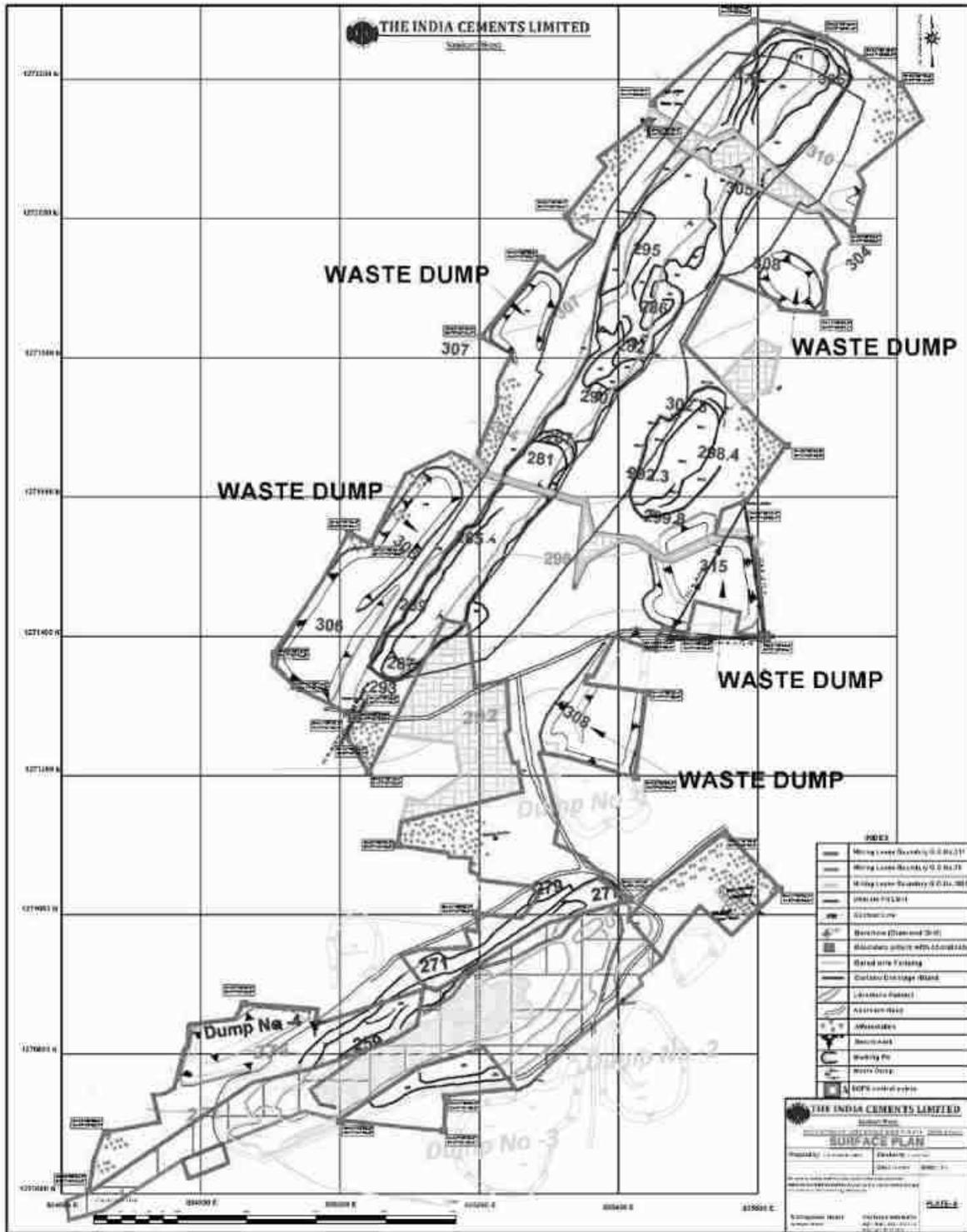




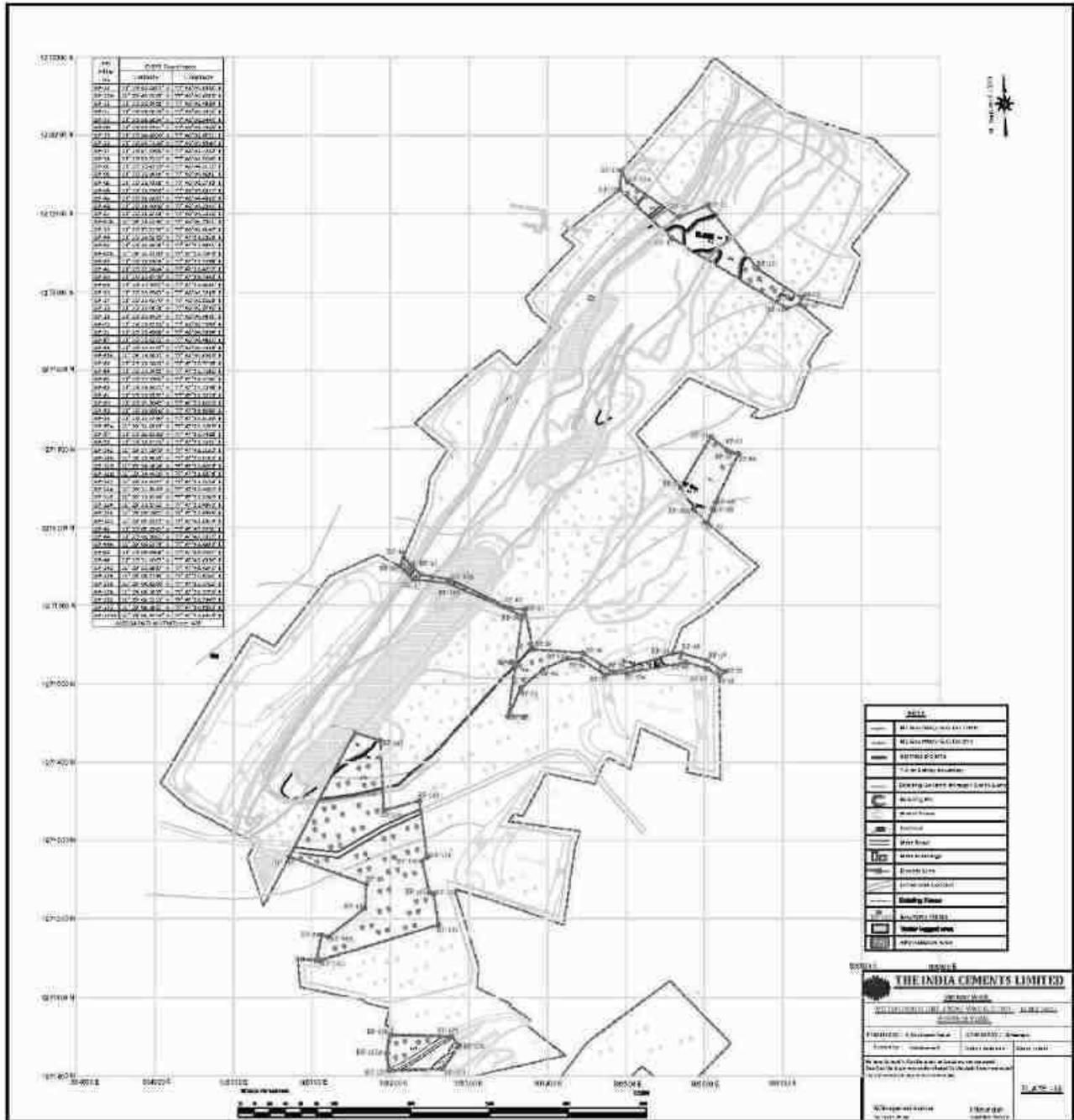
Figure 2.12: Surface Plan – G.O.211





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Figure 2.13: Surface Plan – G.O.1086





2.5 SIZE AND MAGNITUDE OF THE OPERATION:

As already mentioned, Mothaiyanur Limestone Mines namely, G.O.No.211, G.O.No.1086 and G.O.No.76 involve the production of 0.5MTPA, 0.012MTPA and 0.61 Lakh TPA of Limestone respectively within their lease areas. The mining will be done by open cast mechanized mining method.

2.6.1 RESERVES:

Reserves are estimated by geological cross section method and classified as per UNFC classification separately for each of the lease hold area. Its details are as follows:

Table 2.1: Summary of Limestone Reserves & Resources

		GO-211	GO-1086	GO-76	
	UNFC CODE	as on 01.04.2023	as on 01.04.2022	as on 01.04.2021	Grade
A. Total mineral reserve					
Proved mineral reserve	111	4.47	0.1086	0.69	Cement Grade
Probable mineral reserve	121 and 122	-	0.0892	-	
B. Total Remaining Resources					
Feasibility Mineral resource	211	0.84	0.0037	1.86	Cement Grade
Pre-feasibility Mineral Resource	221 and 222	-	-	-	
Measured Mineral Resource	331	-	-	-	
Indicated Mineral Resource	332	-	-	-	
Inferred Mineral Resources	333	2.75	0.1072	2.17	Cement Grade
Reconnaissance Mineral Resource	334	-	-	-	
Total Reserves + Resources		8.06	0.3087	4.72	

2.6.2 MINING METHOD:

Since the Mothaiyanur Limestone mining leases are contiguous and adjacent to each other, the mining operations are planned on a contiguous working basis. The mine will continue to be worked as opencast mechanised mine with excavator, drill, rock breakers in combination with controlled blasting. The entire output from the mine is captively used for cement manufacturing plant at ICL's Sankari cement plant.





Figure 2.15: Mining Flowsheet

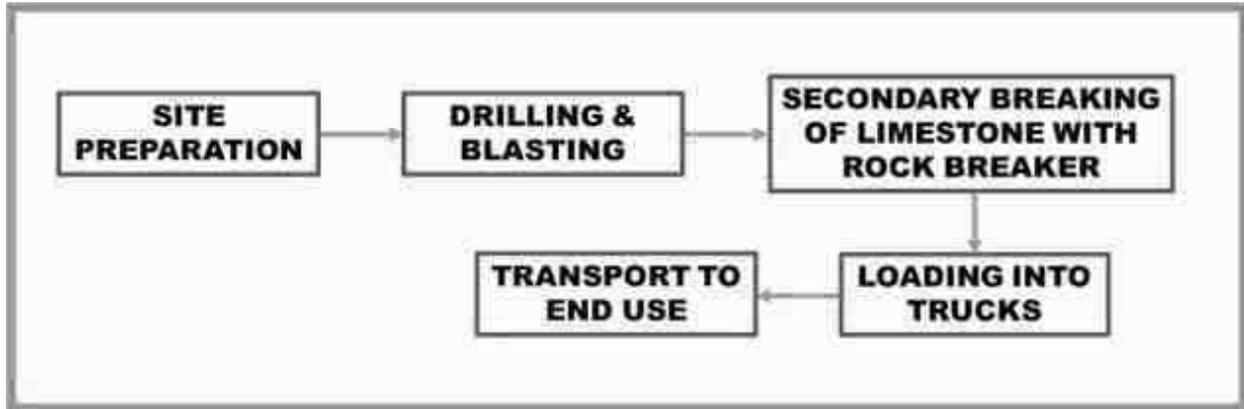


Table 2.2: Details of Equipments

Sl.No.	Make	Capacity	Diameter of Hole(mm)
Drill in T			
1	Atlas Capco	2.00	115.00
2	Sandvik	2.00	35.00
Excavator / Loader in m3			Nos
3	210 Class Excavator	0.90	3
4	Front End Loader HM	3.00	2
5	Cat 323 Rock Breaker	Nil	2
6	JD	0.24	1
Tipper in T			Nos
7	Ashok Leyland	10.00	10
Dozers Details in HP			Nos
8	Dozer	178.00	1

2.6 PROPOSED SCHEDULE FOR APPROVAL AND IMPLEMENTATION:

The proponent propose to implement the production immediately after obtaining all the statutory approvals such as CTO, etc. The proponent will comply with the environmental clearance conditions during mining operations. The schedule of project implementation envisaged for this project is provided below. This is a tentative schedule subject to various factor, hence unforeseen variations may occur..

2.7 TECHNOLOGY AND PROCESS DESCRIPTION:

The Mothaiyanur Limestone Mine was worked as opencast mechanized mine during the earlier workings and the same will be continued. Rock breakers in combination with controlled blasting are practiced in this mine. Drilling machines area also deployed based on the requirement. The





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

blasted limestone will be sized based on the requirement using rock breakers, then loaded in to tippers for further transportation to the ICL cement plant. The waste material will be loaded in to tippers and will be dumped in the earmarked location.

Table 2.3: Existing Pit Configuration – G.O.211

Pit	Avg. Length (M)	Avg. Width (M)	Avg. Depth (M)	Area in ha
Pit – 1	1100	100	23	9.21
Pit – 2	190	100	9	1.52
				10.73

Table 2.4: Existing Pit Configuration – G.O.1086

Pit	Avg. Length (M)	Avg. Width (M)	Avg. Depth (M)	Area in ha
Block 1	51	96	10	0.39
Block 2	4	74	20	0.04
Block 3	60	16	14	0.13
Block 5	27	16	4	0.04
Block 6	45	7	10	0.03

Table 2.5: Existing Pit Configuration - G.O.76

Pit	Avg. Length (M)	Avg. Width (M)	Avg. Depth (M)	Area in ha
Pit – 1	675	96	35	6.1

2.8 PROJECT DESCRIPTION:

2.9 PLAN PERIOD-PRODUCTION & WASTE DISPOSAL:

The limestone production and waste rock development removal is planned simultaneously in order to expose the limestone. The year wise production quantity was drawn based on the captive plants requirement of limestone from this mining lease area. The yearwise planned development and production for the 2 leases are given below:

Table 2.6: Yearwise Production– G.O.211

Year	Pit ID	OB Volume (m ³)	OB Quantity (t)	ROM Volume (m ³)	ROM Quantity (t)	Mineral Reject (t) @ 35%	Production Main (t) @65%	OB Ratio to Ore (m ³ /t)	Total Waste (T)	Total Excavation (T)
2024-2025	Pit No 1	7400.00	21164.00	11000.00	27500.00	9625.00	17875.00	0.2691	30789.0	48664.0
2025-2026	Pit No 1	74960.00	214385.6	87200.00	218000.0	76300.00	141700.0	0.3439	290685.6	432385.6
2026-2027	Pit No 1	383200.0	1095952	307600.0	769000.0	269150.0	499850.0	0.4983	1365102.0	1864952.0
2027-2028	Pit No 1	401800.0	1149148	302960.0	757400.0	265090.0	492310.0	0.5305	1414238.0	1906548.0





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

2028-2029	Pit No 1	443600.0	1268696	307600.0	769000.0	269150.0	499850.0	0.5769	1537846.0	2037696.0
	Total		3749346		2540900.00	889315.0	1651585.00		4638660.6	6290245.6

Table 2.7: Yearwise Production– G.O.1086

Year	Waste Quantity(t)	ROM Quantity(t)	Total Handling (t)	ROM Quantity Saleable Mineral (t)	ROM Quantity Mineral Reject (t)	Ore to OB Ratio (ROM Quantity / Waste Quantity)
2023-2024	4500.00	14500.00	19000.00	9425.00	5075.00	0003.22
2024-2025	16800.00	17550.00	34350.00	11408.00	6142.00	0001.04
2025-2026	18100.00	18168.00	36268.00	11809.00	6359.00	0001.00
2026-2027	15225.00	17738.00	32963.00	11529.00	6209.00	0001.17
2027-2028	13738.00	18398.00	32136.00	11958.00	6440.00	0001.34
Total	68363.00	86354.00	154717.00	56129.00	30225.00	

Table 2.8: Yearwise Production – G.O.76

Year	Total Handling (t)	Waste Quantity (t)	ROM Quantity (t)	ROM Quantity Saleable Mineral (t)	ROM Quantity Mineral Reject (t)	Ore to OB Ratio (ROM Quantity / Waste Quantity)	Grade Range (%)	Total Waste (T)
2022-23	0	0	0	0	0			0
2023-24	4188	0	4188	2722	1466	1:0.54.	38-46	1466
2024-25	0	0	0	0	0			0
2025-26	75750	0	75750	49238	26513	1:0.54.	38-46	26513
2026-27	121250	39000	92250	59963	32288	1:1.19.	38-46	71288
Total	201188	39000	172188	111922	60266			99267

Waste Disposal During Plan Period:

Details of waste generation and its disposal during the plan period of the 3 mining leases are given below:

Table 2.9: Waste Material Handling during the Plan Period - G.O.211

Year	Dump Id	Type of Dump	Proposed Area (ha)	Height (m)	Total Dump Quantity (m ³)
2024-2025	Dump No 3	Waste	0.28	5.00	10765.00
2025-2026	Dump No 3	Waste	1.39	20.00	101638.00
2026-2027	Dump No 2	Waste	2.95	20.00	477310.00
2027-2028	Dump No 2 & 5	Waste	1.93	26.00	494490.00
2028-2029	Dump No 3 &	Waste	2.92	15.00	443600.00
Total					1527803.00

Table 2.10: Waste Material Handling during the Plan Period - G.O.1086

Sl.No.	Year	Dump Id	Type of Dump	Proposed Area (ha)	Height (m)	Total Dump Quantity (m ³)
1	2023-2024	Dump No 1	Waste	0.05	10.00	5200.00
2	2024-2025	Dump No 2	Waste	0.07	12.00	7920.00
3	2025-2026	Dump No 3	Waste	0.08	12.00	9720.00





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

4	2026-2027	Dump No 4	Waste	0.04	15.00	6000.00
5	2027-2028	Dump No 5	Waste	0.06	15.00	9300.00
	Total					38140.00

Table 2.11: Waste Material Handling during the Plan Period - G.O.76

S.N.	Year	Dump Id	Type of Dump	Proposed Area (ha)	Height (m)	Total Dump Quantity (m ³)
1	2022-23	-	-	-	-	-
2	2023-24	Dump 1	Waste	0.053	2	1060
3	2024-25	-	-	-	-	-
4	2025-26	Dump 1	Waste	0.16	21	33264
5	2026-27	Dump 1	Waste	0.33	21	70182
	Total					104506





Figure 2.16: Mine Position at the end of Plan Period - G.O.211

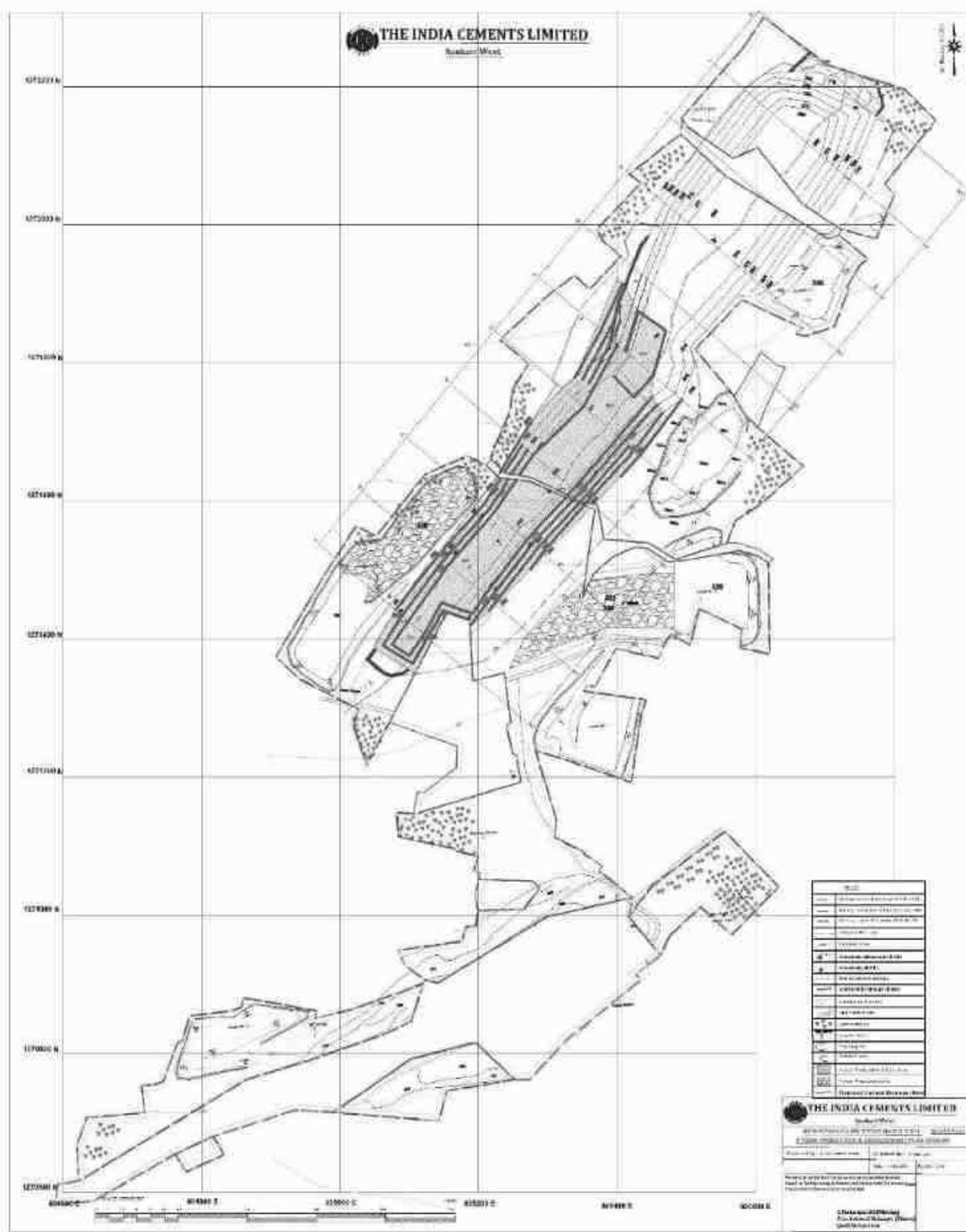




Figure 2.18: Mine Position at the end of Plan Period - G.O.76

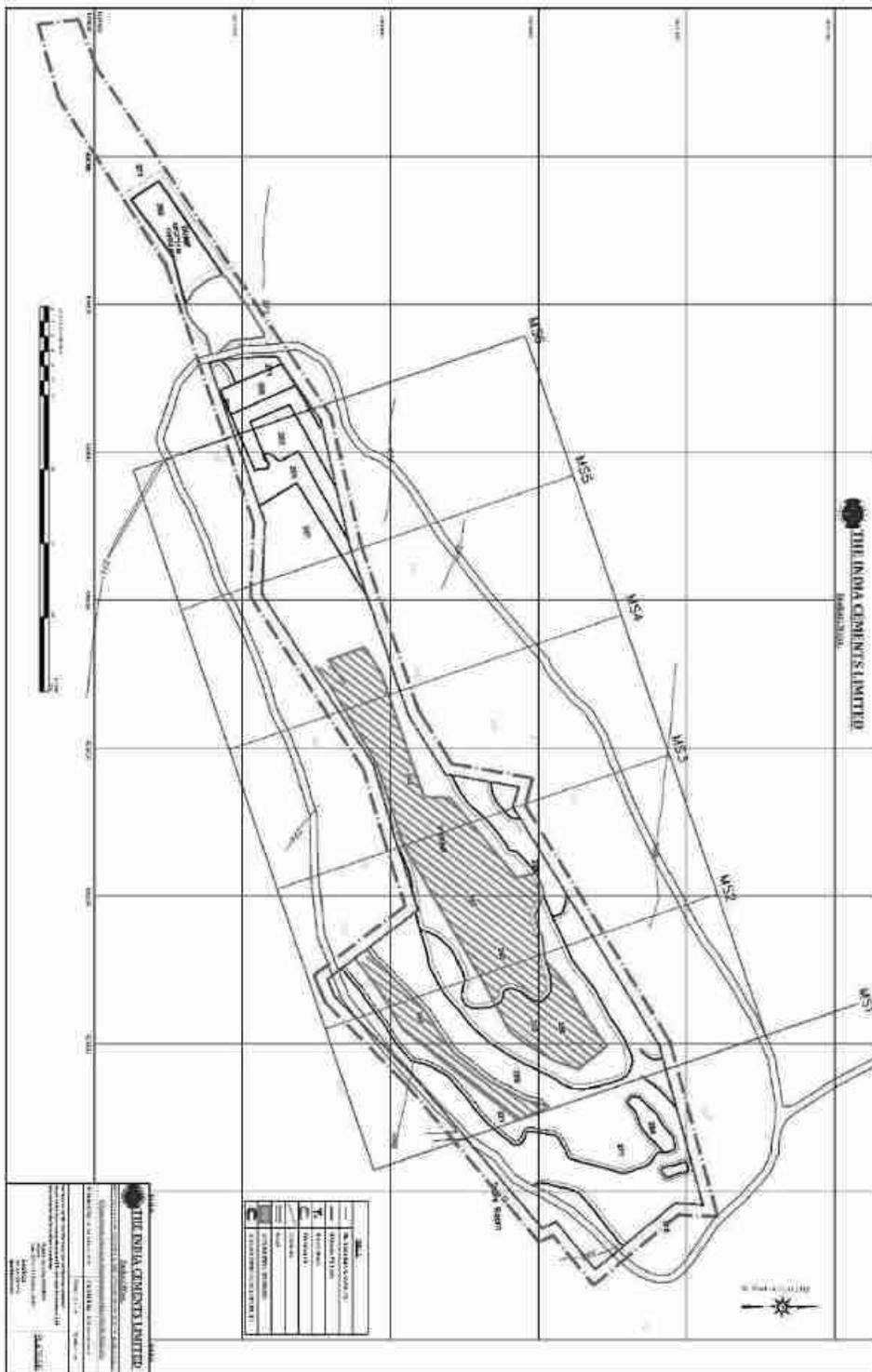




Figure 2.19: Mine Position at the end of Plan Period Cross Section- G.O.211

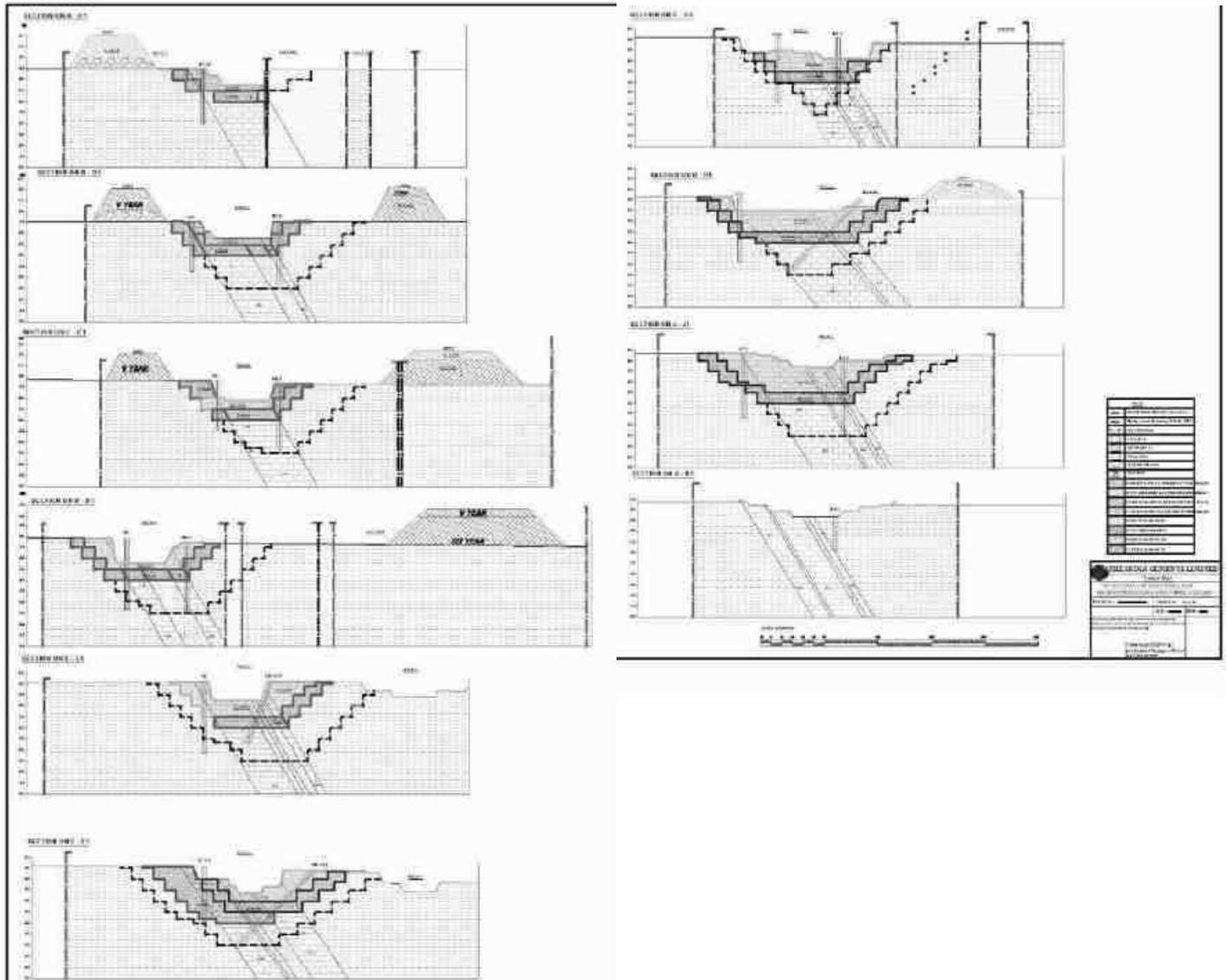
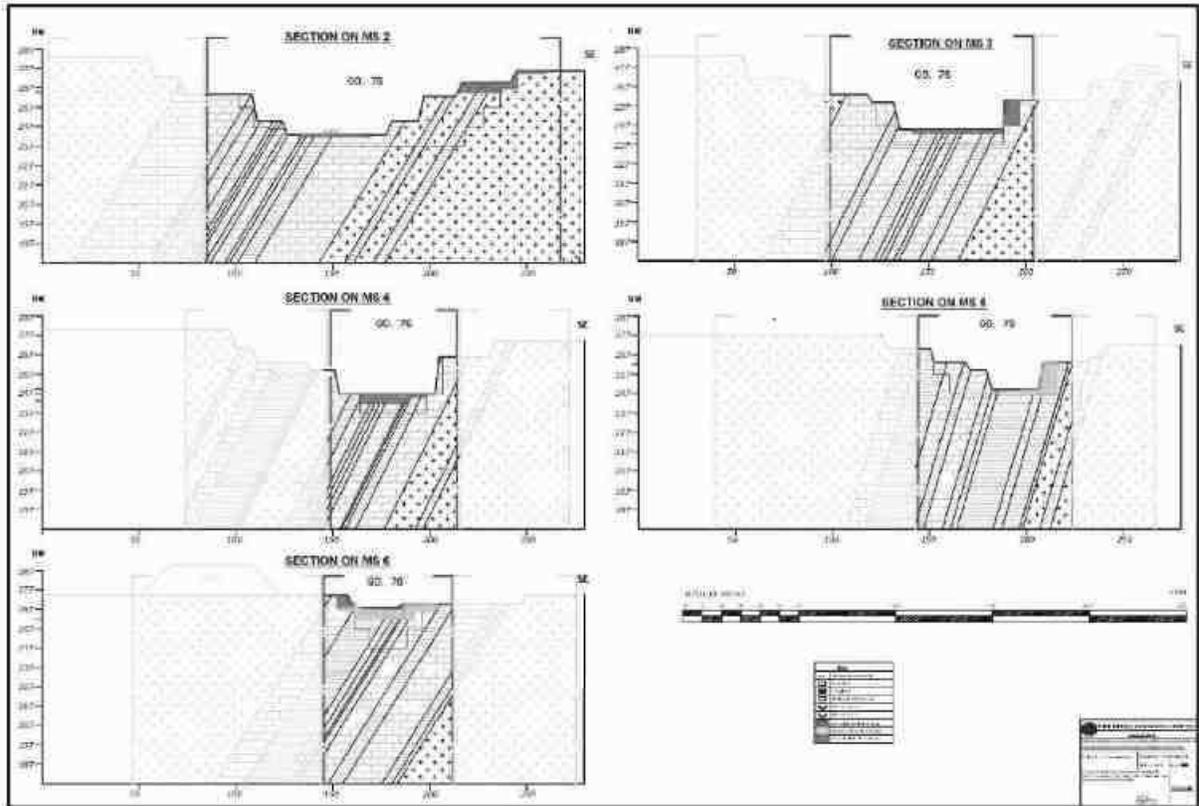


Figure 2.21: Mine Position at the end of Plan Period Cross Section- G.O.76



2.9.1 CONCEPTUAL STAGE:

The balance available mineable reserves will be mined in this stage during the lease period. At the end of the life of mine, the maximum depth will be reached. Ultimately the entire mined out area lease periphery will be properly fenced and will be left as water body. The external dumps will be reclaimed with vegetation.



Figure 2.22: Conceptual Plan - G.O.211

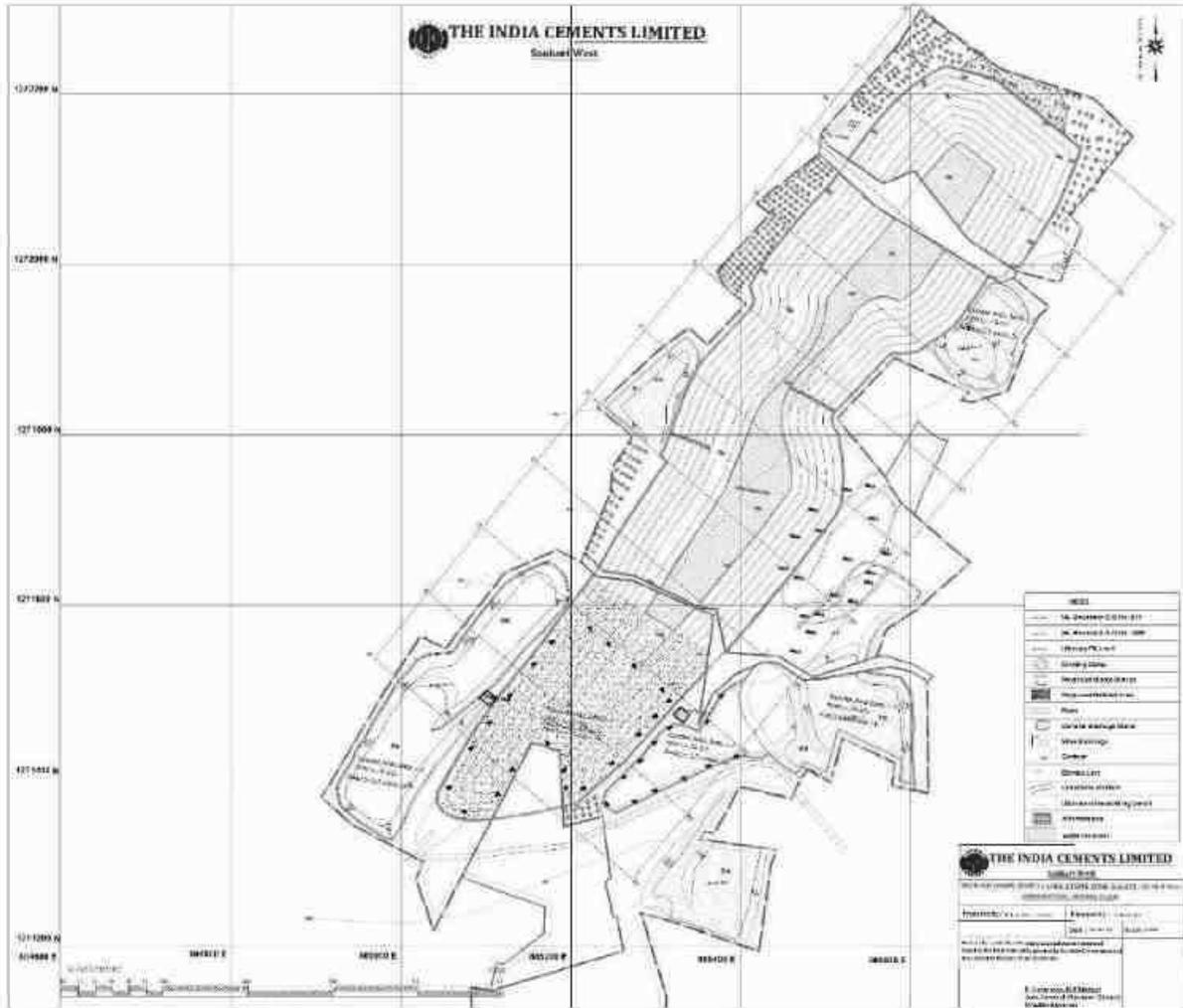




Figure 2.23: Conceptual Cross Section – G.O.211

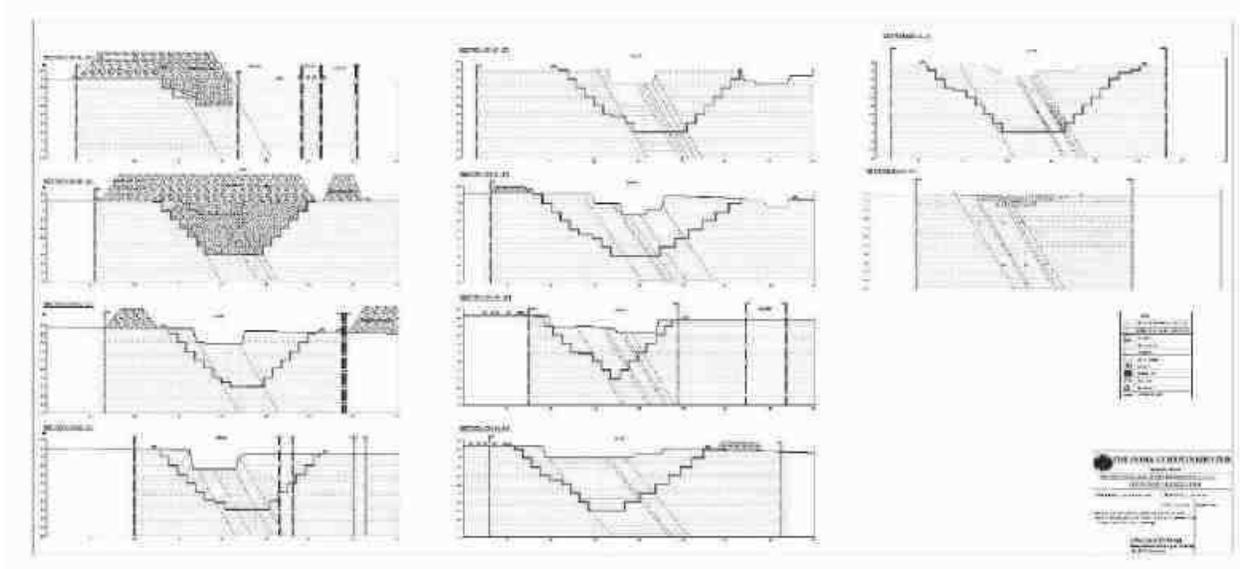




Figure 2.24: Conceptual Plan - G.O.1086

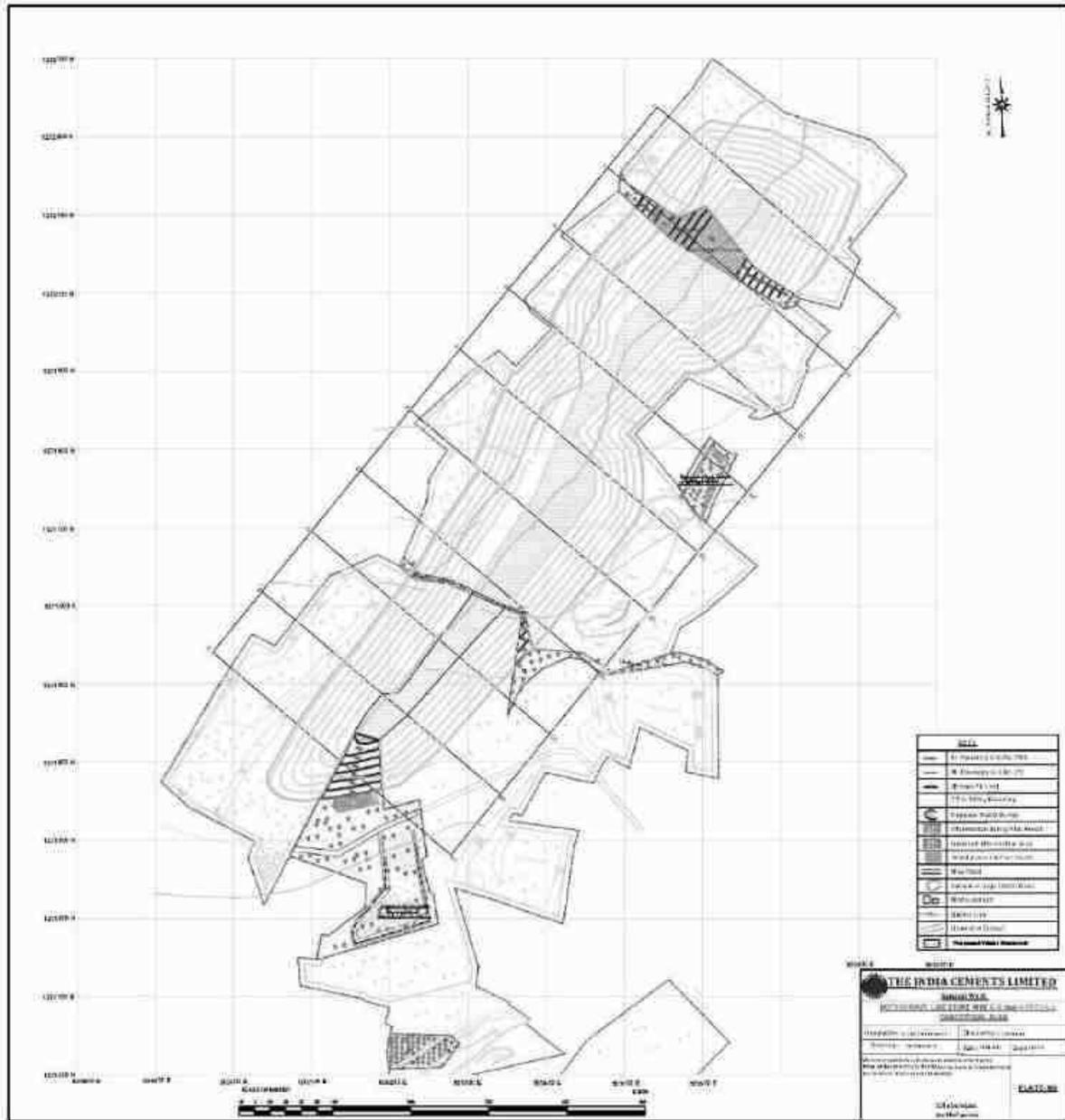




Figure 2.26: Conceptual Plan - G.O.76

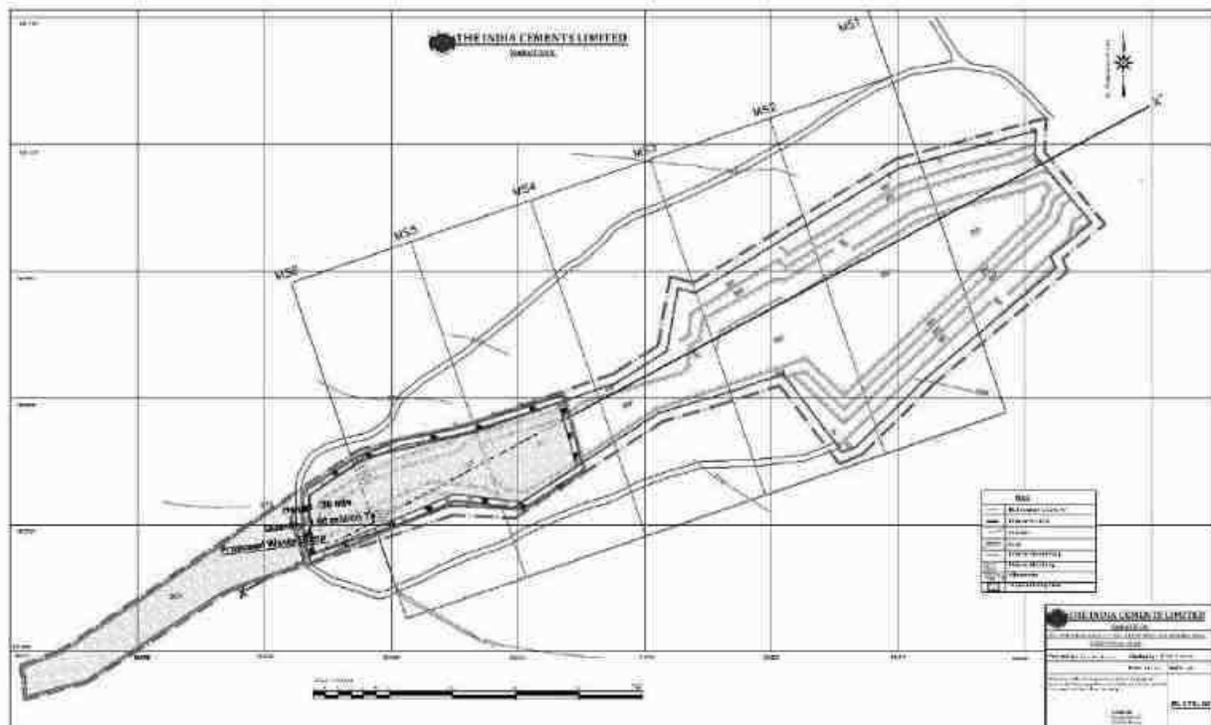
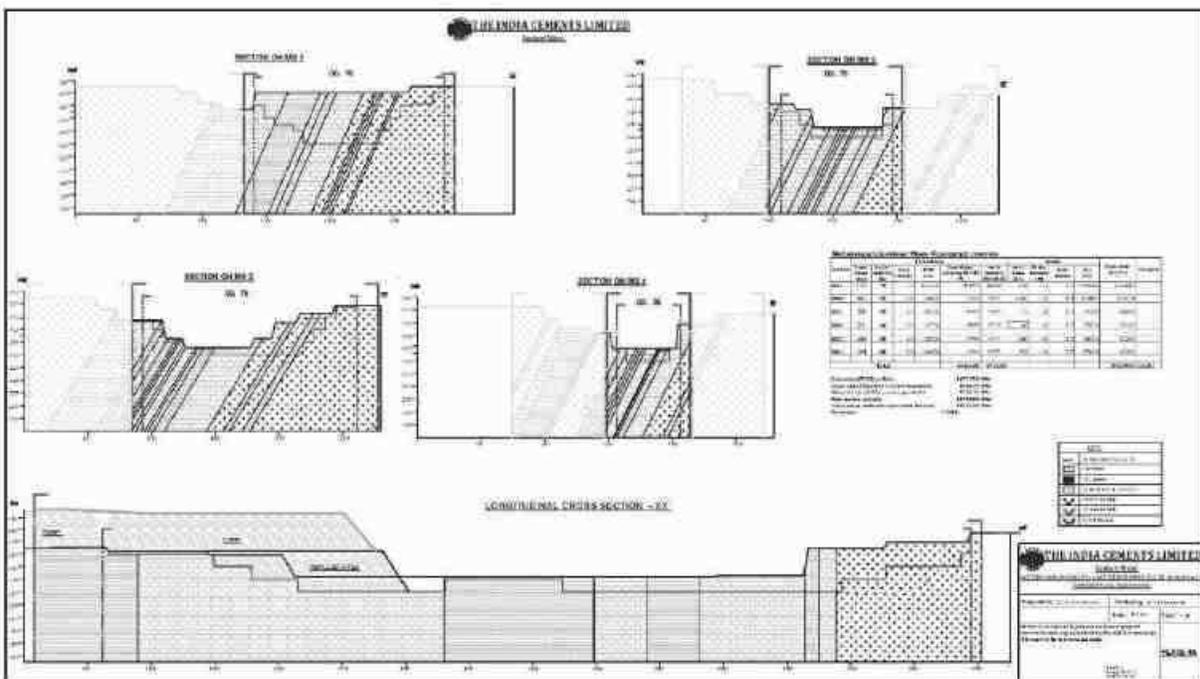


Figure 2.27: Conceptual Cross Section – G.O.76





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

2.9.2 LAND DEGRADATION / UTILIZATION:

The details of land to be used for mining & allied activities for the 3 leases are given in Table No- 2.13. Ultimately the entire mined out area lease periphery will be properly fenced and will be left as water body. The external dumps will be reclaimed with vegetation.

Table 2.12: Land Degradation Utilization

Land use	GO-211			GO-1086			GO-76		
	Present Area (Ha)	At the end of mine scheme (Ha)	At the end of mine life (Ha)	Present Area (Ha)	At the end of mine scheme (Ha)	At the end of mine life (Ha)	Present Area (Ha)	At the end of mine scheme (Ha)	At the end of mine life (Ha)
Area under mining	10.73	16.32	20.76	0.63	0.77	1.335	6.1	6.18	6.19
Storage for top soil	---	---	---	---	---	---	---	---	---
Overburden/dump	7.65	9.70	9.43	0.06	0.36	1.10	--	0.49	0.033
Mineral storage	---	---	---	---	---	---	---	---	---
Infrastructure(workshop, administrative building)	0.06	0.06	--	0.03	0.03	0.03	--	--	--
Road	0.68	0.68	0.74	0.17	0.17	0.17	0.17	0.17	0.17
Railways	---	---	---	---	---	---	---	---	---
Tailing pond	---	---	---	---	---	---	---	---	---
Effluent treatment plant	---	---	---	---	---	---	---	---	---
Mineral separation plant	---	---	---	---	---	---	---	---	---
Town ship	---	---	---	---	---	---	---	---	---
Other details / Green belt	4.90	5.90	19.91	0.46	0.56	0.90	0.94	1.046	1.046
Undisrupted area	26.82	18.18		3.515	2.975	1.33	0.795	0.119	0.566
Grand total	50.84	50.84	50.84	4.865	4.865	4.865	8.005	8.005	8.005

2.9.3 PROJECT REQUIREMENTS:

Table 2.13: Project Requirements

Manpower	The project will bestow employment opportunities totally to about 130 people. Priority will be given to locals towards employment.										
Water Requirement and Source	<p>Water Requirement: 50 KLD</p> <p>Water requirement for the project is mainly for maintaining the green belt and also for sprinkling on the haulage roads to mitigate dust emissions</p> <table border="1"> <thead> <tr> <th>Details</th> <th>Quantity (KLD)</th> </tr> </thead> <tbody> <tr> <td>Domestic</td> <td>2.0</td> </tr> <tr> <td>Dust suppression – Water Sprinkling, Wet Drilling</td> <td>30.0</td> </tr> <tr> <td>Greenbelt/Plantation</td> <td>18.0</td> </tr> <tr> <td align="center">Total</td> <td align="center">50</td> </tr> </tbody> </table> <p>Source: The entire water requirement will be met from the rain water collected and stored in the mine pit.</p>	Details	Quantity (KLD)	Domestic	2.0	Dust suppression – Water Sprinkling, Wet Drilling	30.0	Greenbelt/Plantation	18.0	Total	50
Details	Quantity (KLD)										
Domestic	2.0										
Dust suppression – Water Sprinkling, Wet Drilling	30.0										
Greenbelt/Plantation	18.0										
Total	50										





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Power Requirement	This mine is a fully mechanized mine, all machineries are diesel operated and power required for office and etc will be drawn from Tamil Nadu Electricity board.
Site Services	As the mine project is in operation for many years i.e. from 1976 onwards, good infrastructural facilities already exist in the area. The entire stretch of approach road to Sankari cement plant is owned by ICL, through which limestone is being transported to the cement manufacturing unit. In addition, good water supply and power facilities already exist for the present project. All site service facilities are available for smooth uninterrupted mining operations, as per statutory standards. Any further desired improvements will be carried out
Project Cost	G.O.211 – Rs.99 Lakhs, G.O.1086 -Rs.12.95 Lakhs and G.O.76 – Rs.4.9 Lakhs

2.10 DESCRIPTION OF MITIGATION MEASURES:

Scientific and systematic development of mines will be carried out by the project authorities for preserving as well as improving the environmental conditions in and around the mining lease area. Elaborate analysis on impacts and mitigation measures to be adopted on implementation of this project and the same has been dealt in Chapter- IV.

2.11 ASSESSMENT OF NEW & UNTESTED TECHNOLOGY:

There is no new technology that is being implemented. This was a working mine which was working for decades. Hence, the same technology will be continued as it has found to be technologically and economically viable.

2.12 CONCLUSION:

The working mining project has benefitted this region directly and indirectly in the fields of potential employment opportunities, improved per capita income of local people, improved social welfare facilities in respect of education, medical healthcare systems, communicational aspects, infrastructural build-up, etc. In the context of accrual of tangible benefits on all fronts arising from project operations, the project is worthy of approval for improving the infrastructural, social and financial status of the region, the State and the country, as a whole.



CHAPTER - III

DESCRIPTION OF ENVIRONMENT



CHAPTER 3

DESCRIPTION OF ENVIRONMENT

3.1 GENERAL:

The existing environmental baseline data for the various environmental components were collected in the study area for the purpose of assessing the impact on present environment due to the project activities.

Monitoring was carried out systematically and meticulously as per relevant IS codes, CPCB, MoEF&CC guidelines during Winter Season (December 2023 to February 2024) for the above said parameters are given in this chapter.

For the purpose of this study, the area has been divided into two zones, namely, core and buffer zones. Core zone covers the combined Mine lease area. The buffer zone covers an area of 10 km radius from the periphery of the lease area. The details of villages falling in the study area and other features are given in Index Plan in Figure No - 3.1.

The primary data collection was done by means of field monitoring and the secondary data collection was obtained from published sources and government documents. The details of the baseline data collection which has been elaborated through the course of this chapter has been concised below:

Table 3.1: Type of Baseline Data

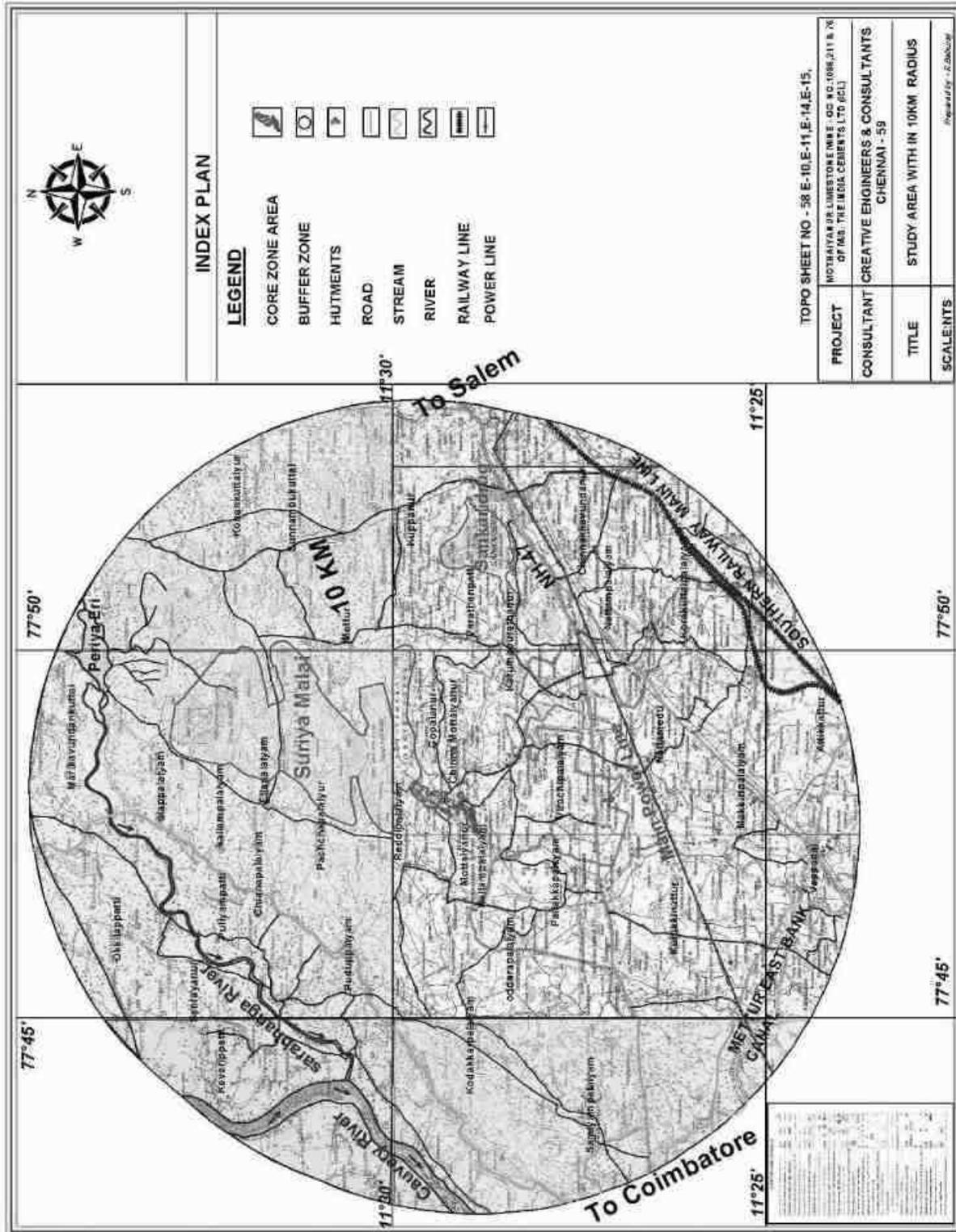
S.No	Studies	Parameters / Study	Location
1	Socio Economy	Demographic Data from Census 2011	Core and Buffer Zone
		Sample Survey	Buffer Zone
2	Micro Meteorology	Rainfall Data from IMD	Salem District
		Temperature, Humidity, Wind Speed, Wind Direction	1 Representative Location
3	Ambient Air Quality	PM10, PM2.5, SO2, NOx, CO	1 Core Zone, 5 Buffer Zone
4	Water Quality	Physical and Chemical Parameters	1 Core Zone, 5 Buffer Zone
5	Noise Levels	Ambient Noise	1 Core Zone, 5 Buffer Zone
6	Soil Quality	Physical and Chemical Parameters	1 Core Zone, 4 Buffer Zone
7	Land Use and Land Cover	Land use pattern within 10km study area using RS Satellite	Buffer Zone
		Land use based on Census 2011	Core and Buffer Zone
8	Biological Environment	Flora and Fauna	Core Zone and Buffer Zone
9	Hydrology & Hydro Geology	Hydrogeological profile of the area	Core Zone and Buffer Zone





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Figure 3.1: Study Area Map





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Table 3.2: Environmental Setting of the Study Area

S.No	PARTICULARS	GO-211	GO-1086	GO-76
1	Mine site topography	271 to 310 RL	271 to 310 RL	271 to 310 RL
2	Nearest highway	Salem to Coimbatore Highway (NH-47) – 2.95Km – SE	Salem to Coimbatore Highway (NH-47) – 3.3Km – SE	Salem to Coimbatore Highway (NH-47) – 2.9Km – SE
3	Nearest Railway station	Sankari Durg Railway Station (by road) – 8.7km, SE	Sankari Durg Railway Station (by road) – 9.0 km, SE	Sankari Durg Railway Station (by road) – 8.8 km, SE
4	Nearest Airport	Salem Airport – 43Km (NE)	Salem Airport – 43Km (NE)	Salem Airport – 43.5Km (NE)
5	Nearest major water bodies	Cauvery River- 7.0 km, NW Sarabhanga River – 6.3Km, NW Mettur East Bank canal – 4.5Km, NW	Cauvery River- 7.2 km, NW Sarabhanga River – 6.5Km, NW, Mettur East Bank canal – 4.7Km, NW	Cauvery River- 7.0 km, NW Sarabhanga River – 6.1Km, NW, Mettur East Bank canal – 4.7Km, NW
6	Nearest town/City	Sankari - 8.0 km, E	Sankari - 8.2 km, E	Sankari - 8.0 km, E
7	Nearest villages	Mothaiyanur - < 0.5km - W Chinna mothaiyanur - <1.0km - E Reddipalayam - 1.2km - NW	Mothaiyanur - < 0.5km – W Chinna mothaiyanur - <1.0km – E, Reddipalayam - 1.4km - NW	Mothaiyanur - < 0.5km - W Chinna mothaiyanur - <1.0km – E, Reddipalayam - 1.5km - NW
8	Notified Archaeologically important places, Monuments	Sankagiri Fort – 7.0 Km (East)	Sankagiri Fort – 7.3 Km (East)	Sankagiri Fort – 7.1 Km (East)
9	Local Places of Historical and Tourism Interest	Sankagiri Fort – 7.0 Km (East)	Sankagiri Fort – 7.3 Km (East)	Sankagiri Fort – 7.1 Km (East)
10	Environmental sensitive areas, Protected areas as per Wildlife Protection Act, 1972 *	Nil	Nil	Nil
11	Reserved / Protected Forests	Suriyamalai Reserve Forest – more than 60m from the mine workings on the north,	Suriyamalai Reserve Forest – more than 280m from the mine workings on the north,	Suriyamalai Reserve Forest – more than 1.3Km from the mine workings on the north,
12	Defence Installations	Nil within 10 km radius	Nil within 10 km radius	Nil within 10 km radius
13	Seismic Zone	Zone – II (Least Active)	Zone – II (Least Active)	Zone – II (Least Active)
16	Other Industries in the study area	ICL's sankari cement plant, Veerachipalayam limestone mines, Karumapurathanur limestone mines, quarries in Mangarangampalayam	ICL's sankari cement plant, Veerachipalayam limestone mines, Karumapurathanur limestone mines, quarries in Mangarangampalayam	ICL's sankari cement plant, Veerachipalayam limestone mines, Karumapurathanur limestone mines, quarries in Mangarangampalayam

*Tiger reserve, Elephant reserve, Biospheres, National parks, Wildlife sanctuaries, community reserves and conservation reserves





3.2 SOCIO-ECONOMIC CONFIGURATIONS OF THE AREA:

3.2.1 GENERAL:

The Socio-Economic details of the study area are collected through:

- Identification of villages falling from the study area map with combined Taluk map.
- Collection of primary data through sample survey, village meetings and discussion.
- Collection of the demographic pattern of villages falling in the area through NIC 2011 census data.
- Occupational structure of villages falling in the study area through NIC 2011 census data.
- Details of the amenities available in villages falling in the study area through NIC 2011 census data. The findings of the study are illustrated below:

3.2.2 SECONDARY DATA DESCRIPTION:

This lease area is located in Chinnakavundanur village, Sankari taluk of Salem district. Based on 2011 census data, in the 10km radius there are 29 rural villages and 6 urban areas namely Ellandaikuttai(CT), Padaiveedu(TP), Sankari(TP),Thevur(TP) Kumarapalayam (M) & Arasiramani (TP). Three taluks from Two districts namely, Sankari taluk & Omalur Taluk of Salem district, Tiruchengode Taluk of Namakkal District are falling in the study area.

Table 3.3: Population in Buffer Zone

Zone / Area	Number of Villages	Total House Holds	Total Population	Area (Hectares)
0-2km	2	2644	9137	-
2-5km	9	17180	63661	-
5-10km	24	65162	235466	-

Source: Census of India, 2011

- The total population of these 29 rural villages and 6 urban areas is 308264 in which the male population is 157406 (51.06%) and the female population is 150858 (48.94%). This shows that the male and female population ratio is almost equal.
- Among the total population 0.04% is Scheduled Tribes, 14.68 % is Scheduled Caste and 85.27 % people belong to other castes.





- Among the total population, 36.74% are literate males and 27.97% are literate females. This shows that the male literates are slightly more than the female literates.
- Totally, the illiterate constitute 35.30% of which the female cover 20.97% and the male 14.33%.

Table 3.4: Caste Wise Population Distribution

Zone		0-2km	2-5km	5-10km
Total	Population	9137	63661	235466
	Male	4702	32828	119876
	Female	4435	30833	115590
Scheduled Caste	Population	2477	13582	29209
	Male	1324	6987	14858
	Female	1153	6595	14351
Scheduled Tribe	Population	0	16	110
	Male	0	11	56
	Female	0	5	54

Table 3.5: Literacy Details

Zone		0-2km		2-5km		5-10km	
Total		9137		63661		235466	
Literates	Population	5463	59.79%	39450	61.97%	154546	65.63%
	Male	3218	35.22%	23179	36.41%	86845	36.88%
	Female	2245	24.57%	16271	25.56%	67701	28.75%
Others	Population	3674	40.21%	24211	38.03%	80920	34.37%
	Male	1484	16.24%	9649	15.16%	33031	14.03%
	Female	2190	23.97%	14562	22.87%	47889	20.34%

Table 3.6: Occupational Structure In The Buffer Zone

Zone / Area		0-2km	2-5km	5-10km
Total population		9137	63661	235466
Main workers	TOT	4487	31530	116544
	M	2851	18683	73513
	F	1636	12847	43031
Cultivators	TOT	1285	6848	10694
	M	712	3696	6299
	F	573	3152	4395
Agri Labours	TOT	1406	9302	19765
	M	764	4474	9113
	F	642	4828	10652
House Hold	TOT	39	1421	4961
	M	25	600	2754
	F	14	821	2207
Marginal workers	TOT	863	3785	6609

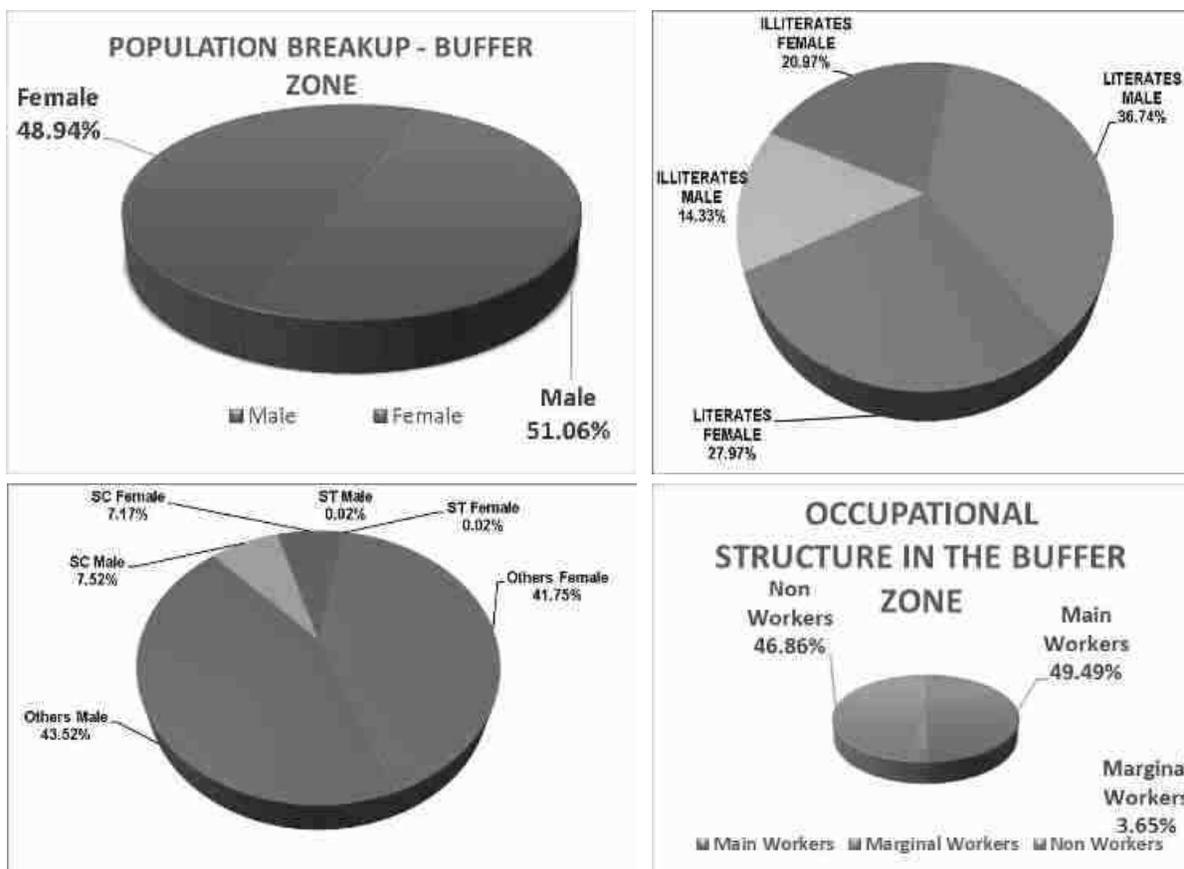


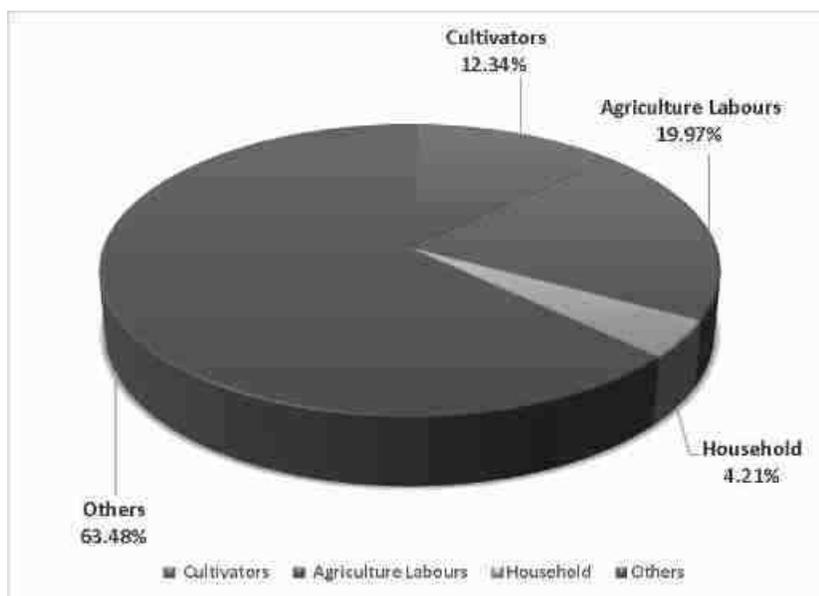


	M	296	1727	3195
	F	567	2058	3414
Non workers	TOT	3787	28346	112313
	M	1555	12418	43168
	F	2232	15928	69145

- Among the total population non workers are about 46.86% (144446) and remaining part constitute the working population i.e. 53.14% (163818).
- Among the population, 49.49% people are main workers (152561) and 3.65% people are marginal workers (11257).
- The village wise population, literacy levels and occupational structure details area given in **Annexure-4 and 5**. The demographic structure within the buffer zone is shown diagrammatically in **Figure No – 3.2**.

Figure 3.2: Demographic Structure in Buffer Zone





3.2.3 DETAILS OF AMENITIES:

Based on 2011 census data, regarding the educational facilities, 29 rural villages out of 28 rural villages have educational facilities. There are totally 68 Primary Schools functioning in these 28 rural villages. Among them 13 villages have one primary school, 2 villages have 2 primary schools, 3 villages have 3 primary schools, 3 villages have 4 primary schools, 2 villages have 5 primary schools and 1 village has 6 primary schools. One village have no primary school.

Table 3.7: Primary Schools in the Buffer Zone Rural Villages

S.No	No of Rural Villages	Number of primary schools	Totals
1	13	1	13
2	3	2	6
3	6	3	18
4	2	4	8
5	2	5	10
6	1	6	6
7	1	7	7
Total	28		68

Table 3.8: Education Facility Availability

PARTICULARS	Available in village	Not Available in village
Govt Primary School	28	1
Govt Middle School	19	10
Govt Secondary School	9	20
Govt Senior Secondary School	6	23





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Govt Arts and Science Degree College	0	29
Govt Engineering College	0	29
Govt Medicine College	0	29
Govt Management Institute	0	29
Govt Polytechnic	0	29
Govt Vocational Training School/ITI	0	29

Better and higher education facilities are available in nearby town like Sankari, Tiruchengode, Komarapalayam, Bhavani and Erode.

Table 3.9: Healthcare Amenities Availability

PARTICULARS	Available in village	Not Available in village
Community Health Centre	1	28
Primary Health Centre	8	21
Primary Health Sub Centre	25	4
Maternity And Child Welfare Centre	11	18
TB Clinic	8	21
Hospital Allopathic	0	29
Hospital Alternative Medicine	0	29
Dispensary	8	21
Veterinary Hospital	9	20
Mobile Health Clinic	0	29
Family Welfare Centre	8	21

Better Healthcare facilities are available in Sankari, Bhavani and Komarapalayam

Table 3.10: Infrastructure Facilities

Particulars	Available in village	Not Available in village
Water Supply & Others Availability		
Tap Water-Treated	28	1
Covered Well	26	3
Hand Pump	23	6
Tube Wells/Borehole	29	0
Spring	4	25
River/Canal	6	23
Tank/Pond/Lake	5	24
post office	3	26
bus services	26	3
railway station	4	25
Commercial Bank	2	27
Cooperative bank	5	24

The details of the educational, medical and infrastructural facilities available in the buffer zone is provided in **Annexures- 6-8**. However, there are vast improvement in the field presently.





3.2.4 FIELD SURVEY:

The objective of the study is to understand the present socio-economic condition, availability of existing infrastructure facilities in the area & to know the needs of the people in the project peripheral villages, to provide an implementable future CER proposal pertaining to specific needs addressing local requirements.

Few villages in the study area such as Mothaiyanur, Reddipalayam, Gopalanur, Nallapalayam, Chinnagoundanur, Pallakkapalayam, etc. were visited to know about socio-economic conditions. Salient details of the study are given below:

- Studied villages have different community people which include different religion and different castes.
- Agriculture is the main occupation of the villagers. Agriculturists and agriculture labourer are dominant. Cauvery water distribution scheme for agriculture is improving the activities in its own way.
- Crops such as Vazhai, coconut, sugar cane, cholam, kuchi kilangu & vegetables are generally planted in the study area. Besides, aricanut, paddy, teak plantation are also observed in the water available region near cauvery & its tributary areas.
- Lorry building works, lorry owners, its associated activites, including oil storage & distribution terminal of IOCL, cotton mills, stone cutting works, ICL cement plant & mines and other miscellaneous works also provide employment oppurtunities.
- Primary, middle & highschool facilties are commonly available in the area. ICLs Shankar nagar higher secondary school also provide good educational faciltities. Arts and science colleage facilities are available in Sankagiri area, Better & higher educational facility is available in salem, Tiruchegode region.
- Primary Health Centre/ Sub centre facilities are generally available nearby. Better medical facilities are available in Sankagiri area, salem, Tiruchegode region.
- Drinking water facility is sourced from Kaveri water and Borewell water. There are over head tanks and public taps are available. For agriculture activities, villagers use Kaveri River through the canals, pipeline.





- Electricity, Bus facility and individual toilet facilities, banks, self help groups linked with Government Women Development Corporation are available.

Identified Needs: Various needs were identified such as improvement of infrastructural facilities in the nearby Government schools and also the nearby vilalges. Considering that M/s. The India Cements Ltd. has been operating plant & mines in the area, these needs can be met based on the priority and need of the locals.

3.3 EXISTING ENVIRONMENTAL QUALITY

3.3.1 MICRO-METEOROLOGY

3.3.1.1 General:

The meteorological conditions in an area regulate the dispersion of air pollutants being released into the atmosphere. The principal variables are horizontal convective transport i.e. wind speed and direction and vertical convective transport, i.e. mixing height, stability class and topography of the area.

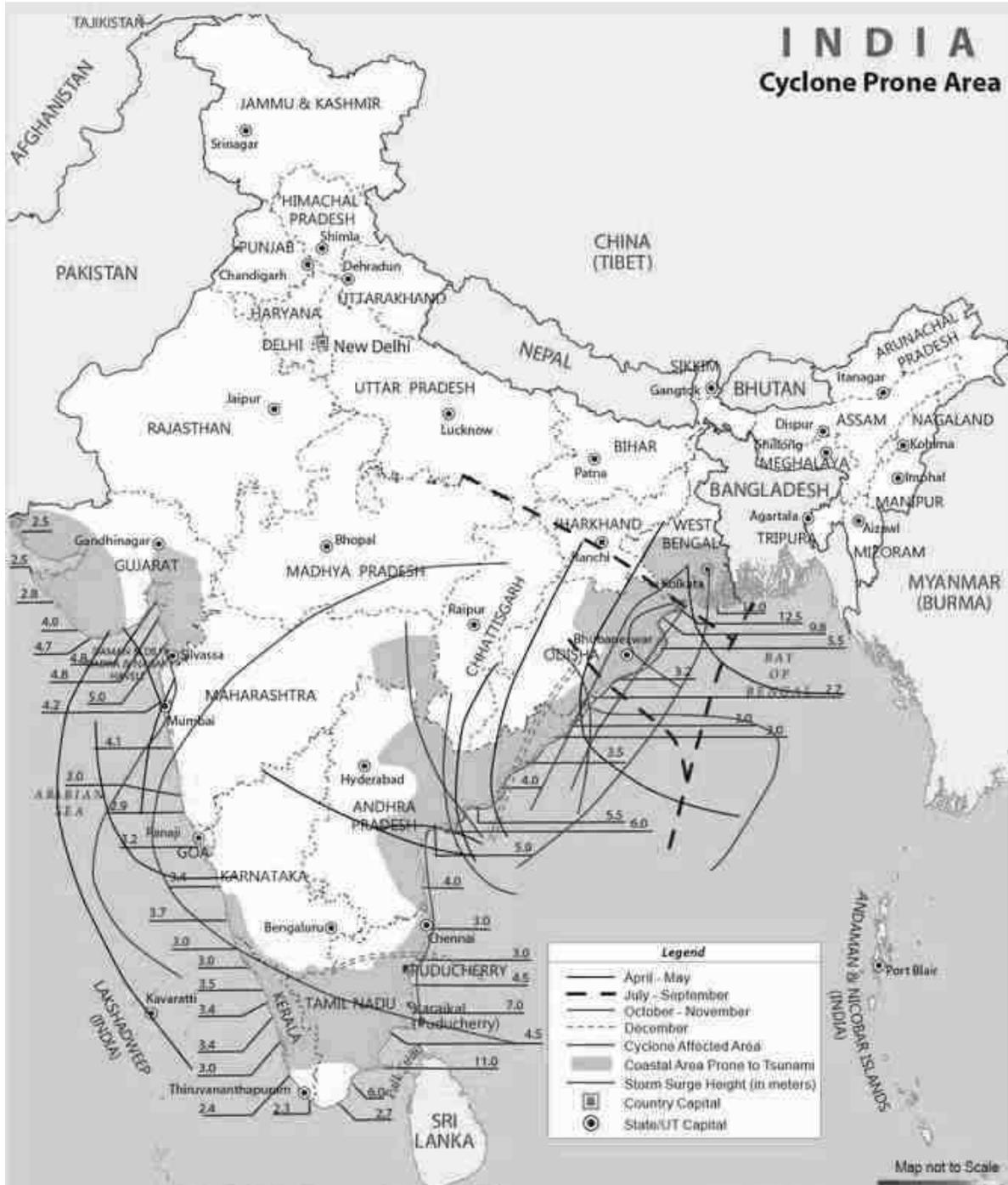
3.3.1.2 Historical Meteorological Data:

A. Cyclones And Depressions

Cyclonic storms and depressions in Bay of Bengal affect the East Coast of India. Isolated ones, forming in January to March in the South Bay of Bengal move West-North-westwards and hit Tamil Nadu coast. In April and May, cyclonic storms and depressions form in the South and adjoining Central Bay and move initially to the Northwest, then North and then recurve to the Northeast striking the Arakan coasts in April and Andhra Pradesh (AP)-Orissa-West Bengal (WB) – Bangladesh coasts in May. Most of the monsoon (June – September) storms develop in the central and in the north bay and move west – north - westwards affecting AP – Orissa – WB coasts. Post monsoon (October – December) storms form mostly in the south and central Bay, recurve between 15° and 18° N affecting Tamil Nadu – AP – Orissa – WB – Bangladesh coasts. **Figure No - 3.3** depicts the history of cyclonic storms, which have struck the Indian coast during the months of October, November and December during the last 75 years. . East coast is prone to cyclonic storms round the year but mostly these occur prior to SW i.e., in May and after SW monsoon i.e., in October and November.



Figure 3.3: History of Cyclonic Storms



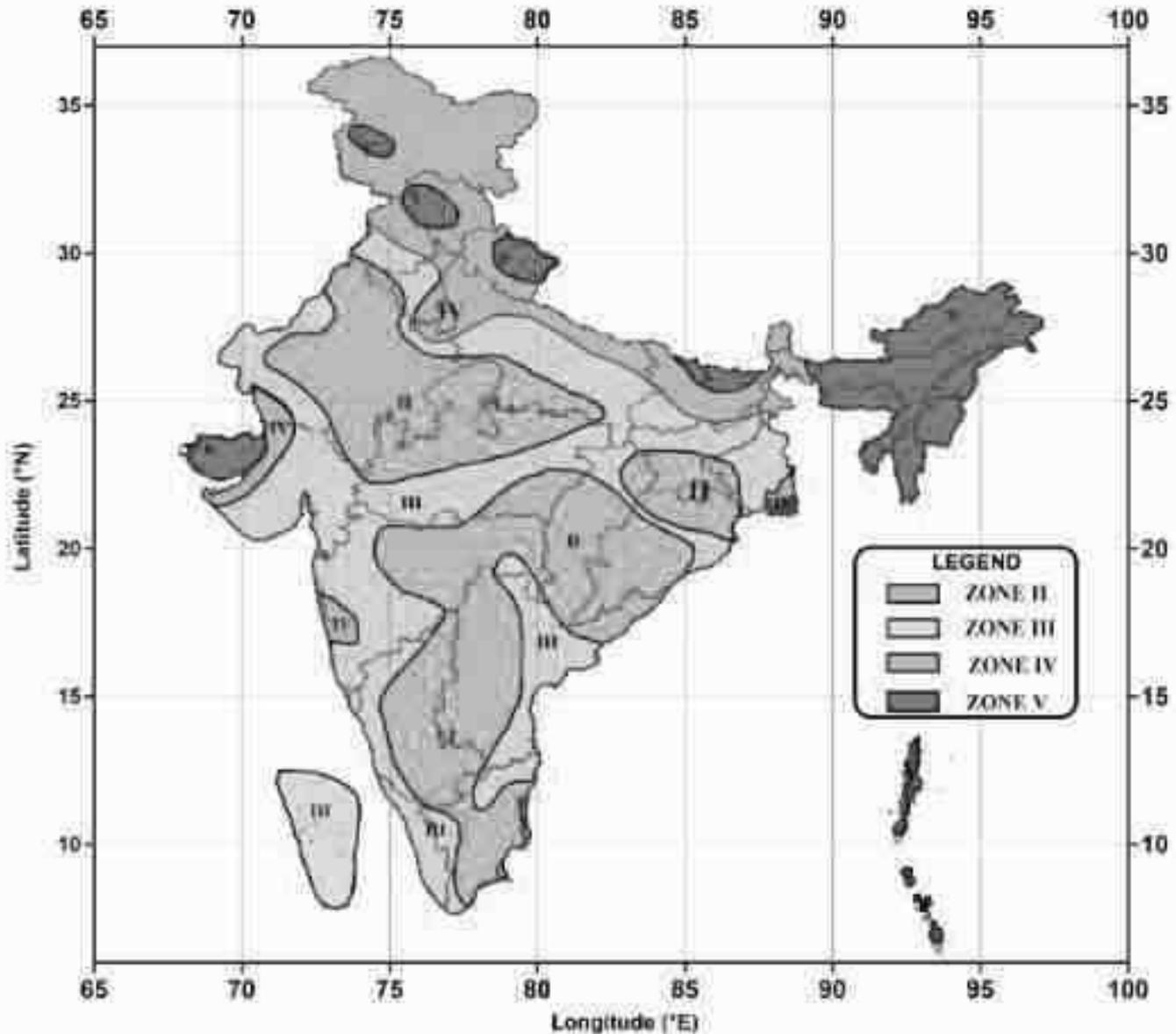
Source: Vulnerability Atlas of India series, above figure accessed from www.maps of india.com



B. SEISMIC DATA

From the seismic zone map of India as depicted in the **Figure No - 3.4**, it can be seen that the project site and study area falls in the Zone – III and is described as least active zone.

Figure 3.4: Seismic Zone Map of India



Source: <https://pib.gov.in/PressReleasePage.aspx?PRID=1740656>





C. Climate and Rainfall Data:

The district enjoys a tropical climate. The weather is pleasant during the period from November to January. Mornings in general are more humid than the afternoons, with the humidity exceeding 78% on an average. In the period June to November the afternoon humidity exceeds 66% on an average. In the rest of the year the afternoons are drier, the summer afternoons being the driest. The hot weather begins early in March, the highest temperature being felt in April and May.

The district receives the rain under the influence of both southwest and northeast monsoons. The northeast monsoon chiefly contributes to the rainfall in the district. Most of the precipitation occurs in the form of cyclonic storms caused due to the depressions in Bay of Bengal. The southwest monsoon rainfall is highly erratic and summer rains are negligible.

The rainfall data for the period of 2011-2020 recorded in IMD Salem is presented in **Table No – 3.9**. From the table it seems that maximum annual rainfall of 1135.0 mm was received during 2015 and lowest rainfall of 609.0 mm was received during 2012. Rainfall histograms are presented in **Figure No - 3.5 (A) & (B)**.

Table 3.11: Average Annual Rainfall Data (2011-20)

YEAR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Rainfall
2011	0.15	9.23	9.94	104.02	79.64	80.67	110.34	220.76	47.64	99.09	80.64	19.89	862.01
2012	0.38	0.03	0.25	18.63	155.95	17.49	91.65	69.94	59.67	114.28	68.15	13.52	609.94
2013	0.02	6.96	3.68	36.77	49.56	68.81	37.97	152.37	218.3	147.29	105.77	49.73	877.23
2014	0	1.87	4.12	7.22	152.18	72.58	29.1	128.22	120.23	239.91	60.34	39.42	855.19
2015	20.03	4.46	18.74	131.52	87.08	72.34	39.32	109.67	149.38	134.24	295.57	73.32	1135.67
2016	0	0	0.1	2.1	122.63	81.13	134.22	93.85	27.5	57.42	11.23	65.12	595.3
2017	9.48	0	15.28	17.62	77.77	17.56	30.07	129.28	162.86	161.86	45.65	7.41	674.84
2018	1.63	6.33	10.55	9.33	95.99	43.77	48.63	40.65	102.7	105.59	78.43	12.15	555.75
2019	5.3	1.31	1.75	48.38	45.46	46.76	52.61	133.97	232.59	167.98	101.19	50.67	887.97
2020	1.89	0	0.22	51.51	38.07	39.51	91.58	122.48	172.6	114.58	111.58	108.49	852.51
NORMAL	12.8	8.5	16.3	42.7	90.7	50.6	81.5	109.3	138.6	186.1	108.6	52.3	898

Source – Salem District, IMD





Figure 3.5: Monthly Average Rainfall

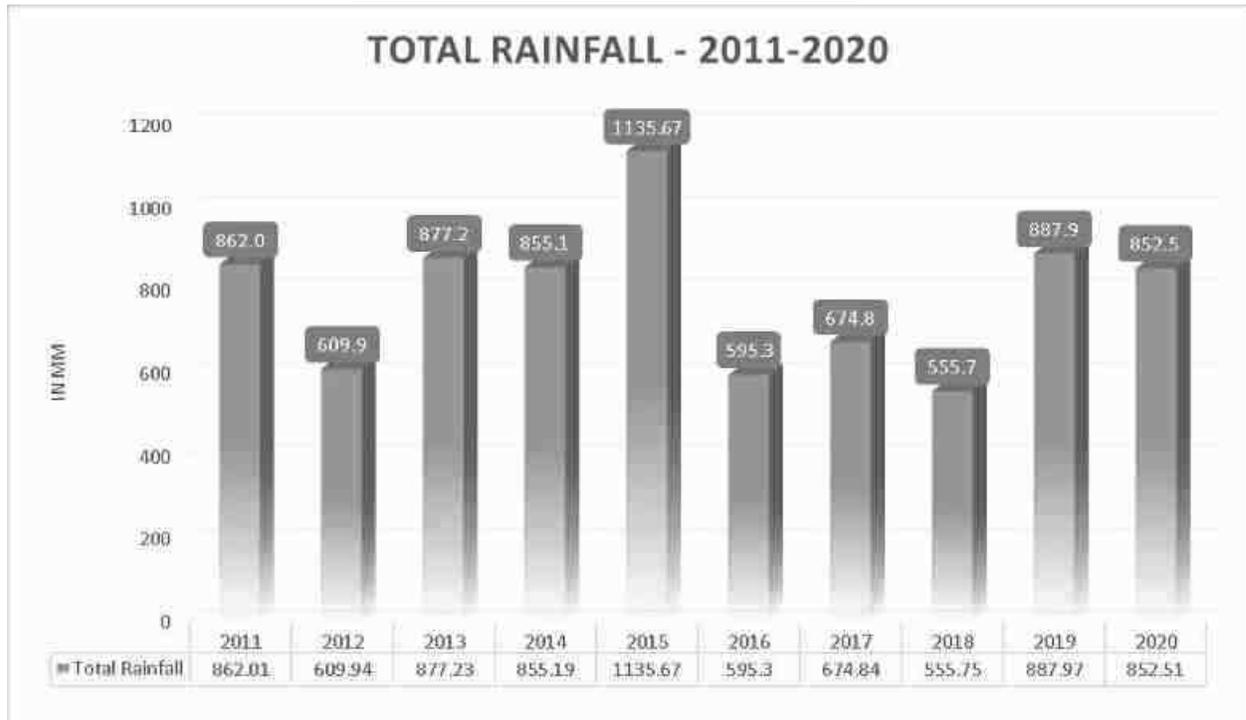
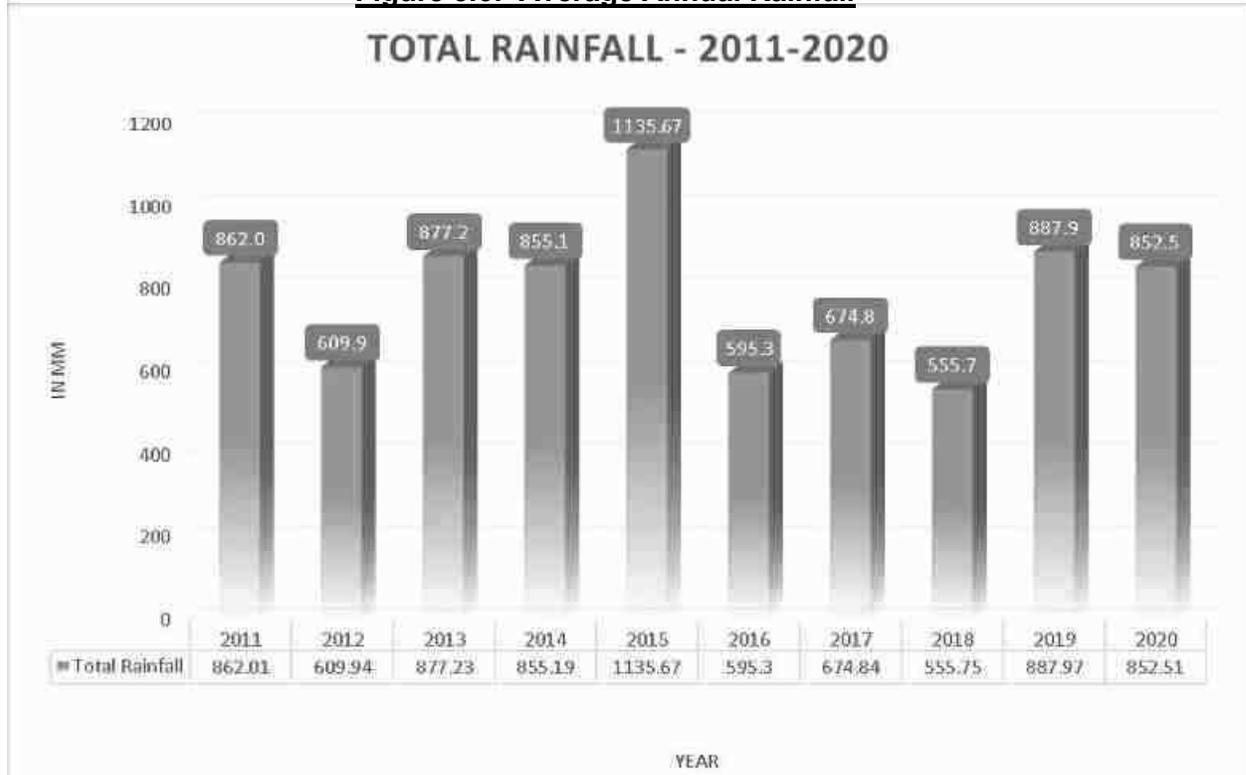


Figure 3.6: Average Annual Rainfall





3.3.1.3 SITE SPECIFIC METEOROLOGICAL DATA:

In order to monitor micrometeorology and microclimatic parameters ICL has established a continuous weather monitoring station in their cement plant. Data of wind velocity, wind direction, ambient temperature, relative humidity, were recorded at hourly intervals along with rainfall for 24 hours throughout the monitoring period.

DATA ANALYSIS:

The temperature in the area during the study period ranged from 18.6°C to 36.9°C while the relative humidity varied between 20.0 – 95.0%. The wind speed during the study period ranged from <1.8 to 25.2 Km/hr. The predominant wind direction is from NE. The meteorological data are presented in **Table No – 3.10**. The average wind rose is depicted in **Figure No - 3.7**.

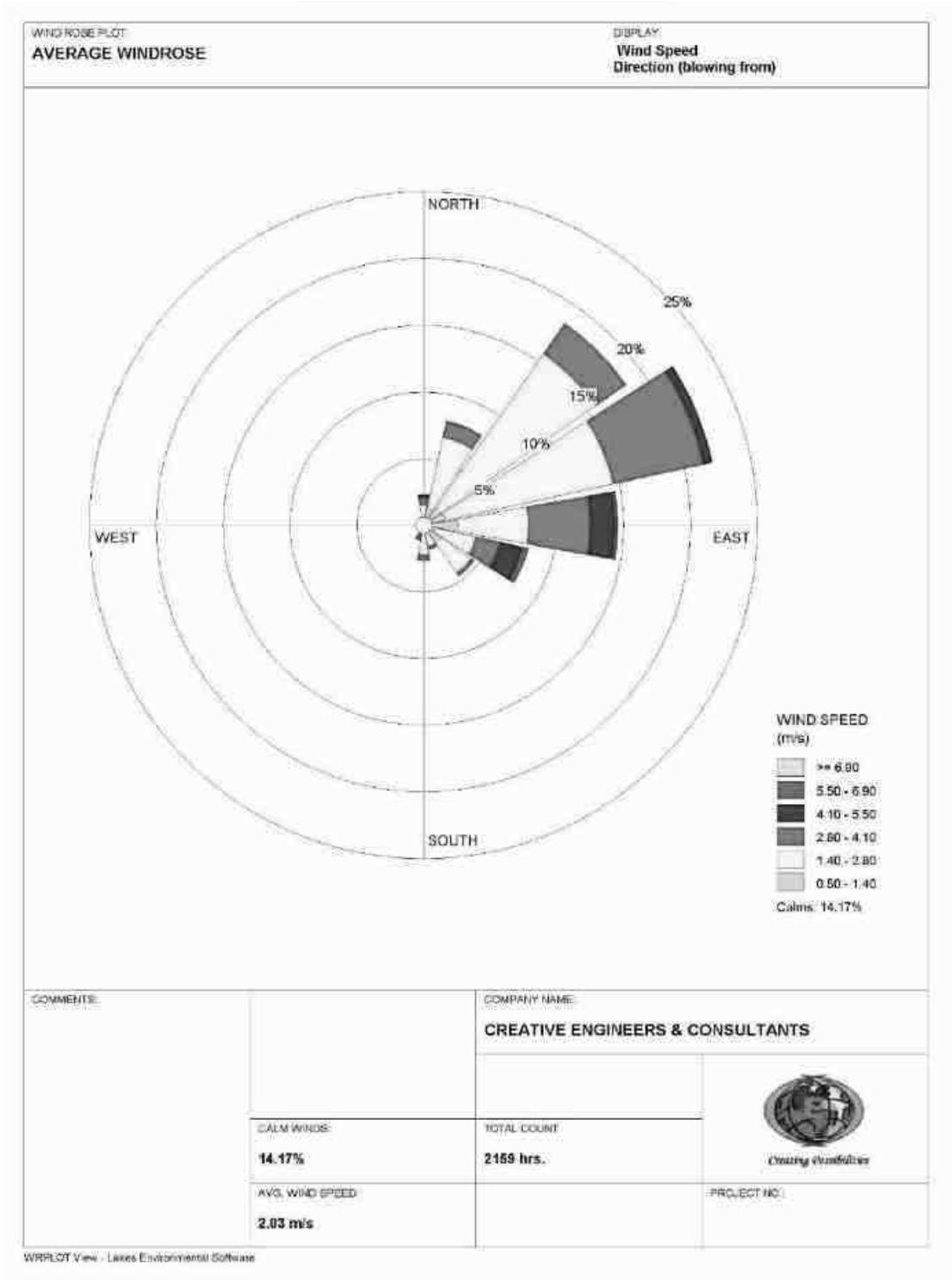
Table 3.12: Meteorological Data

Location : ICL CEMENT PLANT			
S.NO	PARAMETERS	MIN	MAX
1	Temperature In °c	18.6	36.9
2	Humidity in %	20.0%	95.0%
3	Wind speed in km/hr	<1.8	25.2
4	Predominant wind direction from	NE	





Figure 3.7: Average Wind Rose





3.3.2 AMBIENT AIR QUALITY (AAQ):

The principal objective of the Ambient Air Quality Monitoring (AAQM) is to assess the existing ambient air quality in and around the project area. The ambient air quality depends upon the emission sources, meteorological conditions and the background concentration of specific pollutants. The study of the existing ambient air quality data in the area is an essential and primary requirement for assessing the impact on air quality due to the mining activities and also to the potential environmental changes. With the above objective, Particulate Matter (PM10), Particulate Matter (PM2.5), Sulphur Dioxide, Oxides of Nitrogen and Carbon Monoxide were analysed at the selected locations in the study area. Besides, the Silica content in the core zone was also evaluated.

Ambient Air quality has been assessed through a network of 6 ambient air quality stations. The following methodology has been considered for design of ambient air quality monitoring network in the area. Based on these criteria, 6 numbers of air sampling stations were selected in the area as shown below in Table No.3.10.

- ❖ Topography / terrain of study area.
- ❖ Populated areas within study area.
- ❖ Residential /sensitive areas within study area.
- ❖ Magnitude of surrounding industries.
- ❖ Representation of regional background levels.
- ❖ Representation of cross sectional distribution in down wind direction.
- ❖ Predominant wind direction and wind pattern.

Table 3.13: Air Quality Monitoring

1.	Monitoring Period	Winter Season (Dec 2023 – Feb 2024)
2.	Monitoring Location	The location map showing Ambient Air Quality study stations are shown in Figure No- 3.9.
3.	Methodology	
	Parameter	Protocol
	a. Particulate Matter (PM10)	Gravimetric (IS 5182: Part 23:2017)
	b. Particulate Matter PM2.5	Gravimetric (IS 5182: Part 24:2019)
	c. Sulphur Dioxide	Colorimetric (West & Gaeke Method) (IS 5182: Part 02: 2017)
d. Nitrogen Dioxide	Colorimetric(Modified Jacob & Hocheiser Method) (IS 5182: Part 06:2017)	





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

	e. Carbon Monoxide	CO Monitor
	f. Silica	Colorimetric (Molybdate Method) NIOSH 7601 -2003
4.	Monitoring Frequency	2 days in a week, 4 weeks in a month for 3 months in a season.

Table 3.14: Air Quality Monitoring Locations

S.NO	LOCATION CODE	LOCATION	LATITUDE & LONGITUDE	DISTANCE FROM CORE ZONE (KM)	DIRECTION
1	MA1	Mothaiyanur Lime stone Mine	11°29' 04.11"E, 77°48'0.66"N	-	-
2	A2	Mothaiyanur	11°29'11.47"E, 77°47'39.89 "N	<500m	W
3	A3	Reddipalayam	11°29'26.48"E, 77°47'03.58 "N	1.5km	NW
4	A4	Nallampalayam	11°29'09.75"E, 77°46'47.72 "N	1.9km	SW
5	A5	Gopalanur	11°29'22.99"E, 77°49'40.12"N	2.5KM	E
6	A6	Chinna Mothaiyanur	11°28'34.54"E, 77°48'22.52 "N	<500m	E

Figure 3.8: Ambient Air Quality Study Stations

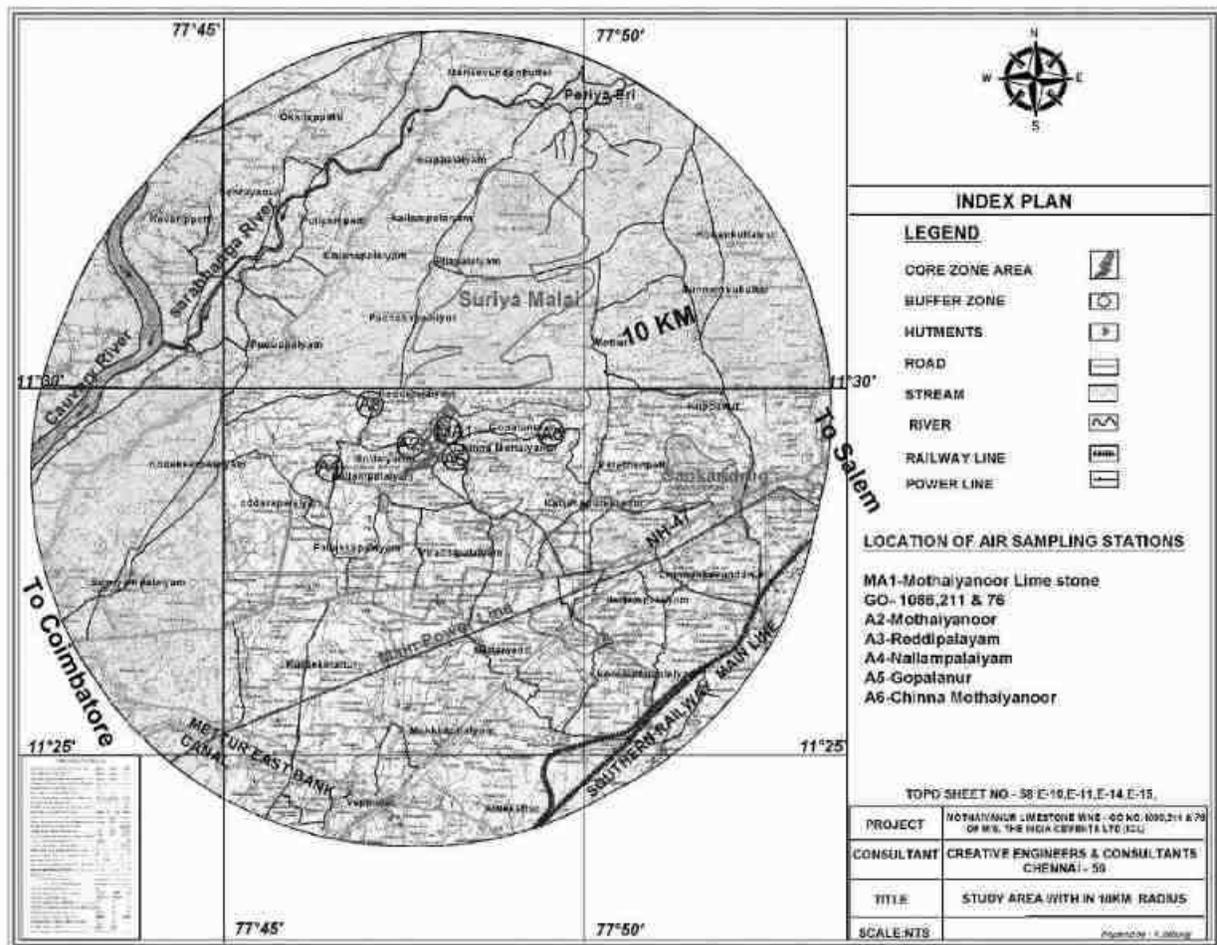


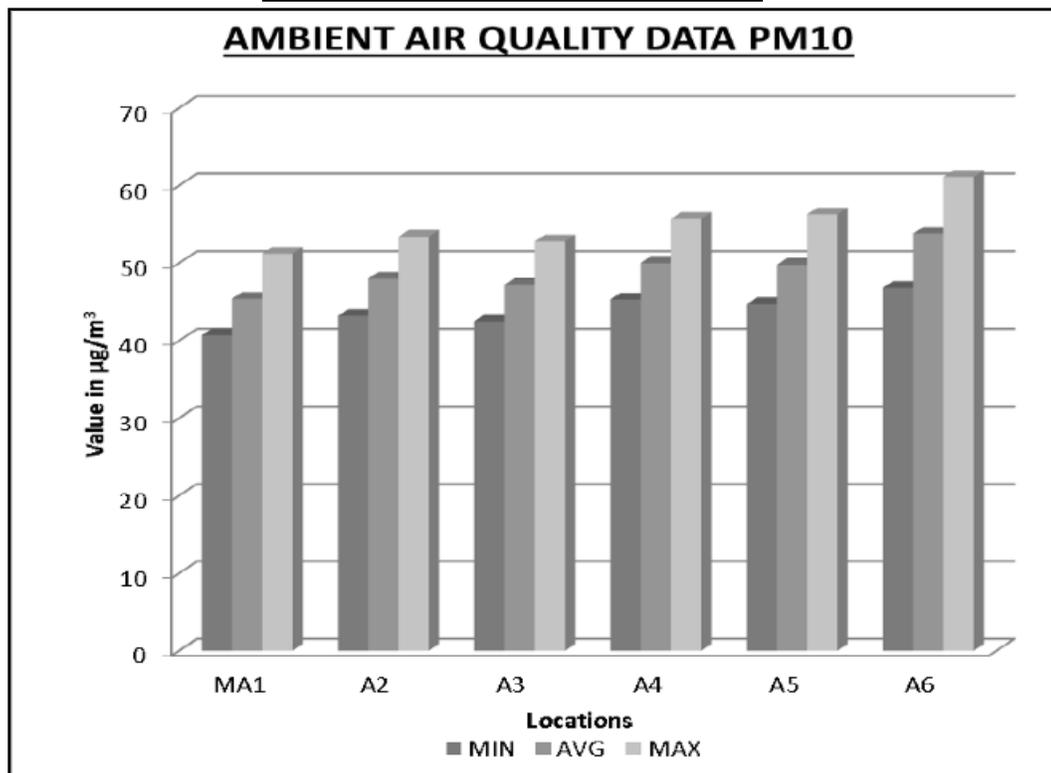


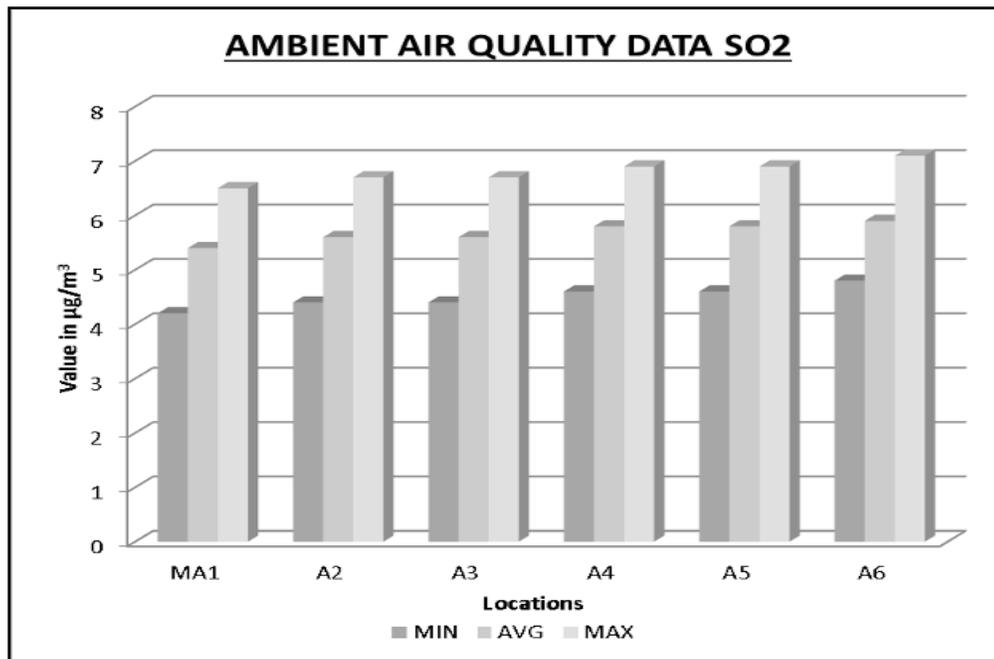
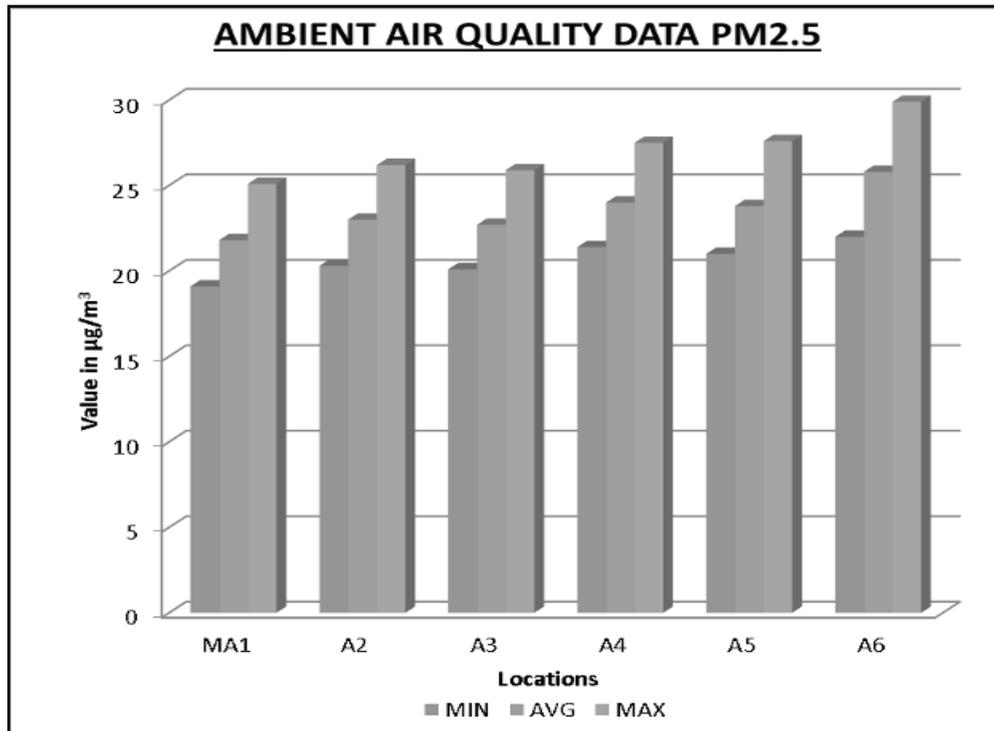
Table 3.15: Ambient Air Quality Data

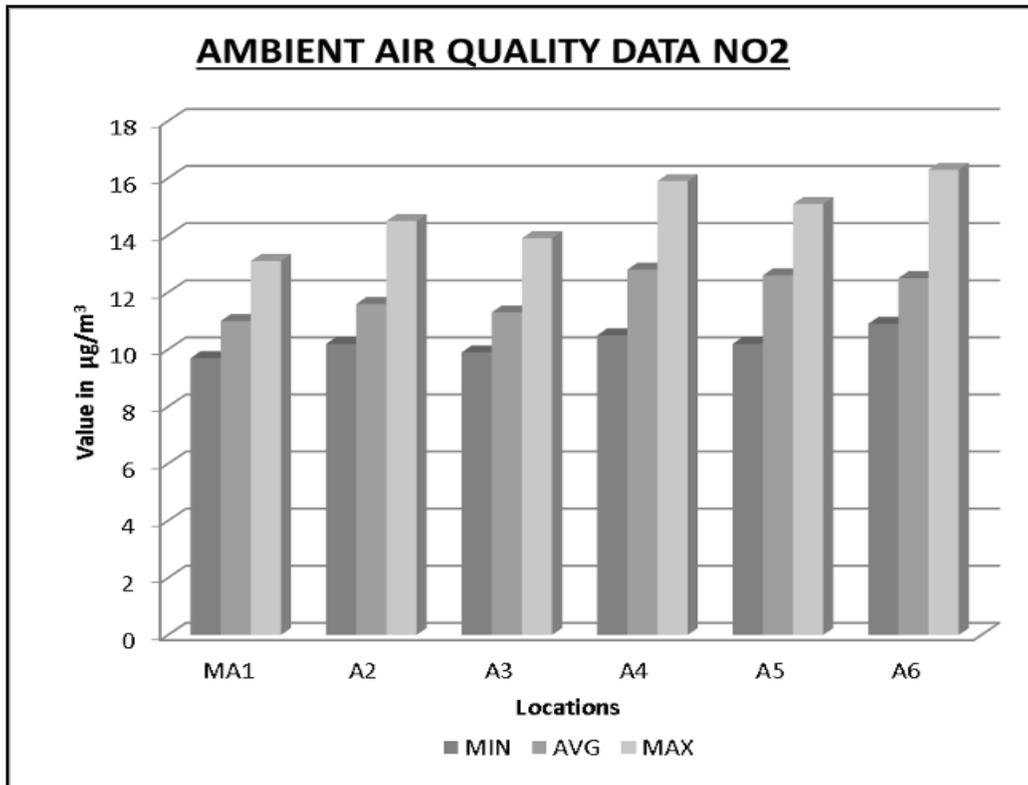
PARAMETERS LOCATIONS	Cat.*	All Value in $\mu\text{g}/\text{m}^3$											
		PM ₁₀			PM _{2.5}			SO ₂			NO ₂		
		MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX
MA1- Mothaiyanoor Lime stone Mine	I	40.7	45.4	51.2	19.1	21.8	25.1	4.2	5.4	6.5	9.7	11	13.1
A2-Mothaiyanoor	R	43.2	48	53.4	20.3	23	26.2	4.4	5.6	6.7	10.2	11.6	14.5
A3-Reddipalayam	R	42.5	47.2	52.8	20.1	22.7	25.9	4.4	5.6	6.7	9.9	11.3	13.9
A4-Nallampalayam	R	45.3	50	55.7	21.4	24	27.5	4.6	5.8	6.9	10.5	12.8	15.9
A5-Gopalanur	R	44.7	49.8	56.3	21	23.8	27.6	4.6	5.8	6.9	10.2	12.6	15.1
A6-Chinna Mothaiyanur	R	46.8	53.8	61.1	22	25.8	29.9	4.8	5.9	7.1	10.9	12.5	16.3
NAAQ Limits		PM ₁₀			PM _{2.5}			SO ₂			NO ₂		
	*	100			60			80			80		
	**	100			60			80			80		

***Note:** Category: * - Industrial, Residential, Rural and other area, ** – Ecologically Sensitive Area (notified by Central Government)

Figure 3.9: Ambient Air Quality Data







3.3.2.1 Results and Discussion:

The AAQ monitored data for all locations for above parameters are shown in **Table No - 3.12** and in **Figure No - 3.9**. Ambient Air Quality data during the study period is given in **Annexure – 9**. From the table it is seen that, in the ambient air, the PM₁₀ values were in the range of 40.7-61.1 µg/m³. PM_{2.5} values were in the range of 19.1-29.9 µg/m³. SO₂ levels were ranging from 4.2 – 7.1 µg/m³. NO₂ levels were ranging from 9.7-16.3 µg/m³. The existing Ambient Air Quality levels for PM₁₀, PM_{2.5}, SO₂ and NO₂, are within the NAAQ standards prescribed CPCB limits of 100 µg/m³, 60 µg/m³, 80 µg/m³ & 80 µg/m³. The CO values in all the locations were found to be below detectable limit. Silica values in the study area are found to be below detectable limit. (Detection limit – 0.05 mg/m³)

3.3.3 WATER ENVIRONMENT:

Assessment of baseline data on water environment includes Identification of water resources, Collection of water samples and Analyzing water samples collected for physico-chemical



COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

parameters as per standards. The water sampling was carried out for 6 locations. Details of the same has been provided below:

Table 3.16: Water Quality Monitoring

1.	Monitoring Period	Winter Season (Dec 2023 – Feb 2024)			
2.	Monitoring Location	The location map showing water sampling locations are given in Figure No.3.11.			
Code	Sample Type	Location	Latitude & logitude	Distance	Direction
W1	Mine pit	Mothaiyanur Limestone Mine	11°29' 04.11"N, 77°48'0.66"E	-	-
W2	Borewell	Mothaiyanoor	11°29'09.64"N, 77°47'40.56 "E	<500m	W
W3	Borewell	Reddipalayam	11°29'26.65"N, 77°47'03.74 "E	1.5km	NW
W4	Borewell	Nallampalaiyam	11°29'15.90"N, 77°46'42.20 "E	1.9km	SW
W5	Borewell	Gopalanur	11°29'28.00"N, 77°49'36.62"E	2.5KM	E
W6	Borewell	Chinna Mothaiyanur	11°28'34.54"N, 77°48'22.52 "E	<500m	E
3.	Methodology	Sampling - IS 3025 Part - I			
		Analysis – IS 3025 relevant parts / APHA 23rd Edition			





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Figure 3.10: Location of Water Sampling Stations

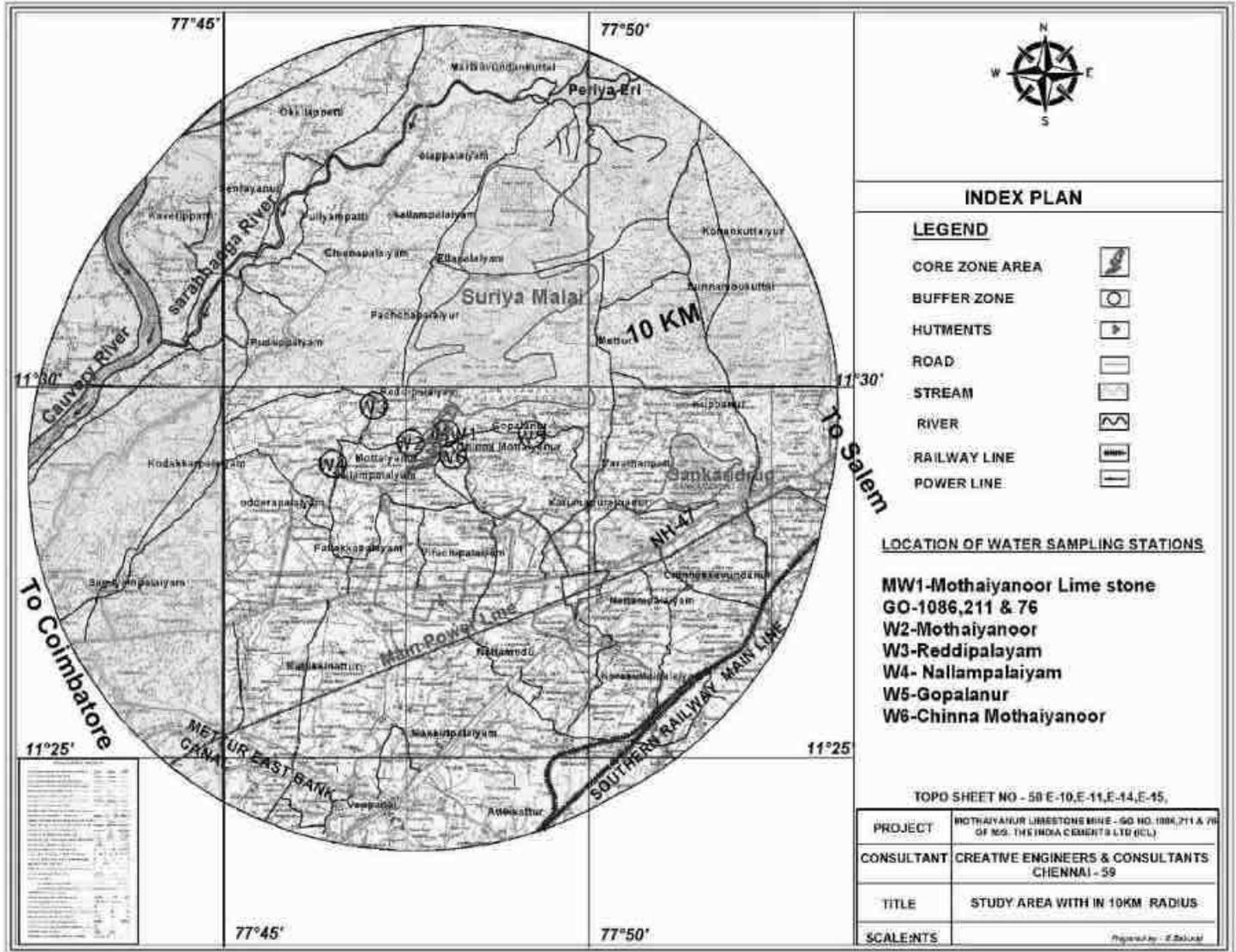




Table 3.17: Summary of Water Quality Data

Season	December 2023 to February 2024	
Monitoring Locations	6 locations	
Parameters	Range of values	Limits*
pH at 25 °C	7.35 – 7.89	6.5-8.5
Total Dissolved Solids, mg/L	224 – 1246	2000
Chloride as Cl-, mg/L	33.27 – 332.66	1000
Total Hardness (as CaCO ₃), mg/L	154.84 – 539	600
Total Alkalinity (as CaCO ₃), mg/L	41.16 – 470.40	600
Sulphates as SO ₄ ²⁻ , mg/L	68.49 – 379.34	400
Iron as Fe, mg/L	0.02 – 0.06	0.3
Nitrate as NO ₃ , mg/L	2.45 – 5.64	45
Fluoride as F, mg/L	0.44 – 0.68	1.5

3.3.3.1 Results and Discussion:

The results of the 6 bore well water sample analysis are shown in **Table No - 3.13**. The pH values of bore well water were ranging in between 7.35 – 7.89. TDS values were in the range of 224 - 1246 mg/L. Chloride values were ranging from 33.27 –332.66 mg/L. Iron content was found to be in the range 0.02 - 0.06 mg/L. The water quality of ground water is found to be within the prescribed Permissible limits of IS: 10500 Norms in the absence of an alternative source as per Drinking Water Specifications. The water quality data is provided in **Annexure-10**.

3.3.4 NOISE ENVIRONMENT:

Opearional phase of this project may lead to increase noise levels from the existing levels at least in and around the project area. As noise level beyond permissible limits will cause adverse impacts on the environment, it has become imperative to assess the noise levels in and around the mine area. Noise level measurements were taken at the 5 locations during the monitoring period. Details of the same are provided below:





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Table 3.18: Noise Level Monitoring

1.	Monitoring Period	Winter Season (Dec 2023 – Feb 2024)			
	Monitoring Location	The location map showing noise monitoring locations are given in Figure No.3.12 .			
	Code	Location	Latitude & longitude	Distance	Direction
2.	N1	Mothaiyanur Limestone Mine	11°29' 04.11"E, 77°48'0.66"N	-	-
	N2	Mothaiyanoor	11°29'11.47"E, 77°47'39.89 "N	<500m	W
	N3	Reddipalayam	11°29'26.48"E, 77°47'03.58 "N	1.5km	NW
	N4	Nallampalayam	11°29'09.75"E, 77°46'47.72 "N	1.9km	SW
	N5	Gopalanur	11°29'22.99"E, 77°49'40.12"N	2.5KM	E
	N6	Chinna Mothaiyanur	11°28'34.54"E, 77°48'22.52 "N	<500m	E
3.	Methodology	Noise levels were measured using sound level meter manufactured by (Model No - SL-4001, Make - Lutron). Sound Pressure Level (SPL) measurements were measured at all locations where ambient air quality monitored; one reading for every hour was taken for 24 hours.			
4.	Monitoring Frequency	Once during monitoring period			

Figure 3.11: Location of Noise Sampling Stations

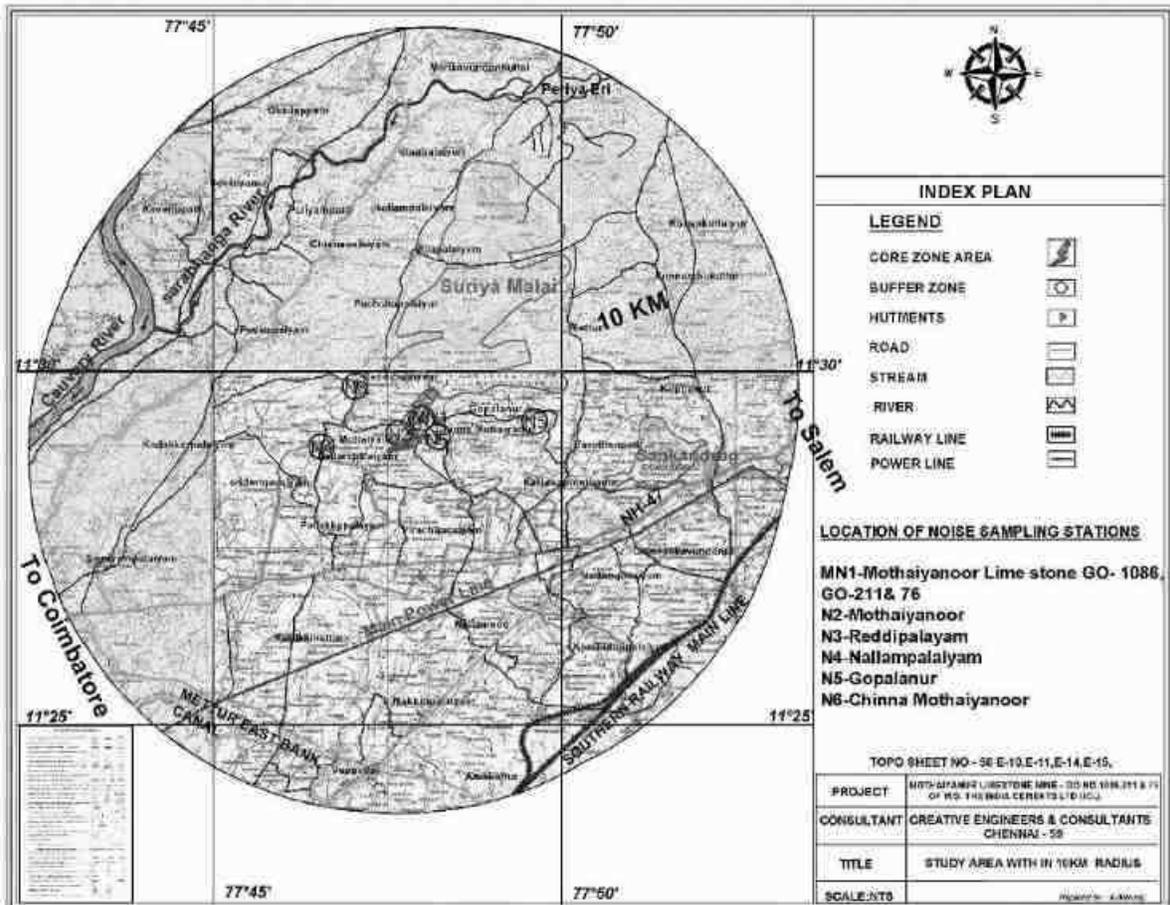
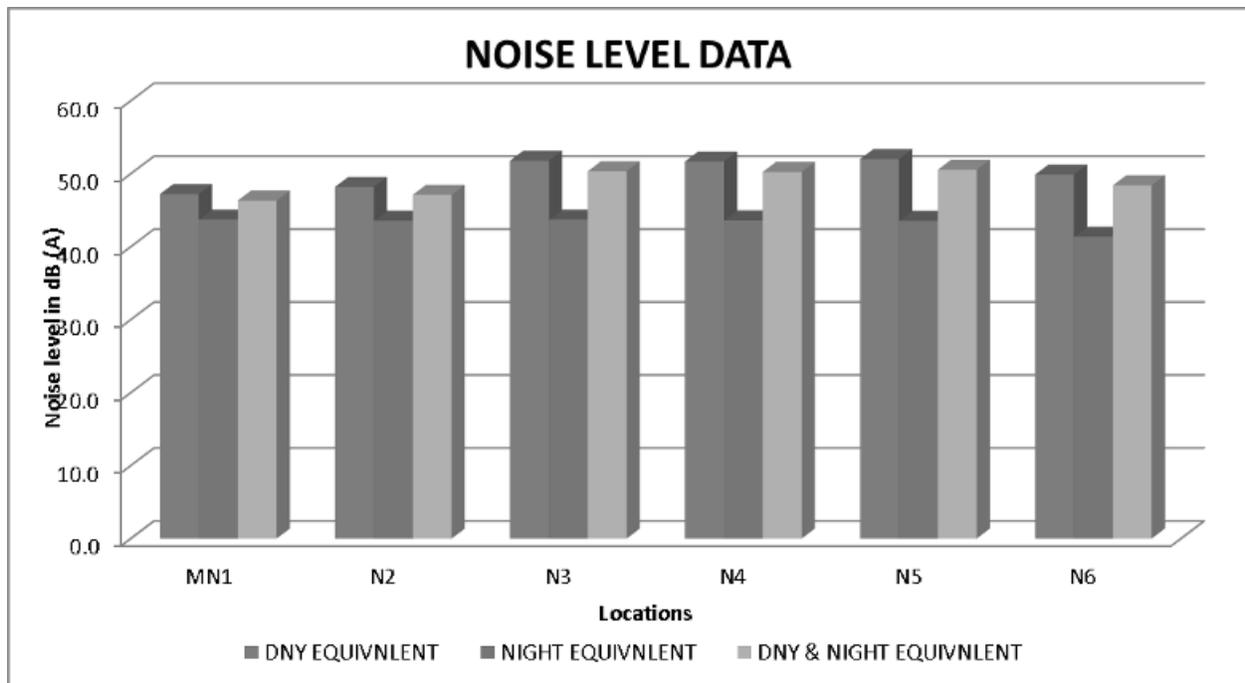




Table 3.19: Ambient Noise Level in dB (A)

Date and time of monitoring	MN1	N2	N3	N4	N5	N6
Day Equivalent	47.2	48.2	51.8	51.7	52.0	49.9
Night Equivalent	43.7	43.6	43.7	43.6	43.5	41.4
Day & Night Equivalent	46.3	47.1	50.4	50.2	50.5	48.4
Limits: As per CPCB: Work zone Exposure in 8 hr - 90 dB(A) As per MoEF&CC: Residential: Day equivalent - 55 dB(A); Night equivalent - 45 dB(A)						

Figure 3.12: Noise Level Data



3.3.4.1 Results and Discussion:

The results of noise levels for all locations are given in **Table No-3.15**. The noise values for all above locations are shown in a comparative chart given in **Figure No - 3.12**. In the buffer zone, day Equivalent Noise (Leq-d) noise levels were ranging from 38.7 dB(A) to 40.1 dB(A) and night Equivalent Noise (Leq-d) levels ranged between 51.5 dB(A) to 59.2 dB(A). While comparing with the MOEF&CC Norm of 55 dB(A) for day time and 45 dB(A) for night time, the monitored ambient noise levels were within the limit values for Residential areas.





3.3.5 SOIL CHARACTERISTICS:

Soil samples were collected in 5 locations in the core and buffer zone to analyse the physiochemical characteristics of the soil in the area. Elaborate details of the same has been provided below.

Table 3.20: Soil Quality Monitoring

1.	Monitoring Period	Winter Season (Dec 2023 – Feb 2024)			
2.	Monitoring Location	The location map showing soil sampling locations are given in Figure No.3.14.			
	Code	Location	Latitude & logitude	Distance	Direction
	S1	Mothaiyanur Limestone Mine	11°29' 04.11"E, 77°48'0.66"N	-	-
	S2	Mothaiyanoor	11°29'11.47"E, 77°47'39.89 "N	<500m	W
	S3	Reddipalaiyam	11°29'26.48"E, 77°47'03.58 "N	1.5km	NW
	S4	Nallampalaiyam	11°29'09.75"E, 77°46'47.72 "N	1.9km	SW
	S5	Gopalanur	11°29'22.99"E, 77°49'40.12"N	2.5KM	E
3.	Methodology	Composite soil samples using sampling augers and field capacity apparatus.			
4.	Monitoring Frequency	Once during monitoring period			





Figure 3.13: Location of Soil Sampling Stations

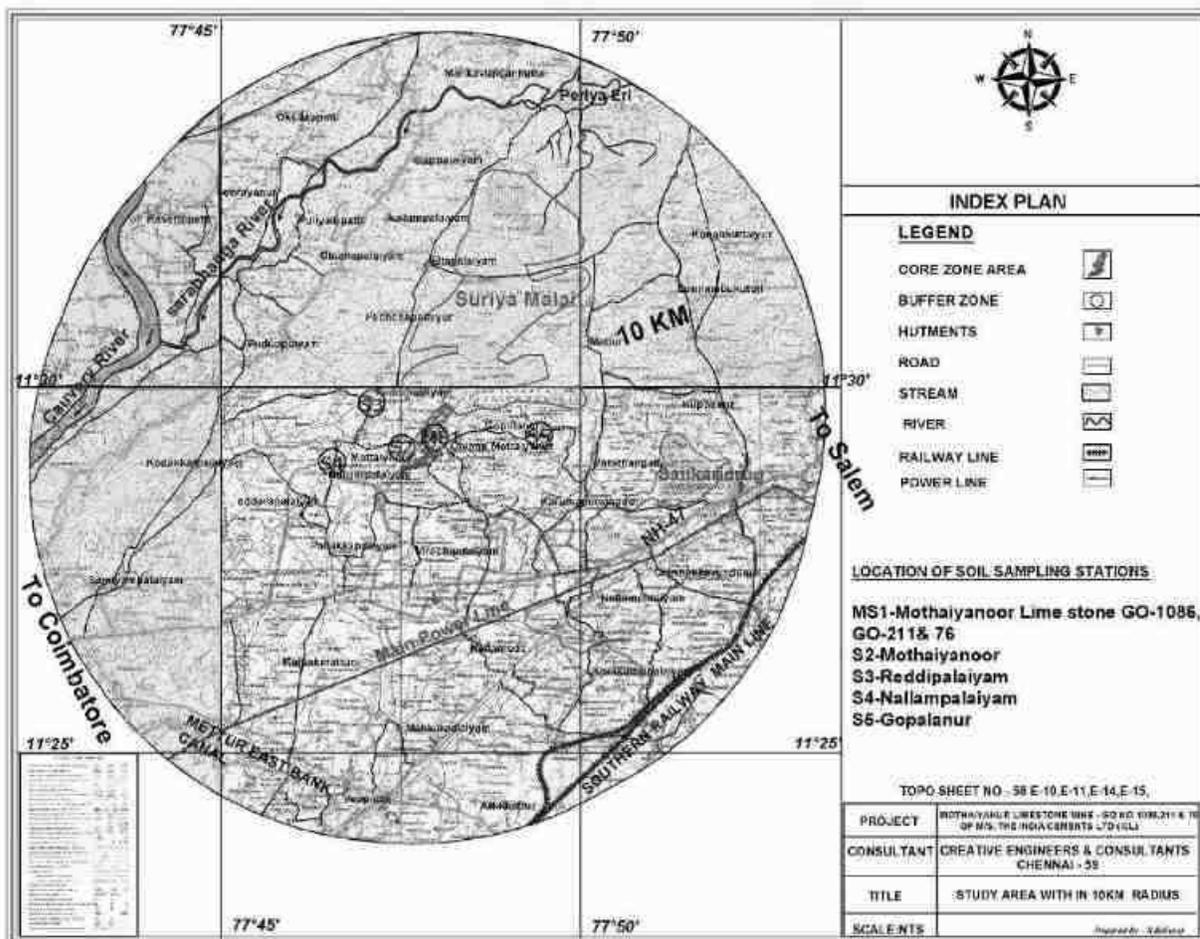


Table 3.21: Soil Quality Data

S.No	Parameters	Unit	MS1	S2	S3	S4	S5
1	pH at 25°C	-	7.66	7.12	7.02	7.28	7.33
2	Electrical Conductivity	(µmhos/cm)	65.49	102.2	47.86	89.43	74.56
3	Dry matter content	%	96.32	94.66	95.72	94.99	98.12
4	Water Content	%	3.68	5.34	4.28	5.01	1.88
5	Organic Matter	%	0.89	0.79	0.85	1.42	1.24
6	Soil texture	-	SILT LOAM	LOAM	SILT LOAM	LOAM	LOAM
7	Grain Size Distribution	%					
	i. Sand		30.54	40.72	24.33	45.75	46.69
	ii. Silt		52.43	47.32	57.92	43.86	42.11
	iii. Clay		17.03	11.96	17.75	10.39	11.20
10	Phosphorous	µg/g	0.92	1.54	1.23	1.57	2.27
11	Sodium	mg/kg	704	602	836	410	352





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

12	Potassium	mg/kg	770	680	962	544	510
13	Total Nitrogen	mg/kg	220	196	252	448	420
14	Total Sulphur	%	BDL(D.L - 0.02)				

3.3.5.1 Results and Discussion:

Results of the soil samples show that the pH values were ranging between 7.02 to 7.66 and Electrical Conductivity values were ranging between 47.86 – 102.2 μ mhos/cm. Soils are generally silt loam and loam type. Organic matter values were ranging between 0.79 – 1.42%.

Total Nitrogen values were ranging between 196 - 448 mg/kg. Phosphorus values were ranging between 0.92 - 2.27 μ g/g. Potassium values were ranging between 502-958mg/kg. Sodium values were ranging between 352- 836 mg/kg. Total Sulphur values were observed to be BDL. The soil quality data for the samples collected and analyzed are provided in **Table No – 3.16.**

3.4 LAND ENVIRONMENT - LANDUSE & LAND COVER

For preparing an impact statement, aspects of the land conditions are covered under land use. An industrial project / mine can cause changes in land use, soil process in different intensities depending upon the size of the project and distance involved between the industries and the area. Here, land use status for a radius of 10 km has been studied.

3.4.1 DATA USED AND METHODOLOGY

For the present study on land use pattern of buffer area around the proposed stone and gravel quarry, an archived historical data of Landsat 9 data shas been used as base data acquired on Feb 2024 (**Figure No.3.14**) has been used to generate the require landuse map showing their spatial pattern within the buffer area. The table showing data used for generation of information on landuse and subsequent GIS analysis is given below

Table 3.22: RS satellite image used for the present study

S.No	Type of Data	Date	Generated Map
1.	Landsat 9	Feb 2024	Landuse (LU) Map showing 10 Km around the ML area

Interpretation of satellite image requires understanding of relationship between image elements and their respective terrain elements. Since, in the present study, the landuse information is obtained using visual interpretation, an interpretation key is generated. The image elements such



as color, tone, texture, size, shape and associated elements have been used to delineate various landuse categories. The landuse categorization and nomenclature used in the present study is based on the national level landuse classification system, which is adopted for the entire country as recommended by National Remote Sensing Centre (NRSC), Department of Space, Government of India.

Figure 3.14 : Landsat 9 Satellite Data of the Study Area

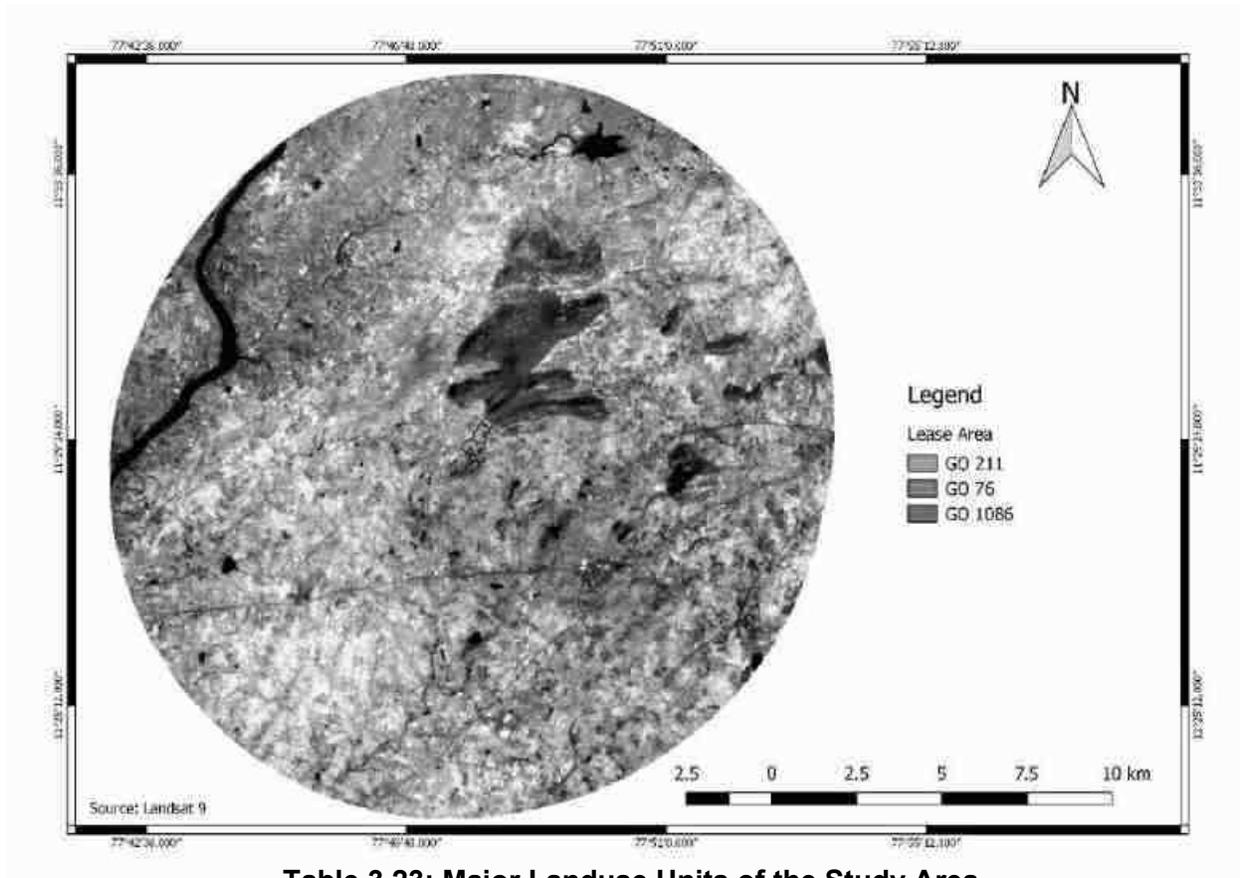


Table 3.23: Major Landuse Units of the Study Area

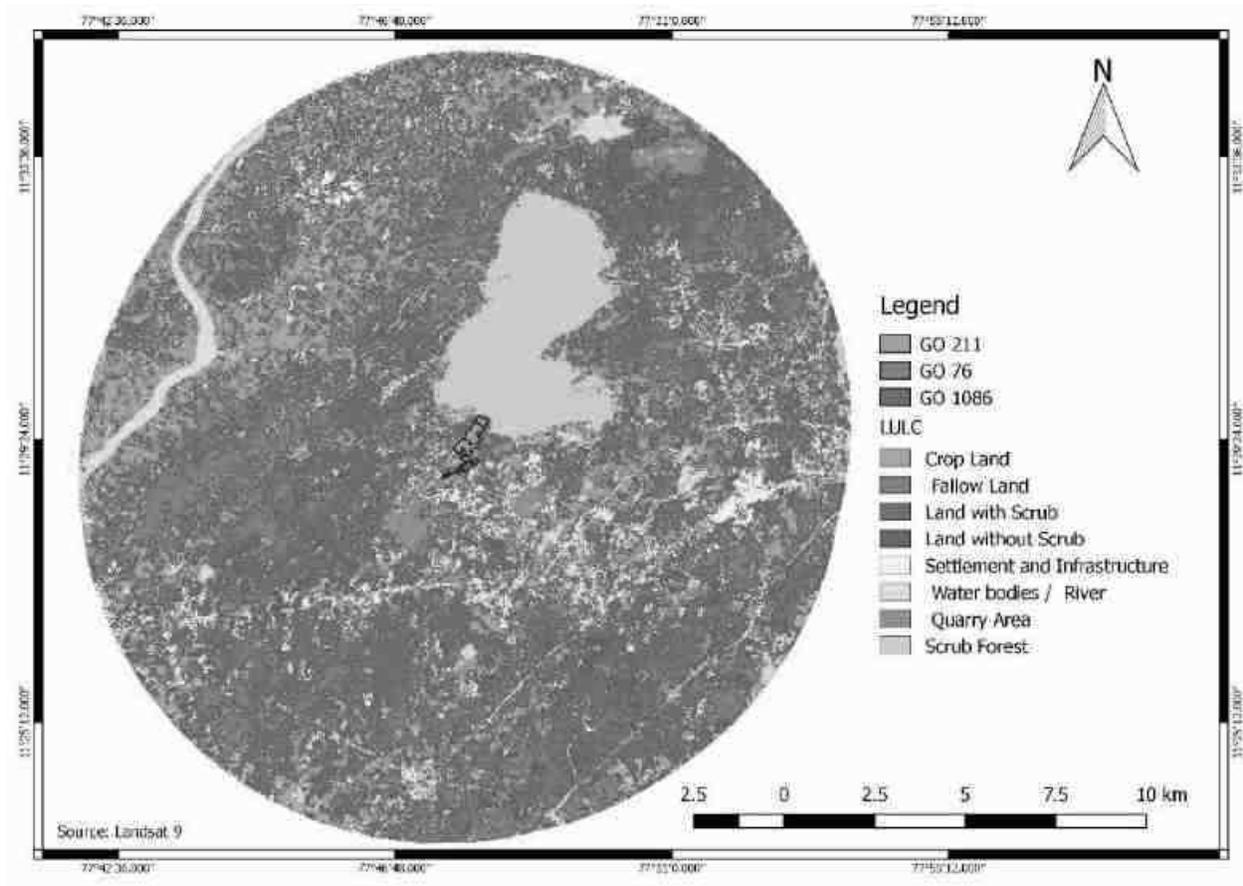
S.No	Major Category	Landuse unit
1	Built-Up Land	Village, Town, Industrial / Vacant Area
2	Agricultural Land	Crop Land Fallow Land Plantation Farm Land
3	Forest Land	Open Scrub Forest
4	Waste Land Mining Area	Land With Scrub/ Land Without Scrub Barren Rocky/ Stony Waste Quarries / Abandoned Quarries
5	Waterbodies	Tanks/ Rivers / Streams

Such LandUse and Land cover (LULC) categories have been verified using field check and identified sample sites within the buffer area, verified on field and transferred into gis geo-



coordinates using observation coordinates received from hand held GPS (global positioning system) instrument. Thus, an interpreted final landuse map has been generated (**Figure No. 3.15**) using above such elaborate procedure and transformed into GIS environment for its spatial distribution and area estimation. Spatial nature and extent of various landuse categories within the buffer area discussed is given below:

Figure 3.15: Map Showing Land Use Categories around 10km Buffer





Photograph showing Land use In Buffer Zone





Table 3.24: Area Estimation of Landuse Categories in Buffer Zone

S.No	Landuse Feature	Area (Sq.Km)	Percentage
1	Agriculture/ Plantation	63.37	17.50
2	Fallow Land	70.61	19.50
3	Land With Scrub	98.90	27.32
4	Land Without Scrub	9.97	2.75
5	Settlement / Infrastructure	34.18	9.44
6	Water bodies	13.54	3.74
7	Mining Area / Industries	6.39	1.77
	Scrub / Reserve Forest	65.11	17.98
	Total	362.07	100.00

From the above table it is seen that 17.50 % of the study area is agriculture land and 19.50 % are fallow land. Land with scrub constitutes 27.32 %, lands without scrub constitute 2.75 % and waterbodies constitute 3.74 %, Scrub / Reserve Forest constitute 17.98 % and Mining area constitute 1.77 %.

3.4.2 LAND USED BASED ON REVENUE RECORDS:

The study area for the land use pattern (10 km radius) has been divided into four zones viz. Zone-I (0-2 km), Zone-II (2-5 km), Zone-III (5-10 km) and Zone-IV (0-10 km) respectively. The land use pattern of the study area falling within 10 km radius around the proposed project area is presented in Table No.3.21.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Table 3.25: Land Use Pattern of the Study Area Falling Within 10 Km Area in (Ha)

Study Area	Total Geographical Area	Forest Area	Area under Non-Agricultural Uses	Barren & Un-cultivable Land Area	Permanent Pastures and Other Grazing Land Area	Land Under Miscellaneous Tree Crops etc. Area	Culturable Waste Land Area	Fallows Land other than Current Fallows Area	Current Fallows Area	Total Un irrigated Land Area	Area Irrigated by Source
0 - 2KM	3026.1	73.88	251.1	433.67	17.42	1.83	2.63	375.43	204.14	1316.49	349.51
2 - 5KM	9719.13	1656.06	523.07	541.78	46.05	2	51.32	126.21	3218.73	2589.8	964.11
5 - 10KM	18500.06	182.95	2892.11	756.83	130.79	63.06	104.94	458.2	3354.74	5336.27	5220.17
Grand Total	31245.29	1912.89	3666.28	1732.28	194.26	66.89	158.89	959.84	6777.61	9242.56	6533.79

Table 3.26: Village Wise Landuse Pattern

Sl.No	Name of village	Total Geographical Area	Forest Area	Area under Non-Agricultural Uses	Barren & Un-cultivable Land Area	Permanent Pastures and Other Grazing Land Area	Land Under Miscellaneous Tree Crops etc. Area	Culturable Waste Land Area	Fallows Land other than Current Fallows Area	Current Fallows Area	Total Unirrigated Land Area	Area Irrigated by Source
0- 2 KM	Sankari Taluk, Salem District											
1	Chinnakavundanur	2276.3	73.88	220.8	413.4	17.42	1.83	0	323.13	184.84	762.49	278.51
2	Alathur	749.8	0	30.3	20.27	0	0	2.63	52.3	19.3	554	71
	Sub Total A	3026.1	73.88	251.1	433.67	17.42	1.83	2.63	375.43	204.14	1316.49	349.51
2 - 5 KM	Sankari Taluk, Salem District											
3	Devanakavandanur	4536.93	1656.06	183.15	407.88	2.04	0	0	25.6	926.2	1060	276
4	Katteri	2176.91	0	143.54	35.94	5.01	0	42.12	0	1028.62	698.66	223.02
5	Virachchipalayam	640.85	0	54.3	36.22	0	0	0.8	0	85.53	297	167
6	Sanniyasipatti Ag.	244.67	0	29.44	3.74	0	0	0	0.61	61.88	42	107
	Tiruchengode Taluk, Namakkal Dist											
7	Pallakkapalayam	1454.83	0	57.16	22	24	0	1.23	100	739.66	375.89	134.89
8	Sowdapuram	664.94	0	55.48	36	15	2	7.17	0	376.84	116.25	56.2
	Sub Total B	9719.13	1656.06	523.07	541.78	46.05	2	51.32	126.21	3218.73	2589.8	964.11
5-10 KM	Omalar Taluk, Salem District											
9	Panikkanur	213.22	0	23.73	7.57	3.79	0	2.25	0	47.88	100	28
10	Pappambadi	834.23	0	119.46	53.58	0	17.92	32.5	0	196.77	306	108
11	Desavilakku	1948.04	0	247.45	149.57	6.14	25.7	47.06	0	480.12	741	251
	Sankari Taluk, Salem District											
12	Kaveripatti	615.23	0	70.68	0	0	0	2.45	32.5	20.6	150	339
13	Koneripatti	794.87	0	158.4	0	0	0.04	0	20	31.43	124.58	460.42
14	Kaveripatti Agraharam	452.03	0	70.6	0	0	0.15	0	0	34.28	66	281
15	Manjakalpatti	1159.77	182.95	47.77	248	0	0	0	45.62	71.43	442.58	121.42
16	Vettukkadupatti	306.22	0	13.83	13.38	0	1.75	5.12	20.1	100.04	110	42





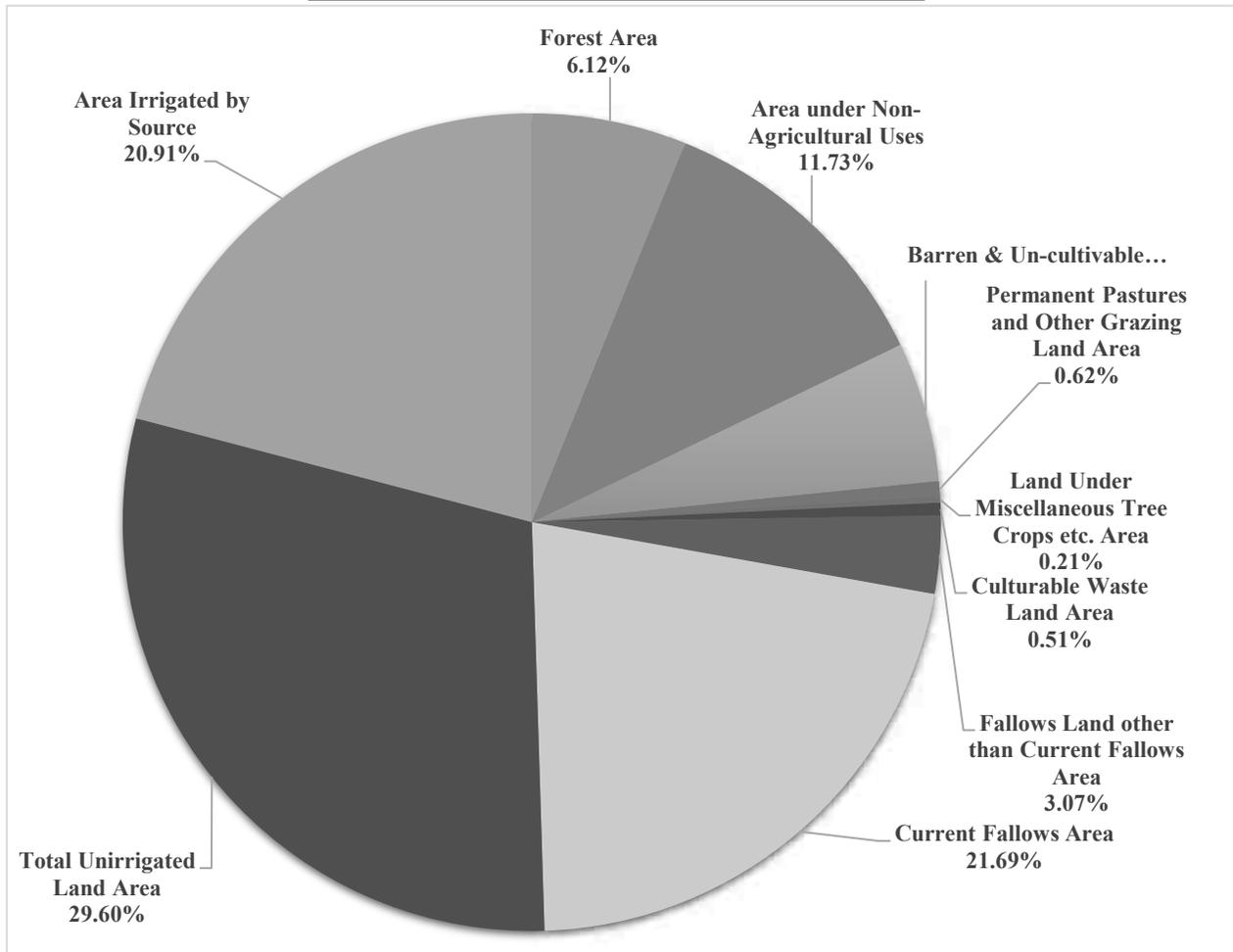
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17	Aiveli	590.78	0	92.5	50.94	0	0	0	45.66	205.68	130	66
18	Pullakkavundampatti	756.39	0	111.71	0	0	0	0	27.4	115.28	159	343
19	Pullakkavundampatti Agraharam	575.48	0	120.26	0	0	0	0	32.5	108.72	42	272
20	Morur	2100.8	0	230.37	13.29	1.88	0	0	127.46	553.2	958.71	215.89
Tiruchengode Taluk, Namakkal Dist												
21	Kumarapalayam Agraharam	1278.11	0	165.76	30	0	0	0	0	378.95	14.9	688.5
22	Modamangalam	653.81	0	146.65	0	40	8.5	0	14.04	12.27	316.47	115.88
23	Modamangalam Agraharam	348.74	0	154.5	0	10	0	0	0	2.02	115.3	66.92
24	Karuveppampatti	1131.8	0	408.65	30.5	14.5	9	5	21.17	92.09	266.18	284.71
25	Anangur	1727.68	0	155.53	0	15.48	0	5	31.75	135.05	1032.54	352.33
26	Kaliyanur	766.26	0	121.46	40	10	0	3	0	198.22	24.11	369.47
27	Kaliyanur Agraharam	335.62	0	69.4	38	10	0	2.5	0	31.12	5.29	179.31
28	Samayasangili Agraharam	911.98	0	145.96	40	7	0	0.06	40	322.95	5.9	350.11
29	Pallipalayam Agraharam (Part)	999	0	217.44	42	12	0	0	0	216.64	225.71	285.21
Sub Total C		18500.06	182.95	2892.11	756.83	130.79	63.06	104.94	458.2	3354.74	5336.27	5220.17
Total - A+B+C		31245.29	1912.89	3666.28	1732.28	194.26	66.89	158.89	959.84	6777.61	9242.56	6533.79

*Source: District Primary Cences Abstract, Namakkal, Salem and Erode district of Tamilnadu State-2011



Figure 3.16: Landuse within Buffer Zone Area



3.5 BIOLOGICAL ENVIRONMENT:

Study of the biological environment of any area comprises of well-planned ecological survey for the floristic and faunal composition of the areas through various scientifically planned techniques. Accordingly, the ecological survey for the proposed quarry area including core and buffer zone were carried out to identify various species occurring in the area.



3.5.1 FLORA:

An ecological survey of the study area was conducted with reference to listing of species and assessment of the existing baseline ecological conditions. The objective of the survey is as follows:

- ❖ Generate existing data from field observations of various terrestrial floristic occurrences.
- ❖ Collect secondary data from Government records as well as through discussion with Forest officials, knowledgeable public etc.,
- ❖ Compare the data with authentic past records to identify changes, if any.
- ❖ Identify the impact of project operations on the biological aspects.

To accomplish the above objectives, a general ecological survey covering an area of 10 km radius was conducted. The locations were identified for phyto-sociological aspects to assess the current status.

3.5.1.1 Sampling Methodology:

In order to provide representative ecological status for the study area, the 10-km radius buffer area has been divided into four quartiles for biodiversity sampling, i.e., NE (Q-1), NW (Q-2) SW (Q-3) and SE (Q-4). Each of the quartiles have been examined for representative flora on randomly sampled quadrats for trees (10x10 m), shrubs (5x5 m) and herbs (1x1 m) depending upon prevailing geographical conditions and bio-diversity aspects of study area.

Phyto-sociological Survey: Phyto-sociological parameters, viz., Abundance (i.e., density), average and minimum stems were measured to determine the distribution and ecological aspects of the species. Abundance is a measure of the density of distribution of an individual species within a given area. It is calculated by summed individuals of a species. Average species number is calculated for all quadrates; similarly, minimum number of individuals represented is recorded at quadrats level. A total of 10 quadrats were laid down in core area and a total of 20 quadrats were laid out in four quartiles (5 each) of buffer area.

Quadrats method for flora : Quadrats of 10 × 10m were laid down randomly within core and 10kms buffer area; each quadrat was laid to assess the trees (>5 cm GBH) and 5 × 5 m sub-quadrat nested within the quadrat for shrubs and two plot 1 × 1 m for herbs . The quadrats were laid at a minimum distance of a kilometer apart to maximize the sampling efforts and minimize





the species homogeneity, such as small stream area, trees in agricultural bunds, tank bunds, farm forestry plantations, natural forest area, avenue plantations, house backyards, etc. In each sample quadrat, individuals belonging to tree, shrub and herb species were recorded separately, and have been identified on the field. The prevailing land use and habitat quality has been noted down for each location on the field.

Vegetation Analysis using index: Species diversity will be calculated by using Shannon and Wiener (1963) formula as follows:

$$H' = - \sum_{i=1}^R p_i \ln p_i$$

Whereas,

H' is Shannon index of general diversity,

p_i is often the proportion of individuals belonging to the i th species in the dataset of interest.

Evenness index was calculated as: $E = H'/H_{max}$,

Whereas $H_{max} = \log_2$ (number of species in the plot)

Using the above methodology, a general ecological survey covering an area of 10 km radius was conducted. The locations were identified for phyto-sociological aspects to assess the current status and Species were identified using regional floras. (Gamble and Fischer 1921- 1935; Matthew 1991).

Core Zone:

Major part of the lease area is already used for mining and allied activities and as such free from any major natural vegetation. Plantation carried out by the PP and few local shrubs are mostly found in the area. The dominated species area *Morinda tinctoria*, *Prosopis juliflora*, *Azadirachta indica*, *Prosopis cineraria* etc. The detailed list of trees are given in Table No.3.23





Photograph showing Core Zone





Table 3.27: List of Plants in the Core Zone

Sl.No	Plant Species	Family	Local Name
Trees			
1	Prosopis cineraria	Fabaceae	Vanni
2	Morinda tinctoria	Rubiaceae	Manchanari
3	Acacia planifrons	Fabaceae	Kudai vel
4	Albizia amara	Fabaceae	Vagai
5	Vachellia nilotica	Fabaceae	Karuvelan
6	Acacia auriculiformis	Fabaceae	Pencile tree
7	Azadirachta indica	Meliaceae	Vembu
8	Prosopis juliflora	Fabaceae	Vealimul
9	Phoenix sylvestris	Arecaceae	Eeachamaram
Shrub			
1	Tecoma stans	Bignoniaceae	Sonnapatti
2	Lantana camara	Verbenaceae	Unni chedi
3	Parthenium hysterophorus	Asteraceae	
4	Dodonaea viscosa	Sapindaceae	Virali
5	Carissa spinarum	Apocynaceae	Sirukilaa
6	Ricinus communis	Euphorbiaceae	Amanakku
7	Nerium oleander	Apocynaceae	Arali
Herbs			
1	Tridax procumbens	Asteraceae	Milakai poondu
2	Sida cordifolia L.	Malvaceae	Kurunthotti
3	Leucas aspera	Lamiaceae	Thulasi
4	Abutilon indicum	Malvaceae	keezha nelli
5	Phyllanthus niruri L.	Phyllanthaceae	Nela nelli
6	Ocimum sanctum	Lamiaceae	Vettukai poondu
7	Cleome viscosa L.	Cleomaceae	Naikkaduku
8	Cleome viscosa	Cleomaceae	Nilatutti
Grasses			
1	Cynodon dactylon	Poaceae	
2	Chloris barbata	Poaceae	Chevvarakupul
3	Kyllinga cylindrica	Cyperaceae	
4	Carex nubigena	Poaceae	
5	Chloris cruciata	Poaceae	

Buffer Zone: Major part of the study area is of fallow and scrubby type. Agriculture is restricted due to lack of adequate water resources and mostly monsoon dependent. In general, agricultural seems to be prominent in the western side of the lease area proximate to Caveary river . Crops such as Vazhai, coconut, sugar cane, cholam, kuchi kilangu & vegetables are generally planted in the study area. Besides, aricanut, paddy, teak plantation are also observed in the water available region near cauvery & its tributary areas. Suriya malai reserve forest is of scrub forest type with mostly shrubs and bushes only. Totally 56 tree species were observed in buffer zone followed by 19 shrub species, 23 Species of herb, 8 climber species, 7 grass species and 9





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOONDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Agricultural crops. The dominant tree species are *Azadirachta indica*, *Tamarindus indica*, *Prosopis juliflora* and *Mangifera indica* followed by shrub species are *Lantana camara*, *Dodonaea viscosa*, *Senna auriculata* and *Calotropis gigantea*. The dominated herb species are *Acalypha indica*, *Cleome viscosa*, *Amaranthus spinosus* and *Achyranthes aspera*.

Table 3.28: List of Plant Species in the Buffer Zone

Sl.No	Plant Species	Family	Local Name
Trees			
1	<i>Punica granatum</i> L.	Lythraceae	Maadulampazham
2	<i>Mangifera indica</i> L.	Anacardiaceae	Maamaram
3	<i>Cassia fistula</i> L.	Fabaceae	Konrai
4	<i>Delonix elata</i> (L) Gamble	Fabaceae	Vadanarayan
5	<i>Cocos nucifera</i> L.	Arecaceae	Tennai
6	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Fabaceae	Kodukkapuli
7	<i>Spathodea campanulata</i> P.Beauv.	Bignoniaceae	Patadi
8	<i>Millingtonia hortensis</i> L.f.	Bignoniaceae	Maramalli
9	<i>Senna siamea</i> (Lam.)	Fabaceae	Manjal konrai
10	<i>Artocarpus heterophyllus</i> Lam	Moraceae	Palaa
11	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nelli
12	<i>Lannea coromandelica</i> (Houtt.) Merr.	Anacardiaceae	Oodiyan
13	<i>Peltophorum pterocarpum</i> (DC.) K.Heyne	Fabaceae	Kilukiluppai
14	<i>Casuarina equisetifolia</i> L.	Casuarinaceae	Savukku
15	<i>Lagerstroemia speciosa</i> (L.) Pers.	Lythraceae	Pu-marutu
16	<i>Prosopis juliflora</i> (Sw.) DC.	Fabaceae	Vealimul
17	<i>Murraya paniculata</i> (L.) Jack	Rutaceae	Vengarai
18	<i>Manilkara zapota</i> (L.) P.Royen	Sapotaceae	Chappotta
19	<i>Vachellia leucophloea</i> (Roxb.)	Fabaceae	Velvelam
20	<i>Carica papaya</i> L.	Caricaceae	Pappali
21	<i>Morinda tinctoria</i> Roxb.	Rubiaceae	Manchanari
22	<i>Madhuca longifolia</i> (J.Konig) J.F.Macbr.	Sapotaceae	Illupei
23	<i>Acacia auriculiformis</i> A.Cunn. ex Benth.	Fabaceae	Pencile tree
24	<i>Musa paradisiaca</i> L.	Musaceae	Valzhlai
25	<i>Moringa oleifera</i> Lam.	Moringaceae	Murungai
26	<i>Eucalyptus globulus</i> Dehnh.	Myrtaceae	
27	<i>Psidium guajava</i> L.	Myrtaceae	Koyya
28	<i>Murraya koenigii</i> (L.) Sprengel.	Rutaceae	Curry leaf
29	<i>Albizia lebeck</i> (L.) Benth.	Fabaceae	Vagai
30	<i>Acacia planifrons</i> Wight & Arn.	Fabaceae	Kudai vel
31	<i>Delonix regia</i> (Boj. Ex Hook.) Raf.	Fabaceae	Mayil konrai
32	<i>Citrus limon</i> (L.) Burm.f.	Rutaceae	Lemon
33	<i>Terminalia catappa</i> L.	Combretaceae	Nattuvadumai
34	<i>Wrightia tinctoria</i> (Roxb.) R.Br	Apocynaceae	Paalai
35	<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae	Porasu
36	<i>Aegle marmelos</i> (L.) correa	Rutaceae	Vilam Palam
37	<i>Ficus benghalensis</i> L.	Moraceae	Aalamaram
38	<i>Thespesia populnea</i> (L.) Sol.	Malvaceae	Puvarasu
39	<i>Butea superba</i> Roxb.	Fabaceae	Kodi murukkan
40	<i>Tectona grandis</i> L.f.	Lamiaceae	Tekku





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Sl.No	Plant Species	Family	Local Name
41	<i>Vachellia nilotica</i> (L.) P.J.H.Hurter & Mabb	Fabaceae	Karuvelan
42	<i>Polyalthia longifolia</i> Sonn.	Annonaceae	Nietilingam
43	<i>Phoenix sylvestris</i> (L.) Roxb	Arecaceae	Eeachamaram
44	<i>Millettia pinnata</i> (L.) Panigrahi	Fabaceae	Pungai
45	<i>Terminalia bellirica</i> (Gaertn.) Roxb	Combretaceae	Thanaki
46	<i>Melia dubia</i> Cav.	Meliaceae	Malai Vembu
47	<i>Albizia saman</i> F.Muell.	Fabaceae	Rain tree
48	<i>Calamus rotang</i> L	Arecaceae	Parambai
49	<i>Borassus flabellifer</i> L.	Arecaceae	Panna-maram
50	<i>Tamarindus indica</i> L.	Fabaceae	Puli
51	<i>Conocarpus lancifolius</i>	Combretaceae	Damas
52	<i>Strychnos nux-vomica</i> L.	Loganiaceae	Yettimaram
53	<i>Ficus religiosa</i> L.	Moraceae	Poarasamaram
54	<i>Ficus hispida</i> L	Moraceae	Pei-atthi
55	<i>Syzygium cumini</i> L.	Myrtaceae	Naval
56	<i>Azadirachta indica</i> A.Juss	Meliaceae	Vembu
Shrubs			
1	<i>Ricinus communis</i> L.	Euphorbiaceae	Amanakku
2	<i>Nerium oleander</i> L.	Apocynaceae	Chevarali
3	<i>Dodonaea viscosa</i> Jacq.	Sapindaceae	Viraali
4	<i>Parthenium hysterophorus</i> L.	Asteraceae	
5	<i>Solanum pubescens</i> Willd	Solanaceae	Sundaikkai
6	<i>Carissa spinarum</i>	Apocynaceae	Sirukilaa
7	<i>Hibiscus rosasinensis</i> L.	Malvaceae	Chemparati
8	<i>Vitex negundo</i> L.	Lamiaceae	Nochchi
9	<i>Vinca rosea</i> (L.) G.Don.	Apocynaceae	Nithyakalyani
10	<i>Ipomoea carnea</i> Jace.	Convolvulaceae	Neyvelik kattamanakku
11	<i>Rosa indica</i> L.	Rosaceae	Rose
12	<i>Jasminum grandiflorum</i> L.	Oliaceae	Malli
13	<i>Senna auriculata</i> (L.) Roxb.	Fabaceae	Aavarampoo
14	<i>Calotropis exicana</i> (L.) W.T.Aiton	Apocynaceae	Earukku
15	<i>Acalypha wilkesiana</i> L.	Euphorbiaceae	kuppai-meni
16	<i>Lawsonia inermis</i> L.	Lythraceae	Marudaani
17	<i>Ixora coccinea</i> L.	Rubiaceae	Vetchi
18	<i>Lantana camara</i> L.	Verbenaceae	Unni chedi
19	<i>Tecoma stans</i> (L.) Ruxb.	Bignoniaceae	Thanga Arali
Herbs			
1	<i>Sida rhombifolia</i> L.	Malvaceae	Kurundotti
2	<i>Cleome gynandra</i> L	Cleomaceae	Taivelai
3	<i>Achyranthes aspera</i> L.	Amaranthaceae	Nayurivi
4	<i>Wedelia calendulacea</i> L.	Asteraceae	Manjal
5	<i>Tridax procumbens</i> L.	Asteraceae	Kinatruppasan
6	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Cemmullikkirai
7	<i>Sida cordifolia</i> L.	Malvaceae	Kurunthotti
8	<i>Solanum xanthocarpum</i> L.	Solanaceae	Kantankattiri
9	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Ammaan Pachcharisi
10	<i>Solanum nigrum</i> L.	Solanaceae	Manathakkali
11	<i>Acalypha indica</i> L.	Euphorbiaceae	Kuppaimeni
12	<i>Cleome viscosa</i> L.	Cleomaceae	Naikkaduku





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Sl.No	Plant Species	Family	Local Name
13	<i>Amaranthus viridis</i> L	Amaranthaceae	Kuppai kirai
14	<i>Andrographis paniculata</i> (Burm.f.) Wall.	Acanthaceae	Siriyaa Nangai
15	<i>Senna tora</i> L	Fabaceae	Tagarai
16	<i>Acanthospermum hispidum</i> DC.	Asteraceae	Mullu Chedi
17	<i>Mimosa pudica</i> L.	Fabaceae	Tottalavadi
18	<i>Phyllanthus niruri</i> L	Phyllanthaceae	Nela nelli
19	<i>Boerhavia erecta</i> L.	Nyctaginaceae	Simai Mukkirattai
20	<i>Tephrosia purpurea</i> (L.) Pers.	Fabaceae	Kollukkai Velai
21	<i>Sida acuta</i> Burm. F.	Malvaceae	Malaidangi
22	<i>Xanthium strumarium</i> L.	Asteraceae	Maruloomatham
23	<i>Leucas aspera</i> (Willd.) Link.	Lamiaceae	Thumbai
Climber			
1	<i>Asparagus racemosus</i> Wild	Asparagaceae	Ammaikodi
2	<i>Cissus quadrangularis</i> L	Vitaceae	Perandai
3	<i>Jasminum angustifolium</i> L Wild	Oleaceae	Kattumalligai
4	<i>Clitoria ternatea</i> L.	Fabaceae	Kannikkodi
5	<i>Hemidesmus indicus</i> (L.) R.Br.	Apocynaceae	Nannari
6	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Vallaarai
7	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Kovai
8	<i>Cuscuta reflexa</i> Roxb	Convolvulaceae	Verillakothan
Grasses			
1	<i>Kyllinga cylindrica</i> (Jacq.) DC.	Cyperaceae	
2	<i>Chrysopogan copei</i> Trin	Poaceae	
3	<i>Cyanodon dactylon</i> (L.) Pers.	Poaceae	
4	<i>Aristida hystrix</i> L.	Poaceae	
5	<i>Fimbristylis uliginosa</i>	Cyperaceae	
6	<i>Carex nubigena</i>	Poaceae	
7	<i>Chloris cruciata</i> (L.) Sw	Poaceae	
Agriculture Crops			
1	<i>Gossypium hirsutum</i> L.	Malvaceae	
2	<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	Cucurbitaceae	
3	<i>Cocos nucifera</i> L.	Arecaceae	
4	<i>Carica papaya</i> L.	Caricaceae	
5	<i>Oryza sativa</i>	Poaceae	
6	<i>Capsicum annum</i> L.	Solanaceae	
7	<i>Mangifera indica</i> L.	Anacardiaceae	
8	<i>Cucurbita pepo</i> L.	Cucurbitaceae	
9	<i>Musa paradisisca</i> L.	Musaceae	

There is no endangered or endemic plant species in core and buffer zone





3.5.2 FAUNA:

There is no Wild Life Sanctuary or National Park within the study area of 10 km. The list of fauna Species in the buffer zone were prepared based on the discussion with local villagers and observation during the field survey. The details are given in **Table No. 3.25**. The Suriya malai reserve forest was observed north of the mine boundary. The details of Flora and Fauna of Suriya malai reserve forest is given in **Annexure – 11**. Deer, Rabbit and two schedule-I species namely Peafowl, Monitor Lizard are present in Suriyamalai R.F are located in the suriya malai forest which is located within the buffer zone.

Table 3.29: List of Fauna in the Buffer Zone

S.No	Species Name	Commom Name	Schedule*
Mammals			
1	<i>Paradoxurus hermaphroditus</i>	Asian palm civet	SCH – II
2	<i>Lepus nigricollis</i>	Indian Hare	SCH – IV
3	<i>Funambulus palmarum</i>	Indian palm squirrel	SCH – IV
4	<i>Golunda ellioti</i>	Indian bush rat	SCH- V
5	<i>Sus scrofa</i>	Wild Pig	SCH – III
6	<i>Felis chaus</i>	Jungle Cat	SCH – II
7	<i>Muntiacus muntjak</i>	Barking deer	SCH – III
Birds			
1	<i>Cuculus micropterus</i>	Indian Cuckoo	SCH – IV
2	<i>Bubulcus ibis</i>	Cattle Egret	SCH – IV
3	<i>Acridotheres tristis</i>	Common Myna	SCH – IV
4	<i>Psittacula krameri</i>	Parakeets	SCH – IV
5	<i>Pycnonotus cafer</i>	Bulbul	SCH – IV
6	<i>Dicrurus macrocercus</i>	Black Drango	SCH – IV
7	<i>Pavo cristatus</i>	Indian peafowl	SCH- I
Reptiles			
1	<i>Bungarus caeruleus</i>	Krait	SCH – IV
2	<i>Daboia russelii</i>	Russell viper	SCH- II
3	<i>Varanus bengalensis</i>	Moniter Lizard	SCH- I
Amphibia – Frog & Toads			
1	<i>Duttaphrynus melanostictus</i>	Asian common toad	SCH – IV

* - Schedule specified in Wild Life Protection Act - 1972

3.6 HYDROGEOLOGICAL STUDY:

Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu which stipulates conducting a hydro geological study to evaluate the impact of mining activities on the nearby areas in addition to the following other points as stated below:





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

- Impact of the project on the water quality, both surface and groundwater, should assessed and necessary safeguard measures, if any required, should be provided.
- Impact on ponds, rivers and other water bodies to be elaborated.
- Contour map of the water table detailing the number of wells located around the site and its impacts on the wells due to mining activity.
- Based on actual monitored data, it may clearly be shown whether working will intersect groundwater or not. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table a detailed Hydrogeological study should be undertaken and report furnished. The report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers.

Comprehensive study covering the above mentioned aspects were carried out by them and a detailed report was also submitted. Salient details of the study report is reproduced below:

The study area of Mothaiyanur Limestone Mines situated in Sankari Block of Salem District is considered to understand the nature of aquifer and the impact of mining activities on aquifer system. The study area details are given below:

Table 3.30: Details of the Study Area

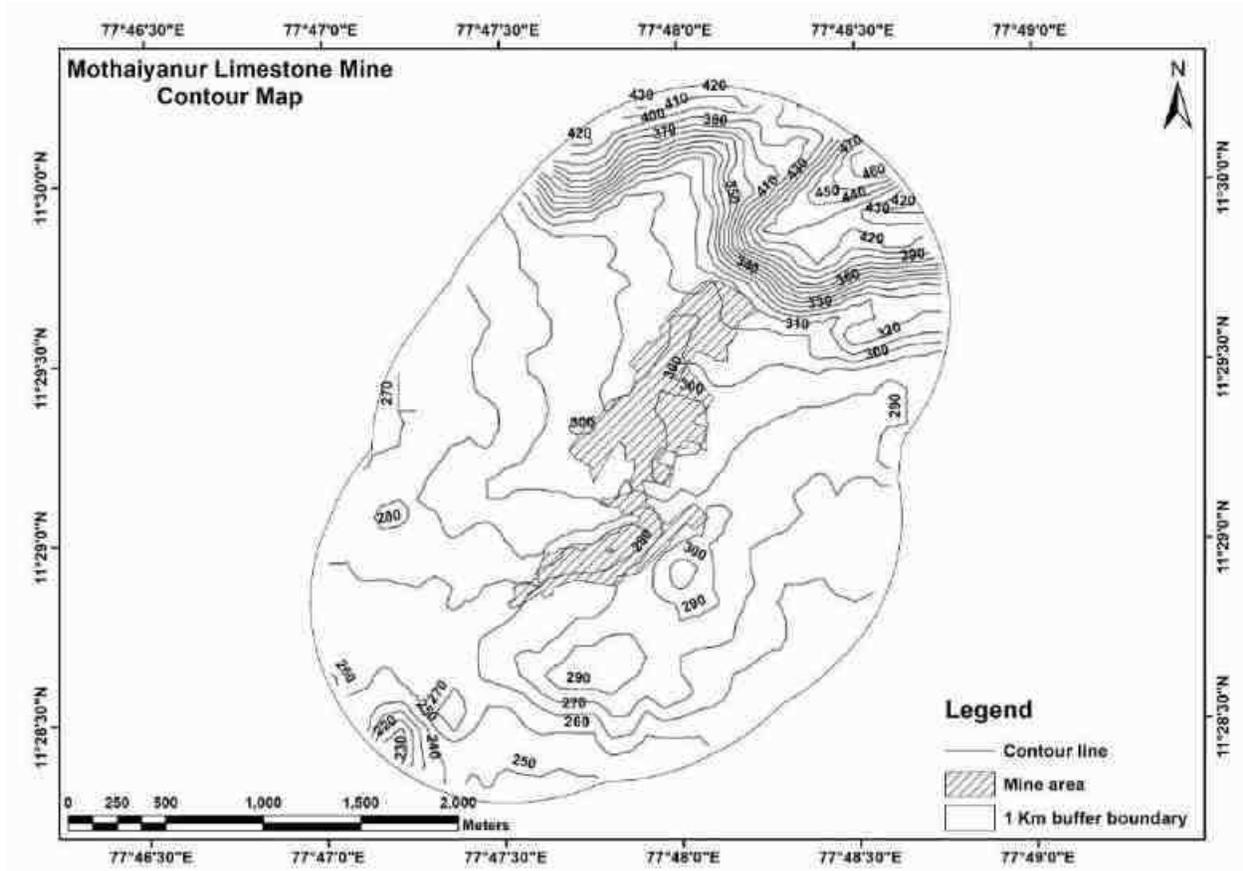
Mining Lease	Extent (Ha)	Topo Sheet No.	Village
GO.No.211	50.840	58 E / 15	Chinnagoundanur
GO.No.1086	4.865	58 E / 15	Chinnagoundanur
GO.No.76	8.005	58 E / 15	Chinnagoundanur

3.6.1 PHYSIOGRAPHY AND DRAINAGE:

Physiography: Limestone occurs in the form of crystalline variety as veins with pinch and swell nature. At places, the limestone bands are intercalated with veins of Calcite with more than 90% CaO. The area of study has lowest relief at the height of 230 m above mean sea level. The highest relief is noted in north and north western part of the study area while the lowest relief region is found in southern and south eastern part. The area pertaining to mining show relief ranging from 271m to 310m.

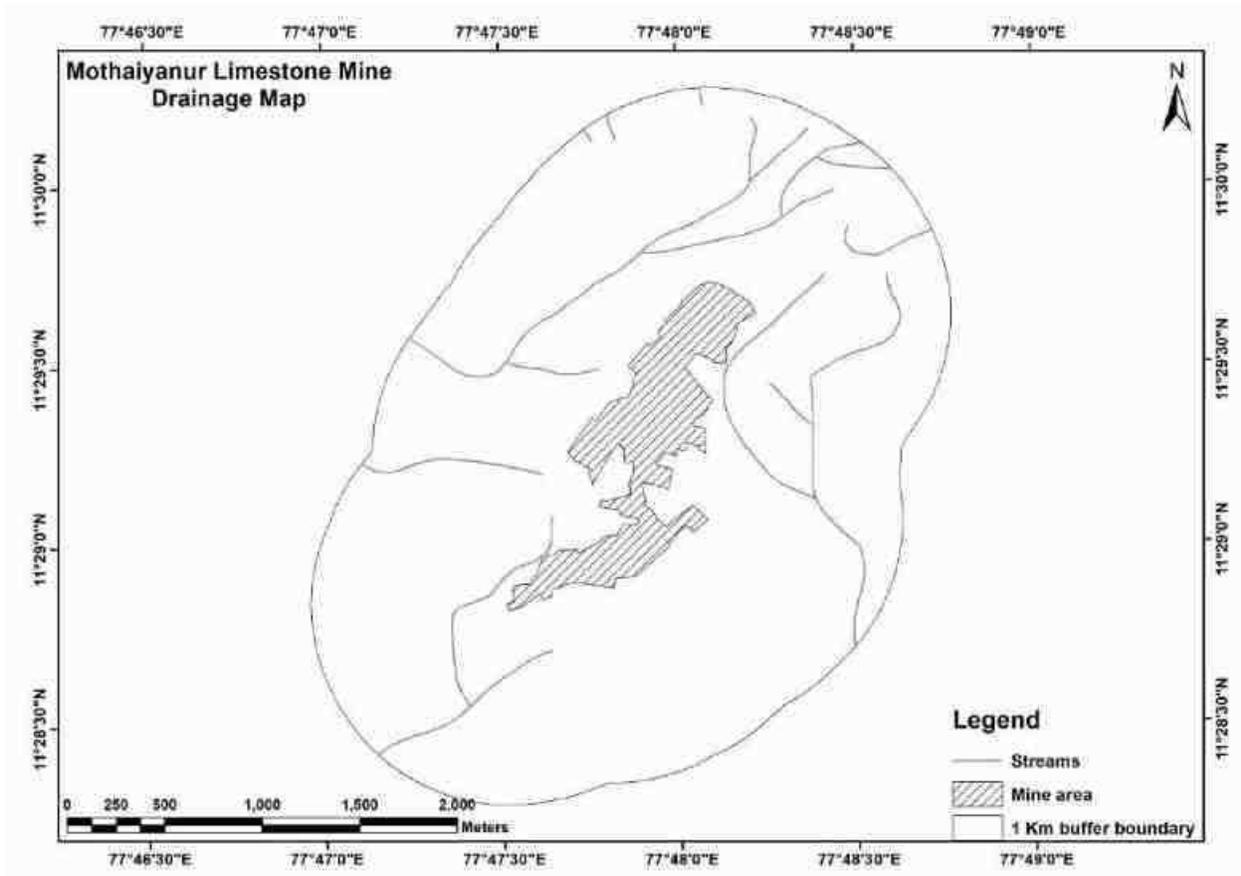


Figure 3.17: Contour Map



Drainage: The rainfall, topography and nature of the formation lead to dendritic drainage pattern in the study area. The mining lease area is neither a catchment area nor a watershed. No river or nalla is emanating from this area. The area experiences very less rainfall during monsoon and open pit developed through mining activity and nearby small tanks are filled with this rainwater. The drainage map prepared from the survey of India topographic maps shows the presence of few streams running from north to south and northeast to southwest directions in a dendritic pattern

Figure 3.18: Drainage Map

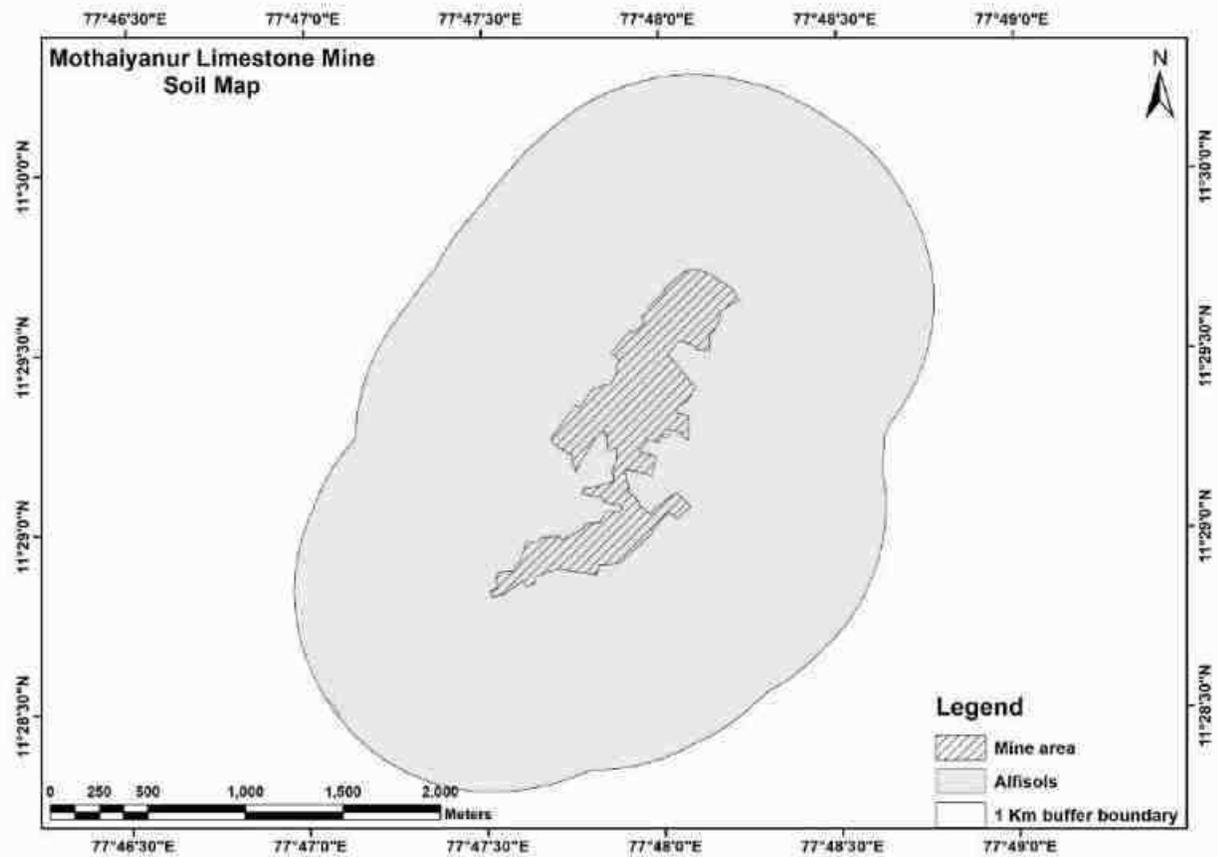


6.2 SOIL AND AGRICULTURAL PRACTICES

Soil: Soil map of Mothaiyanur limestone mine area shows that it is dominated by presence of alfisols. Alfisols are soils consist of deep to very deep, matured soils with alluvial concentration of clay in the sub horizon. The surface horizon is massive and hard. Cultivation is extensive in this type of soil. They have moderate to high base saturation.



Figure 3.19: Soil Map



Agricultural Practices: The major source of irrigation in this region is through wells (93%). The agricultural practice around the mining lease area is moderate to less due to rocky terrain, meager rainfall this type soil cover not supporting for any major cultivation. Most of lands in that are classified as dry lands. Major crops cultivated around the villages of mining area are paddy, millets, pulses, oilseeds, cotton, sugarcane, mango, banana, tapioca, tumeric, vegetables and flower crops (State Agriculture Department, 2016).

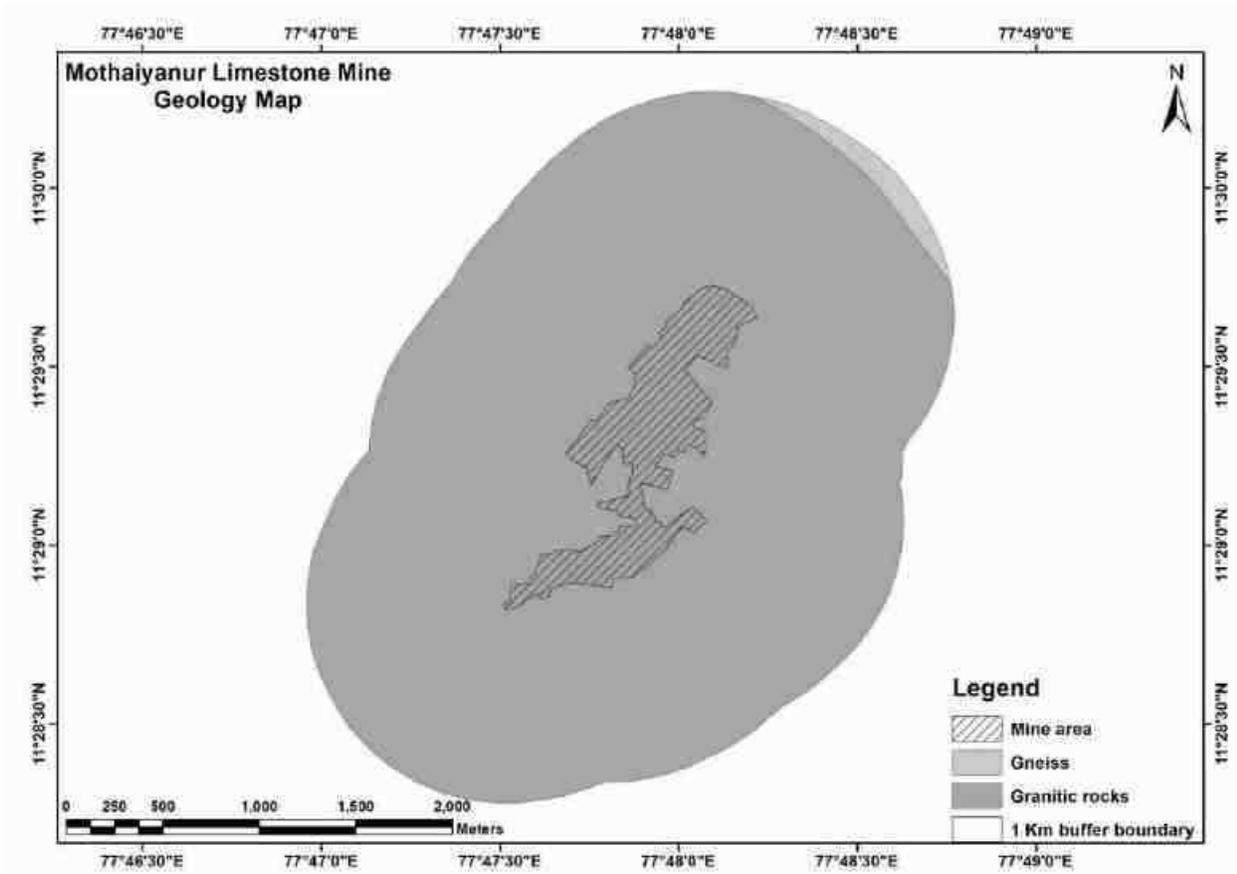




3.6.3 GEOLOGY AND GEOMORPHOLOGY

Geology: The crystalline limestone of Precambrian age occurs in the form of lenticular and linear bands in the Sankari Taluk which is exploited for the production of Cement by India Cements Limited, Sankari west. Calc-gneisses and crystalline limestone represent ancient calcareous sediments which have suffered repeated metamorphism, intrusions by granites and folding during the Archaean age. The harder pink granites which are abundant in the region stand out as hills and knolls resisting erosion. The disposition of the crystalline limestone bands in this region reveals that they maintain a structural conformity with the batholith, by a pattern of skirting around granitic mass from west to east and continuing southward from Sankaridrug to Tiruchengode and beyond. Calcite, which is the predominating mineral ingredient in all the limestone formations, is formed in large masses of contact metasomatic deposits by the process of recrystallization of limestone. The deposit found in Sankari Taluk.

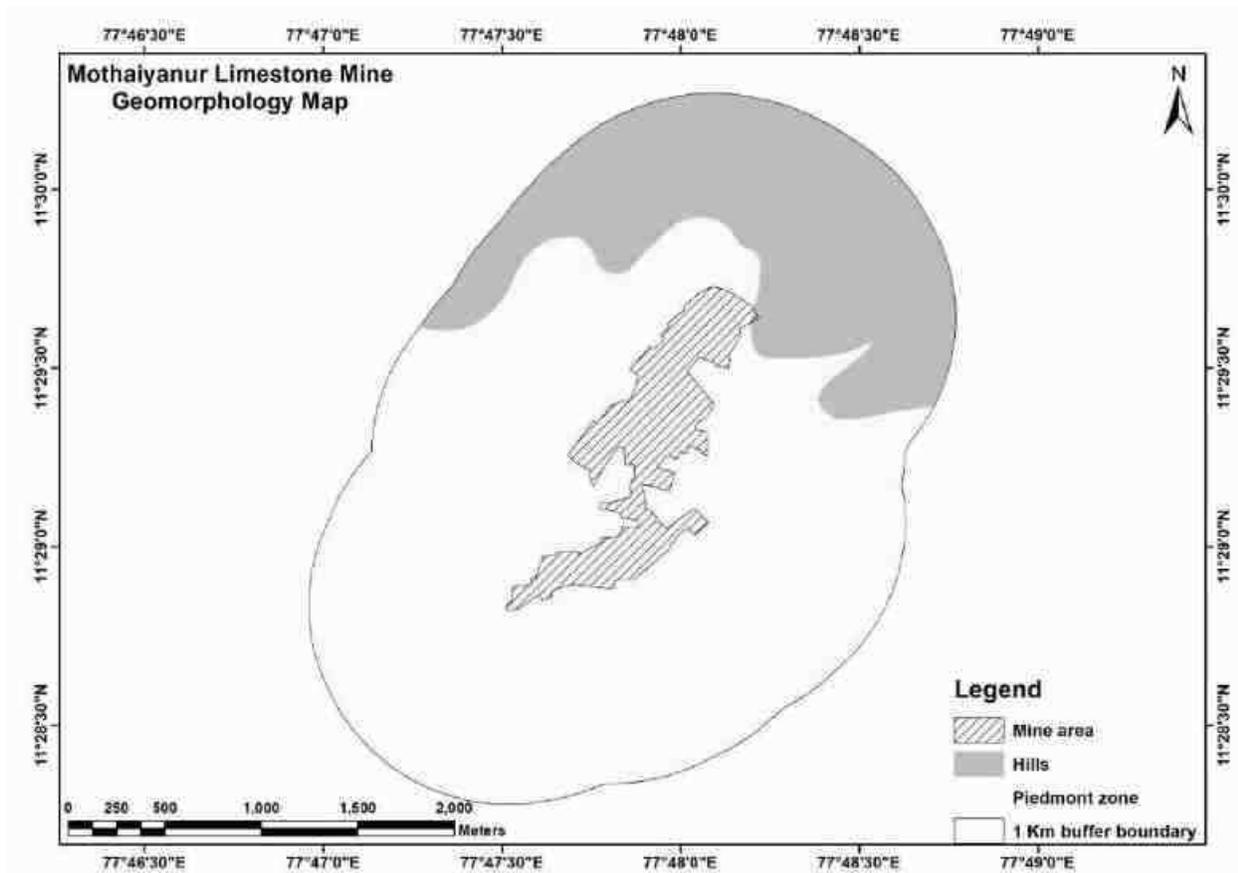
Figure 3.20: Geology Map





Geomorphology: The geomorphology map of the study derived from the satellite imagery using remote sensing and GIS technique. Pediment is covered central and eastern part of the study area. The mining lease area is covered by dissected/dissected land while inselberg hills which is not suitable for agricultural activities are seen along the western part of the mining lease area.

Figure 3.21: Geomorphology Map



3.6.4 WATER TABLE OF THE AREA:

The yields of the open wells are low in the hill areas about 500 lpm for a drawdown of 2 m for four hours pumping, whereas the open well in the plains varies from 200 to 1000 lpm. The yields of dug wells are improved at favorable locations by construction of extension bores, which are 50 to 75 m. deep. In recent years, the declining water levels and reduction in yields of wells are being observed due to increased extraction of ground water by a large number of bore wells for irrigation purposes.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

The water bearing properties of crystalline formations, which lack primary porosity, depend on the extent of development of secondary inter granular porosity. These aquifers are highly heterogeneous in nature due to variation in lithology, texture and structural features even within short distances. Ground water generally occurs under phreatic conditions in the weathered mantle and under semi confined conditions in the fissured and fractured zones at deeper levels.

In general, the study area is an undulating terrain, sloping towards north and south. For away on the north, there is small hillock comprising of quartzite. The water levels of the existing open wells in area of investigation during October 2020 have been collected, computed and analyzed. The analysis result of water level collected shows that the water level ranges varies from below 30 feet to above 40 feet, bgl. The water levels are deeper in southwestern and southeastern part of the study area and tend to become shallower in the northwestern and southern part from the mining lease area. From the water level contour map, it is inferred that the water level is deeper in the areas of thick habitations and shallow to moderate depths at elevated high regions.

Water tables of the area under investigation are derived from the elevation recorded at the water level collection sites through Global Position System (GPS). The water table graph prepared from the data collected show that the water table is shallower in northern part in the highly elevated regions and slightly deeper in other part of the of the study area. The same is illustrated in Figure No.3.26 below.

The spatial distribution map of the water table shows with reference to mean sea level has been prepared infers that the water table follows the topography and the flow is from north east to south western direction.





Figure 3.22: Water Table With Reference To Mean Sea Level

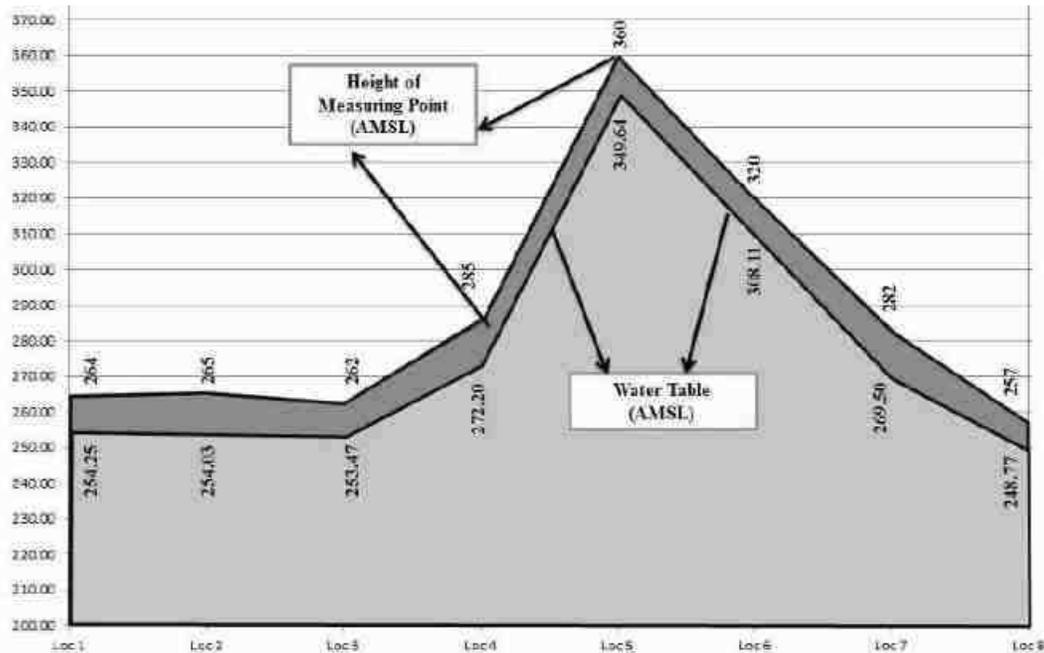
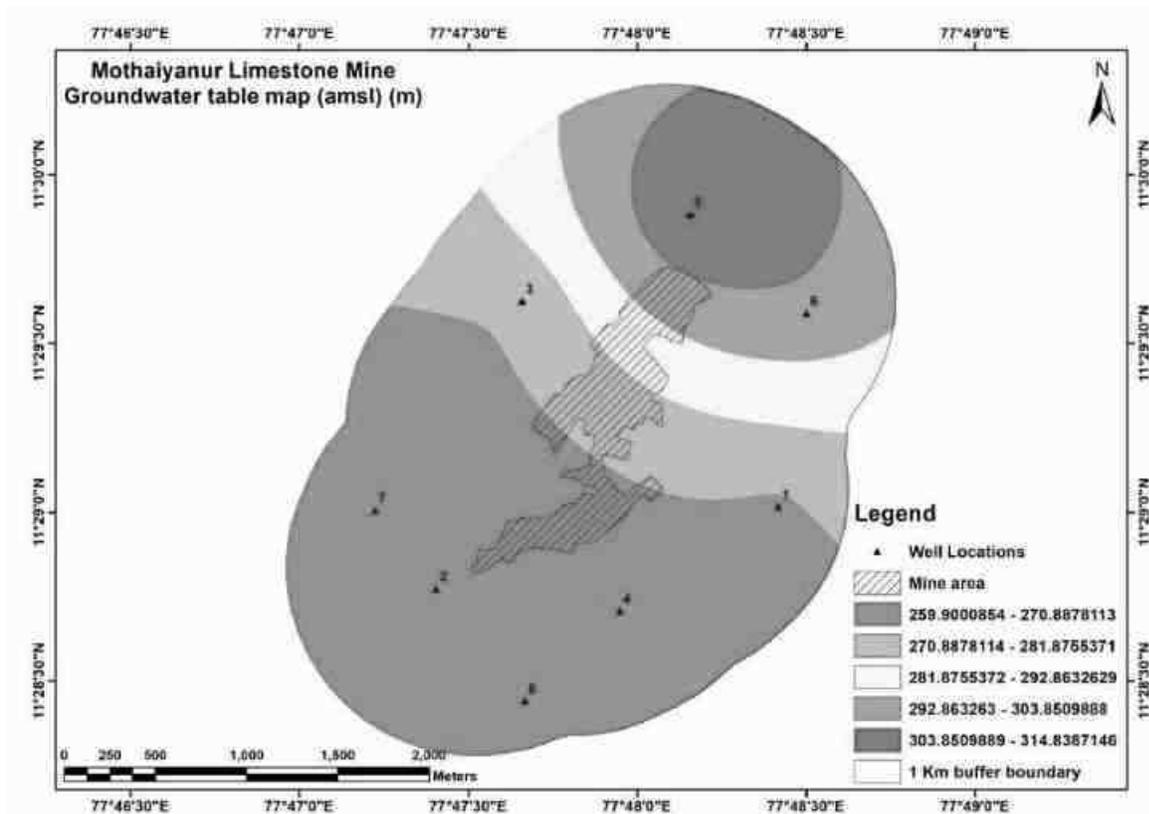


Figure 3.23: Spatial Distribution of Water Table





3.6.5 GEOPHYSICAL STUDIES

3.6.5.1: Vertical Electrical Sounding:

Six vertical electrical sounding (VES) have been carried out in the area which is conducted in equally spaced locations of the entire study area. The resistivity (ρ_a) and thickness (h) of various layers deciphered from Vertical Electrical Soundings carried out in the study area are digitally processed in IPI2WIN software and the results is tabulated below. The location of the VES is depicted in Figure No.3.27. A sample geoelectrical curve of the study area prepared from the IPI2WIN software is shown in Figure No.3.28.

Figure 3.24: VES Locations and Profile Map

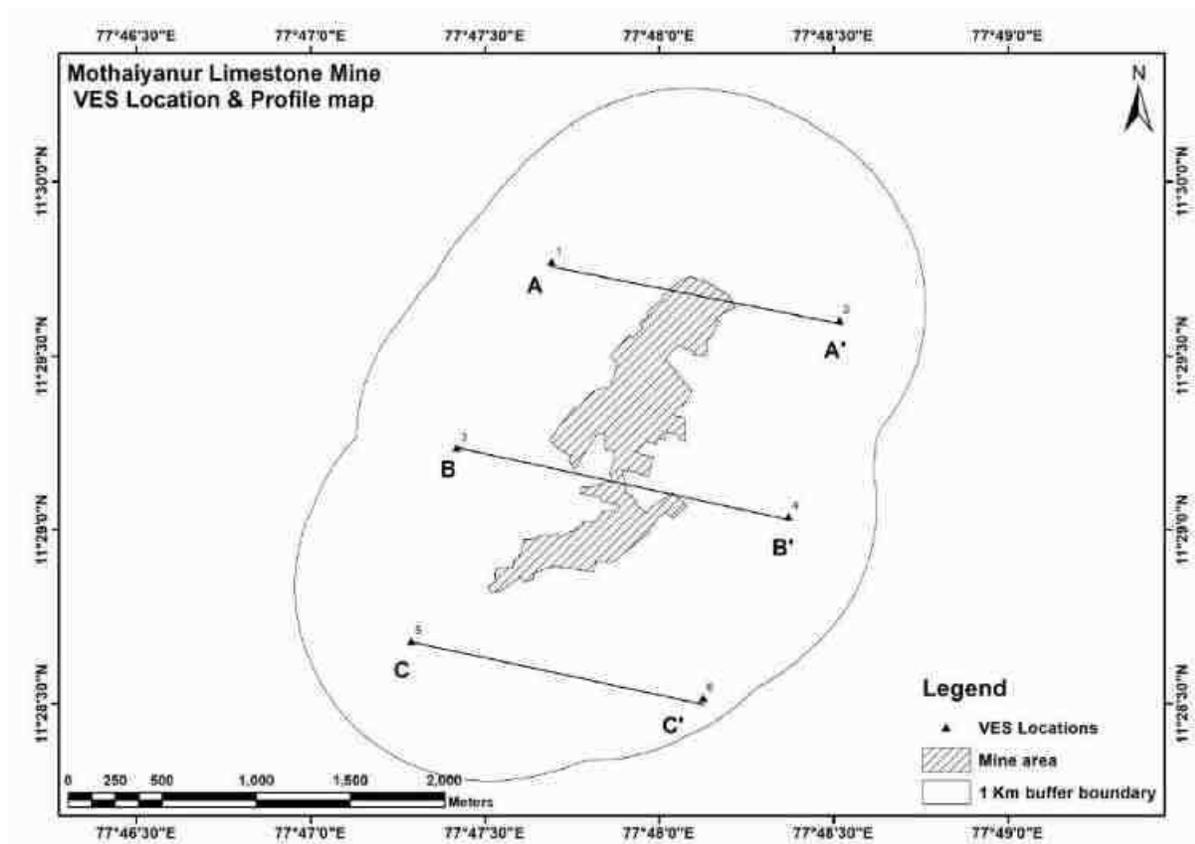




Figure 3.25: VES Curves at Locations 1 to 7

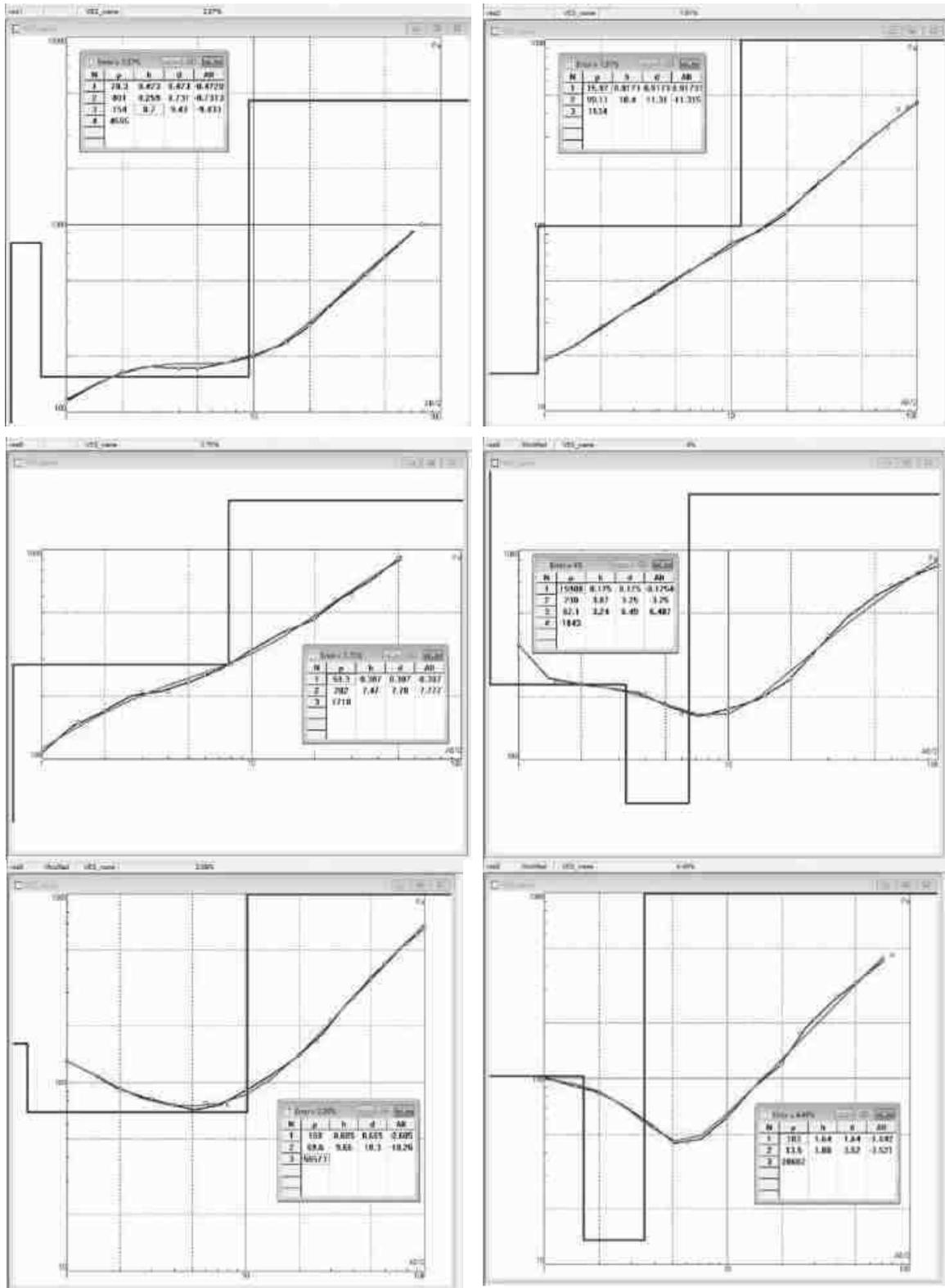




Figure 3.26: VES Results

VES No	Layer Resistivity			
	ρ_1	ρ_2	ρ_3	ρ_4
1	70.30	801.00	154.00	4595.00
2	15.97	99.00	1534.00	-
3	50.30	282.00	1718.00	-
4	1998.00	230.00	62.00	1843.00
5	160.00	70.00	6573.00	-
6	103.00	14.00	8602.00	-

Layer thickness			Iso Apparent Resistivity				
h1	h2	h3	-10	-20	-30	-40	-50
0.47	0.27	8.70	122.30	208.50	497.00	802.60	1044.00
0.91	11.31	-	80.19	117.30	171.60	215.90	262.70
0.30	7.47	-	332.20	465.00	605.20	760.90	905.60
0.17	3.07	3.24	175.00	245.00	393.20	552.80	662.00
0.60	9.66	-	91.38	139.50	213.80	281.00	386.60
1.64	1.88	-	42.81	115.20	166.00	293.80	341.00

The VES data are interpreted qualitatively and quantitatively and inferred that, four to five geoelectrical layers are obtained. Their details are provided below:

First Iso-resistivity layer: The resistivity ranges of the first Iso-resistivity layer is between 15.97ohm-m and 1998 ohm-m. The high resistivity values of above 1000 ohm-m are observed in southeastern part of the study area that is due to exposure of hard gneissic rocks in this region. Most of the study area is occupied by the resistivity values ranging between 30 and 150, which indicate the presence of sand and unconsolidated materials in this layer.

Second Iso-resistivity layer: The second iso-resistivity layer map infers that this layer mostly consists of weathered/unconsolidated formation. It ranges from 14.00 to 801 ohm-m. The range of below 30 ohm-m indicates the presence of clayey materials which is seen in pocket around VES locations 6 in the study area. Resistivity ranges from 30 to 150 ohm-m which is dominated in the southern and few portions near the VES location 2 indicating the presence of weathered materials. Resistivity values 150 to 300 ohm-m indicates the unsaturated formations that are mostly covered in the central region pertaining to south part of mining lease area and extends to northeastern and western part of the area of study. Resistivity ranges above 300 ohm-m is an indication of the presence of hard and compact formation that is restricted to VES location 1 which is situated in north and northwestern part of the area of study.





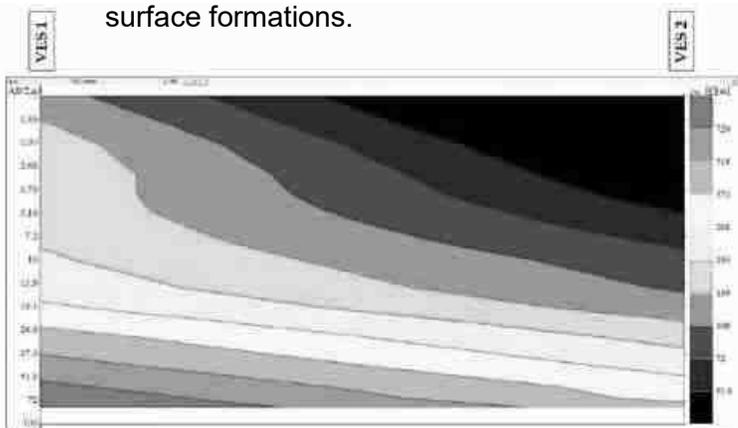
Third Iso-resistivity layer: The third layer iso-resistivity map show resistivity ranges from 62 to 8602 ohm-m. This high resistivity value of third layer indicates these locations are underlain by hard and compact formation. The resistivity ranges below 300 ohm-m, occur in two locations that are situated in northwestern and southeastern part may due to extension of fractured formation in this depth at these locations. Rest of the area is encountered with hard and massive formations that are indicated by the resistivity values above 300 ohm.m. The third layer thickness ranges from 0.0 to 8.70 m with maximum thickness is noticed in northwestern part of the area

Fourth Iso-resistivity layer: The fourth layer iso-resistivity map infers that the resistivity falls between 1843 and 4595 ohm-m. The resistivity range above 300 ohm-m is seen in entire study areas that are due to the hard and compact formation. High resistivity values in all the locations indicate the emergence of hard and compact basement rock formation which is of Archaean age.

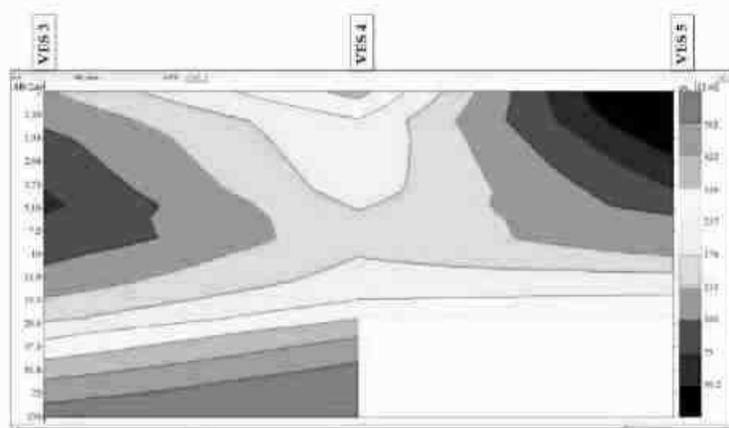
The apparent resistivity values collected from the study area reveals general information on the pattern of the sub surface formations. The study area is predominantly consisting of hard rock, the apparent resistivity in the shallow depth shows higher values, which may be due to the presence of compact formation at shallow depth.

3.6.5.2: 2D Modeling Studies:

The subsurface model along various profile lines has been prepared to visualize the sub surface formations through geophysical data. Four different profile sections drawn along East - West directions have been selected covering the entire study area in order to obtain the image of sub surface formations.



2 D Model along the Profile Line A-A'

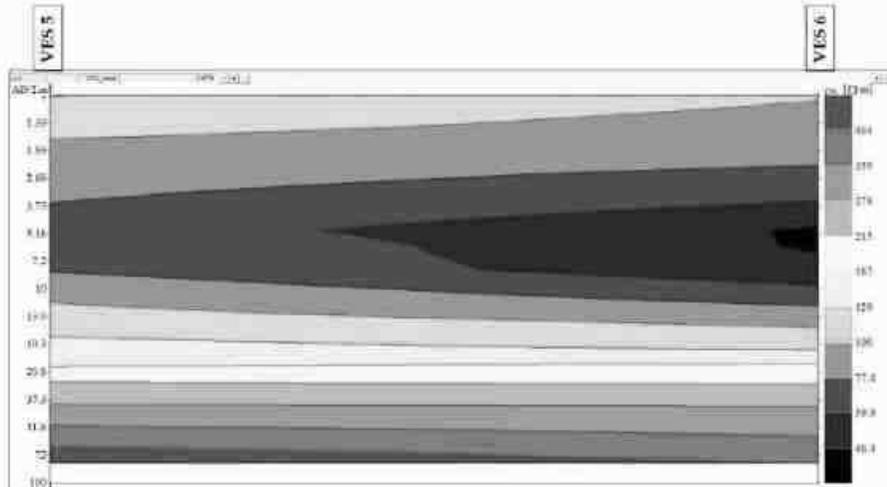


2 D Model along the Profile Line B-B'



From the cross sectional image of profile section A – A', it is inferred that, VES location 1, have highly weathered to fractured formation is seen and semi consolidated to loose soil are observed at VES location 2. The section A-A' image clearly explains the presence of hard and compact formations below 50 m, bgl.

The 2 D Model along the Profile Line B-B' (2 D) connects VES locations 3 and 4. This 2 D model reveals that formation with relatively low resistivity values are seen at VES location 3 near the surface and at VES location, the moderate to high resistivity values are seen at ground level which mostly made up of consolidated materials.



2 D Model along the Profile Line C-C'

The 2 D Model along the Profile Line C-C' (2 D) connects two VES locations (Loc. 5&6) from west to east direction. From this profile cross section, in VES location 5, moderate resistivity values is seen at 3.0 m bgl and relatively low resistivities below 3 to 10 m, bgl that are made up of semi consolidated materials. Whereas, weathered and more fractured rock formations are observed upto the depth of 5 to 9 m, bgl from the surface at VES location 6. The hard and compact formation starts from the depth of 40 m, below ground level at both VES locations 5 and 6

3.6.5.3: Pumping Test:

A pumping test has been carried out on a nearest existing dug-well located in village Mothaiyanur mines located in Salem district. The following observations were made during the pump test:

- The static water level measured is 8.50 m, bgl



- The rate of pumping or the discharge rate is 10.25 lps
- Total Depth of dugwell is 11 m.
- Pump installed – 5 Hp submergible electric motor
- Aquifer type – Granitic aquifer
- Dimension of well = 7 m (Breadth) x 14 m (Length)
- Constant discharge or yield of well during pumping – 10.25 LPS (litres per second) by Volumetric method.
- The pumping test is conducted for 100 minutes
- The water level recorded after 100 minutes is 9.30 m
- Hence, the draw down at the end of 100 minutes is calculated as 0.8 m
- The recuperation water level is also monitored for 420 minutes and the residual drawdown was 9.10 m (2.16 % recuperation).

Pumping data was plotted in semi log (time in minutes since pumping started vs drawdown in m) and based on the straight-line method (Jacob method) the aquifer parameters are determined.

Figure 3.27: Pumping Data Plotted in Semi Log

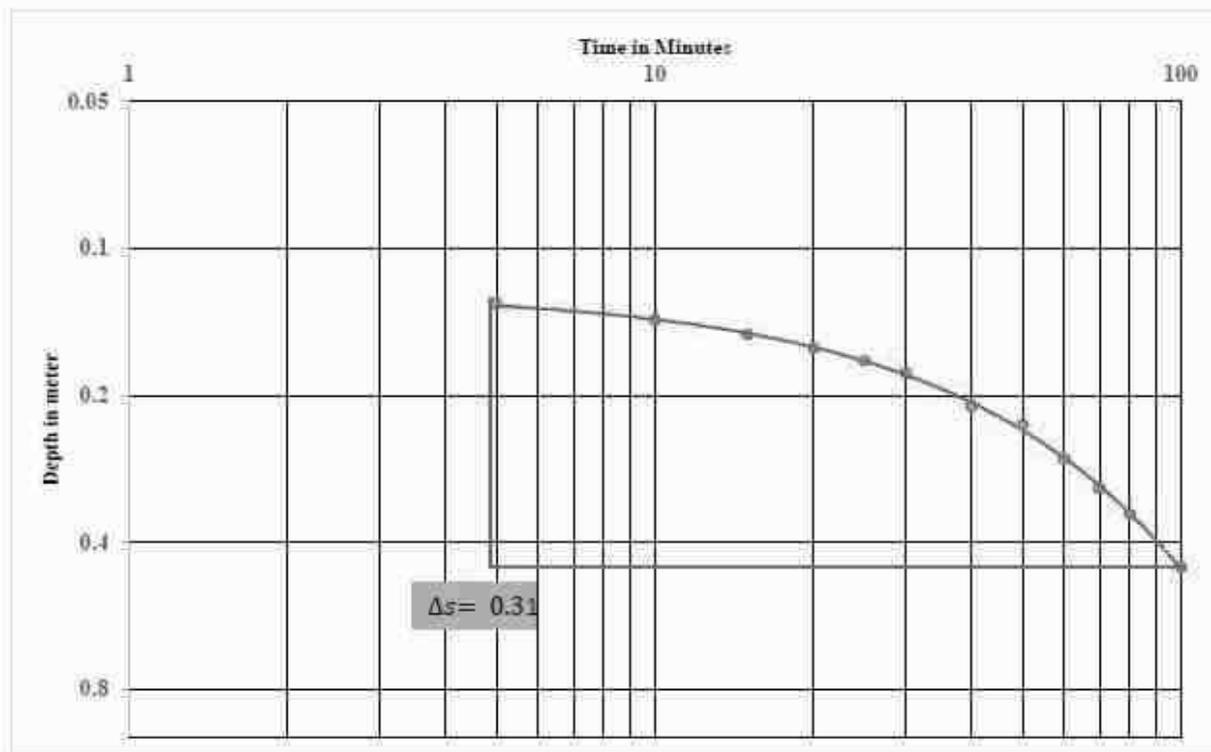


Fig. 43: Plot - semi log (time in minutes since pumping started vs drawdown in m) -





The transmissivity is calculated from the pumping of the dug well present in the mining zone is found to be 495.67 m²/day, which is found to be very high and the well receives water from the surrounding weathered formations in very fat rate. Since the shallow dug well where the pumping test is conducted is in southern part of the study area, it also gets water supply from the fractured zones that are situated in the higher elevation zones in faster rate.

3.6.6 CONCLUSION:

The water levels of the existing open wells in area of investigation during October 2020 have been collected, computed and analyzed. The analysis result of water level collected shows that the water level ranges varies from below 9 m to above 12 m, bgl. The water levels are deeper in northwestern part of the study area and tend to become shallower in the south and southwestern part of the study area from the mining lease area. The spatial distribution map of the water table show with reference to mean sea level has been prepared infers that the water table follows the topography and the flow is from north west to south eastern direction

Vertical electrical sounding (VES) have been carried out in the area which is conducted in equally spaced locations of the entire study area with maximum current electrode separation extend up to 100 m (AB) using Schlumberger configuration. The most dominate type of curve is HA, H and A type resembling the occurrence as top soil that are underlined by weathered and fractured zones. The hard and compact occurs below these fractured zones at the depth of 14 to 30 m, bgl. The pumping test conducted in existing dug well in the mining area suggest that gets water supply from the top soil and fractured zones that are situated in the higher elevation zones in faster rate.

The existing hydro geological condition in the mines area indicates that there is no adverse environmental impact on the groundwater/ surface water regime.



CHAPTER - IV

ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES



CHAPTER 4

ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

4.1 GENERAL

Mining operations in these leases were carried out for decades. The limestone mined out is being transported to the cement plant in Sankari through company’s own dedicated road.

Mothaiyanur Limestone Mines namely, G.O.No.211, G.O.No.1086 and G.O.No.76 involve the production of 0.5MTPA, 0.012MTPA and 0.61 Lakh TPA of Limestone respectively within their lease areas. The above mining leases are contiguous and adjacent to each other & the mining operations are planned on a contiguous working basis. Since the overall production is also less the equipments to be deployed are also mostly common and less. As such the impact assessment and the management measures are also planned on a common basis.

Scientific and systematic development of mining will be continued by the project authorities for preserving as well as improving the environmental conditions in and around the mining lease area. The environmental quality of the project area is within limits prescribed by statutory bodies and it is amply supported by the fact that the monitored data on various environmental attributes are found to be within permissible limits. These data will be periodically submitted to various competent authorities also.

Besides this, awareness programme on safety, health, environment will also be conducted periodically to the staff and workers of the mines. Detailed assessment of impacts and mitigative measures specific to this lease is undertaken for various environmental components like Air, water, noise, land etc., and the details of the same are elaborated in this chapter.

Further it is relevant to mention here that in appreciation of good environment, safety management and performance, ICL Sankari division has received many awards during MEMC and Mines Safety Week celebrations, Indian Bureau of Mines. Some of the same are provided below:

Table 4.1: Tamil Nadu Mines Safety Association –Mines Safety Observation Week-2023, Salem Zone

S.No	CATEGORY	MINE NAME	PRIZE
1	Face working condition & Face machinery	Veerachipalayam limestone mine	I Prize





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

2	Transport/workshop Facilities	Veerachipalayam limestone mine	I Prize
3	Ore- handling and workshop facilities	Karumapurathanur limestone mine	I Prize
4	Welfare amenities and medical facilities	Veerachipalayam limestone mine	II Prize
5	Electrical Installation	Veerachipalayam limestone mine	I Prize
		Karumapurathanur limestone mine	II Prize
6	Blasting storage & Explosives	Karumapurathanur limestone mine	I Prize
7	Swatchchta Mission	Veerachipalayam limestone mine	I Prize
	Overall Performance	Veerachipalayam limestone mine	I Prize

Table 4.2: MEMC Week 2023-24 (North Zone)

S.NO	Category	Name of the Mine	Prize Category
1	Systematic and Scientific development	Veerachipalayam limestone mine	II prize
2	Mineral conservation	Veerachipalayam Limestone Mine	I prize
3	Environmental monitoring	Karumapurathanur Limestone Mine	II prize
4	Publicity and propaganda	Karumapurathanur Limestone Mine	II prize





4.2 AIR ENVIRONMENT:

4.2.1 SOURCES OF AIR POLLUTION:

In general, mining operations and its allied activities may result in deterioration of air quality due to pollution arising from the project operation if appropriate measures are not taken. The principal sources of air pollution in the area due to mining and allied activities are:

Dust generation in the mine due to:

- a) Extraction of limestone from developmental waste
- b) Movement of HEMM such as shovels dumpers etc.
- c) Drilling and blasting operation
- d) Loading and unloading operation
- e) Wind erosion of dumps

Besides, Gas emission also occur as a result of operation of diesel driven mining equipments, compressors, transporting vehicles, etc.

Particulate matter smaller than 10 microns, referred to as PM₁₀, can settle in the bronchi and lungs and cause health problems like Bronchitis, Emphysema, Bronchial Asthma, Irritation of mucus membranes of eyes, etc. Particles smaller than 2.5 micrometers (PM_{2.5}), tend to penetrate into the lungs and very small particles (< 100 nanometers) may pass through the lungs to affect other organs.

Besides the above mentioned fugitive dust emissions, atmospheric pollution can occur as a result of emission of SO₂, NO_x, CO etc., from diesel driven mining equipment, compressors, generator sets, etc. Larger suspended particles are generally filtered in the nose and throat and do not cause problems.

Adverse Health effects Inhalation of SO₂ in higher concentrations of 8-12 ppm in air causes throat irritation, coughing, constriction of the chest, lachrymation, and smarting of the eyes. A concentration of 150 ppm can be endured only a few minutes, because of eye irritation and the effect on the membranes of the nose, throat and lungs. Exposure to a concentration of 500 ppm by volume in air for a few minutes is very dangerous At high concentrations it can cause life-threatening accumulation of fluid in the lungs (pulmonary edema).NO_x reacts with ammonia, moisture, and other compounds to form nitric acid vapor and related particles. Small particles can penetrate deeply into sensitive lung tissue and damage it, causing premature death in





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extreme cases. Inhalation of such particles may cause or worsen respiratory diseases, such as emphysema or bronchitis, or may also aggravate existing heart disease.

The effects of CO exposure can vary greatly from person to person depending on age, overall health and the concentration and length of exposure. At lower concentrations, it causes fatigue in healthy people and chest pain in people with heart disease. At moderate concentrations it causes angina, impaired vision, and reduced brain function. At higher concentrations it can cause impaired vision and coordination, headaches, dizziness, confusion, nausea, flu-like symptoms that clear up after leaving home.

The activity / source of pollution, its impact/ consequence and the common control measures to be implemented towards the mitigation of adverse impact on air quality are explained below:

Table 4.3: Impact and Mitigation Measures – Air Environment

S. No	Activity	Consequence	Mitigation Measures
1	Drilling	Dust Emanation	Drilling with dust extractors, usage of sharp drill bits and with inbuilt water injecting system.
			Provision of PPEs including nose mask to the workers engaged in the operation.
			Usage of Drill bits of good condition
2	Blasting	Instantaneous dust emanation	Controlled blasting technique
			Well-designed blast by effective stemming and use of milli second delay detonators.
			Avoiding blasting during high wind periods where the fine dust is carried away easily affecting the ambient air quality.
			Periodical Ground vibrations monitoring using mini-mate instrument and ensuring results are well within the norms.
3	Excavation and Loading	Dust emanation, Gaseous Emission	Proper maintenance of HEMM.
			Provision of green net over a length of 300 m on the northern side to mitigate propagation of dust outside the lease area.
			HEMM will be operated as per the manufacturer's guidelines
			Acoustic enclosures for operator cabin.
			Imparting sufficient training to operators on safety and environmental parameters
			Proper maintenance of hauling equipments
			Provision of dust filters / mask to workers working at highly dust prone and affected areas.
			Avoiding overloading of dumpers.
Controlled loading and unloading will be ensured.			





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

4	Ore and Waste Transportation	Dust emanation, Gaseous Emission	Regular water sprinkling by engaging a 10 KL water tanker on internal roads, haul, loading and unloading points for dust suppression on a common basis.
			It is proposed to install a fixed water sprinkler of 600m length along the main approach road towards dust suppression.
			Transportation of ore shall be carried out through the company's own dedicated black topped road to the Sankari Cement Plant located 4.6 Km in the south eastern side of the lease area.
			Only vehicles having valid permission as per Central Motor Vehicle Rules, 1989 and The Motor Vehicles (Amendment) Act, 2019 will be used for transportation of material.
			Avoiding overloading of Tippers carrying ore. Besides, the trucks shall be covered with tarpaulin.
			Vehicular emissions controlled through regular and proper preventive maintenance schedules and emissions tests will be done with diesel smoke meter equipment to ensure emission values.
			Sufficient time lag will be left between movement of two truck to allow settling of dust
5	Others	Dust emanation, Gaseous Emission	Development of greenbelt / barriers around mine in the safety zone and carrying out plantation within the lease area.
			About 34,595 plants have already been planted so far since the commencement of the mining operations covering a total area of 25.77Ha in mothaiyanur mines and other mining leases of ICL. Besides, outside the lease area also plantation is carried out over an area of 9.6Ha with a total of 13,185 plants.
			Besides, it is proposed to carry out additional Avenue Plantation also.





PHOTOGRAPHS SHOWING DUST SUPPRESSION MITIGATIVE MEASURES



BLACK TOPPED TRANSPORTATION ROAD





Due to well – designed and appropriate mitigative measures adopted and to be adopted in the project, the impact on air environment is expected to be well within statutory limits. This is amply corroborated by the prediction of impact on air quality due to mining operations. Impact on air quality due to fugitive emissions was estimated based on the latest computer model – AERMOD View Gaussian Plume Air Dispersion Model developed by Lakes Environmental Software.. Details of the modeling study / estimation including the modeling technique and post project air quality values are elaborated in the following paras.

4.2.2 AIR QUALITY IMPACT PREDICTION:

Prediction of impacts on air environment has been carried out using mathematical model based on a steady state Gaussian plume dispersion model designed for area sources for short term. In the present case, Industrial Source Complex [ISC3] 1993 dispersion model based on steady state Gaussian plume dispersion, designed for area sources for short term and developed by United States Environmental Protection Agency [USEPA] has been used for simulations from point sources.

4.2.2.1 Pollutants Considered For Computation:

The model simulations are done for the air pollutant arising from the mining operations, lease wise and also cumulatively for PM₁₀, PM_{2.5}. **Ground Level Concentration (GLC)** have been computed using hourly meteorological data. The study details are as follows:

4.2.2.2 Emission Sources:

Pollution from the project will arise manly on account of mining and allied operations:

Table 4.4: Emission Sources

ACTIVITY	SOURCE TYPE
A. Mining operations	Open pit
B. Transportation	Line

4.2.2.3 Emission Factors:

Quantification of particulate emissions has been carried out by the emission factor technique. Emission factor is a statistical average of the rate at which a pollutant is released during an activity. This factor when multiplied by the level of that activity in a given situation will give the





overall effect. Fugitive emissions have been predicted by using standard equations given and suggested by AP-42, USEPA (1998) for mining & allied activities. The modeling is done for the peak production to know the worst scenario. The details of the emission factors used for the same are provided below

Table 4.5: Emission Factors

S.No	Activity	PM10	PM2.5	Unit
1	Ore Loading	1.5×10^{-3}	2.1×10^{-4}	Kg/T
2	OB Loading	1.4×10^{-4}	1.5×10^{-5}	Kg/T
3	Hauling inside lease area	0.53	0.076	Kg/VKT
4	Ore Unloading	1.23×10^{-3}	1.4×10^{-4}	Kg/T
5	OB Unloading	5×10^{-4}	6×10^{-5}	Kg/T
6	Drilling	0.56	0.11	Kg/Hole

Table 4.6: Quantity used for Emission Rate Calculation

SL NO	PARTICULARS	PRODUCTION IN TONNE			CUMULATIVE
		GO-211	GO-1086	GO-76	
1	Peak ROM	769000	18398	92250	879648
2	Waste (OB/SB/IB + Interstitial Reject)	1268696	13738	39000	1321434
	Total	2037696	32136	131250	2201082

4.2.2.4 Source wise Emission rate:

Based on the emission factors, after adopting necessary control measures like dust suppression, Proper maintenance of HEMM, using better quality diesel, using latest equipment, proper maintenance of roads, trained operators etc. the expected emission rate due to various operations in this project is calculated and is given below:

Table 4.7: Emission Rate (g/sec)

ACTIVITIES/POLLUTANTS	GO-211		GO-1086		GO-76	
	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5}
Ore Loading	0.067	0.009	0.002		0.008	0.001
OB Loading	0.010	0.001			0.000	0.000
OB Unloading	0.037	0.004	0.001	0.000	0.001	0.000





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Drilling	0.066	0.013			0.004	0.001
Hauling inside lease area	0.715	0.103	0.014	0.002	0.064	0.009
Total	0.895	0.130	0.017	0.002	0.078	0.011

A. Emission Source Coordinates: The center of mine was assumed in the mathematical modeling.

B. Meteorological Conditions Used In Predictions: The hourly meteorological data has been generated for Winter Season, December 2023 – February 2024 and the same has been used in the predictions.

4.2.2.1 Results and Discussions

Table 4.8: Peak Incremental Concentration

S.no	Parameters	Peak incremental concentration $\mu\text{g}/\text{m}^3$			
		GO-211	GO-1086	GO-76	Cumulative
1	PM ₁₀	3.23	0.090	0.53	3.36
2	PM _{2.5}	1.18	0.018	0.11	1.15

It is observed that the peak incremental concentration for PM₁₀, PM_{2.5} occurring very near the source. At away from the source the values are getting reduced due to dispersion effects. The Isopleths of PM₁₀, PM_{2.5} concentrations with control measures scenario lease wise and also cumulative basis have also been drawn and these are given in **Figure No.4.1 to 4.8**. The incremental and predicted concentrations at the locations of ambient air quality have been discussed in the following section.





Figure 4.1: Isopleth of GLC Prediction for PM₁₀ - G.O.211

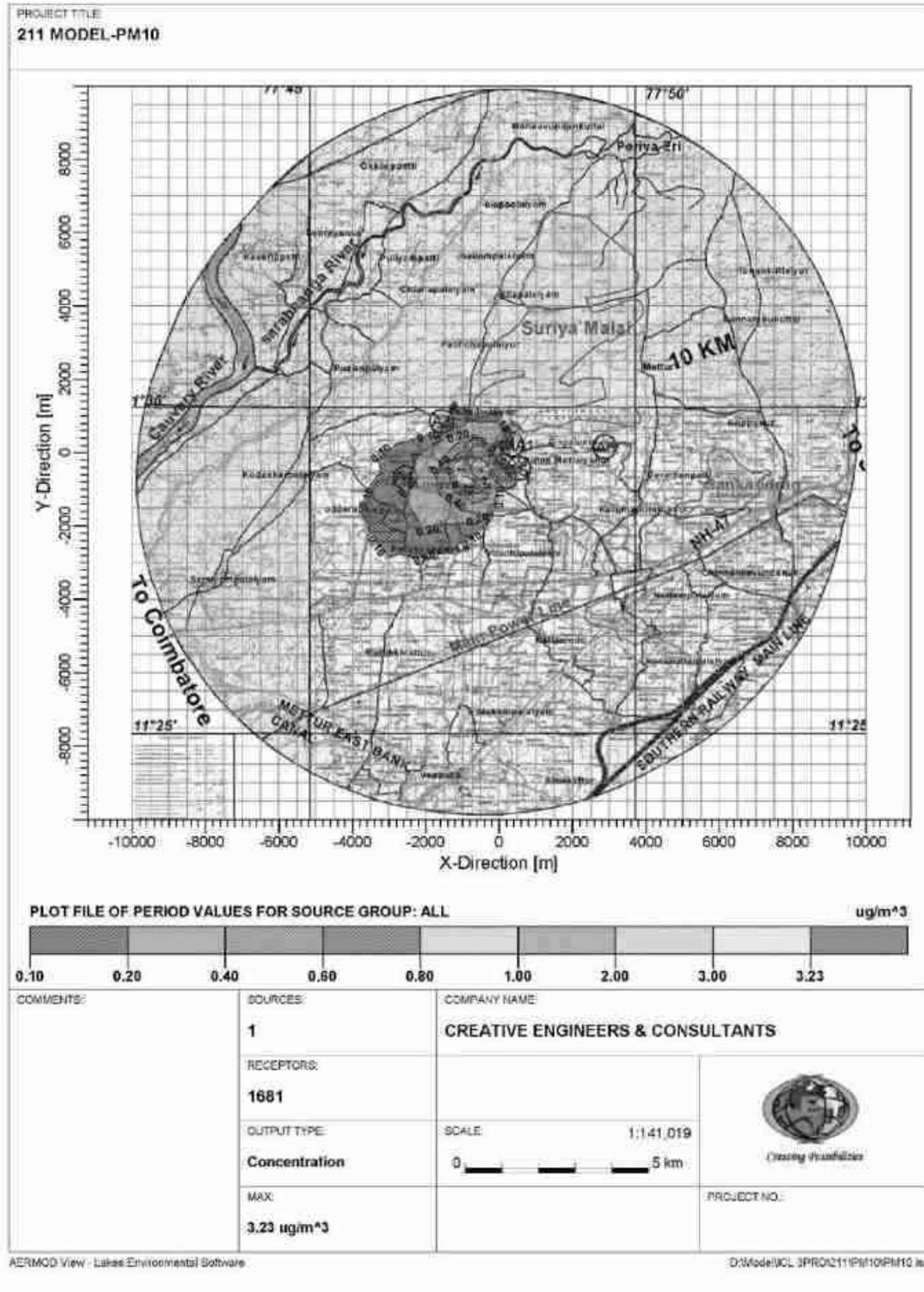




Figure 4.2: Isopleth of GLC Prediction for PM_{2.5}- G.O.211

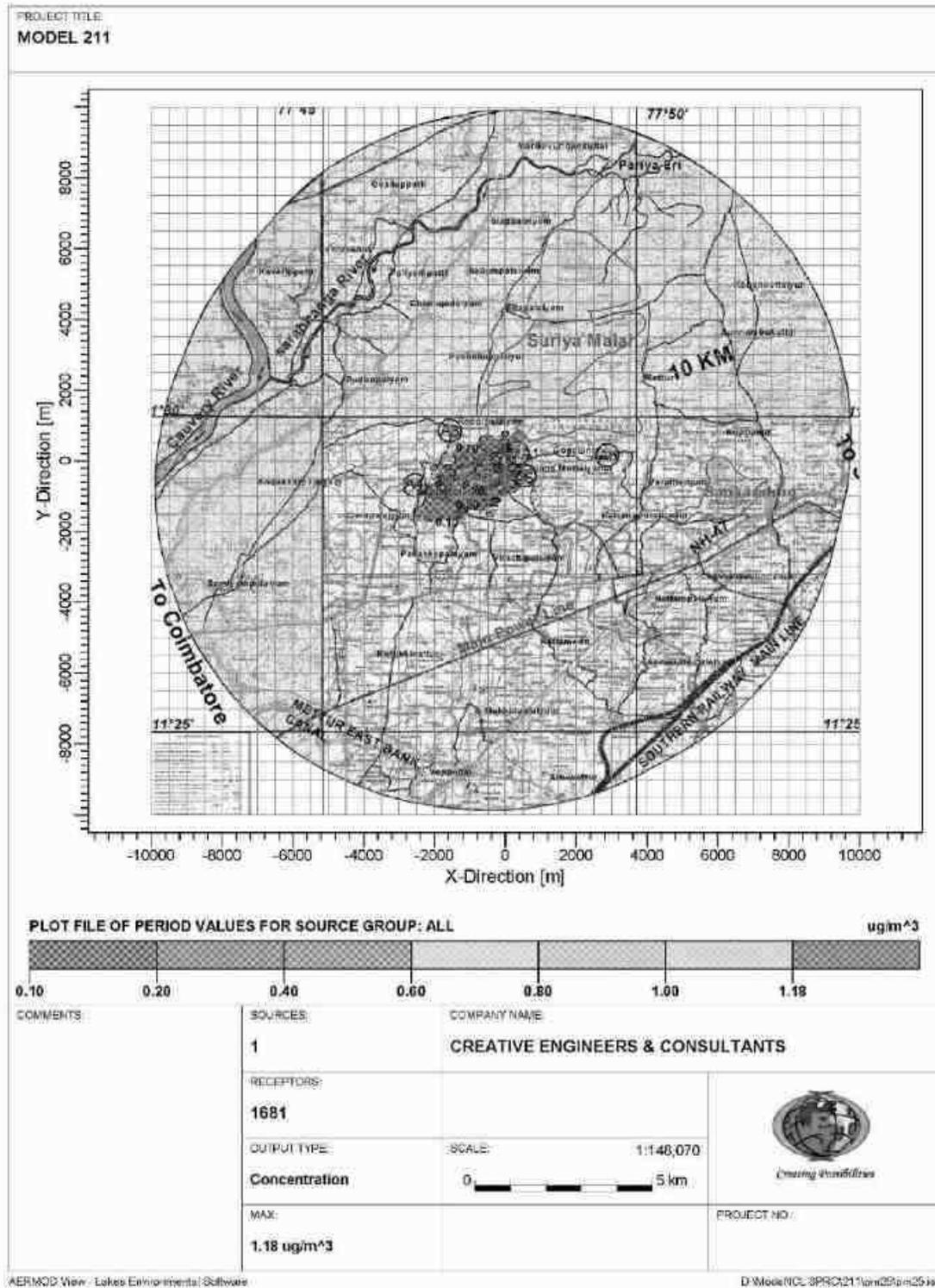




Figure 4.3: Isopleth of GLC Prediction for PM₁₀. G.O.1086

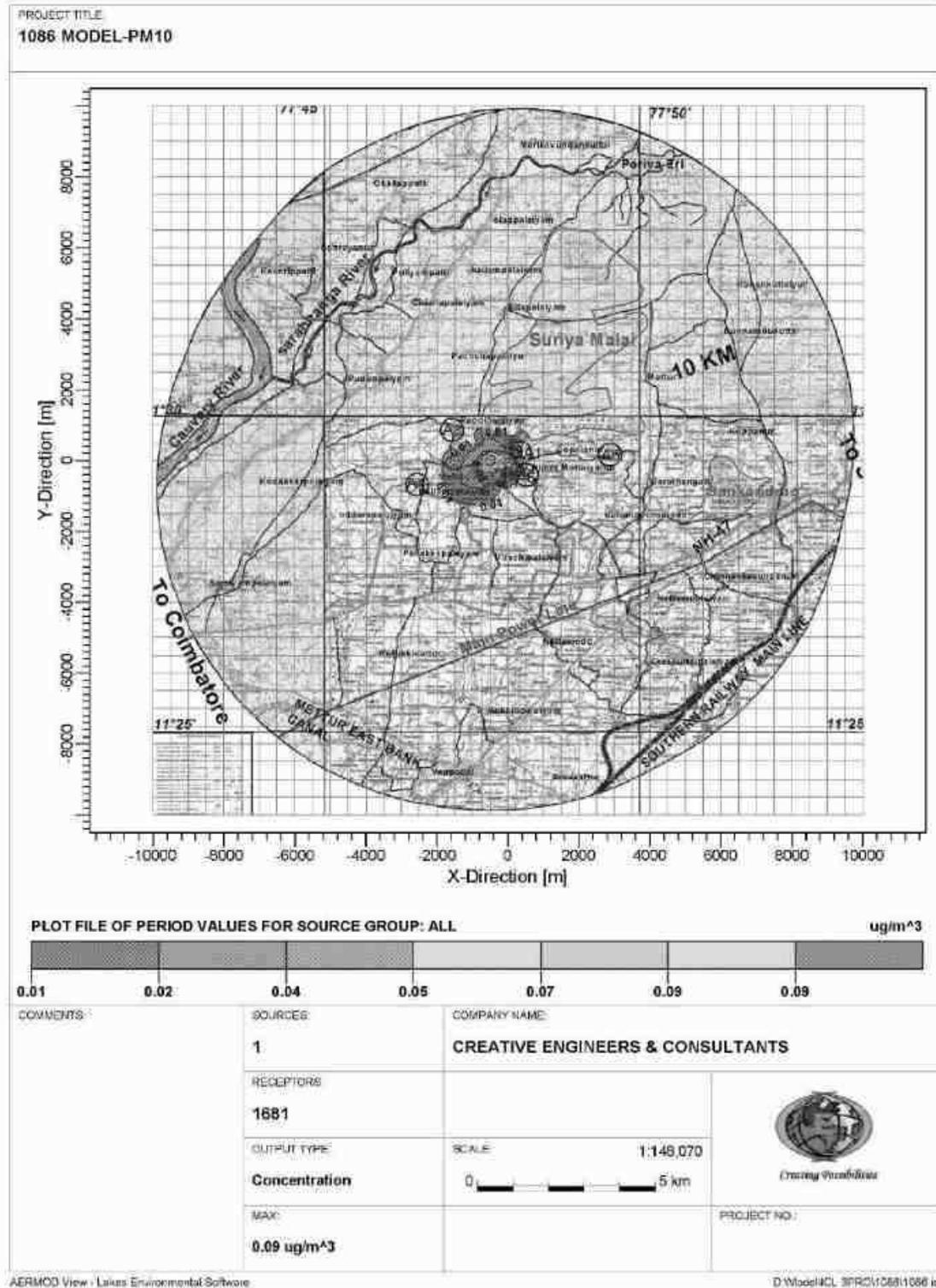




Figure 4.4: Isopleth of GLC Prediction for PM_{2.5}. G.O.1086

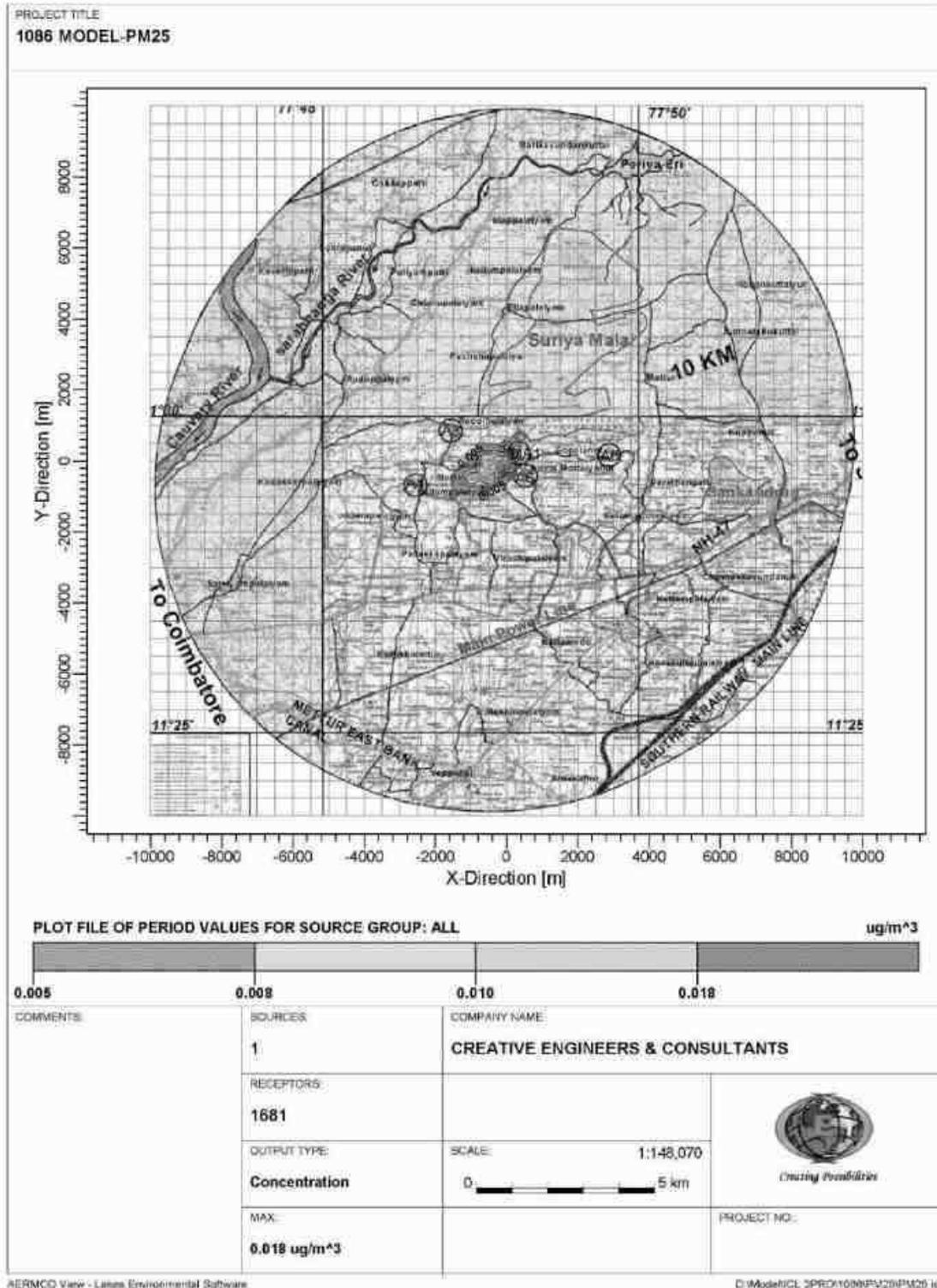




Figure 4.5: Isopleth of GLC Prediction for PM₁₀. G.O.76

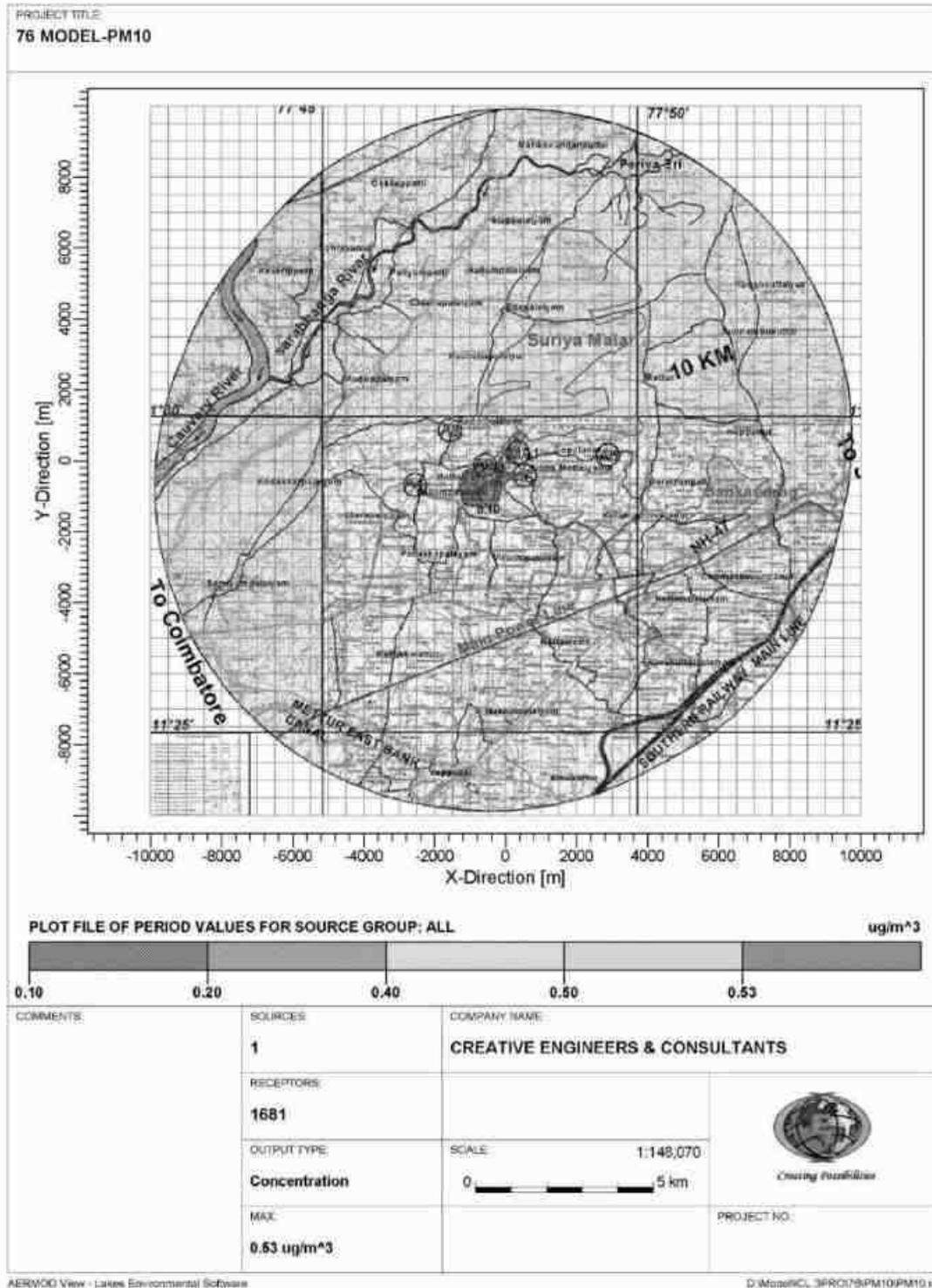




Figure 4.6: Isoleth of GLC Prediction for PM_{2.5}- G.O.76

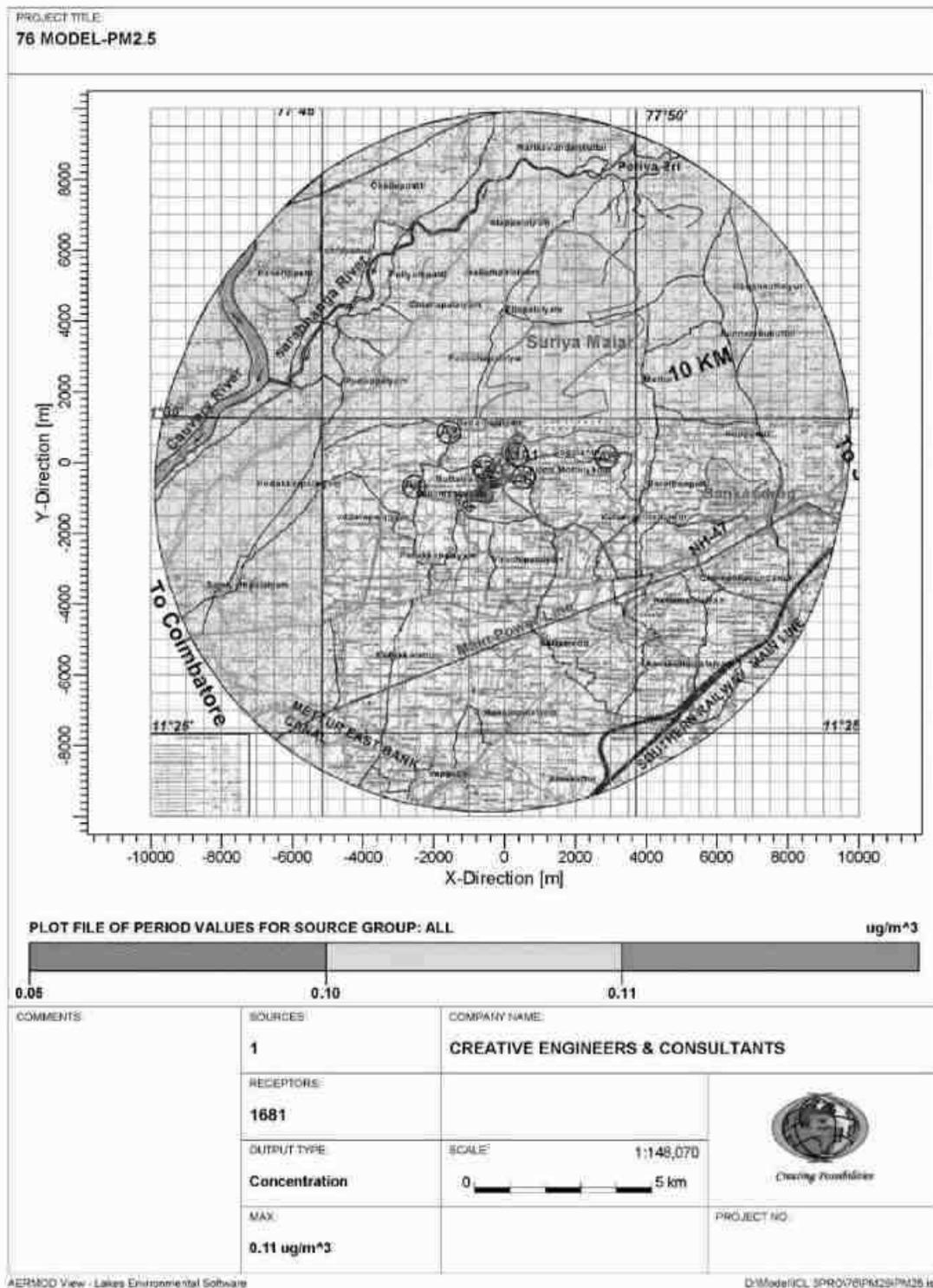
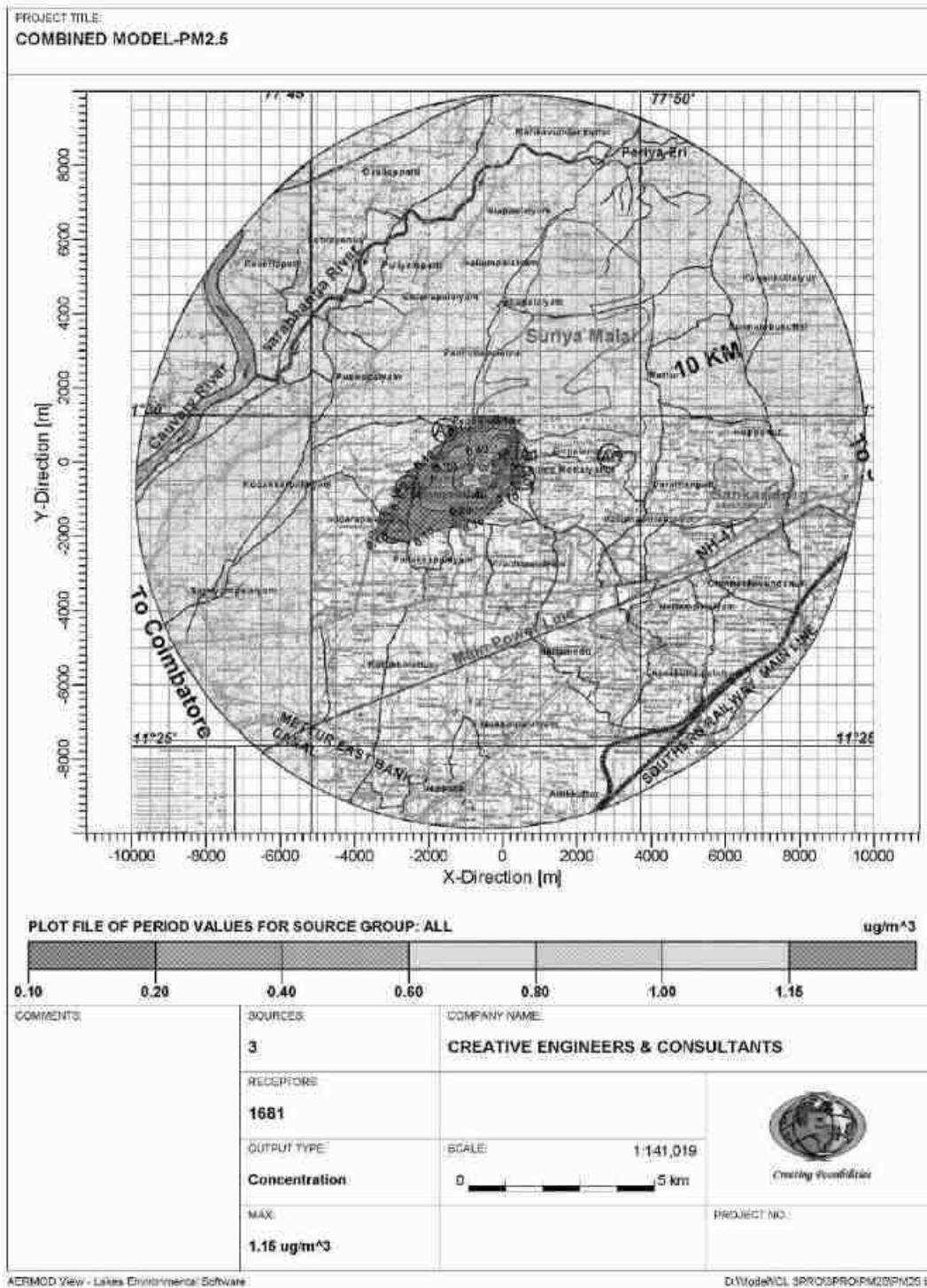




Figure 4.8: Isoleth of GLC Prediction for PM_{2.5} Cumulative





Predicted Ambient Air Quality:

The post project Concentrations of PM₁₀, PM_{2.5}, (GLC) (base line + incremental) on a cumulative basis after adopting necessary control measures is given below.

Table 4.9: Concentrations Of PM₁₀ after Project Implementation

Values in $\mu\text{g}/\text{m}^3$

S. No	Location	Background Concentration	Predicted Incremental Concentration	Post Project Concentration	Statutory Limits
1	MA1- Mothaiyanoor Lime stone,	51.2	3.3	54.5	-
2	A2-Mothaiyanoor	53.4	1.5	54.9	100
3	A3-Reddipalayam	52.8	<1.0	53.8	
4	A4-Nallampalaiyam	55.7	<1.0	56.7	
5	A5-Gopalanur	56.3	<1.0	57.3	
6	A6-Chinna Mothaiyanur	61.1	1.0	62.1	

Table 4.10: Concentrations Of PM_{2.5} after Project Implementation

Values in $\mu\text{g}/\text{m}^3$

S. No	Location	Background Concentration	Predicted Incremental Concentration	Post Project Concentration	Statutory Limits
1	MA1- Mothaiyanoor Lime stone,	25.1	1.1	26.2	-
2	A2-Mothaiyanoor	26.2	<1.0	27.2	60
3	A3-Reddipalayam	25.9	<1.0	26.9	
4	A4-Nallampalaiyam	27.5	<1.0	28.5	
5	A5-Gopalanur	27.6	<1.0	28.6	
6	A6-Chinna Mothaiyanur	29.9	<1.0	30.9	

It can be seen that the resultant added concentrations with baseline figures even at worst scenario, show that the values of ambient air quality with respect to PM₁₀ are in the range of 53.8 $\mu\text{g}/\text{m}^3$ to 62.1 $\mu\text{g}/\text{m}^3$ and with respect to PM_{2.5} are in the range of 26.2 $\mu\text{g}/\text{m}^3$ to 30.9 $\mu\text{g}/\text{m}^3$ which are within the statutory stipulations in each case. For preservation of environment in this mine strict enforcement of management schemes and regular air quality monitoring for taking corrective actions, as needed. By adopting the effective implementation of all the mitigative measures, no adverse impact on Air quality due to the combined mining operation in this lease area is expected.



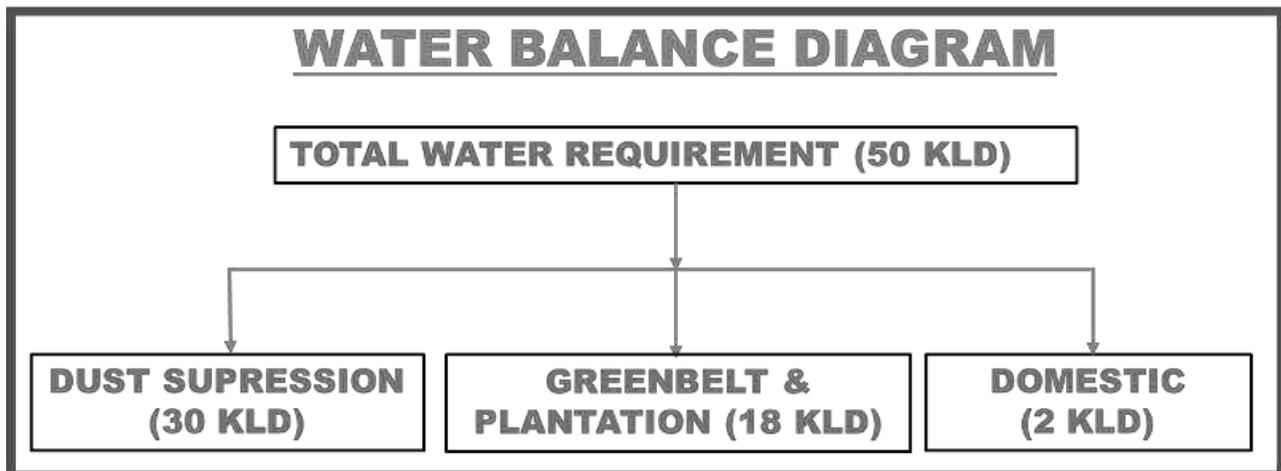


4.3 WATER ENVIRONMENT:

4.3.1 WATER REQUIREMENT:

The total cumulative water requirement will be 50.0 KLD. This comprises 2.0 KLD for domestic use, 30.0KLD for dust suppression by water sprinkling, wet drilling and 18 KLD for greenbelt and plantation. The water requirement is met from rainwater collected in the mine pit. The water balance diagram for the same is shown in **Figure No 4.7**

Figure 4.9: Water Balance Diagram



4.3.2 SOURCES OF WATER POLLUTION:

The existing water environment showing water quality at different sampling stations in the area has been described in Chapter-III.

Direct impact on human beings due to poor water quality consequent to mining operation can lead to various water borne diseases like diarrhea, jaundice, dysentery, typhoid, etc. Besides, the polluted water may not be useful for animal or human consumption, vegetation and may affect aquatic life, if effluents are not properly treated to remove the harmful pollutants. The activity / source of pollution, its impact / consequence, and the proposed control measures are explained below:

Elaborate details regarding the above mentioned impacts and mitigation measures are provided in the subsequent paragraphs.



Table 4.11: Control Measures – Water Environment

S.No	Source	Consequence	Mitigation Measures
A	Workshop, service building	Generation of effluent	Common workshop for all the leases of the proponent is present in the mines office and the same will be used for this project also.
			The workshop effluent will be passed through oil and grease trap. The treated water is reused within the workshop.
			The oil from the oil storage tank is safely disposed to CPCB authorized re-processor.
B	Domestic use	Generation of waste water	Common septic tank with soak pit facility is available in the mines office and same will be used.
C	Rainfall	Runoff from waste dump and stack	There are surface runoff management structures such as garland drains and earthen bunds along mine haul roads, mine periphery and around dumps. Based on the mine and dump movement during future workings these drains will be suitably re-oriented and further strengthened.
		Dump erosion	Plantation of native species on dump tops and slopes with geo-matting to arrest and prevent erosion will be further made.
		Rainwater Harvesting	Within the lease area, the rainwater falling within the mine pit area is made to drain to the mine sump in the lowest level of working through proper bench slopes towards the peripheral drains in the bench end. Mine sump itself acts as a good rain water harvesting pit. Collected water is being used for watering of haul roads, greenbelt and plantation, etc. Outside the lease area, various measures such as rooftop rainwater harvesting structures in the Sankar Hr.Sec School, two rainwater harvesting ponds of 17,280 KL and 14,625 KL capacity each, desilting of nearby village ponds, etc. are being carried out. These measures will be continued in the future also.

4.3.3 TREATMENT SCHEME:

A. Workshop Effluent:

There is a common workshop facility and the effluent arising from the same is will be treated through an oil & grease trap and clear water sump. Treated water confirming limits will be re used within the workshop.





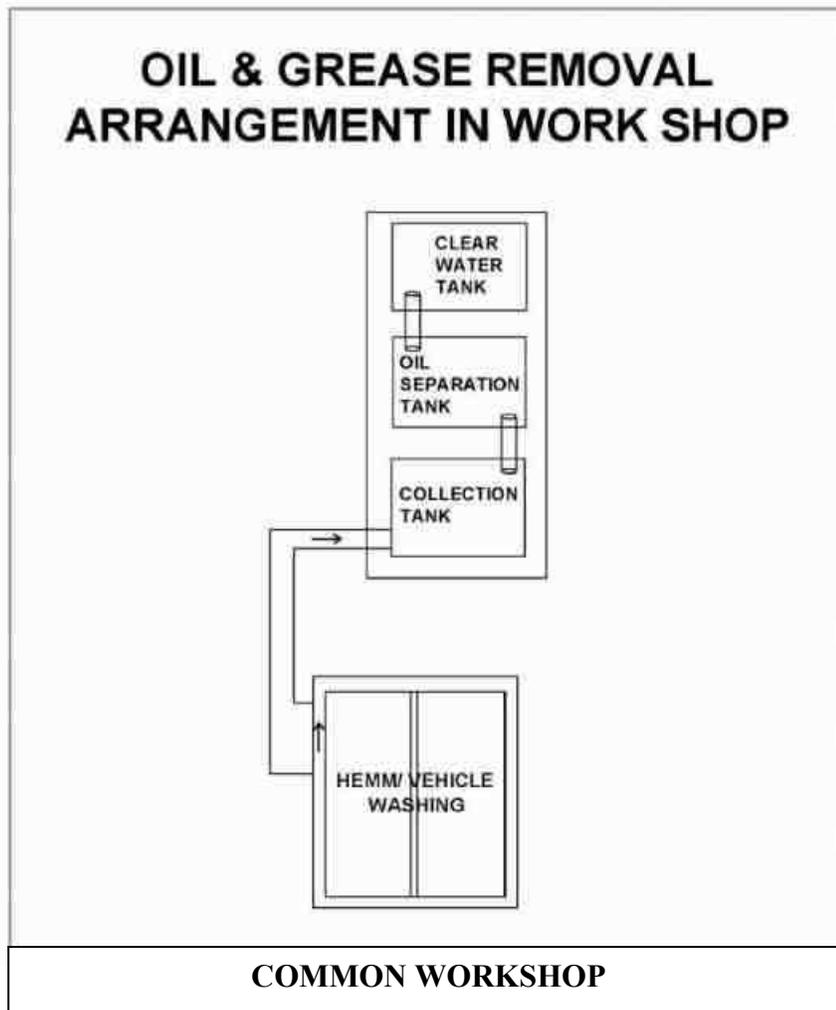
This oil & grease trap contains 3 chambers where the effluents due to washing of HEMM (Heavy Earth Moving Machines) and vehicles on the ramps will be collected in the oil separation tank. From the oil separation tank, the waste oil will be separated by floating mechanism and the oil will be collected in the oil storage tank. Oil from the storage tank will be collected manually and kept for safe disposal to CPCB authorized re-processor. Remaining water from the oil separation tank will be let into the filtration tanks in the remaining chambers and the treated water is collected in the treated water storage tank and reused within the workshop. The quality of the treated water will be periodically tested and ensured that the treated water quality confirms the PCB limits. Schematic flow diagram of the same is shown in **Figure No - 4.8**.



REPURPOSING OF OLD TYRES FOR PLANTATION



Figure 4.10: Oil and Grease Removal Arrangement





B. Generation of domestic effluent:

The domestic sewage to be generated from the project will be collected in septic tank with soak pit arrangement.

C. Washouts from overburden, ore stockpile, etc.

Runoff of waste dumps, limestone stockpiles during monsoon may carry the silt / ore residues and pollute the nearby land / streams, land if it is let-out as such.

Since the mining operations were in vogue till 2014, surface runoff management structures such as garland drains and earthen bunds already exist along mine haul roads, mine periphery and around dumps. Based on the mine and dump movement during future workings these drains will be suitably reoriented and further strengthened.

In the approved present plan period garland drain and earthen bund retaining wall will be constructed in the mine periphery and dump areas as scheduled below:

Table 4.12: Surface Runoff Management Structures

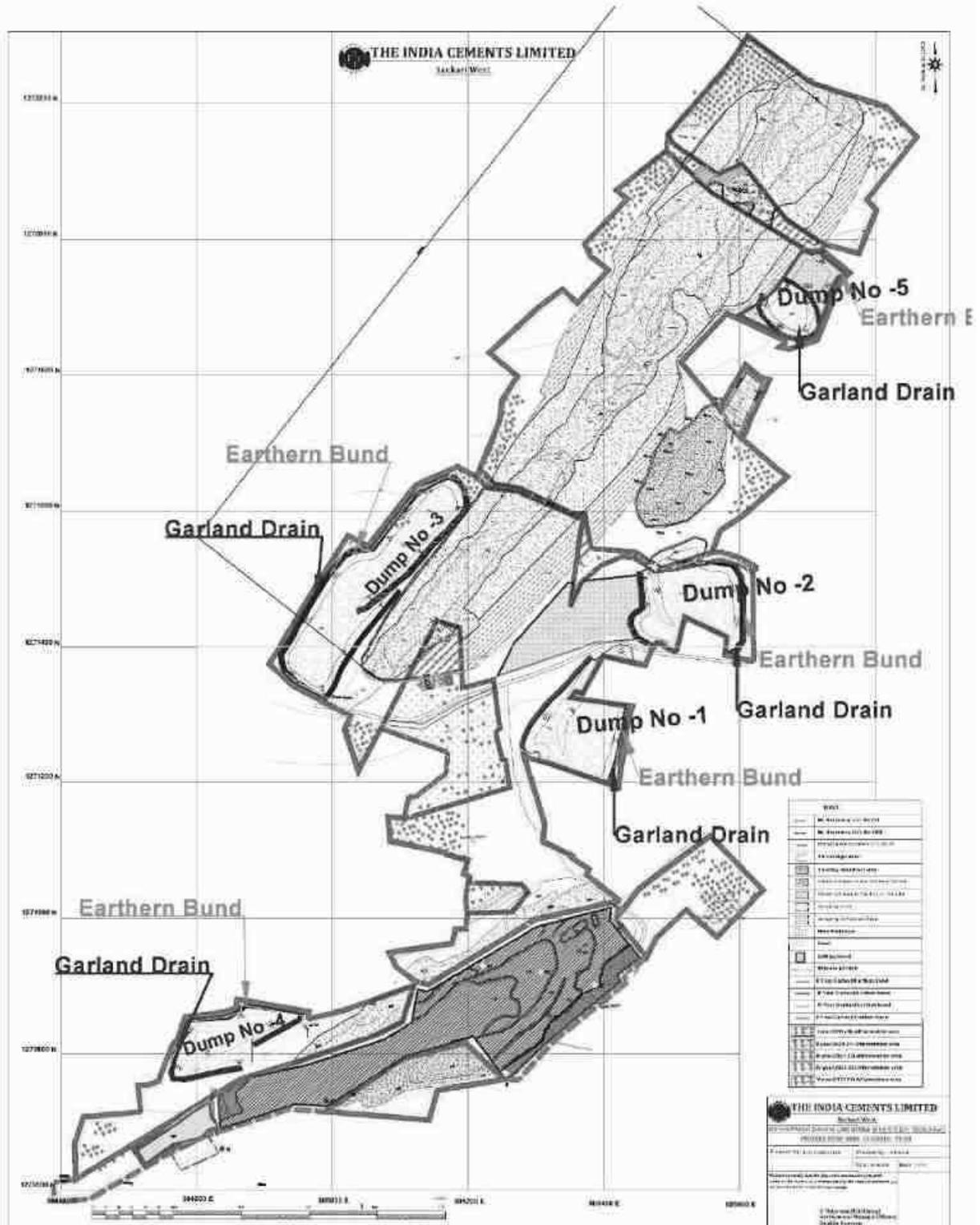
Year	GO 211	GO 1086	GO 76
I	0	48	60
II	183	31	60
III	279	31	60
IV	426	40	80
V	218	37	80
Total	1106	197	340

Based on the mine movement and requirement, the drain and retaining wall arrangements will be properly made and it will be ensured that the entire mine periphery , dumps are covered under surface runoff management arrangements. Besides, there will also be 5 settling ponds which these garland drains will drain the runoff water into. The supernatant clear water in the settling ponds will be reused within the mining. Besides, the mine pit itself acts as a good rainwater harvesting pit. The rainwater collected in the mine sump is reused for watering of haul road, greenbelt and plantation, etc. The surface runoff management structures at the end of the plan period have been depicted below in **Figure No.4.9**.





Figure 4.11: Surface Runoff Management Structures





D. Impact on Hydrogeological Status:

The stage of groundwater development can be defined as the ratio of net draft to net recharge available for irrigation. As per 1997 Methodology, the categorization is modified as Safe, Semi-critical, Critical and Over Exploited as given in the **Table No – 4.13**.

Table 4.13: Range of Categorization as per GWREC Norms – 1997

Safe	Extraction is less than 70 % of recharge
Semi-critical	Extraction is between 70 & 90 % of recharge
Critical	Extraction is between 90 & 100 % of recharge
Over Exploited	Extraction is above 100%

The dynamic ground water resources for Salem District, Sankari West Firka have been provided by the National Water Mission, Ministry of Jal Shakti, Department of Water Resources, RD & GR in the 'Ground water reports of Tamil Nadu Districts, - Notes on Salem'.

Table 4.14: Stage of Groundwater Development

Assessment Unit (Firka)	Net Annual Groundwater Availability	Existing Gross Groundwater draft for irrigation	Existing Gross groundwater draft for domestic and industrial water supply	Existing Gross Groundwater Draft for All Uses	Stage of Groundwater Development	Category of the Firka
Sankari West	678.36	831.00	146.67	977.67	144	Over Exploited

From the table it is seen that the stage of groundwater development for Sankari West Firka is 144 % which falls under Over Exploited Category as per the GWREC Norms.

E. Environmental Impact on Water Regime due to Mining Operation:

As already explained in Chapter – III, a detailed Hydrological investigation study was conducted by Department of Applied Geology, Climate change and Environmental Research Lab, University of Madras, Chennai. Findings of their study is given below:

- Geologically, this mine is mostly covered with granitic gneiss and crystalline limestone beds are formed as band within it.
- Groundwater level is slightly shallow in and around the mining area and no much variation is observed between deepest and shallowest water levels.





- Groundwater is only present in weathered and fractured zones that extend upto the depth of 20m to 30m below ground level. Below this depth, the formation is harder and compact which doesn't allow the groundwater to flow deeper.
- Geophysical studies also confirm the presence of weathered and fractured zones upto the depth of 30m bgl.
- The mined pits below the zone of water table act as a reservoir for the rainwater with very minimum or no infiltration of water into the geological formations is noticed. Evaporation has maximum effect on the stored rainwater in the mined pits.
- The quality of groundwater tested in this region is fresh to moderately poor and recommended for drinking and all kinds of the domestic uses expect one well situation in southern part of the mines.
- High transmissivity of 495.67 m³/day calculated by conducting pumping test suggest the dug well doesn't have any impact on mining activity even though the depth of mining crossed the water table. Groundwater flow is free and received from the weathered and fractured zones at the highly elevation. Infiltration or penetration or seepage to deeper of groundwater compant zones is completely absent.
- The mine pit is actually acting as a rainwater harvesting structures. This is being facilitated to induce the groundwater recharge in this area. The collected rainwater is being utilized for greenbelt development of the area and water sprinkling in the haul road for dust suppression. The remaining water of the mine is being pumped to the nearby agriculture which will induce the groundwater table of shallow aquifer in the nearby area.
- The limestone mining in this part does not have any impact on the aquifer present in and around mining areas and there will not be any impact on ground water even mining in future for further depth of 35m from the present mine depth.

This hydrogeological study concluded that the mining operations will not have any adverse impact on the groundwater and the aquifers present in and around the lease area.

4.3.3.1 RAINWATER HARVESTING PLAN

The rain water falling within the mine pit area is made to drain to the mine sump in the lowest level of working through proper bench slopes towards the peripheral drains in the bench end.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Entire water requirement of all mines is met from harvested rain water in this sump. The quantum of rainwater harvesting & net water available for utilization in each block / mine pit is calculated.

About 5740 m³ of rainwater is expected to be collected inside the mining pit during monsoon season at present. It is necessary to dewater certain quantity of rainwater collected in the mine pit to develop mine working area.

The collected rain water is being utilized for greenbelt development of the area and water sprinkling in the haul road for dust suppression. The remaining water of the mine is being pumped to the nearby agriculture, which will induce the groundwater table of shallow aquifer in the nearby area. Roof top rain water harvesting structures are already installed in the office, administrative building, cement plant, colony buildings of ICL. There also exist two rainwater harvesting ponds located in Colony and Factory of capacities 17280 KL and 14,625 KL. These ponds will be regularly desilted and maintained by the proponent.





4.4 NOISE AND VIBRATION:

4.4.1 NOISE ENVIRONMENT:

The ambient noise levels in the study area have been discussed in Chapter - III. The data shows that the existing noise levels are within statutory tolerable limits. The impact prediction and control measure for noise environment due to mining and allied activities is described below:

4.4.1.1 IMPACT PREDICTION DUE TO NOISE:

Noise is one of the inevitable causes of pollution in mining operations, largely due to the extensive mechanization adopted. Besides, other operations such as drilling, blasting, movement of vehicles, etc., also produce noise of considerable magnitude in mining operations.

The main sources of noise and expected levels are given below in **Table no – 4.15**

Table 4.15: Main Sources of Noise

Sl. No.	Source	Inside Cabin	Noise level at dB(A) 10 m. from source
1	Shovel	84-91	59-68
2.	Dumpers/Tippers	87-96	75-85
3.	Drill	88- 95	75-83

Prolonged exposure to a high noise level is harmful to the human auditory system and can create mental fatigue, rebellious attitude, annoyance and carelessness, which may lead to neglect of work and also result in accidents. The impact of noise level as per World Health Organization's 1986 notification is given below in **Table No - 4.16**.

Table 4.16: Impact of Noise Levels

NOISE LEVELS	ADVERSE EFFECTS
90-115 dB	Partial deafness and nervous irritability
> 115 dB	Permanent deafness
Impulsive noise (>90dB)	Frightens livestock grazing in the nearby areas

OSHA (Occupational Safety and Health Administration), USA and other similar organisations stipulate that noise level up to 90 dB(A) is acceptable for eight hours exposure Leq (Equivalent





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

sound level) (8hrs) per day. The Directorate General of Mines Safety, in circular No. DG (Tech)/18 of 1975, has prescribed the noise level in mining occupations (TLV) for workers, in an 8 hour shift period with unprotected ear as 90 dB(A) or less.

The production quantity is low and hence few equipment's only will be used . Besides, the noise will be felt only near the active sources. There will be considerable reduction in the noise level due to the absorption factor, environmental surroundings and other attenuation factors. As far as absorption factor is concerned, If the ground cover is vegetated or has a soft texture, sound will decrease at the rate of 4.5 dB(A) every time the distance between the source and the observer is doubled. Besides, there will be shielding factor, which takes into account the environmental surroundings. With every 30m of dense land scape vegetation, 5 dB(A) of additional attenuation can be obtained up to a maximum of 10 dB(A). As such at away places the effect of noise will not be felt.

Since contiguous mining with common equipments to be used for these leases, anticipated noise levels resulting from operation of the various common machineries like excavator, tippers, drill have been computed using point source model. Computation of cumulative noise levels at the nearby villages is made based on the assumption that there are no attenuation paths between the source and the boundary.

Noise modeling is carried out using the following formula:

$Lp2 = Lp1 - 20 \log R2/R1$, Where, $Lp1$ and $Lp2$ are sound pressure levels at points located at distances $R1$ and $R2$ respectively from the source. The study results are as follows:

Table 4.17: Post Project Noise Levels

SI.No	Location	Baseline Day Eq.in dB(A)	Post project noise Eq in dB(A)	Limit dB(A) as per MoEF&CC
1.	North West Corner	47.2	54.7	90
2.	North East Corner	47.2	59.1	90
3	South East Corner	47.2	55.1	90
4	South West Corner	47.2	56.2	90
5	A2-Mothaiyanoor	48.2	48.8	55
6	A3-Reddipalayam	51.8	52.0	55
7	A4-Nallampalayam	51.7	51.9	55
8	A5-Gopalanur	52.0	52.3	55
9	A6-Karumapurathanur	49.9	51.4	55





From the studies, it is found that the predicted cumulative Noise Levels due to mining operations at the periphery of the mine lease itself will be less even without considering any attenuation factor. However, practically there will be attenuation due to vegetation etc., and as such there will not be any adverse noise propagation outside the lease boundary. Since the habitations are also away the effect of noise due to mining operations will not be felt at all in the surrounding villages.

4.4.1.2 CONTROL MEASURES FOR NOISE ENVIRONMENT:

Periodical monitoring of noise level in the mine show that the values are well within statutory limits. Hence, by continuing the following mitigative measures already being adopted for noise control, the impact on noise levels will continue to be insignificant:

1. Planting rows of native trees along roads, around mine area and other noise generating centers to act as acoustic barriers.
2. Sound proof operator's cabin for equipments like dumpers, shovel, tippers, etc.
3. Proper and regular maintenance of equipments may lead to less noise generation.
4. Providing in-built mechanism for reducing sound emissions.
5. Providing earplugs to workers exposed to higher noise level.
6. Conducting regular health check-up of workers including Audiometry test for the workers engaged in noise prone area.

Avenue plantations already exist along peripheral portions of the mining lease areas. Further greenbelt and afforestation will be planned and executed in future to abate noise and dust propagation in the area.

4.4.2 GROUND VIBRATIONAL DUE TO BLASTING EFFECTS:

Vibrations due to blasting may cause damage to nearby structures, if appropriate control measures are not adopted. Flyrock is another possible damage causing outcome of blasting. There are many factors, which influence these, like long explosive column with little stemming column, improper burden, loose material or pebbles near holes and long water columns in the holes.

The following control measures will be planned to reduce ground vibratory conditions to sustainable statutory limits.





- 1) The peak particle velocity (PPV) of ground vibration will be kept below 10mm/s for 8-25hz frequency range through optimally controlled blasting techniques , after necessary field trials.
- 2) Drilling and charging pattern will be ideally formulated, with less explosive charge, etc., after field trials.
- 3) Use of suitable initiating sequence and millisecond delay detonators.
- 4) It is suggested to carry out blasting with minimum charge per delay so that there will be minimal impact on the surrounding areas due to vibration.
- 5) To contain fly rocks, stemming column will not be less than burden of the hole. Blasting area will also be muffled, if necessary, to stop fly rocks propagation.
- 6) Blasting will not be carried out when strong winds are blowing towards the inhabited areas. Blasting will be done during midday time and never at night.
- 7) Surrounding villages will be regularly inspected for any visual cracks on walls and feed backs will be gathered to investigate the reasons for these and for reassessing the charge per delay from time to time.
- 8) Proper care and supervision during blasting by a competent and experienced person.

By adoption of above measures, it will be ensured that the ground level vibration due to blasting are maintained within the limits prescribed by DGMS, Dhanbad at the mining areas vide Circular No. 7 dated 29 -08-1997 as given below

Table 4.18: Permissible Peak Particle Velocity (PPV) In Mining Areas

In mm/sec

Type of structure	Dominant excitation frequency Hz		
	<8 Hz	8-25 Hz	>25 Hz
A. Buildings/structures not belonging to owner			
Domestic houses /structures (Kuchha brick and cement)	5	10	15
Industrial buildings (RCC and framed structures)	10	20	25
Objects of historical importance and sensitive structures.	2	5	10
B. Building belonging to owner with limited span of life			
Domestic houses/structures (Kuchha brick and cement)	10	15	25
Industrial buildings (RCC and framed structures)	15	25	50





4.5 LAND ENVIRONMENT:

The mining lease in the area is under operation by project proponent, since 1964. The entire lease area is in ICL Possession. Mining operations in the leases have been suspended since 2014.

Table 4.19: Land Use Table – G.O.211

S.No	Land use	Present Area (Ha)	At the end of mine scheme(Ha)	At the end of mine life (Ha)
1	Area under mining	10.73	16.32	20.76
2	Storage for top soil	---	---	--
3	Overburden/dump	7.65	9.70	9.43
4	Mineral storage	---	---	--
5	Infrastructure(workshop, administrative building)	0.06	0.06	0.06
6	Road	0.68	0.68	0.68
7	Railways	---	---	--
8	Green belt	4.90	5.90	19.91
9	Tailing pond	---	---	--
10	Effluent treatment plant	---	---	--
11	Mineral separation plant	---	---	--
12	Town ship	---	---	--
13	Other details - Non mining area	26.82	18.18	--
	Grand total	50.84	50.84	50.84

Table 4.20: Land Use Table – G.O.1086

S.No	Land use	Present Area (Ha)	At the end of mine scheme(Ha)	At the end of mine life (Ha)
1	Area under mining	0.630	0.770	1.335
2	Storage for top soil	---	---	--
3	Overburden/dump	0.060	0.360	1.100
4	Mineral storage	---	---	--
5	Infrastructure(workshop, administrative building)	0.030	0.030	0.030
6	Road	0.170	0.170	0.170
7	Railways	---	---	--
8	Green belt	0.460	0.560	0.900
9	Tailing pond	---	---	--
10	Effluent treatment plant	---	---	--
11	Mineral separation plant	---	---	--
12	Town ship	---	---	--
13	Other details - Non mining area	3.515	2.975	1.330
	Grand total	4.865	4.865	4.865





Table 4.21: Land Use Table – G.O.76

S.No	Land use	Present Area (Ha)	At the end of mine scheme(Ha)	At the end of mine life (Ha)
1	Area under mining	6.100	6.180	6.19
2	Storage for top soil	---	---	--
3	Overburden/dump	--	0.490	0.490
4	Mineral storage	---	---	--
5	Infrastructure(workshop, administrative building)	--	--	--
6	Road	0.17	0.17	0.17
7	Railways	---	---	--
8	Green belt	0.94	1.046	1.046
9	Tailing pond	---	---	--
10	Effluent treatment plant	---	---	--
11	Mineral separation plant	---	---	--
12	Town ship	---	---	--
13	Other details - Non mining area	0.795	0.119	0.109
	Grand total	8.005	8.005	8.005

4.5.1 LAND RECLAMATION:

Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area . Infrastructures will be dismantled and reclaimed.

4.6 BIOLOGICAL ENVIRONMENT:

4.6.1 EXISTING FLORA AND FAUNA:

The core zone area is partly mined out area. Details of flora / fauna pattern in core and buffer zones have been described in chapter - III.

4.6.2 IMPACT OF MINING ON BIOLOGICAL ENVIRONMENT:

The significance of impact on biological environment due to mining and allied activities on various fronts is described below:





Table 4.22: Impact on Biological Environment

S.No	ISSUES	OBSERVATIONS
1	Clearance of vegetation due to mining and allied activities	The mine area is already opened up. As such no clearance of major vegetation was involved. However, good plantation measures at various places like around mine, along road, dump top and dump slopes (both old and new), in the nearby land owned by ICL etc., will result in substantial improvement in vegetative cover when compared to its pre-mining status.
2	Retardation of tree growth, tip burning, etc, due to deposition of dust and the Particulate matter generated from the mining operation.	Necessary mitigative measures like dust suppression, proper maintenance of equipments, roads will be carried out to prevent dust generation.
3	Proximity to national park / wildlife Sanctuary / reserve forest / mangroves / Coastline / estuary / sea	<ul style="list-style-type: none">• Suriyamalai Reserve Forest is located north of GO 211. From the air quality modelling studies carried out, it is noted that in the RF area, the incremental concentration is <math><1 \mu\text{g}/\text{m}^3</math> only. In order to further prevent dust propogation, it is proposed to erect a green net / tin sheet along the northern side of the lease area for a length of 300m. By carrying out various dust control measures within such as water sprinkling. Wet drilling, etc. during mining operations, no adverse impact on air quality due to mining operations is expected.• With regards to the noise levels, the expected post project noise levels due to this project at various locations were studied. It is seen that near the Suriyamalai R.F., the post project noise levels will be well within the stipulated limits of 55 dB(A). To further prevent the impact due to noise, it is proposed to carry out good greenbelt cover in the safety zone areas in the mine periphery including the northern side of the lease area.• Hence, by following these measures, no adverse impact on suriyamalai reserve forest due to mining operations is expected. Regular periodic monitoring near the RF area will be carried out to ensure the same.
4	Release of effluents into water body that also supplies water to wildlife	There are no water bodies near the site and also there will be no discharge of effluent from the mine.
5	Proposed project could increase siltation that would affect nearby biodiversity area	Surface runoff management structures like garland drain, check dams, retaining walls, settling pond etc. as explained above will be constructed and as such there will not be any appreciable impact on surface water quality which in turn can





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

		affect the bio diversity of the area.
6	Activities of the project affects the breeding / nesting sites of birds and animals	In the present ML area there is no wetland and the natural flow of water also not available in the core zone. A migratory bird needs sufficient wetlands with sufficient food, shelter, roosting places and nesting places which is not possible here.
7	Located near an area populated by rare or endangered species	Towards conservation of Schedule-I species, Rs.10.0 Lakhs will be spent on a combined basis for all the leases of ICL and its cement plant. The various measures will be undertaken in consultation with the DFO.
8	Risk of fall/slip or cause death to wild animals due to project activities	There are no wild animals in the area. The dumps / bunds around the mine itself act as a good barrier for entry of stray animals. In the post mining stage.
9	Project affects the forest-based livelihood / any specific forest product on which local livelihood depends	Not applicable
10	Project likely to affect migration routes	No migration routes are in the area.
11	Project likely to affect flora of an area, which have medicinal value	No such significantly important medicinal value species within the ML area and its nearby region.
12	The project likely to affect wetlands, fish breeding grounds, marine ecology	There are no any wetlands, fish breeding grounds, marine ecology nearby the ML area which will be affected due to this project.
13	Pollution leading to release of greenhouse gases (GHG) rise in temperature	<ul style="list-style-type: none">•This being a mining project, no adverse generation of heat is envisaged.•Certified vehicles with low carbon emissions will only be used. These equipments will be properly and regularly maintained. Besides, regular vehicular emission tests will be done for the transport vehicles to ensure minimal impact due to carbon emissions. To further mediate the carbon emissions, a good greenbelt and plantation plan has been planned.•There are no Protected or Eco-Sensitive Zone or forest land nearby wherein it can have an impact.•It will be ensured that mining will be carried out adhering to all the statutory rules and regulations and maintaining the environmental quality within the prescribed standards by effective implementation of various mitigative measures.•These mitigative measures will be continued for the entire lease period ensuring no impact on the environment. <p>As such release of Greenhouse gases (GHG), rise in temperature, affecting livelihood of the local people ,loss of Agriculture, Forestry and Traditional Practices is not envisaged. Such a limited scope will not induce any climatic</p>





	change leading to droughts, floods etc.
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There are no migratory corridors, migratory avian-fauna, rare endemic and endangered species. Therefore there shall be no impacts due to mining activity on them. Even though there are no impact on bio diversity and flora / fauna status due to project operations, positive impacts will arise due to well-planned reclamation measures for restoration of land status in the area ultimately to productive land category with elaborately planned green belt development activities and along with creation of water resources in the abandoned pits.

4.6.3 CONTROL MEASURES FOR BIOLOGICAL ASPECTS:

To reduce the adverse effects on flora / fauna status of the area due to deposition of dust generated from mining operations, water sprinkling and water spraying systems will be ensured in all dust prone areas to arrest dust generation. Methodical and well-planned plantation scheme is being carried out depending upon the immediate need, priority and availability of land which will be continued in future also. The plantation is being done in multiple rows in a staggered way to cover the area to give the desired stratified appearance of multi tiers.

The objectives of the greenbelt cover will cover the following:

- Noise abatement
- Reuse of waste water to the extent possible
- Prevention of soil erosion
- Ecological restoration
- Aesthetic, biological and visual improvement of area due to improved vegetative and plantations cover.

The areas where greenbelt is already developed are:

- 1) Peripheral portions of the mine lease area.
- 2) All along the roads in the project area.
- 3) Around infrastructure area

During plantation development, the following aspects are considered in different areas:

A) Greenbelt around mine dumps, etc.:

- ◆ Tall growing, closely spaced, evergreen trees native to the area.
- ◆ Easy, quick early growth and establishment.
- ◆ Uniform spreading of crown habit.
- ◆ Timber trees having long gestation period.





- ◆ Trees with high foliage density, leaves with larger leaf area.
 - ◆ Attractive appearance with both good flowering and fruit bearing.
 - ◆ Bird and insect attracting species.
 - ◆ Suitable green cover with minimal maintenance.
- B) Avenue Trees:**
- ❖ Trees with conical canopy and with attractive flowering.
 - ❖ Trees with medium spreading branches to avoid obstruction to the traffic.
 - ❖ Trees with branching at 10 feet and above.

As such no impact on bio-diversity and flora fauna status due to project operations, positive impacts will arise due to well-planned reclamation measures for restoration of land status in the area ultimately to productive land category with elaborately planned greenbelt development activities and along with creation of water resources in the abandoned pits. Removal of vegetation (flora) existing in the area and thereby fauna from the area required for mining and other purposes shall have the impact on flora and fauna of the region, But the ultimate reclamation planned, leaves a congenial environment for development of flora & immigration of fauna through massive afforestation and creation of water resources.

Planning the mining layout has been done so as to have the least requirement of the land and take necessary steps for ultimate reclamation of the mined out land so that the land after exhaustion of limestone in adjacent mine of project proponent taken for the mining purposes as far as possible is brought under afforestation programme. Noise and vibrations due to blasting and operation of the machines will have an impact on humans. However controlled blasting and use of advanced blasting techniques and vibration monitoring carried out will minimize the effects of blasting. With the provision of retention walls, garland drains and vegetation of dumped areas there shall be reduction in soil erosion. This in turn will improve the natural vegetation growth by improving the species density.

The project authorities intends to reclaim majority of mining lease area with better environmental quality indices due to raising of good green cover with creation of water storage which can improve the floral content and attract fauna to the mined out area. Thus the project shall ultimately leave a congenial environment for improvement of floral and faunal population. The final selection of species will be done as per advice of local forest department. Thus every effort





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

is being made for regeneration of biodiversity of the mined out area in a scientific way to better the land status.

4.6.4 GREEN BELT & PLANTATION:

4.6.4.1 Existing Plantation:

About 34,595 plants have already been planted so far since the commencement of the mining operations covering a total area of 26.903 Ha in the mining leases of ICL. Besides, outside the lease area also plantation is carried out over an area of 9.72 Ha with a total of 13,185 plants.

Table 4.23: Plantation carried out (In all lease hold areas)

Name of the Lease	Afforestation within the lease area		Afforestation outside the lease area	
	Cumulative area covered for plantation (Ha)	Cumulative No. of plantation	Cumulative area covered for plantation(Ha)	Cumulative No. of plantation
Mothaiyanur	6.43	7396	1.56	2070
Other Leases	20.473	27199	8.16	11115
Total	26.903	34595	9.72	13185

Table 4.24: Species Planted

S. No.	Species Name	Tamil Name
1	<i>Albizia lebbbeck</i>	Vagai
2	<i>Millettia pinnata</i>	Pungai
3	<i>Terminalia arjuna</i>	Marudu
4	<i>Delonix regia</i>	May flower
5	<i>Malpighia emarginata</i>	Cherry
6	<i>Casuarina equisetifolia</i>	Casurania
7	<i>Acacia nilotica</i>	Subabul
8	<i>Psidium guajava</i>	guava
9	<i>Eucalyptus globulus</i>	Eucalyptus
10	<i>Pithecellobium dulce</i>	Konapuliaanka
11	<i>Polyalthia longifolia</i>	Asoka
12	<i>Ficus religiosa</i>	Arasamaram
13	<i>Tecoma stans</i>	Thangarali
14	<i>Azadirachta indica</i>	Neem
15	<i>Delonix elata</i>	Vadhanarayan
16	<i>Cassia fistula</i>	Sarakondrai
17	<i>Tectona grandis</i>	Teak
18	<i>Syzygium cumini</i>	Naval maram
19	<i>Conocarpus lancifolius Engl.</i>	Damas
20	<i>Cocos nucifera</i>	Coconut
21	<i>Ficus benghalensis</i>	Banyan tree





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

22	<i>Phyllanthus emblica</i>	Nelli
23	<i>Punica granatum</i>	Mathulai
24	<i>Citrus limon</i>	Lemon
25	<i>Terminalia catappa</i>	Badam tree
26	<i>Manilkara zapota</i>	Sappota
27	<i>Mangifera indica</i>	Mango
28	<i>Aegle marmelos</i>	Villa
29	<i>Moringa oleifera</i>	Murungai
30	<i>Melia dubia</i>	Malaiveempu
31	<i>Tamarindus indica</i>	Tamrind
32	<i>Gossypium hirsutum</i>	Paruthi

Avenue plantation has already been carried out from the mine lease area of the Karumapurathanur Limestone Mines to the factory, the Veerachipalayam limestone Mines and the Mothaiyanur Limestone Mines. The details of the same has been provided below:

Table 4.25: Avenue Plantation

S.no	From	To	Total length of the road	No.of plants	name of spices
1	KLQ	Factory	2000 M	540	Ashoka, Dupai plant,teak & neem
2	KLQ	VLQ	3000 M	1020	Dupai,neem
3	KLQ	MLQ	1500 m	840	Dupai, neem





Photographs of Plantation





AVENUE PLANTATION





HERBAL GARDEN



NURSERY





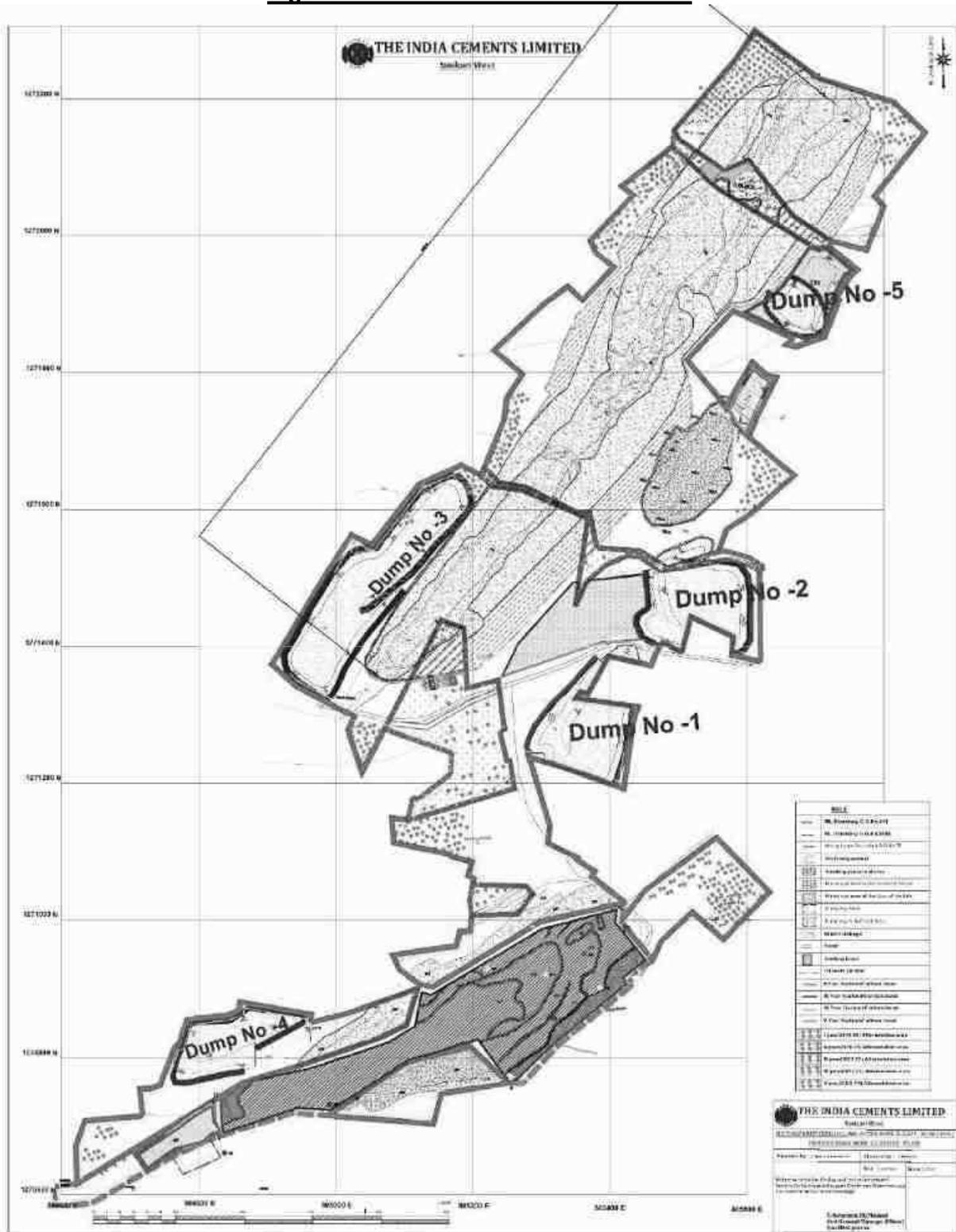
4.7.4.2: Proposed Plantation Details:

During the plan period, totally 7.506 Ha of the lease periphery will be covered with plantation. Besides, the inactive dumps will also be reclaimed and vegetated. Local species like neem, Pungan etc) will be planted. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area The plantation plan is given below in **Figure 4.10**.





Figure 4.12: Combined Plantation Plan





4.7 SOCIO ECONOMIC ENVIRONMENT:

The predicted pollution scenario in respect of ambient air quality, Noise levels, water aspects, biological aspects etc., have been described earlier in this chapter, which show that all these environmental parameters, during operation of the project, will be well within the statutorily prescribed levels. As such, impact due to the project will be positive on socio-economic aspects.

It will be ensured that the buffer zone will be properly preserved environmentally in all respects within sustainable limits through necessary monitoring. The project is being operated with due care for minimizing environmental impacts with proper EMP measures for pollution control which will be continued in future also.

In Sankari area, the ICL's mining and cement plant operations has resulted in direct employment opportunities for about 130 persons through contract means. Besides, indirectly about 100 persons are benefited through allied services like trading, logistics, casual lab or needs, etc. Various service-related activities connected with the project operations as shown under.

- Project related ancillary services
- Project related logistical operations for transport of limestone to cement plant, etc.,
bringing various materials for project operations, etc.
- Various trading services for consumer goods, spare parts, sundry items, etc.
- Contractual services connected with the project.
- Green belt and horticultural works in the project.
- Casual labor needs for various activities.

Besides, there is marked improvement of various facilities in the local areas due to project operation. The salient features of which are listed below

- ❖ Improvement in medical and health care system
- ❖ Improvement in educational services
- ❖ Infrastructural betterment through better roads, lighting and communicational systems
- ❖ Betterment of drinking water facilities.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

- ❖ Vocational training facilities for local eligible youth of local community to enable them to seek employment in suitable project operations and elsewhere.
- ❖ Benefit to the State and the Central governments through financial revenues by way of royalty, cess, DMF, GST etc., from this project directly and also indirectly.

4.8.1 COMMUNITY DEVELOPMENTAL ACTIVITIES ALREADY CARRIED OUT:

The India Cements Limited has implemented good community developmental activities around their project site. The project proponent has carried out beneficial social welfare activities to improve the social and physical infrastructure of the local area. They have conducted community need assessment surveys around the project site to identify the areas which need development and improvement under community developmental activities. ICL is having a full-fledged CSR coordinator at corporate office to take care of all the developmental activities of their group. The proponent has spent more than Rs 180 lakhs under various community developmental activities in the recent past & its details are given in Table 4.25.

Table 4.26: Community Developmental Activities Carried out by ICL in the past

Year	Particulars	Amount in Rs	Details
2011	Sports & recreation	188000	Playground preparation in Sanyasipatti
	Human development & capacity building	1050931	Providing chairs, tables, light, computer, desk, water tank for teachers of schools in Mothaiyanur, Veerachipalayam, Sanyasipatti, Devannagoundanur, Padaiveede & Alathur.
	Infrastructure	273332	Construction of shelter with concrete flooring in front of pragaram in Padaiveedu, Toilets and urinals construction in school in Mothaiyanur, Sanyasipatti, Veerachipalayam & Bus shelter at Thomas Nagar
	TOTAL	1512263	
2012	Environment	40000	Saplings distribution & Environment awareness in Sankari west
	Human development & capacity building	228998	Construction of toilets for school children, Devannagoundanur, Padaiveedu, sintex tanks, pipeline in Nallamapalayam, provided furniture, fans and light, cooking utensils, plates and tumblers, steel almirah and rack, speaker and microphone stand at Alathur, Devannagoundanur and Nallamapalayam
	Infrastructure	270149	Construction of bus shelter in Sankari, Construction of shelter with concrete flooring in front of pragaram - Anjenayer temple
	TOTAL	539147	
2013	Health	35704	Health camp for rural women, children less than 5 years, eye camp and general health campaign association with Aravind eye hospital, Madurai, in Sankari
	Human development &	373757	Providing computer with UPS, bench & desk to Panchayat union middle school Sangagiri, benches, desks, fans, SS water drum &





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Year	Particulars	Amount in Rs	Details
	capacity building		construction of toilet for girls to Panchayat union middle school Nagichettipatti, construction of toilet for boys and girls at Panchayat union elementary school Gopalanur. providing providing steel almirah, table , chair , children plastic chair, cooker, clock and sports item ect to Anganwadi school Mothaiyanur, Anganwadi school Saniyassipatti, Anganwadi school Mekkadu, Panchayat union elementary school - Saniyassipatti. .Conducting Science exhibition for Sankari surrounding area Govt school . Providing desk and bench for students in Sri Ramanuja Darshana Vidyasala, Mallegoundampalayam, Palladam - Coimbatore
	Infrastructure	332113	Construction of bus shelter at Saniyassipatti village & Padaiveedu village
	Discretionary fund	10000	On the occassion of 151 st Swami Vivekanada's birthday celebration, National Youth day was celebrated by Ramakrishna Mission Ashrama, Salem for which we have donated Rs.100000.
	Socio-economic	85697	Organizing veterinary camps in 5 surrounding villages- Padaiveedu, Thiruchengodu - Namakkal
	TOTAL	837271	
2014	Health	56047	General medical camp, Eye camp & dental camp Sankari
	Human development & capacity building	209425	Providing cooking utensils for noon meal scheme - for government high school - Pallakkapalayam. Providing steel almirah,table, chair, plate and , tumbler for anganwadi school at Chinnagoundanur. Providing gas stove, cooker, water drum and fan to Anganwadi school at Mekkadu. Career counseling cum motivation camp for 10th and 12th standard students in the surrounding area.Providing cDVD player -1 no, Rhymes and stories cassettes (Tamil and English), Playing toys, Chairs, Mats , Cooker to Anganwadi school at Karadivavi – Mallegoundampalayam, Palladam - Coimbatore
	Infrastructure	161752	Construction of bus shelter at 3 locations, Sanniyasipatti, Sankari - Salem & Construction of concrete roof for mortuary room, Sankari
	Vulnerable groups	30000	Provided RO Water plant to Differently Abled Rehabilitation Future Development Charitable Trust and Training Centre, Pullagoundampatti
	TOTAL	457224	
2015	Environment	104738	Saplings distribution & Creating environmental awareness in Sankari west
	Health	1036502	Eye camp, dental camp, Cancer screening for women, General medical camp and Providing free hearing aid for public in and around Sankari
	Education		
	Human development & capacity building	68376	Providing table & chairs, steel almirah, fan to school in Chinnagoundanur and providing one submersible pump to govt. ITI, Salem.
	Infrastructure	300000	Construction of bus shelter in Goundanur,Sankari & Mothaiyanur
	Vulnerable groups	96500	Issuing needy items for Orphanage in Salem and Namakkal
	TOTAL	1606116	
2016	Health	10000	Diabetics & blood pressure checkup at Rasipurathanur & Sanyasipatti.
	Others	13104	Supplying buttermilk near Tiruchengode temple
	TOTAL	23104	





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

Year	Particulars	Amount in Rs	Details
2017-2018	Health	304574	For health camps around sankari and other nearby villages
	Education	579419	Various assistance like table chair, computers, books etc to surrounding schools
	Human development & capacity building	1750023	Construction of toilets, providing assistance to schools, repair of school building etc
	Others	81600	Food packets, assistance for cultural activities, etc
	TOTAL	2715616	
2018-2019	Health	982896	For health camps around Sankari and other nearby villages
	Education	258721	Various assistance like table chair, computers, books etc to surrounding schools
	Human development & capacity building	1741057	Construction of toilets, providing assistance to schools, repair of school building etc
	Others	72583	Food packets, assistance for cultural activities, etc
	TOTAL	3055257	
2019-2020	Health	1073679	For health camps around Sankari and other nearby villages
	Education	2604341	Various assistance like table chair, computers, boke etc to surrounding schools
	Human development & capacity building	732854	construction of toilets, providing assistance to schools, repair of school building etc
	Others	123643	Food packets, assistance for cultural activities, etc
	Drinking water & Sanitation	506623	Providing drinking water tank and construction/repair of bore wells construction of toilets
	TOTAL	5041140	
2020 - 2021	Health	326875	Oxygen supply system donated to Govt Hospital, Covid 19 pandemic - face mask and Sanitizer to Industrial Health & Safety Dept and medical camp
	Human development & capacity building	213632	construction of toilets, providing assistance to schools, repair of school building etc
	Others	310268	Assistance for cultural activities, etc
	TOTAL	850775	
2021 - 2023	Infrastructure	871000	Padaveedu primary health center - Ups and battery, VAO office padaveedu repair woks ,Providing concrete road - Kavandanoor to Chiinagoundanoor, Providing Rest she for lorry drivers, Providing security room, Bore well , water tanks, Walking stick provide to public, Footwear provide to public, Medical camp conducted at Padaiveedu Panchayat office.
	Drinking water & Sanitation	1230000	Drinking water tank provision at pachamapalayam and Nathamedu govt . School, providing Toilet with septic tank, Providing Bore well for Lorry drivers
	TOTAL	831000	
	Grand total	19569913	





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

நாமக்கல் மாவட்ட ஆட்சித்தலைவர் மற்றும் தலைவர், மாவட்ட ஊரக வளர்ச்சி முகமை, அவர்களின் நடவடிக்கைகள் முன்னிலை : திருமதி.ஸ்ரீயா பி சிங், இ.ஆ.ப.,

ந.க.எண்:2683/2021/அ5

நாள். 18.08.2021.

பொருள்: நன்கொடை தொகை வழங்குதல் - மாவட்ட ஊரக வளர்ச்சி முகமை - நாமக்கல் மாவட்டம் - எலச்சிப்பாளையம் வட்டாரம் - மோளிப்பள்ளி ஊராட்சி அளவிலான கூட்டமைப்பு - சிமெண்ட், செங்கல் உற்பத்தி தொழில் திட்டத்திற்கு நன்கொடை வரப்பெற்றது - தொகையினை காசோலை மூலம் வழங்க - ஆணையிடப்படுகிறது.

- பார்வை: 1. திட்ட இயக்குநர்/இணை இயக்குநர், மாவட்ட இயக்க மேலாண்மை அலகு, நாமக்கல் ந.க.எண்.3599/2019/அ4, நாள். 14.08.2021.
2. The India Cements Limited, Sankari Works, Letter No.FS/PR/2021, நாள்.13.08.2021.

ஆணை

பார்வை 1-ல் காணும் கடிதத்தின்படி, நாமக்கல் மாவட்டம், எலச்சிப்பாளையம் வட்டாரம், மோளிப்பள்ளி ஊராட்சி அளவிலான கூட்டமைப்பு மூலம் செயல்படும் சிமெண்ட், செங்கல் உற்பத்தி தொழில் திட்டத்திற்கு பார்வை 2-ல் காணும் நிறுவனம் மாவட்ட ஆட்சித்தலைவர் பெயருக்கு காசோலையாக வழங்கிய நன்கொடை தொகை ரூ.10,00,000/-ஐ (ரூபாய் பத்து இலட்சம் மட்டும்) மேற்கண்ட கூட்டமைப்பின் பொது நிதி வங்கி கணக்கிற்கு விடுவிக்குமாறு தெரிவிக்கப்பட்டுள்ளது.

எனவே, பார்வை 2-ல் காணும் நிறுவனம் வழங்கிய நன்கொடை தொகை ரூ.10,00,000/-ஐ (ரூபாய் பத்து இலட்சம் மட்டும்) மாவட்ட ஊரக வளர்ச்சி முகமை அலுவலகத்தில் பராமரிக்கப்பட்டு வரும் மாவட்ட ஆட்சித் தலைவர், நாமக்கல் பெயரிலான இரத்தியன் வங்கி கணக்கிலிருந்து (கணக்கு எண். 7061147646) மோளிப்பள்ளி ஊராட்சி அளவிலான கூட்டமைப்பிற்கு காசோலை மூலம் வழங்க இதன் வழி ஆணையிடப்படுகிறது.

(ஒம்./-) ஸ்ரீயா பி சிங்,
மாவட்ட ஆட்சித்தலைவர் மற்றும் தலைவர்,
மாவட்ட ஊரக வளர்ச்சி முகமை,
நாமக்கல்.

// உண்மை நகல் //

(Handwritten Signature)
18/8/21

**DONATION FOR DISTRICT RURAL DEVELOPMENT DEPARTMENT
- RS.10 LAKHS**





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.



HYGIENE KIT DISTRIBUTION IN PHC OF PALLAKAPALAYAM, CHINNAGOUNDANUR AND PADAIVEEDU



CONSTRUCTION OF WAITING HALL IN HEALTH AND WELLNESS CENTER IN MOTHAIYANUR VILLAGE – Rs.3 LAKHS





CONTRIBUTION TO 6 SCHOOLS UNDER CER – RS.11 LAKHS





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MEDICAL CAMP CONDUCTED IN NEARBY VILLAGES- NEARLY 250 PEOPLE BENEFITTED IN EACH CAMP





EYE CAMP, HEARING CAMP, DENTAL CAMP AND BREAST AWARENESS CAMP





HYGIENE KIT AND COLOR CODED DUSTMINS TO PANCHAYAT UNION PRIMARY SCHOOL



HYGIENE KIT AND COLOR CODED DUSTMINS TO GOVT. PRIMARY HEALTH CENTER, PADAIVEEDU





BISCUIT PACKETS, WATER BOTTLES TO 10,000 DEVOTEES ON THHAIPUSAM FESTIVAL



TT VACCINATION TO SANKAR HR.SEC.SCHOOL BY PRIMARY HEALTH CENTER, PADAIVEEDU



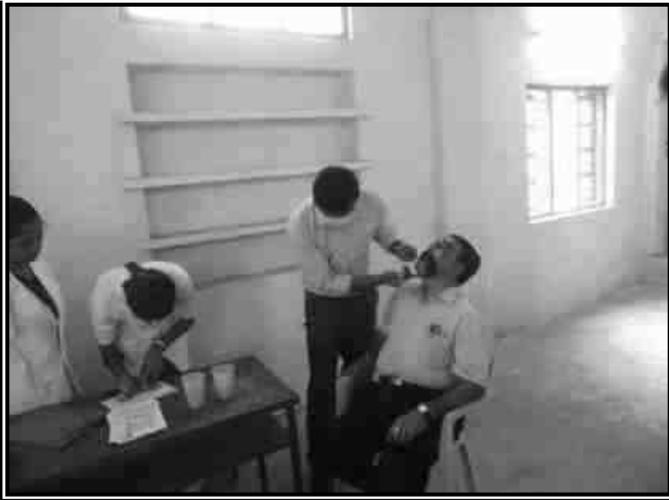


MEDICAL CAMPS CONDUCTED BY ICL



General Medical camps conducted in surrounding villages





Dental Camp organized at Sankar Higher Secondary School



Eye camp conducted for people in and around Sankari



Veterinary camps in Padaiveedu, Tiruchengode, Namakkal





Providing free hearing aids to poor people



Providing materials to poor people in surrounding villages



Provision of free spectacles to poor people



PROVIDING MATERIALS TO SCHOOLS



Supplying utensils to surrounding Government schools



Distribution of saplings to students

INFRASTRUCTURE DEVELOPMENT



RO Water plant set at Differently Abled Rehabilitation Future Development Charitable Trust and Training Centre, Pullagoundampatti





ARRANGING TOUR PLANS FOR CHILDREN



Mettur picnic for mentally challenged children of orphanage in salem



Mettur tour arranged for children in an orphanage in Namakkal





TOWARDS ENVIRONMENTAL AWARENESS



Distribution of saplings on Founder's birthday



**Emission tests done for vehicles on
Environment day**



Providing materials for flood relief in Chennai



Supplying buttermilk near Tiruchengode temple



EYE CAMP FOR PUBLIC AT SANKAR SCHOOL PREMISE





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.



GENERAL MEDICAL CAMP AT SANKAR SCHOOL PREMISE



PROMOTION OF EDUCATION



RURAL DEVELOPMENT





CONTRIBUTION TO SPORTS



ENVIRONMENTAL RELATED ACTIVITIES



DONATION TO REHABILITATION





In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community. Towards futures socio-economic development of the surrounding area, the proponent has earmarked a combined amount of Rs.15.0 Lakhs. The activities identified will be implemented in a phased manner in the nearby Government school.

4.8 OCCUPATIONAL HEALTH AND SAFETY:

4.8.1 BASELINE STATUS:

Primary data collection through field survey conducted in the study area reveals that there is no reported incident of any occupational diseases in the area. Medical services for local areas and workers are rendered at present. This will be further improved in future. Hazardous jobs like blasting, loading, etc., are planned to be executed safely and with all precautionary measures as prescribed in Metalliferous Mines Regulations of 1961, so as to minimize hazards and incidences of health problems.

4.8.2 IMPACTS ON OCCUPATIONAL HEALTH DUE TO PROJECT OPERATIONS:

Anticipated occupational illness sequel to mining activities can be as follows:

- Dust related pneumonia
- Tuberculosis
- Rheumatic arthritis
- Segmental vibration
- Miner's Nystagmus
- Eye diseases with irritation of eye, etc.

4.8.3 MITIGATIVE MEASURES FOR OCCUPATIONAL HEALTH:

There is an occupational health center present inside the premises of the Cement Plant of The India Cements Ltd. It is functioning primarily as a first aid center. There is a Full Fledged AFIH [Certified Doctor Available Round the Clock], Two Full time Staff Nurses, One First Aid Trained Dresser cum Ambulance Driver and One Cleaner. All types of general medical cases are attended and given treatment and required first aid is performed. If necessary, the patients are also referred to nearby speciality hospitals for further treatment. Services provided by the occupational health center is as follows:

- Audiometry





- Spirometry
- ECG
- Blood sugar monitoring

Besides, prior to the onset of COVID-19 pandemic, regular diabetic camps were carried out in the nearby villages and talks by specialists from nearby hospitals to spread awareness about health were arranged. In addition to this, eye camps, hearing defect camps, provision of spectacles and hearing aids are also done. Some of the details of the medical camps carried out and the number of people who attended the same are given below:

Table 4.27: Details of Medical Camp

Year	Type of Camp	Number of attendees
2015	Uterus screening camp	132
2016	Hearing aid camp / Uterus screening camp	107
2017	Hearing aid camp / Uterus screening camp	190
2018	Hearing aid camp	101
2019	Hearing aid camp	108
2020	Hearing aid camp	147
2021	Diabetes camp	168
2022	Medical camp/Eye camp	145
2023	Eye camp/Diabetes camp	123

Photographs of this occupational health center is provided below:





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Cement plant and mining operations are being carried out in this area for many decades. As such, no major health ailments are reported within the region. No respiratory health ailment are reported in the village, during health camps.

Occupational health survey will be carried out for the workers and officers. Protective respiratory devices shall be provided to the personnel working in dusty areas and adequate training and information on safety and health aspects will be provided as part of Mines Vocational Training. A first aid box will be made available for immediate treatment. First aid training will be imparted to the selected employees regularly. The list of first aid members shall be displayed at strategic places.

The following remedial steps will be enforced to ensure minimization of occupational health and safety problems.

- ❖ Medical examination of workers at pre-entry level stage of workers, etc., by qualified doctors, with periodical examination of all workers/staff at least once a year, as per DGMS circulars.
- ❖ Conducting tests on staff/workers which include spirometry, audiometry, vision test, X-ray, ECG, etc.
- ❖ Regular awareness campaigns amongst staff and workers about AIDS, Malaria, etc.,
- ❖ Provision of ambulance and First aid facility as necessary.
- ❖ Organization of medical camps at local areas for treatment of patients, especially senior citizens, children and ladies.
- ❖ All staff and workers will be provided with PPE to guard against excess noise levels, Dust generation and inhalation, etc., as per standards prescribed by DGMS.
- ❖ Occupational health checks up and assessment will be done by trained Doctors for Occupational Health. Their advice will also be sought frequently in this respect. Health report will be given to employees regularly after health check-ups.
- ❖ Vocational training will be imparted to all workers/ staff before induction, to make them familiar with jobs and the safety precautions to be taken while doing the jobs. Refresher training will also be arranged as per statutes.





- ❖ Provisions of regular records of health checkups, etc.

4.8.4 MITIGATIVE MEASURES FOR SAFETY ASPECTS:

Various safety provisions will be made for the men and equipments in the mine workings and its details are as follows:

FOR MACHINERIES:

SI NO	Safety Provision	Machinery Name
1.	Cabin Guard Extension	Power Shovels and Tippers/ Dumpers
2.	Operator Seat Belt	Power Shovels , Tippers and Dumpers
3.	Fire Extinguisher	Power Shovels , Tippers, Dumpers and Wheel Loaders
4.	Side & Rear View Camera & Blind Spot Mirror	Power Shovels , Tippers and Dumpers
5.	Battery Cut off Switch	Wheel Loaders
6.	Service Brake	Wheel Loaders , Tippers and Dumpers
7.	Emergency Brake	Wheel Loaders , Tippers and Dumpers
8.	Reverse Alarm	Wheel Loaders , Tippers and Dumpers
9.	Propeller Shaft Safety Chain	Tippers
10.	Head Light & Reverse (Back) Light	Power Shovels , Dumpers , Wheel Loaders and Tippers

FOR WORKMEN:

SI No	Safety Equipments
1.	Helmets
2.	Shoes
3.	Goggles
4.	Dust Mask
5.	Hand Gloves
6.	Reflective Jackets
7.	Ear Muffs
8.	Signal Lights/Flags
9.	Life Jackets and Lifebuoys

In addition to this, the following measures are being and will be enforced:

- ❖ Formation of pit safety committee under Mines manager with representation such as mines foreman, engineers, and workers representatives. They will meet at least once a month to over view all safety aspects and corrective measures enforcement.
- ❖ Organization of safety contests and safety campaigns regularly to update knowledge of safe operational procedures, etc.
- ❖ Frequent review of accident cases to ensure initiation of prompt measures to avoid or reduce accidents.





- ❖ Provision of safety Helmets, goggles, safety boots, ear muffs, gas masks, etc. to workers /staff to protect them against pollution aspects and to minimize accident rates.

In view of above mentioned mitigation measures to minimize impacts on occupational and safety aspects, the impact on these aspects due to project operations will be insignificant and minimal, as is evidenced by study of past incidences on these aspects.

4.9 LOGISTICAL SYSTEM:

Limestone output from this mine and adjoining leases are transported through private dedicated black topped road of ICL to Sankari cement plant, about 4.6 Km away. The mode of transport is through 25T / 30 Tonne Tippers/dumpers. As the materials from all the leases are transported in dedicated road, there will not be any appreciable impact of the project on the local logistical scenario.

Table 4.28: Details of Transportation

Sl.no	Particulars of activity	G.O. 211	G.O.1086	G.O.76	Cumulative
A	Average Material Transported (TPA)	499850	11958.00	59963	5,71,771
B	No of days in a year	300	300	300	300
C	Transport hours per day	16	16	16	16
D	Truck capacity in T	30	30	30	30
	Trips per hour	3 Trips/hr	1 Trip/Hr		4 Trips/hr

From the above table it seen during the current mining operations, there is 4 trips of truck transport per hour. Considering that the transportation occurs in the proponent's own dedicated road from the mines to the cement plant (Provided below in **Figure No.4.11**), and considering the implementation of the below mentioned mitigation measures, no major impact is envisaged in the logistical front.

- ❖ Water sprinkling of limestone in the transport vehicles before transporting, so that no dust nuisance during transport will arise.
- ❖ Proper maintenance of transport roads
- ❖ Proper maintenance of transport vehicles.
- ❖ Avoiding overloading of material
- ❖ Keeping traffic regulators at vulnerable locations.
- ❖ Covering of loaded vehicles with tarpaulin sheet.
- ❖ Plantation on either side of transport road.



Figure 4.13: Transport Road from Mine Lease to Cement Plant



4.10 WASTE MANAGEMENT:

The Hazardous waste management involves the following steps:

- Identification of hazardous waste
- Handling & storage
- Disposal

4.10.1 IDENTIFICATION OF HAZARDOUS WASTE:

Mining and allied activities will generate the following waste:

- Used waste oil due to periodical replacement of lubricants in machinery
- Used lead acid batteries
- Oil contaminated cotton waste, filters etc.
- Used oil / waste oil barrels



These wastes are categorized under serial no 5.1 & 5.2 of schedule – 1 under Hazardous Waste (Management, Handling and Transboundary movement) Rules, 2008 and amendments there on.

4.10.2 HANDLING & STORAGE:

The following Procedure will be followed for Handling & storage of hazardous waste:

- Ensuring availability of different colour bins for collection of different types of waste.
- Collection of used oil/ waste oil in leak proof container / barrel.
- Ensuring that there are no leakages/spillages of hazardous wastes.
- Storing of Hazardous waste material in a separate storage area for waste oil, oil contaminated cloths and used lead acid batteries.
- Ensuring that the fire extinguisher system is available at hazardous material storage area.
- The oil barrels will be placed in the shed having paved floor with slope towards the collection pit in a corner for oil spillage collection in case of any leakage.

Plastic waste: Single use plastics/ use and throwaway plastics will be banned in the site as directed by the Tamil Nadu Government vide GO(Ms)No.84 regarding ban on use of plastic products. The employees will be encouraged to use compostable material or reusable material.

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CHAPTER - V

ANALYSIS OF ALTERNATIVES (TECHNOLOGY & SITE)



CHAPTER 5

ANALYSIS OF ALTERNATIVES

5.1 ALTERNATE TECHNOLOGY:

Mechanized open cast mining was carried out involving drilling, blasting, excavation, loading and transportation of limestone to the cement plant in the ICL sankari leases for more than 5 decades . This is a techno economically proven method and hence consideration of an alternate technology is not warranted. Mining operations will continue using the same method.

5.2 ALTERNATE SITE:

The mineral deposits are generally site specific in nature. Besides, mining operations have been carried out in the lease area for more than 5 decades Hence question of seeking alternate site does not arise.

* * * * *



CHAPTER - VI

ENVIRONMENTAL MONITORING PROGRAMME



CHAPTER 6

ENVIRONMENTAL MONITORING PROGRAMME

6.1 GENERAL

Regular, systematic and sustained programme schedules for implementation and monitoring of various control measures are devised and implemented with clear cut guidelines of various concerned plans for keeping a continuous surveillance on the various environmental quality parameters in the area.

The monitoring schedules are planned to aim at regular and systematic study of various pollution levels with respect to air and water quality, noise levels etc., to ensure that they conform to the standards laid down by the Environment Protection Act, 1986 and various Central and State Pollution Control Board Limits.

The various methodologies and frequency of studies of all environmental quality parameters as per prescribed norms laid down by MOEF&CC and State Pollution Control Board are followed.

Environmental control measures include components like land degradation, air, water and soil quality, noise levels, afforestation measures, etc. For monitoring of environment over the life of the mine, a set of stations for study of quality parameters are fixed as per the actual requirements and prevailing conditions of environmental factors, as dictated from time to time, depending on the prevailing pollution levels.

6.2 MONITORING SCHEDULES FOR VARIOUS PARAMETERS

The India Cements Ltd. will conduct regular Environmental monitoring for various parameters and the same are submitted to statutory authorities. The monitoring schedules are planned for systematic study of various pollution levels with respect to air and water qualities, noise levels, etc. to ensure that they conform to the standards laid down by Environmental Protection Act and various statutory Limits. However, based on the need and priority it may be suitably modified / improved in consultation with local authorities. The monitoring schedules to be adopted in this quarry are given below.





Table 6.1: Environmental Monitoring Schedule

S.No	Environmental Parameters	Parameters to be monitored	Monitoring area coverage /locations	Frequency of monitoring
1	Air Quality	Sulphur dioxide (SO ₂), Oxides of Nitrogen (NO ₂), Respirable Particulate Matter (PM _{2.5} and PM ₁₀).	4 locations in the buffer zone and 2 work zone locations.	As per CTO condition
2	Water Quality	General, Physical, and chemical parameters	Ground Water samples (around the project area) and Mine Pit water samples	As per CTO condition
3	Water Table Fluctuations	Water Levels	Nearby wells and Borewells	On yearly basis pre and post monsoon level
4	Noise	Leq. Lmax Lmin, Leq Day & Leq Night dB(A)	Work zone locations and buffer zone villages	Every Quarter
5	Vibration	Peak Particle Velocity	Mine periphery	Once to arrive at optimum blasting parameters
6	Socio Economic Environment	Socio Economic Survey, Review of implementation of CD activities proposed	Buffer Zone	Yearly basis
7	Occupational Health	Occupational health survey to detect early incidence of diseases, Audiometry Test for workers in noise prone area and review of safety matters.	Staff and Workers involved in the project	Occupational Health Survey – Once in 3 years, Safety matter review – Every Month
8	Greenbelt	Maintenance	Within the lease area	Regularly

6.3 LEGISLATIVE AND REGULATORY FRAME WORK:

The project will have environmental policy declaring its responsibility and commitment to protect the environment and to ensure public safety. The existing policy will be available with all





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

4 THE GAZETTE OF INDIA : EXTRAORDINARY [PART III—Sec. 4]

(1)	(2)	(3)	(4)	(5)	(6)
9	Benzene (C ₆ H ₆) µg/m ³	Annual*	05	05	- Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP) - particulate phase only, ng/m ³	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m ³	Annual*	06	06	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m ³	Annual*	20	20	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note. — Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

SANT PRASAD GAUTAM, Chairman
[ADVT-III/4/18409/Exy.]

Note: The notifications on National Ambient Air Quality Standards were published by the Central Pollution Control Board in the Gazette of India, Extraordinary vide notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998.





Table 6.4: IS – 10500 :2012 Standards

Table 1 Organoleptic and Physical Parameters
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to Part of IS 3025	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Colour, Hazen units, <i>Max</i>	5	15	Part 4	Extended to 15 only, if toxic substances are not suspected in absence of alternate sources
ii)	Odour	Agreeable	Agreeable	Part 5	a) Test cold and when heated b) Test at several dilutions
iii)	pH value	6.5-8.5	No relaxation	Part 11	—
iv)	Taste	Agreeable	Agreeable	Parts 7 and 8	Test to be conducted only after safety has been established
v)	Turbidity, NTU, <i>Max</i>	1	5	Part 10	—
vi)	Total dissolved solids, mg/l, <i>Max</i>	500	2 000	Part 16	—

NOTE — It is recommended that the 'acceptable limit' is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

**Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts
(Foreword and Clause 4)**

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Aluminium (as Al), mg/l, Max	0.03	0.2	IS 3025 (Part 55)	—
ii)	Ammonia (as total ammonia-N), mg/l, Max	0.5	No relaxation	IS 3025 (Part 34)	—
iii)	Anionic detergents (as MBAS) mg/l, Max	0.2	1.0	Annex K of IS 13428	—
iv)	Barium (as Ba), mg/l, Max	0.7	No relaxation	Annex F of IS 13428* or IS 15302	—
v)	Boron (as B), mg/l, Max	0.5	1.0	IS 3025 (Part 57)	—
vi)	Calcium (as Ca), mg/l, Max	75	200	IS 3025 (Part 40)	—
vii)	Chloramines (as Cl ₂), mg/l, Max	4.0	No relaxation	IS 3025 (Part 26)* or APHA 4500-Cl G	—
viii)	Chloride (as Cl), mg/l, Max	250	1 000	IS 3025 (Part 32)	—
ix)	Copper (as Cu), mg/l, Max	0.05	1.5	IS 3025 (Part 42)	—
x)	Fluoride (as F) mg/l, Max	1.0	1.5	IS 3025 (Part 60)	—
xi)	Free residual chlorine, mg/l, Min	0.2	1	IS 3025 (Part 26)	To be applicable only when water is chlorinated. Tested at consumer end. When protection against viral infection is required, it should be minimum 0.5 mg/l
xii)	Iron (as Fe), mg/l, Max	0.3	No relaxation	IS 3025 (Part 53)	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xiii)	Magnesium (as Mg), mg/l, Max	30	100	IS 3025 (Part 46)	—
xiv)	Manganese (as Mn), mg/l, Max	0.1	0.3	IS 3025 (Part 59)	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xv)	Mineral oil, mg/l, Max	0.5	No relaxation	Clause 6 of IS 3025 (Part 39) Infrared partition method	—
xvi)	Nitrate (as NO ₃), mg/l, Max	45	No relaxation	IS 3025 (Part 34)	—
xvii)	Phenolic compounds (as C ₆ H ₅ OH), mg/l, Max	0.001	0.002	IS 3025 (Part 43)	—
xviii)	Selenium (as Se), mg/l, Max	0.01	No relaxation	IS 3025 (Part 56) or IS 15303*	—
xix)	Silver (as Ag), mg/l, Max	0.1	No relaxation	Annex J of IS 13428	—
xx)	Sulphate (as SO ₄) mg/l, Max	200	400	IS 3025 (Part 24)	May be extended to 400 provided that Magnesium does not exceed 30
xxi)	Sulphide (as H ₂ S), mg/l, Max	0.05	No relaxation	IS 3025 (Part 29)	—
xxii)	Total alkalinity as calcium carbonate, mg/l, Max	200	600	IS 3025 (Part 23)	—
xxiii)	Total hardness (as CaCO ₃), mg/l, Max	200	600	IS 3025 (Part 21)	—
xxiv)	Zinc (as Zn), mg/l, Max	5	15	IS 3025 (Part 49)	—

NOTES

1 In case of dispute, the method indicated by '*' shall be the referee method.

2 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.





Table 6.5: Noise Level Standards

Area Code	Category of Area	Limits in dB(A) Leq	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note :

1. Day time shall mean from 6 a.m. and 10.0 p.m.
2. Night time shall mean from 10.0 p.m. and 6 a.m.
3. Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
4. Mixed categories of areas may be average as one of the four above mentioned categories by the competent authority.

* dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A “decibel” is a unit in which noise is measured.

“A”, in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq: It is energy mean of the noise level over a specified period.

Table 6.6: Permissible Noise For Industrial Workers As Laid Down By CPCB

Exposure time (in hr. per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114





Table 6.7: Permissible Peak Particle Velocity (PPV) In Mining Areas

In mm/sec.

Type of structure	Dominant excitation frequency Hz		
	<8 Hz	8-25 Hz	>25 Hz
A. Buildings/structures not belonging to owner			
Domestic houses /structures (Kuchha brick and cement)	5	10	15
Industrial buildings (RCC and framed structures)	10	20	25
Objects of historical importance and sensitive structures.	2	5	10
B. Building belonging to owner with limited span of life			
Domestic houses/structures (Kuchha brick and cement)	10	15	25
Industrial buildings (RCC and framed structures)	15	25	50

The above said monitoring location and the frequency of monitoring shall be suitably modified in consultation with the nodal agency as per the actual requirements and prevailing conditions of the mine and environmental factors, as dictated from time to time, depending on the prevailing pollution levels, if required.

6.4 ENVIRONMENTAL MONITORING COST:

Cost provision towards environmental monitoring is made. Further details of the capital and recurring cost of environmental management has been provided in in Table No. 10.2, Chapter-X.

* * * * *



CHAPTER - VII

ADDITIONAL STUDIES



CHAPTER 7 ADDITIONAL STUDIES

7.1 GENERAL:

The additional studies covered for this EIA / EMP report are:

1. Public consultation of the project as per MoEF&CC mandates.
2. Risk Assessment
3. Cumulative Impact Study
4. R&R Plan
5. Mine closure planning

7.2 PUBLIC HEARING:

This draft EIA/EMP report will be submitted for public hearing as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.

7.3 RISK ASSESSMENT:

Risk assessment is a process whereby risks are analyzed assessed and risk management priorities are evaluated. It is defined as the characterization of the potential adverse effect to human health & environment due to environmental hazards.

Objectives of risk assessment are:

- Identifying hazardous activities
- Assessment of risk level and severity in different operations
- Identification of control measures
- Setting monitoring process
- Reduce the impact of mishaps of all kinds





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

- Reduce the inherent potential for major accidents

Methodology of Risk assessment:

- Collection of information & identification of hazard
- Classify their severity and probability of occurrence
- Identification of exposed risks
- Assess the risk and risk rating based on
 - ❖ Probability
 - ❖ Exposure
 - ❖ Consequence
- Prioritization of the risks
- Implementation of control measures
- Monitoring risk assessment
- Evaluation and correction

For the various risks, likely to arise, detailed analysis of causes and control measures is given in below:

S.No	Factors	Causes of risks	Control measures
1.	Slope stability of mine face and dumping benches	a) Bench may slide due to its unconsolidated nature. b) Vibration due to movement of vehicles in the benches.	Overall bench slope angle will be maintained optimally as per DGMS requirement. Working bench width will be more than bench height.
2.	Drilling	a) Due to high pressure of compressed air hoses may burst. b) Down the hole drill rod may break due to improper maintenance of rod.	<ul style="list-style-type: none">• Periodical preventative maintenance and replacement of worn out accessories in the compressor and drill equipment.• As per manufacturers recommendation rod to be replaced and bits will be changed.
3.	Blasting	a) Fly rock, ground vibration, noise etc. b) Improper charging of explosives	<ul style="list-style-type: none">• Burden and spacing will be kept optimum on trial basis.• Explosive charge per delay will be minimized.• Controlled blasting with Nonel will be used.
4.	Excavation	a) Hauling and loading equipment are in such	<ul style="list-style-type: none">• Operator shall not operate the machine when person & vehicles are in such





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

S.No	Factors	Causes of risks	Control measures
		proximity while excavation b)Swinging of bucket over the body of tipper c) Driving of unauthorized person	proximity. • Shall not swing the bucket over the cab and operator leaves the machine after ensuring the bucket is on ground. • Shall not allow any unauthorized person to operate the machine by effective supervision.
5.	Transportation	a)Operating the vehicle "nose to tail" b) Overloading of material c) While reversal & overtaking of vehicle d) Operator of truck leaving his cabin when it is loaded	• It will be ensured that all these causes will be nullified by giving training to the operators. • No over loading will be done. • Audio visual reverse horn will be provided. • Proper training will be given.
6.	Fire due to electricity and Oil	a)Due to the short circuit of cables & other electrical parts b) Due to the leakage of inflammable liquid like diesel, oil etc.	• Electrical parts shall be cleaned frequently with the help of dry air blower • All fastening parts and places will be tightening. Suitable fire suppression equipment shall be provided.
7.	Natural calamities	Unexpected happenings	The mine management is capable to deal with the situation.

7.3.1. DISASTER MANAGEMENT PLAN:

The complete mining operation is carried out under the management control and direction of a qualified mine manager holding a First Class Manager's certificate of competency. The DGMS have been issuing a number of standing orders, model standing orders and circulars to be followed by the mine management in case of disaster, if any. Moreover, mining staff is being sent to refresher courses from time to time to keep them alert. However, following natural/industrial hazards may occur during normal operation.

- Inundation of mine pit due to flood/excessive rains :
- Slope failure of the pit and waste dumps
- Accident due to heavy mining equipment and





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

➤ **Blasting and use of Explosives**

In order to take care of above hazard / disasters the following control measures have been adopted.

- Checking and regular maintenance of garland drains and earthen bunds to avoid any inflow of surface water in the mine pit.
- Provision of high capacity standby pumps with generator sets with sufficient quantity of diesel for emergency pumping especially during monsoon.
- All safety precautions and provisions of metalliferous mine regulation 1961 is strictly followed during all mining operations
- Entry of unauthorized persons is prohibited.
- Firefighting and first-aid provisions in the mines office complex and mining area are provided.
- Provisions of all the safety appliances such as safety boot, helmets, goggles, dust masks, ear plugs and ear muffs etc. are made available to the employees for their use.
- Training and refresher courses for all the employees working in hazardous premises
- Observance of all safety precautions for blasting and storage of explosives as per MMR 1961.
- Working of mine, as per approved plans and regularly updating the mine plans
- Cleaning of mine faces is regularly done
- Regular maintenance and testing of all mining equipment as per manufacturers guidelines
- Suppression of dust on the haulage roads with frequent water sprinkling, etc.
- Increasing the awareness of safety and disaster through competitions, posters and annual safety weeks and environmental weeks, encouraged through suitable rewards and other similar drives.

The management and the EMC will be able to deal with the situations efficiently keeping in view of the likely sources of dangers in the mine.





7.3.2.1 Structure of Disaster Management Plan:

The structure of the DMP is described below.

Outline of Disaster Management Plan:

The purpose of disaster management plan is to restore the normalcy for early resumption of mining operation due to an unexpected, sudden occurrence resulting to abnormalities in the course of mining activity leading to a serious danger to workers or the environment or any machinery.

- **System of Communication:** Internal communication system by means walkie talkie, cell phones are provided for the department head and to their line of command are essential. The telephone Nos. and addresses of adjoining mines, rescue station, police station, fire service station, local hospital, electricity supply agency and standing consultative committee members are maintained by the in-charge of the first aid station.
- **Consultative Committee:** A common standing consultative committee for the ICL's Sankari group of mines in which the head of Mines manager of each lease will be there. The other members consist of safety officer/ medical officer (full time) /Asst.manager / public relation officer/foreman. This team prepares the emergency plan.
- **Emergency Plan:** The emergency plans, adopted and to be adopted to deal with any emergency situation are described below:
- **Organization Plan:** Organization plan includes a clear statement on the line of command and the responsibilities of each person involved in case of emergency situation.
- **Equipment Plan:** Equipment plan includes clearly stipulating make and type of machinery, capacity of machinery, location of operations and field of operations. Emergency plan includes Emergency Preparedness Plan and the standing orders will be prepared and displayed at all conspicuous places. Functions of the emergency consultative committee:
 1. The team shall meet once in six months to discuss the possible or probable causes/ instances leading to any disaster that may occur in and around the mines.
 2. The team shall assess the required resources to deal with the situation that may be identified as above.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

3. The team leader shall lay down a detailed procedure or oral information to each member to follow in case of any impending or possible or actual disaster.
 4. The team shall conduct mock drill once in a year to understand the practical problems that may arise while implementing the Emergency Preparedness Action Plan including the response time and take necessary steps to make the system effective.
 5. The team shall make necessary recommendations/suggestions to the Management for identifying / monitoring/ dealing with any possible or probable disaster.
 6. The minutes of the meeting of team shall be prepared including the probable cause of incident, response time and corrective and preventive actions required to be taken to avoid the reoccurrences of the same and kept as record.
 7. The team may draw an Action Plan and modify the same from time to time based on changed circumstances.
 8. The Emergency Preparedness team shall come into action immediately in case of any disaster.
 9. The team shall record the actual performance/procedure followed/short comings while dealing with any actual disaster which will be discussed at various levels to strengthen the plan and approach.
 10. Mines Manager shall inspect all the places where disaster occurred, along with Emergency Preparedness Team to give further instructions.
 11. Mines Manager shall ensure that all affected places are safe to resume the normal works and then only shall give permission to start the operations.
- **Facilities and Accommodation:** Accommodation and facilities for first aid station, rescue room and for various working groups will be provided. Regular checking of these facilities shall be under taken by the Asst. Manager (Mines).
 - **First Aid and Medical Facilities:** The mine management is having first aid / medical center for use in emergency situation. All casualties would be registered and will be given first aid. The center will have facilities for first aid and minor treatment resuscitation





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

and transport. It will have proper telephone/ mobile phone facility for quick communication with hospitals where the complicated cases are to be referred. Regular checking of these facilities shall be under taken by the in charge of the first aid station.

- **Store and Equipment:** A detailed list of equipment available, its type and capacity and items reserved for emergency will be maintained by the foremen and Asst.Manager.
- **Transport Services:** A well-defined transport control system will be provided to deal with the situation. Foremen shall be made in charge for these services.
- **Functions of Public Relations Group:** It is essential to keep cordial relation with Government officials and other social service organization and working groups. Liaison with representatives of the mine workers is required to ameliorate the situation of panic, tension, sentiments, grievances and misgivings created by any disaster. Management is required to ameliorate the injured, survivors and family members of affected persons by providing material, finance, moral support and establishing contact with relatives of victims. The consultative committee formed, especially the nominated public relation officer shall look into these aspects.
- **Security:** Manning of security posts is very essential during the disaster management. This shall be undertaken by the foremen.
- **Catering and Refreshment:** Arrangements are to be made for the victims, rescue teams and others. The nominated public relation officer shall look into these aspects.

7.3.2.3 Care and Maintenance during Temporary discontinuance:

If the mine is discontinued temporarily for more than 120 days, notice will be given 30 days before the date of such discontinuance to the concerned authorities. During discontinuance period, necessary arrangements will be made to avoid the entry of unauthorized persons. The accessibility to the mine from the surface will be prevented by providing security guards and fencing arrangements. The mines manager shall take all the steps required for the care and maintenance during temporary discontinuance.

7.3.2.4 Executorial Procedures For Emergency Plan:

The following procedural methodologies will be adopted for proper execution of emergency plan.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

- ❖ On realizing anything serious occurrence happened anywhere in the mine, immediate information has to be passed on to the nearest available mining official and the mine management.
- ❖ On being informed about the emergency it will be verified for its correctness by the mining official who will telephone in particular to the Manager and supervisors of other parts/operations of the mine and managers of adjoining mine so that persons may be withdrawn.
- ❖ On receiving information of emergency intimation, it will be sent to the consultative committee, already formed by the mines manager. The mines manager shall also inform about the disaster to the police, nearest office of mines safety, office of pollution control board, District Collector in charge of emergency plan of the district and other required statutory bodies of State and Central Government. Shift in-charge will ensure that all the materials and transport system to deal with emergency situation are made available at the site.
- ❖ First aid facilities and ambulance to be made ready for providing to the victims. The Doctor should be immediately called upon.

The name and address of person responsible for management of disaster / emergency plan is given below:

**S.Natarajan (Assistant General Manager - Mines)
M/s The India Cements Ltd.
Sankari West Post,
Sankari Taluk,
Salem District – 637303
Ph.no. 9790011299**

Although there is no likelihood of any possible risks or disasters, pertaining to the mine workings such as inundation consequences, etc., spreading to outside peripheral areas, an “Off-site Emergency Plan” will be planned and documented in consultation with Collector and other concerned Government Officials. In case of any unfortunate happening of an emergency in off-site areas, prompt execution of various action plans as laid down in the offsite Emergency plan has to be carried out with the help of the concerned Government officials and local people.





7.4 REHABILITATION AND RESETTLEMENT (R & R) PLAN:

Since the mining & allied activities in these 3 leases are in place for more than 5 decades, and the entire land is in ICL's possession, there will be no dislocation of any persons or R & R involved.

7.5 MINE CLOSURE PLAN:

In the mine closure stage, all necessary measures will be taken as per Act & Rules, There is no proposal for back filling, reclamation and rehabilitation. The quarried pits after the end of life of mine will be properly fenced all around to prevent inherent entry of public and cattle and all the statutory requirements will be fulfilled. As already explained, in the post mining stage the rainwater harvested in the mined out void shall be utilized .

Progressive Mine Closure Plan are submitted as per the Rule 23 under MCDR 2017. Plans and sections for this plan have been given in the review of mining plan. As per Mineral Conservation and Development (Amendment) Rules – 2017 under Rule 27(1), the lessee has already submitted the Bank guarantee at the IBM regional office, Chennai.

* * * * *



CHAPTER - VIII

PROJECT BENEFITS



CHAPTER 8 PROJECT BENEFITS

Sankari got prominence in the state and country due to establishment of Cement plant and linked mines by ICL. As a responsible Corporate Citizen, ICL is sensitive to the welfare and development needs of the society around it.

India Cements' CSR activities tell a story of wealth creation fueled by the foresight, missionary zeal and vision of its founders and the dedicated efforts of its employees over the last seven decades. The India Cements Limited, right from its inception has been alive to the larger social responsibility of organized industry. Over the years developed an enviable reputation as a caring organization not only taking care of its stakeholders but looking beyond cement to put a smile on the face of the common people through various community development initiatives.

India Cements focus on building relationships, relationships that help enrich lives, relationships that promise a better tomorrow.

ICL's Sankari cement plant and associated Limestone mining activities in the region has brought about transformational prosperity and improvements in physical and social infrastructures in the area like:

- Direct & indirect employment to scores of peoples.
- Extending quality education facility through Sankari Higher Sec School to the local people.
- Improvements in infrastructure in the area like construction of school buildings, toilets and boundary walls, Provision of drinking water through bore wells, Construction of roads, Supply of electricity, Construction of houses to poor, Providing free healthcare, Conducting training and other Social Welfare activities.
- Increase in education and literacy level of the people due to creation of more facilities.
- Financial gains for the state and central Governments through collection of various taxes like royalty, GST, DMF and NMET (National Mineral Exploration Trust) etc.,
- Increase in General Awareness of the People.
- Increase in Competitive Spirit Among Youths
- Improvement of the General Living Standard of the People in the Vicinity





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

- Overall Improvement in HDI (Human Development Index)
- Growth of Allied Industries in the Area.
- Generation of self-employment through self-help groups.
- Improvement in Per Capita Income.
- Providing certain facilities for the local schools and panchyats

In short, the working mining projects has benefitted this region directly and indirectly in the fields of potential employment opportunities, improved per capita income for local people, improved social welfare facilities in respect of education, medical healthcare systems, communicational aspects, infrastructural build-up, etc and will continue to do so.

From the above, it can be seen that as the proponent will continue their extensive social welfare activities which they have been doing so far, the villages near the lease area will be benefited. In addition, locals will be employed for this project once the project operation starts. Hence, overall, this project will be beneficial to the society, and also the state and country as a whole.

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CHAPTER - IX

ENVIRONMENTAL COST BENEFIT ANALYSIS



CHAPTER 9 ENVIRONMENTAL COST BENEFIT ANALYSIS

Appendix-III of the MoEF notification S.O. 1533 dated 14.09.2006, which describes the generic structure of Environmental Impact Assessment document, states that the chapter 'Environmental cost benefit analysis' is applicable if it is recommended during scoping stage.

ToR has been received from SEIAA, Tamil Nadu for Mothaiyanur Limestone Mine G.O.211,G.O.1086 and G.O.76. Environmental cost benefit analysis is not prescribed in the terms of reference. Hence, it is not applicable for this project.

* * * * *



CHAPTER - X

ENVIRONMENTAL MANAGEMENT PLAN



CHAPTER 10

ENVIRONMENTAL MANAGEMENT PLAN

10.1 INTRODUCTION:

This chapter describes the implementation strategies of the environmental management measures described through the course of this EIA/EMP report for the purpose of mitigating significant impacts due to the proposed expanded mining operations.

10.2 COMPONENTS OF THE ENVIRONMENTAL MANAGEMENT PLAN:

The environmental management plan comprises identification of the major impacts due to project operations and their suitable mitigative measures. (Provided in an elaborate manner in Chapter-IV) Based on the environmental policy of the company, the environmental management cell will oversee the implementation of these mitigative measures. The details of the proponent's environmental policy, environmental management cell and also the budgetary allocation towards various environmental management measures has been elaborated in this chapter.

10.2.1 ENVIRONMENTAL POLICY:

The company has formulated a well-planned and integrated Environmental policy. The salient features of this policy are shown below. The India Cements Limited, Sankari Works, are committed to ensure:

- Compliance to Legal and other requirements, relevant to environmental and Occupational Health & Safety.
- Work with all employees to eliminate unsafe conditions & unsafe acts and to control pollution from the work place.
- Continual improvement of environmental performance through Conservation of Energy & Natural resources and Waste minimization & possible utilization.
- Communication of Environmental and Occupational Health & Safety policy to all personnel, working for or on behalf of the organization.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

- To detect departures or violations of environmental standards and to take immediate corrective actions to set right the environmental status within statutory standards.
- Sustained maintenance of the set standards and periodic reviewing of environmental and Occupational Health & Safety Objectives and Targets.

M/s The India Cements Ltd. is an **ISO14001:2015 (Environment Management System)**, **ISO 9001:2015 (Quality Management system)** and **OHSM 18001:2007(Occupational Health & Safety Management system)** certified company.





Figure 10.1: ISO 9001:2015



भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

गुणता प्रबंधन पद्धति प्रमाणन अनुज्ञापति

LICENCE FOR THE QUALITY MANAGEMENT SYSTEMS CERTIFICATION

राष्ट्रीय प्रत्यायन प्रमाणन निकाय बोर्ड, नई दिल्ली द्वारा प्रत्यायित

(Accredited by National Accreditation Board for Certification Bodies, New Delhi)

कर्म II (स्कीम-II) के पैरा 3 के उप-पैरा (b) को देखें।
Form II (Refer Sub-Para (b) of Para 3 of Scheme II)

भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

गुणता प्रबंधन पद्धति प्रमाणन अनुज्ञापति
LICENCE FOR THE QUALITY MANAGEMENT SYSTEMS CERTIFICATION

राष्ट्रीय प्रत्यायन प्रमाणन निकाय बोर्ड, नई दिल्ली द्वारा प्रत्यायित
(Accredited by National Accreditation Board for Certification Bodies, New Delhi)

लाइसेंस सं.क्यूएम/एल - 6006831.4
Licence No. QM/L- 6006831.4

1.भारतीय मानक ब्यूरो अधिनियम, 2016 (2016 का 11) द्वारा प्रदान की गई शक्तियों के अन्तर्गत, ब्यूरो
By virtue of the power conferred on it by the Bureau of Indian Standards Act 2016 (11 of 2016), the Bureau hereby grants/recertifies to

श्री इंडिया सीमेंट्स लिमिटेड **The India Cements Limited**
संकरी नगर वर्क्स, संकरी वेस्ट, **Sankari Nagar Works, Sankari West,**
सलेम डिस्ट्रिक्ट - 637 303 **Salem District-637 303.**
तमिलनाडु, भारत. **Tamilnadu, India.**

जो (जिन्हें इसके बाद लाइसेंसधारी कहा गया है) इसके साथ लगी अनुसूची में विशेष रूप से वर्णित उत्पादों और/या सेवाओं या प्रक्रियाओं (जिन्हें इसके बाद लाइसेंसधारी कहा गया है) इसके साथ लगी अनुसूची में विशेष रूप से वर्णित उत्पादों और/या सेवाओं या प्रक्रियाओं के संबंध में ब्यूरो के गुणता प्रबंधन पद्धति प्रमाणन के लाइसेंसधारी के एक्टिविटी में उसी संख्या से सूचीबद्ध होने का अधिकार और स्वयंसेवक प्रदानकर्ता प्रमाणित करता है, जो इस लाइसेंस को है। इस प्रकार के उत्पाद और/या सेवाओं या प्रक्रियाओं लाइसेंसधारी द्वारा **IS/ISO 9001:2015** के अनुरूप गुणता प्रबंधन पद्धति के अनुसार केवल ऊपर बताए गए पते (पते) पर निर्मित/प्रदान/प्रदानित किए जाएंगे।
(hereinafter called the Licensee) the right and licence to be listed in the Bureau's register(s) of Licensees of Quality Management Systems Certification in respect of the products and/or services or processes particularly described in the schedule hereto, bearing the same number as this licence. Such products and/or services or processes shall be manufactured/provided/carried out by the Licensee at only the address(es) given above, and under the Quality Management Systems in accordance with **IS/ISO 9001:2015**.

2.यह लाइसेंस इन लाइसेंस का विधायन करने वाले उपरोक्त अधिनियम और उसके अधीन बंधन गत विधियों और विनियमों के संबंध में लाइसेंस के अंतर्गत स्वीकृत पुनः प्रमाणित किया गया और लाइसेंसधारी एतद् द्वारा ब्यूरो को उपरोक्त विधियों और विनियमों का विधिकार प्रदान करने का वचन देता है।
The licence is granted/recertified subject to the relevant provisions of the above Act and the rules and regulations made thereunder governing the licences referred to above, and the Licensee hereby covenants with the Bureau duly to observe with the said Rules and Regulations.

3.यह लाइसेंस 16 नवंबर 2023 से 24 सितंबर 2026 तक वैध रहेगा और विनियमों के अनुसार इसे नवीनीकृत किया जा सकता है।
This licence shall be valid from 16 November 2023 to 24 September 2026 and may be renewed as prescribed in the Regulations.

नवंबर 2023 के 29 तारीख को हस्ताक्षरित एवं मुहरमंकित
Signed, Sealed and Dated on 29th day of November 2023

यु. एस. पी. यादव / U. S. P. YADAV
से. प्रो. निदेशक (दक्षिण) / Deputy Director General (South)
भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
दक्षिण क्षेत्रीय कार्यालय, वेदा भौमा रोड, श्री गंगा नदी किनारे
Southern Regional Office, V Ganga Road, Off Ganga, 600 017
Chennai, Tamil Nadu, India




उ.एस.पी. यादव
(यु. एस. पी. यादव)
वैश्विक एफ और उप महानिदेशक (दक्षिणी क्षेत्र)
भारतीय मानक ब्यूरो
(U. S. P. YADAV)
Sec'y & Deputy Director General (Southern Region)
for BUREAU OF INDIAN STANDARDS




MSC -F6.4-15

Creative Engineers & Consultants
CHAPTER-10 : ENVIRONMENTAL
MANAGEMENT PLAN

PRO CODE: CEC/EMP/MI-215
REV NO : 00/JUL/24
10-3



Figure 10.2: ISO 14001:2015



संस्कृत: पर्यावरणविद्या

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S

धारा III (स्कीम-III) के पैरा 3 के उप-पैरा (5) को देखें।
Form III (Refer Sub-Para (5) of Para 3 of Scheme III)

भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

पर्यावरण प्रबंधन प्रणाली प्रमाणन लाइसेंस
LICENCE FOR THE ENVIRONMENTAL MANAGEMENT SYSTEMS CERTIFICATION

राष्ट्रीय प्रत्यायन प्रमाणन निकाय बोर्ड, नई दिल्ली द्वारा प्रत्यायित
(Accredited by National Accreditation Board for Certification Bodies, New Delhi)

लाइसेंस सं.ईएम/एल- 6000590.3
Licence No. EM/L- 6000590.3

1.भारतीय मानक ब्यूरो अधिनियम, 2016 (2016 का 17) द्वारा प्रदान की गई शक्तियों के अन्तर्गत, ब्यूरो
By virtue of the power conferred on it by the Bureau of Indian Standards Act 2016 (17 of 2016), the Bureau hereby
grants/re-certifies to

<p>श्री इंडिया सीमेंट्स लिमिटेड संकरी नगर वर्क्स, संकरी वेस्ट, सलेम डिस्ट्रिक्ट - 637 303 तमिलनाडू, भारत.</p>	<p>The India Cements Limited Sankari Nagar Works, Sankari West, Salem District-637 303. Tamilnadu, India.</p>
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जो (जिन्हें इनके बाद लाइसेंसधारी कहा गया है) उल्लेखित कार्य सभी अनुसूची में विनिर्दिष्ट उत्पादों और/या सेवाओं का
प्रणाली के संबंध में ब्यूरो के पर्यावरण प्रबंधन प्रणाली प्रमाणन के लाइसेंसधारियों के रजिस्ट्रार(री) में उसी संख्या में नवीनरूप होने
का अधिकार और लाइसेंस प्रमाणन/प्रमाणन करता है, जो इस लाइसेंस की है। इस प्रकार के उत्पाद और/या सेवाओं का प्रमाण
लाइसेंसधारी द्वारा ISO 14001:2015 के अनुसार पर्यावरण प्रबंधन प्रणाली के अनुसार केवल उपर बताए गए पते (पते) पर
निर्मित/प्रदान/प्रदान किए जायेंगे।
(hereinafter called the Licensee) the right and licence to be listed in the Bureau's register(s) of Licensees of
Environmental Management Systems Certification in respect of the products and/or services or processes
particularly described in the schedule hereto, bearing the same number as this licence. Such products
and/or services or processes shall be manufactured/provided/carried out by the Licensee at only the
address(es) given above, and under the Environmental Management Systems in accordance with ISO
14001:2015.

2.इस लाइसेंस इस लाइसेंस का विनियमन करने वाले उपरोक्त अधिनियम और उसके अधीन कानून या विधियों और विनियमों के
अनुसार प्रमाणन के अंतर्गत स्वीकृत पुनः प्रमाणित किया गया और लाइसेंसधारी परत-द्वारा ब्यूरो को उपरोक्त विधियों और
विनियमों का विनियमन करने का उल्लेख है।
The licence is granted/re-certified subject to the relevant provisions of the above Act and the rules and
regulations made thereunder governing the licences referred to above, and the Licensee hereby covenants
with the Bureau duly to observe with the said Rules and Regulations.

3.इस लाइसेंस 18 नवंबर 2023 से 24 सितम्बर 2026 तक वैध रहेगा और विनियमों के अनुसार इसे नवीनीकृत
किया जा सकता है।
This licence shall be valid from 18 November 2023 to 24 September 2026 and may be renewed as
prescribed in the Regulations.

नवंबर 2023 के 29 तारीख को हस्ताक्षरित एवं मुद्रित
Signed, Sealed and Dated on 29th day of November 2023

यु. एस. पी. यादव / U. S. P. YADAV
अपेक्षित निदेश (सीए) / Deputy Director General (South)
भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
दक्षिण क्षेत्रीय कार्यालय, सीए क्रॉस रोड, सी आई सी रोड,
दक्षिण क्षेत्रीय कार्यालय, IV Cross Road, CIT Complex,
चण्डी, चेन्नै / Chennai - 600 113.

S.P.Y
(यु. एस. पी. यादव)
वैश्विक एक और उप महानिदेशक (दक्षिणी क्षेत्र)
भूतः भारतीय मानक ब्यूरो
(U. S. P. YADAV)
Sec 'F' & Deputy Director General (Southern Region)
for BUREAU OF INDIAN STANDARDS



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS



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Page 1 of 2





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Figure 10.3: ISO 18001:2007



OHSSMS

MSC-F6.4-15

पारम (A) प्रमाणिका (A) के पैरा 3 के भाग-दोष (B) को देखें)
Form III (Refer Sub-Para (B) of Para 3 of Scheme III)

भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

व्यावसायिक स्वास्थ्य एवं सुरक्षा प्रबंधन प्रणाली प्रमाणन अनुज्ञप्ति
LICENCE FOR OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEMS CERTIFICATION

राष्ट्रीय प्रत्यायन प्रमाणन निकाय बोर्ड, नई दिल्ली द्वारा प्रत्यावित
(Accredited by National Accreditation Board for Certification Bodies, New Delhi)

लाइसेंस सं. ओएच/एन-6000213.3
Licence No.OH/L-6000213.3

1.भारतीय मानक ब्यूरो अधिनियम, 2016 (2016 का 11) द्वारा प्रदान की गई शक्तियों के अन्तर्गत, ब्यूरो
By virtue of the power conferred on it by the Bureau of Indian Standards Act 2016 (11 of 2016), the Bureau hereby grants/re-certifies to

<p>शे इंडिया सीमेंट्स लिमिटेड संकरी नगर वर्क्स, संकरी वेस्ट, सलेम डिस्ट्रिक्ट - 637 303 तमिलनाडु, भारत.</p>	<p>The India Cements Limited Sankari Nagar Works, Sankari West, Salem District-637 303. Tamilnadu, India.</p>
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को (जिन्हें इसके बाद लाइसेंसधारी कहा गया है) इसके साथ अपनी अनुसूची में विरोध रूप से वर्णित उत्पादों और/या सेवाओं या प्रक्रियाओं के संबंध में ब्यूरो के व्यावसायिक स्वास्थ्य एवं सुरक्षा प्रबंधन प्रणाली प्रमाणन के लाइसेंसधारियों के रजिस्ट्रार(री) में उरी संख्या से प्रतीकदर्श होने का अधिकार और लाइसेंस प्रदान/प्रदायक प्रमाणित करता है, जो इस लाइसेंस की है। इस प्रकार के उत्पाद और/या सेवाओं का प्रक्रम लाइसेंसधारी द्वारा IS/ISO 45001:2018 के अनुसार व्यावसायिक स्वास्थ्य एवं सुरक्षा प्रबंधन प्रणाली के अनुसार केवल उपर्युक्त पता पर (एवं) पर निर्मित/प्रदायक/प्रमाणित किए जाएंगे।
(hereinafter called the Licensee) the right and licence to be listed in the Bureau's register(s) of Licensees of Occupational Health & Safety Management Systems Certification in respect of the products and/or services or processes particularly described in the schedule hereto, bearing the same number as this licence. Such products and/or services or processes shall be manufactured/provided/carried out by the Licensee at only the address(es) given above, and under the Occupational Health & Safety Management Systems in accordance with IS/ISO 45001:2018

2.यह लाइसेंस इस लाइसेंस का विनिर्देश करने वाले उपरोक्त अधिनियम और उसके अधीन बनाए गए नियमों और विनियमों के संबंध में प्रमाणन के अंतर्गत स्वीकृत पुनः प्रमाणित किया गया और लाइसेंसधारी एतद द्वारा ब्यूरो को उपरोक्त नियमों और विनियमों का विधिकार पालन करने का वचन देता है।
The licence is granted/re-certified subject to the relevant provisions of the above Act and the rules and regulations made thereunder governing the licences referred to above, and the Licensee hereby covenants with the Bureau duly to observe with the said Rules and Regulations.

3.यह लाइसेंस 16 नवंबर 2023 से 24 सितम्बर 2026 तक वैध रहेगा और विनियमों के अनुसार इसे नवीनीकृत किया जा सकता है।
This licence shall be valid from 16 November 2023 to 24 September 2026 and may be renewed as prescribed in the Regulations.

नवंबर 2023 के 29 तारीख को हस्ताक्षरित एवं मुद्रांकित
Signed, Sealed and Dated on 29th day of November 2023

यु. एस. पी. यादव / U. S. P. YADAV
उप-निदेशक (दक्षिण) / Deputy Director General (Southern Region)
भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
दक्षिण क्षेत्रीय कार्यालय, वी क्रॉस रोड, सी एच ई सी एफ
Southern Regional Office, IV Cross Road, CH E S I F
तारामनी, चेन्नई/Taramani, Chennai-800 113.

वैधानिक एफ और उप महानिदेशक (दक्षिणी क्षेत्र)
कुल भारतीय मानक ब्यूरो
(U. S. P. YADAV)
& Deputy Director General(Southern Region)
for BUREAU OF INDIAN STANDARDS



भारतीय मानक ब्यूरो
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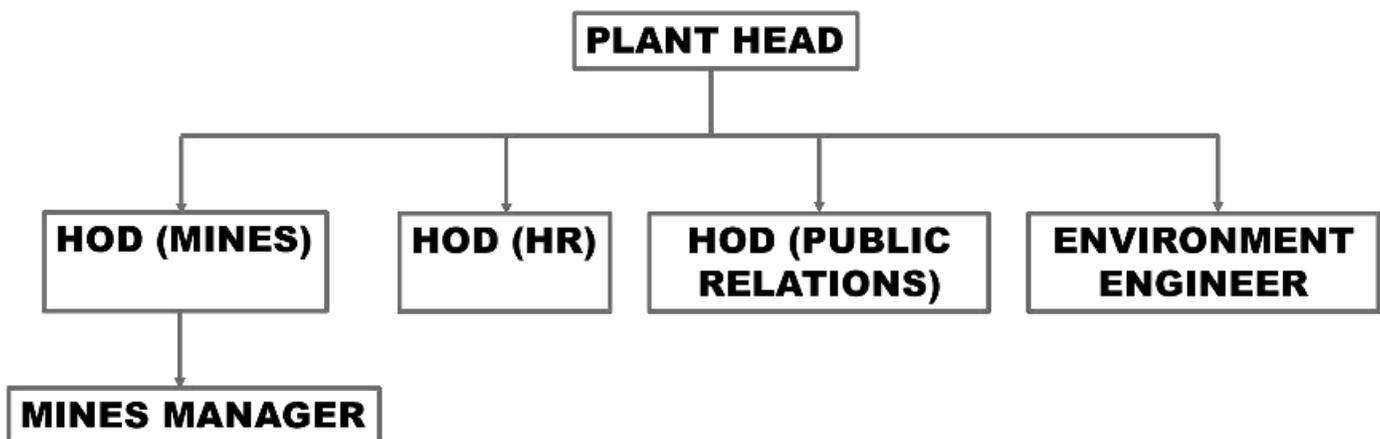




10.2.2 ENVIRONMENTAL MANAGEMENT CELL:

A common environment cell is available at ICL Sankari for the cement plant and mines. This cell undertakes effective monitoring, ensure implementation of various environmental control measures effectively and oversee various environmental management schemes for air quality control, water quality status, noise level control, plantation programmes, social development schemes, construction of garland drains, etc., in the mines. The organizational chart for the same has been provided below:

Figure 10.4: Environmental Management Cell



The Plant Head oversees the environmental administration at the mine through HOD (Mines) who will coordinate with the Manager (Mines) at the mine site who is directly responsible for various environmental activities in the mine. To look after CSR activities, ICL has appointed a CSR (Coordinator) at their corporate office who looks after the CSR activities of all the mines & cement plants of ICL. Planning part of the CSR activities are done at corporate level in consultation with the site head while the implementation part is looked after by HOD (HR). In addition to this, staff support is provided by way of employing skilled and unskilled workers for carrying out various activities.

Environmental control measures will span various factors like land degradation, air, water and soil quality, noise levels, effective land reclamation for excavated areas and solid waste dumps, afforestation measures, etc. The administrative functions of the environment cell are given below.





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1. To study the effects of project activities on the environment.
2. To observe the implementation of environmental control measures.
3. To ensure implementation of Plantation Programme. Regular monitoring of survival rate of plants is carried out to achieve the desired result.
4. To keep records of monitoring etc. in a systematic way, so as to facilitate easy access, when needed by statutory agencies, etc. Also send prescribed returns to statutory authorities.
5. To keep vigil on the efficiency of water management system.
6. Conducting environmental studies and reporting to SPCB.
7. Ensuring the efficiency of water management system.
8. To interact and liaise with State and Central Government Departments.
9. To evaluate the performance of existing pollution control equipment and systems periodically and take timely action to keep the equipment at its optimum performance condition.
10. To ensure the availability of the necessary spares for the pollution control equipment all the times so as to keep the pollutants of the environment within the stipulated limits.
11. To take immediate preventive action in case of some unforeseen environmental pollution attributable to the project.
12. Conducting safety audits and programmes to create safety awareness in workers/ staff.
13. Conducting annual health audits to detect any health problems promptly in the workers/staff. This will reduce occupational health problems.
14. Imparting training on safety and conduct safety drills to educate employees. Firefighting equipment and system has to be kept in 'ready-to-fight' condition.





15. Carrying out socio economic study once in five years in the surrounding areas to find out the benefits derived by the society due to the project and also to fulfill the deficiency, if any, immediately.

10.2.3 ENVIRONMENTAL MANAGEMENT PLAN:

10.2.3.1 General:

Systematic monitoring systems and well-conceived and efficient Environment Management Plan will ensure that during the project operations, the various environmental parameters, are well within the statutorily sustainable limits. The environmental control measures proposed to keep various environmental parameters of the project in terms of air, water, noise, land, biological environment, etc. has been described below.

10.2.3.2 Air Quality:

Frequent water spraying and sprinkling will be done in areas of OB dump , along haul roads, and other dust generation areas using mobile water sprinklers. Elaborate green belt cover is already developed and will be further created along with roads, around mine periphery, around admin building, top & slope of OB dumps, etc. as described in Chapter-IV. The plants will be watered regularly to improve the survival rate. Overloading of dumpers will be avoided to stop spillages. Good preventive maintenance will be practiced in case of HEMM to reduce gaseous pollutants.

10.2.3.3 Water Environment:

Various mitigative measures practiced and planned to be continued in this respect will include following:

- ❖ Workshop effluent from the common workshop will be passed through oil and grease trap. The treated water will be reused in the workshop.
- ❖ Common septic tank with soak pit will be used for the domestic waste water.
- ❖ Since the mining operations were in vogue till 2014, surface runoff management structures such as garland drains and earthen bunds already exist along mine haul roads, mine periphery and around dumps. Based on the mine and dump movement





during future workings these drains will be suitably re oriented and further strengthened.

- ❖ Plantation of native species on dump tops and slope with geo matting to arrest and prevent erosion will be made.
- ❖ The mine pit itself acts as a good rainwater harvesting pit. Collected water will be used for dust suppression, greenbelt and plantation.

10.2.3.4 Noise Environment:

Control measures adopted and to be continued is as follows:

- ❖ Noise protectors, insulation of operator cabins, installation of silencers in machineries, etc.
- ❖ Provision of ear plugs to workers in higher noise prone areas, etc.
- ❖ Provision of adequate green belt around mine areas, along roads, etc. to prevent noise propagation.
- ❖ Conducting regular health checkup of workers including audiometry test for workers engaged in noise prone area.
- ❖ Avenue plantations already exist along peripheral portions of the mining lease areas. Further greenbelt and afforestation will be planned and executed in future to abate noise and dust propagation in the area.

10.2.3.5 Ground Vibration

During the project operations, various control measures as listed below will be carried out to mitigate adverse impact due to the ground vibration caused due to blasting activities:

- ❖ Controlled blasting techniques to maintain the peak particle velocity (PPV) below DGMS prescribed levels.
- ❖ Ideally formulating drilling and charging pattern and ensuring using less charge per delay.
- ❖ To contain fly rocks, stemming column will not be less than burden of the hole. Blasting area will also be muffled, if necessary, to stop fly rocks propagation.





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- ❖ Blasting will not be carried out when strong winds are blowing towards the inhabited areas. Blasting will be done during midday time and never at night.
- ❖ Proper care and supervision during blasting by a competent and experienced person.
- ❖ Besides, different blasting time for the projects in the vicinity is suggested and the timing is to be mentioned in the display board in the respective mines entrance.

10.2.2.6 Biological Environment:

Reasonably good plantation have already been carried out by ICL in their mine lease area, along mineral transport road to plan, colony, plant and other areas. As mentioned in Chapter – IV, These measures will be further augmented during the course of future mining.

10.2.2.7 Socio-Economic Environment:

M/S. The India Cements Limited has implemented good community developmental activities around their project site and positive impacts in the region on the employment. The project proponent has carried out beneficial social welfare activities to improve the social and physical infrastructure of the local area.

The ICL has spent under various heads such as rural development, sports, education, health, etc. In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community.

10.3 ENVIRONMENTAL POLLUTION CONTROL COST:

In this proposed quarry Implementation of environmental control measures as stated above involves capital as well as recurring expenses. The probable capital and recurring environmental control cost are calculated and given below **Table No – 6.5**

Table 10.1: Environmental Control Cost

Activities	Mitigation Measure	Rs. In lakhs	
		Capital	Recurring
Air Environment	Water Sprinkling Arrangements	8.0*	1.5
	Muffle blasting – To control fly rocks during blasting	0.0	0.2
	Wet Drilling with dust extraction	1.5	0.2
	No overloading of trucks/tippers/tractors - Manual Monitoring	0.0	0.2
	Stone carrying trucks will be covered by tarpaulin	0.0	0.3
	Enforcing speed limits of 20 km/hr within ML area - Speed Governors	0.3	0.0
	Regular monitoring of exhaust fumes as per RTO norms	0.0	0.2
	Maintenance of approach roads	0.0	2.0





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CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

	Installing wheel wash system near gate of quarry	1.5	0.6
	Sub-Total	11.3	5.0
Noise Environment	Maintenance of HEMM	-	-
	Oiling & greasing of Transport vehicles and HEMM at regular interval	-	-
	Adequate silencers will be provided in all the diesel engines of vehicles.	-	-
	It will be ensured that all transportation vehicles carry a fitness certificate.	-	-
	Safety tools and implements that are required will be kept adequately near blasting site at the time of charging.	-	-
	Line Drilling all along the boundary to reduce the PPV from blasting activity and implementing controlled blasting.	-	-
	Proper warning system before blasting will be adopted and clearance of the area before blasting will be ensured.	-	-
	Provision for Portable blaster shed	0.5	0.1
	NONEL Blasting to control Ground vibration and fly rocks		11.4
	Sub-Total	0.5	11.5
Waste Management	Waste management (Spent Oil, Grease etc..) by proper waste collection and disposal	0.3	0.2
	Sub-Total	0.3	0.2
Mine Closure	Surface Runoff management - Garland Drain	-	0.2
	Barbed Wire Fencing to quarry area will be provisioned.	-*	0.3
	Green belt development	-	6.0
	Sub-Total	0.0	6.5
Implementation of EC, Mining Plan & DGMS Condition	Fixed Display Board at the Quarry Entrance as permanent structure mentioning Environmental Conditions	0.3	0.0
	Periodic environmental monitoring	0.0	1.5
	Personal Protective Equipment's for workers	2.0	1.0
	Health check up for workers will be provisioned	0.0	1.2
	First aid facility will be provided	0.0	2.5
	Mine will have safety precaution signages, boards.	0.3	0.1
	No parking will be provided on the transport routes. Separate provision on the south side of the hill will be made for vehicles /HEMMs. Flaggers will be deployed for traffic management	0.0	0.3
	Installation of CCTV cameras in the mines and mine entrance	0.9	0.2
	Implementation as per Mining Plan and ensure safe quarry working	0.0	15.0
	Sub-Total	3.5	21.8
	TOTAL	15.6	45.0

*Considering that this is an existing mine, these capital costs have already been incurred.

Towards EMP measures, Rs.15.6 Lakhs is allocated under capital cost. Besides, Rs.45.0 Lakhs per annum will be spent under recurring cost. All the recurring cost of maintenance of pollution control measures, environmental monitoring etc., will be met from revenue and will be spent for the entire lease period.

10.4 CONCLUSION:

A meticulously well-planned Environmental Management Plan, with various programme schedules and timely execution objectives, as above, will ensure that the future environmental quality in the area will be maintained within statutory limits. The environmental management





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strategy as explained above will prove that industrial growth, if properly planned with all environmental concerns and appropriate remedial measures can go a long way to improve life pattern and living conditions of the local community around the project.

* * * * *



CHAPTER-XI



**SUMMARY AND
CONCLUSION**



CHAPTER 11

SUMMARY & CONCLUSION

11.1 INTRODUCTION:

The India Cements Limited (ICL) has initiated action towards obtaining environmental clearance for their Mothaiyanur Limestone Mines namely, G.O.No.211 , G.O.No.1086, and G.O.No.76 located in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu. Since the above mining leases are contiguous and adjacent to each other, the mining operations are planned on a contiguous working basis.

As per MoEF & CC notification, this proposal necessitates preparation of EIA/EMP report along with public hearing and the PP has initiated action towards the same.

As such this combined draft EIA report with separate EMP measures is prepared for these 3 leases (G.O.No.211 , G.O.No.1086 and G.O.No.76) based on standard and additional Terms of Reference issued by SEIAA, Tamil Nadu and is in conformance of the generic structure prescribed by MOEF&CC in their notification of September 2006 and the approved review of mining plan.

Presuming that Environmental Clearance is to be obtained at the stage of lease renewal only, application for obtaining EC was initially submitted to MoEFCC in 2014 and subsequently mining operations were stopped as per MoEFCC directions and Terms fo Reference under violation category was applied. Though GO 211, GO 76 falls under violation category, factually no production violation is involved while considering the base 1993-94 production level. In case of GO 1086 there is no limestone production from year 2014-15 and as such it is not a violation case. NOC is issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and its given vide Annexure-3A and 3C respectively for GO 211 and 76 and Annexure – 3B for GO 1086.

It is now proposed to obtain Environmental Clearance for the following details:

- Mothaiyanur Limestone Mines (G.O.211) over an area of 50.84Ha in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu for the production capacity of 0.5 MTPA.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

- Mothaiyanur Limestone Mines (G.O.1086) over an area of 4.865Ha in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu for the production capacity of 0.012 MTPA.
- Mothaiyanur Limestone Mines (G.O.76) over an area of 8.005Ha in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu for the production capacity of 0.61 LTPA.

11.1.1 PROJECT HISTORY:

Mining Lease: Mothaiyanur Limestone Mines (G.O.211) and G.O1086 were renewed as epr MMDR Amended Act, 2015 upto 31.03.2030. Mothaiyanur Limestone Mines (G.O.76) is deemed to be extended upto 31.03.2030.

Review of Mining Plan:

- Review of Mining Plan for Mothaiyanur Limestone Mines (G.O.211) for the period 2024-25 to 2028-29 was approved by Regional Controller of Mines, IBM obtained vide NO TN/SLM/LST/ROMP-1727.MDS dated 15.12.2023.
- Review of Mining Plan for Mothaiyanur Limestone Mines (G.O.1086) for the period 2023-24 to 2027-28 was approved by Regional Controller of Mines, IBM obtained vide NO TN/SLM/LST/ROMP-1698.MDS dated 19.12.2022.
- Review of Mining Plan for Mothaiyanur Limestone Mines (G.O.76) for the period 2022-23 to 2026-27 was approved by Regional Controller of Mines, IBM obtained vide NO TN/SLM/LST/ROMP-1678.MDS dated 15/12/2021.

11.1.2 ENVIRONMENTAL CLEARANCE APPLICATION:

Particulars	GO.No.211	GO 1086	GO 76
Terms of Reference	SEIAA-TN/F.No.6733/SEAC/ TOR-632/2019 dated 12.07.2019	SEIAA-TN/F.No.6567/SEAC/TOR-630/2019 dated 12.07.2019	SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 dated 17.02.2021
Amendment/ Corrigendum if any	--	SEIAA-TN/F.No.6567/SEAC/TOR-630/CORRIGENDUM/2023 dated 28.07.2023*	SEIAA-TN/F.No.6856/SEAC/TOR-847/2019/Amendment dated 28.11.2022#
ToR validity Extension	• SEIAA-TN/F.No.6733/SEAC/TOR-632/Ext/ dated 26.09.2022	• SEIAA/TN/F.No.6567/SEAC/ TOR-630/Extn/2019 dated 26.09.2022	TOR Identification No. TO24B0000TN5779670A dated 25.06.2024





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

	• TO24B0000TN5476378A dated 16.07.2024	• TO24B0000TN5791761A dated 16.07.2024	
Baseline Data Collection	Winter Season (Dec 2023 – Feb 2024)	Winter Season (Dec 2023 – Feb 2024)	Winter Season (Dec 2023 – Feb 2024)

11.2 SALIENT FEATURES OF THE PROJECT:

Table 11.1: Site Details

Location	Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu
Coordinates	Latitude: 11°28'50.7117"N to 11°29'45.1684"N Longitude: 77°47'31.378"E 77°48'12.7368"E
Nearest Highway	Salem to Coimbatore Highway (NH-47) – 2.9Km – SE
Nearest Village	Mothaiyanur - < 0.5km - W
Nearest Railway Station	Sankari Durg Railway Station (by road) – 10 km, SE
Nearest Airport	Salem Airport – 43Km (NE)
Topography	The lease area is gently sloping with surface RL level varying from 271 to 310 RL and sloping towards south.
Accessibility	The limestone mined out from the lease area will be transported to the proponent's own cement plant located at a distance of 4.6Km by road on the south eastern side of the lease area through dedicated road. It is well connected to the NH-544 (Salem-Coimbatore Highway) located at a distance of 3Km on the southern side of the lease area.

Table 11.2: Environment Setting of The Study Area

S.No	PARTICULARS	GO-211	GO-1086	GO-76
1	Nearest villages	Mothaiyanur - < 0.5km - W Chinna mothaiyanur - <1.0km - E Reddipalayam - 1.2km - NW	Mothaiyanur - < 0.5km – W Chinna mothaiyanur - <1.0km – E, Reddipalayam - 1.4km - NW	Mothaiyanur - < 0.5km - W Chinna mothaiyanur - <1.0km – E, Reddipalayam - 1.5km - NW
2	Nearest town/City	Sankari - 8.0 km, E	Sankari - 8.2 km, E	Sankari - 8.0 km, E
3	Nearest major water bodies	Cauvery River- 7.0 km, NW Sarabhanga River – 6.3Km, NW Mettur East Bank canal – 4.5Km, NW	Cauvery River- 7.2 km, NW Sarabhanga River – 6.5Km, NW, Mettur East Bank canal – 4.7Km, NW	Cauvery River- 7.0 km, NW Sarabhanga River – 6.1Km, NW, Mettur East Bank canal – 4.7Km, NW
4	Reserved / Protected Forests	Suriyamalai Reserve Forest – more than 60m from the mine workings on the north,	Suriyamalai Reserve Forest – more than 280m from the mine workings on the north,	Suriyamalai Reserve Forest – more than 1.3Km from the mine workings on the north,





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

S.No	PARTICULARS	GO-211	GO-1086	GO-76
5	Notified Archaeologically important places, Monuments	Sankagiri Fort – 7.0 Km (East)	Sankagiri Fort – 7.3 Km (East)	Sankagiri Fort – 7.1 Km (East)
6	Local Places of Historical and Tourism Interest	Sankagiri Fort – 7.0 Km (East)	Sankagiri Fort – 7.3 Km (East)	Sankagiri Fort – 7.1 Km (East)
7	Environmental sensitive areas, Protected areas as per Wildlife Protection Act, 1972	Nil	Nil	Nil
8	Defence Installations	Nil within 10 km radius	Nil within 10 km radius	Nil within 10 km radius

Table 11.3: Technical Description

Particulars	GO.No.211	GO 1086	GO 76
Mineable Reserves	4.47 Mil.T	0.1978 Mil.T	0.69 Mil.T
Geological Reserves	8.06 Mil.T	0.3087 Mil.T	4.72 Mil.T
Mining Method	The Mothaiyanur Limestone Mine was worked as opencast mechanized mine during the earlier workings and the same will be continued. Rock breakers in combination with controlled blasting are practiced in this mine. Drilling machines area also deployed based on the requirement. The blasted limestone will be sized based on the requirement using rock breakers, then loaded in to tippers for further transportation to the ICL cement plant. The waste material will be loaded in to tippers and will be dumped in the earmarked location.		
Peak Production	0.5 MTPA	0.012 MTPA	0.61 Lakh TPA
Waste Generation and Management during plan period	<ul style="list-style-type: none"> •Waste Quantity – 3.749 Mil.T •Mineral Reject – 0.889 Mil.T •Will be dumped in the dumps within the lease area 	<ul style="list-style-type: none"> •Waste Quantity – 0.068 Mil.T •Mineral Reject – 0.030 Mil.T •Will be dumped in the dumps within the lease area 	<ul style="list-style-type: none"> •Waste Quantity – 0.039 Mil.T •Mineral Reject – 0.060Mil.T •Will be dumped in the dumps within the lease area
Ultimate Depth	75m	75m	40m
Manpower	122	13	16
Mode of Transport	By own Road		
Water Requirement and source	Requirement – 50KLD Source - Rain water collected and stored in the mine pit.		
Power Requirement	This mine is a fully mechanized mine, all machineries are diesel operated and power required for office and etc will be drawn from Tamil Nadu Electricity board.		
Project Cost	Rs. 99 lakhs	Rs.12.95 Lakhs	Rs.4.9 Lakhs





11.3 EXISTING ENVIRONMENTAL SCENARIO:

11.3.1 GENERAL:

The studies and data collection have been carried out systematically and meticulously as per relevant IS codes, CPCB and MoEF&CC guidelines and as per approved ToR during **Winter Season (December 2023 – February 2024)** For the purpose of this study, the area has been divided into two zones, namely, core and buffer zones. Core zone is considered as the total combined lease area, while buffer zone encompasses an area of 10 km radius distance from the periphery of core zone.

11.3.2 SOCIO-ECONOMIC STATUS:

The details of the 10Km radius study area has been provided below:

Table 11.4: Details of Buffer Zone

Distance	No. of Villages	No. of Urban Areas	Taluk	District
0-2Km	2	0	Sankari	Salem
2-5Km	4	2	Sankari	Salem
	2	1	Tiruchengode	Namakkal
5-10Km	3	0	Omalur	Salem
	9	1	Sankari	Salem
	9	2	Tiruchengode	Namakkal
Total	29	6	3 Taluks	2 Districts

Table 11.5: Social, Economic And Demographic Profile of the Study Area

Details	Population	Percentage
A. Gender-wise distribution		
Male Population	157406	51.1
Female Population	150858	48.9
Total	308264	100.0
B. Caste-wise population distribution		
Scheduled Caste	45268	14.6
Scheduled Tribes	126	0.0
Other	263122	85.4
Total	308264	100.0
C. Literacy Levels		
Total Literate Population	199459	64.7
Others	108805	35.3
Total	308264	100.0
D. Occupational structure		
Main workers	152561	49.5





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Details	Population	Percentage
Marginal workers	11257	3.7
Total Workers	163818	53.14
Total Non-workers	144446	46.9
Total	308264	100.0

11.3.2.1 SAMPLE SURVEY:

Nearby villages were visited for conducting sample Village survey on all socio-economic aspects and requirements of the people. The existing socio-economic scenario is studied and CER activities are also suggested to the proponent. The study details are given in **Para 3.2.4, Chapter – III.**

11.3.3 EXISTING ENVIRONMENTAL QUALITY:

Table 11.6: Baseline Data

A) METEOROLOGICAL DATA	Winter Season (Dec 2023 to Feb 2024)		
PARAMETERS	MINIMUM	MAXIMUM	
Temperature in °C	18.6	36.9	
Humidity in %	20.0%	95.0%	
Wind speed Km/Hr	<1.8	25.2	
Predominant wind direction (From)	NE		
B) AMBIENT AIR QUALITY	Monitoring Location – 6 locations		
PARAMETER	RESULT (µg/m³)		*LIMIT (µg/m³)
Location	Core Zone	Buffer Zone	
Particulate Matter (Size <10 µm)	40.7 – 51.2	42.5 – 61.1	100
Particulate Matter (Size <2.5 µm)	19.1 – 25.1	20.1 – 29.9	60
Sulphur Dioxide (as SO ₂)	4.2 – 6.5	4.4 – 7.1	80
Nitrogen Dioxide (as NO ₂)	9.7 – 13.1	9.9 – 16.3	80
Conclusion: The existing Ambient Air Quality levels for PM10, PM2.5, SO2 and NO2, are within the NAAQ standards prescribed CPCB limits of 100 µg/m ³ , 60 µg/m ³ , 80 µg/m ³ & 80 µg/m ³ . The CO values in all the locations were found to be below detectable limit. Silica values in the study area are found to be below detectable limit. (Detection limit – 0.05 mg/m ³)			
C) WATER QUALITY	Monitoring Location – 6 locations (Bore wells)		
PARAMETER	Result	*LIMIT (µg/m³)	
pH at 25 °C	7.35 – 7.89	6.5-8.5	
Total Dissolved Solids, mg/L	224 – 1246	2000	
Chloride as Cl ⁻ , mg/L	33.27 – 332.66	1000	





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

Total Hardness (as CaCO ₃), mg/L	154.84 – 539	600
Total Alkalinity (as CaCO ₃), mg/L	41.16 – 470.40	600
Sulphates as SO ₄ ²⁻ , mg/L	68.49 – 379.34	400
Iron as Fe, mg/L	0.02 – 0.06	0.3
Nitrate as NO ₃ , mg/L	2.45 – 5.64	45
Fluoride as F, mg/L	0.44 – 0.68	1.5

Conclusion: The water quality of ground water is found to be within the prescribed Permissible limits of IS: 10500 Norms in the absence of an alternative source as per Drinking Water Specifications.

D) NOISE LEVELS

Monitoring Location – 6 locations

PARAMETER	RESULT dB(A)		*LIMIT (µg/m ³)
	Day Equivalent	Night Equivalent	
Core Zone	47.2	43.7	90
Buffer Zone	48.2 – 52.0	41.4 – 43.7	Day Equivalent - 55dB(A), Night Equivalent - 45dB(A)

*Permissible noise for industrial workers as laid down by CPCB (at 8 hrs Exposure Time). While comparing with the MoEF&CC Norms, the monitored ambient noise levels are generally within the limit values.

E) SOIL QUALITY

Monitoring Location – 5 locations

PARAMETER	Range of values
pH	7.02 – 7.66
Electrical Conductivity (µmho/cm)	47.86 – 102.2
Organic matter (%)	196 – 448
Total Nitrogen (mg/kg)	196 – 448
Phosphorus (mg/kg)	0.92 – 2.27
Sodium (mg/kg)	352 – 836
Potassium (mg/kg)	510 - 962

Soil is of Silt Loam Type.

F) LAND ENVIRONMENT:

For the present study on land use pattern in the study area, remote sensing satellite data have been used. The area estimated of land use categories around the 10km buffer zone is provided below:





Table 11.7: Land Use in 10Km Buffer Zone

S.No	Landuse Feature	Area (Sq.Km)	Percentage
1	Agriculture/ Plantation	63.37	17.50
2	Fallow Land	70.61	19.50
3	Land With Scrub	98.90	27.32
4	Land Without Scrub	9.97	2.75
5	Settlement / Infrastructure	34.18	9.44
6	Water bodies	13.54	3.74
7	Mining Area / Industries	6.39	1.77
8	Scrub / Reserve Forest	65.11	17.98
	Total	362.07	100.00

From the above table it is seen that 17.50 % of the study area is agriculture land and 19.50 % are fallow land. Land with scrub constitutes 27.32 %, lands without scrub constitute 2.75 % and waterbodies constitute 3.74 %, Scrub / Reserve Forest constitute 17.98 % and Mining area constitute 1.77 %.

G) BIOLOGICAL ENVIRONMENT:

Major part of the lease area is already used for mining and allied activities and as such free from any major natural vegetation. Plantation carried out by the PP and few local shrubs are mostly found in the area. The dominated species in the core zone are *Morinda tinctoria*, *Prosopis juliflora*, *Azadirachta indica*, *Prosopis cineraria* etc. Major part of the study area is of fallow and scrubby type. Agriculture is restricted due to lack of adequate water resources and mostly monsoon dependent. In general, agricultural seems to be prominent in the western side of the lease area proximate to Caveary river . Crops such as Vazhai, coconut, sugar cane, cholam, kuchi kilangu & vegetables are generally planted in the study area. Besides, aricanut, paddy, teak plantation are also observed in the water available region near cauvery & its tributary areas. Suriya malai reserve forest is of scrub forest type with mostly shrubs and bushes only. Totally 56 tree species were observed in buffer zone followed by 19 shrub species, 23 Species of herb, 8 climber species, 7 grass species and 9 Agricultural crops. The dominant tree species are *Azadirachta indica*, *Tamarindus indica*, *Prosopis juliflora* and *Mangifera indica*. The detailed list of plants found in the Buffer zone is given in Table no – 3.25.

Fauna: There is no Wild Life Sanctuary or National Park within the study area of 10 km. Domesticated animals like Cows, Buffalos, Dogs, Cats etc., are commonly found. The lease and





10 Km buffer zone does not fall in the Western Ghats ESA boundary. No wild mammalian species was directly sighted during the field survey. The list of fauna within the study area is given in Table No – 3.26. The Suriya malai reserve forest was observed north of the mine boundary. The details of Flora and Fauna of Suriya malai reserve forest is given in **Annexure – 19**. Deer, rabbit and two schedule – I species namely Pea fowl and Monitor lizard are located in the suriya malai forest which is located within the buffer zone.

H) HYDROLOGICAL STUDY:

Hydrogeological study was conducted by the Climate and Environmental Research Group (CERG), University of Madras based on the Terms of Reference issued by SEIAA, Tamil Nadu.

In general, the study area is an undulating terrain, sloping towards north and south. For away on the north, there is small hillock comprising of quartzite. The water levels of the existing open wells in area of investigation shows that the water level ranges varies from below 30 feet to above 40 feet, bgl. The water levels are deeper in southwestern and southeastern part of the study area and tend to become shallower in the northwestern and southern part from the mining lease area.

Six vertical electrical sounding (VES) have been carried out in the area which is conducted in equally spaced locations of the entire study area. The VES data are interpreted qualitatively and quantitatively and inferred that, four to five geoelectrical layers are obtained. The apparent resistivity values collected from the study area reveals general information on the pattern of the sub surface formations. The study area is predominantly consisting of hard rock, the apparent resistivity in the shallow depth shows higher values, which may be due to the presence of compact formation at shallow depth.

Four different profile sections of subsurface model is drawn along East - West directions have been selected covering the entire study area. At VES location 1 highly weathered to fractured formation is seen and semi consolidated to loose soil are observed at VES location 2 which explains the presence of hard and compact formations below 50 m, bgl. At VES locations 3 and 4, low resistivity values are seen near the surface and moderate to high resistivity values are seen at ground level which mostly made up of consolidated materials. The hard and compact formation starts from the depth of 40 m, below ground level at both VES locations 5 and 6

A pumping test has been carried out on a nearest existing dug-well located in village Mothaiyanur mines located in Salem district. The transmissivity is calculated from the pumping of the dug well





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

present in the mining zone is found to be 495.67 m²/day, which is found to be very high and the well receives water from the surrounding weathered formations in very fat rate. Since the shallow dug well where the pumping test is conducted is in southern part of the study area, it also gets water supply from the fractured zones that are situated in the higher elevation zones in faster rate.

11.4 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES:

11.4.1 GENERAL:

Mothaiyanur Limestone Mines namely, G.O.No.211, G.O.No.1086 and G.O.No.76 involve the production of 0.5MTPA, 0.012MTPA and 0.61 Lakh TPA of Limestone respectively within their lease areas. The above mining leases are contiguous and adjacent to each other & the mining operations are planned on a contiguous working basis. Since the overall production is also less the equipments to be deployed are also mostly common and less. As such the impact assessment and the management measures are also planned on a common basis.

11.4.2 AIR ENVIRONMENT:

The principal sources of air pollution in the area due to mining and allied activities are dust generation in the mine due to various activities such as excavation of material, movement of HEMM, loading, unloading and transportation operations.. Besides, Gas emission also occur as a result of emission of SO₂, NO_x, CO etc., from diesel driven mining equipment, compressors, generator sets, etc. The following measures will be adopted to control impact on the air quality due to mining operations in the lease area:

Table 11.8: Mitigation Measures – Air Environment

S.No	Activity	Mitigation Measures
1	Drilling	Usage of Drill bits in good condition
		Covering of drill holes with wet cloth
		Usage of sharp drill bits for drilling of holes.
		Provision of dust filters / mask to workers working at highly dust prone and affected areas.
2	Blasting	Well-designed blasting parameter, effective stemming to achieve optimum breakage occurs without generating fines.
		Use of appropriate explosives for blasting and avoiding overcharging of blast holes.
		Avoiding blasting during high wind periods where the fine dust is carried out away easily affecting the ambient air quality.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

		Use of controlled blasting techniques with Nonel to keep the dust generation, noise as well as vibration level within the prescribed limits.
3	Excavation and Loading	Proper maintenance of HEMM
		Enclosures for operator cabin.
		Imparting sufficient training to operators on safety and environmental parameters.
		Proper maintenance of hauling equipments.
		Avoiding overloading of dumpers.
4	Transportation	Regular wetting of transport road using mobile water tanker.
		Regular water sprinkling by engaging a 10 KL water tanker on internal roads, haul, loading and unloading points for dust suppression on a common basis.
		It is proposed to install a fixed water sprinkler along the main approach road towards dust suppression.
		Transportation of ore shall be carried out through the company's own dedicated black topped road to the Sankari Cement Plant located 4.6 Km in the south eastern side of the lease area.
		Avoiding overloading of tippers
		Covering of loaded tippers with tarpaulins during transportation
		Vehicular emissions will be controlled through regular and proper preventive maintenance schedules and emissions tests are done with diesel smoke meter equipment to ensure emission values.
5	Others	Development of greenbelt / barriers around mine in the safety zone and carrying out plantation within the lease area.
		About 34,595 plants within the lease areas of various leases of the proponent and 13,185 plants outside the lease area have been planted since the commencement of the mining operations.
		Besides, it is proposed to carry out Avenue Plantation

Due to adoption of all these measures, no major impact on air quality is envisaged due to this project.

The impact on air quality due to the proposed project is estimated using AERMOD View Gaussian Plume Air Dispersion Model developed by Lakes Environmental Software which is based on steady state Gaussian plume dispersion. Ground Level Concentration (GLC) have been computed using hourly meteorological data for particulate matter PM10 and PM2.5.

The post project added concentrations with baseline figures even at worst scenario, show that the cumulative values of ambient air quality with respect to PM₁₀ are in the range of 53.8 µg/m³





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

to 62.1 µg/m³ and with respect to PM_{2.5} are in the range of 26.2 µg/m³ to 30.9 µg/m³ which are within the statutory limits in each case.

For preservation of environment in this mine strict enforcement of management schemes will be undertaken for taking corrective actions, as needed. By adopting the effective implementation of all the mitigative measures, no adverse impact on Air quality due to the combined mining operation in this lease area is expected.

11.4.3 WATER ENVIRONMENT:

Water Requirement: The total water requirement will be 50.0 KLD. This comprises 2.0 KLD for domestic use, 30.0KLD for dust suppression by water sprinkling, wet drilling and 18 KLD for greenbelt and plantation. The water requirement is met from rainwater collected in the mine pit.

The activity / source of pollution, its impact / consequence, proposed control measures are explained below:

Table 11.9: Mitigation Measures – Water Pollution

S.No	Source	Consequence	Mitigation Measures
A	Domestic use	Generation of waste water	The domestic sewage to be generated from the project will be collected in septic tank with soak pits.
B	Workshop , Service Building	Generation of waste water	Common workshop for all the leases of the proponent is present in the mines office and the same will be used for this project also. The workshop effluent will be passed through oil and grease trap. The treated water is reused within the workshop. The oil from the oil storage tank is safely disposed to CPCB authorized re-processor.
B	Rainfall	Runoff from waste dump and stack	There are surface runoff management structures such as garland drains and earthen bunds along mine haul roads, mine periphery and around dumps. Based on the mine and dump movement during future workings these drains will be suitably re-oriented and further strengthened.
		Rainwater Harvesting	• Within the lease area, the rainwater falling within the mine pit area is made to drain to the mine sump in the lowest level of working through proper bench slopes towards the peripheral drains in the bench end. Mine sump itself acts as a good rain water harvesting pit. Collected water is being used for watering of haul roads, greenbelt and plantation, etc.





			<ul style="list-style-type: none"> • Outside the lease area, various measures such as rooftop rainwater harvesting structures in the Sankar Hr.Sec School, two rainwater harvesting ponds of 17,280 KL and 14,625 KL capacity each, desilting of nearby village ponds under CSR, etc. are being carried out. These measures will be continued in the future also.
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11.4.4 NOISE ENVIRONMENT:

Since contiguous mining with common equipments to be used for these leases, anticipated noise levels resulting from operation of the various common machineries like excavator, tippers, drill have been computed using point source model. Computation of cumulative noise levels at the nearby villages is made based on the assumption that there are no attenuation paths between the source and the boundary. From the studies, it is found that the predicted cumulative Noise Levels due to mining operations at the periphery of the mine lease itself will be less even without considering any attenuation factor. However, practically there will be attenuation due to vegetation etc., and as such there will not be any adverse noise propagation outside the lease boundary. Since the habitations are also away the effect of noise due to mining operations will not be felt at all in the surrounding village. Hence, by implementing the following mitigative measures for noise control, the impact on noise levels will continue to be insignificant:

- Planting rows of native trees along roads, around mine area and other noise generating centres to act as acoustic barriers.
- Sound proof operator’s cabin for equipments like shovel, tippers, etc.
- Proper and regular maintenance of equipments may lead to less noise generation.
- Providing in-built mechanism for reducing sound emissions.
- Providing earplugs to workers exposed to higher noise level.
- Conducting regular health check-up of workers including Audiometry test for the workers engaged in noise prone area.
- Displaying the noise level status of operational machinery on the machines to know the extent of noise level and to control the time to which the worker is exposed to higher noise levels.
- Provision of green net in lease periphery





Further green belt and afforestation will be planned and executed to abate noise and dust propagation in the area.

11.4.5. VIBRATION:

To reduce ground vibratory conditions, various control measures will be implemented such as keeping PPV below 10mm/s for 8-25hz frequency range, formulating drilling and charging pattern with less explosive charge, initiating sequence and using NONEL, carrying out blasting with minimum charge per delay, avoiding blasting during strong winds etc. By adoption of above measures, it will be ensured that the ground level vibration due to blasting are maintained within the limits prescribed by DGMS, Dhanbad at the mining areas vide Circular No. 7 dated 29 -08-1997. Besides, different blasting time for the projects in the vicinity is suggested and the timing is to be mentioned in the display board in the respective mines entrance. Elaborate details regarding the same are provided under section 4.4.2, Chapter-IV.

11.4.6 IMPACT ON LAND ENVIRONMENT:

The mining lease in the area is under operation by project proponent, since 1964. The entire lease area is in ICL Possession. Mining operations in the leases have been suspended since 2014. Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated. In the post mining stage, top mined out benches will be reclaimed and the remaining mined out area will be left as water body which will recharge the ground water. Green development will be carried out progressively around the lease periphery, all the available undisturbed area & along the mineral transport area. Infrastructures will be dismantled and reclaimed. Progressively the waste dumps will be stabilised with compaction and reclaimed with dump plantation & ultimately it will be ensured that the entire waste dumps are properly reclaimed and vegetated.

11.4.7 BIOLOGICAL ENVIRONMENT:

Suriyamalai Reserve Forest is located north of GO 211. From the air quality modelling studies carried out, it is noted that in the RF area, the incremental concentration is $<1 \mu\text{g}/\text{m}^3$ only. In order to further prevent dust propagation, it is proposed to erect a green net / tin sheet along the northern side of the lease area for a length of 300m. By carrying out various dust control measures within such as water sprinkling. Wet drilling, etc. during mining operations, no adverse impact on





air quality due to mining operations is expected. With regards to the noise levels, the expected post project noise levels due to this project at various locations were studied. It is seen that near the Suriyamalai R.F., the post project noise levels is well within the stipulated limits of 55 dB(A). To further prevent the impact due to noise, it is proposed to carry out good greenbelt cover in the safety zone areas in the mine periphery including the northern side of the lease area.

Hence, by following these measures, no adverse impact on suriyamalai reserve forest due to mining operations is expected. Regular periodic monitoring near the RF area will be carried out to ensure the same.

Towards conservation of Schedule-I species, Rs.10.0 Lakhs will be spent on a combined basis for all the leases of ICL and its cement plant. The various measures will be undertaken in consultation with the DFO.

About 34595 plants have already been planted so far since the commencement of the mining operations covering a total area of 26.903 Ha in mining leases of ICL. Besides, outside the lease area also plantation is carried out over an area of 9.72Ha with a total of 13,185 plants. Avenue plantation has already been carried out from the mine lease area of the Karumapurathanur Limestone Mines to the factory, the Veerachipalayam limestone Mines and the Mothaiyanur Limestone Mines. During the plan period, 1.0Ha of the lease periphery and dump area will be covered with plantation. About 2000 number of plants will be planted.

11.4.8 SOCIO ECONOMIC ENVIRONMENT:

In Sankari area, the ICL's mining and cement plant operations has resulted in direct employment opportunities for about 130 through contract means. Besides, indirectly about 100 persons are benefited through allied services like trading, logistics, casual lab or needs, etc. So far the proponent has spent about Rs.180 lakhs for various community development activities. In future various social welfare activities will be continued to improve the physical and social infrastructures of the local community.

11.4.9 OCCUPATIONAL HEALTH AND SAFETY ASPECTS:

Cement plant and mining operations are being carried out in this area for many decades. As such, no major health ailments are reported within the region. No respiratory health ailment are reported in the village, during health camps Occupational health survey will be carried out for the workers and officers. Protective respiratory devices shall be provided to the personnel working in dusty





areas and adequate training and information on safety and health aspects will be provided as part of Mines Vocational Training. A first aid box will be made available for immediate treatment. First aid training will be imparted to the selected employees regularly. In order to ensure minimisation of occupational health and safety problems in the project operation, the following preventive remedial measures will be effectively exercised in the project operations, so as to comply with applicable standards.

- Medical examination of workers at pre-entry level stage of workers, etc., by qualified doctors, with periodical examination of all workers/staff at least once a year, as per DGMS circulars.
- Regular awareness campaigns amongst staff and workers
- Staff will be provided with PPE to guard against excess noise levels, Dust generation and inhalation, etc., as per standards prescribed by DGMS.

11.4.10 IMPACT ON LOCAL LOGISTICAL SYSTEM DUE TO PROJECT:

Limestone output from this mine and adjoining leases are transported through private dedicated black topped road of ICL to Sankari cement plant, about 4.6 Km away. The mode of transport is through 25T / 30 Tonne Tippers/dumpers. From the above table it seen during the cumulative mining operations, there is 4 trips of truck transport per hour. Considering that the transportation occurs in the proponent's own dedicated road and considering the implementation of the below mentioned mitigation measures, no major impact is envisaged in the logistical front.

- ❖ Water sprinkling in the transport vehicles before transporting, so that no dust nuisance during transport will arise.
- ❖ Proper maintenance of transport roads
- ❖ Proper maintenance of transport vehicles.
- ❖ Avoiding overloading of material
- ❖ Covering of loaded vehicles with tarpaulins sheet if warranted.

11.4.11 WASTE MANAGEMENT:

Since the entire mined out material will be used there will not be any solid waste generation from this project. There is no process effluent generation from this mine. Hence no liquid waste is generated.





COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES (GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.

The hazardous waste generated in this mine will be stored in a separate storage area with impervious containers for waste oil, oil contaminated clothes, used lead acid batteries, scraps, tyre storage etc. It will be disposed through authorized recyclers or re-processors periodically. The hazardous wastes will be transported in accordance with the provisions of rules. By effective implementation of above said mitigation measures no major impact due to Hazardous waste is expected.

Single use plastics/ use and throwaway plastics will be banned in the site as directed by the Tamil Nadu Government vide GO(Ms)No.84 regarding ban on use of plastic products. The employees will be encouraged to use compostable material or reusable material.

11.5 ENVIRONMENTAL MONITORING PROGRAMME:

The monitoring schedules are planned for systematic study of various pollution levels with respect to air and water qualities, noise levels, etc. to ensure that they conform to the standards laid down by Environmental Protection Act and various statutory Limits.

Monitoring location and the frequency of monitoring shall be suitably modified in consultation with the nodal agency as per the actual requirements and prevailing conditions of the mine and environmental factors, as dictated from time to time, depending on the prevailing pollution levels, if required.

This being an existing mine, various measures are already in place. Additionally, towards EMP measures, Rs.15.6 Lakhs is allocated under capital cost. Besides, Rs.45.0 Lakhs per annum will be spent under recurring cost. All the recurring cost of maintenance of pollution control measures, environmental monitoring etc., will be met from revenue. Further details of the capital and recurring cost of environmental management has been provided in in Table No. 10.2, Chapter-X.

11.6 ADDITIONAL STUDIES:

This draft EIA/EMP report will be submitted for public hearing as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for





approval by SEIAA, Tamil Nadu. Elaborate description in respect of Risk Assessment and Mine closure plan are given in **Chapter - VII**.

11.7 REMEDIATION PLAN, NATURAL AND COMMUNITY RESOURCE AUGMENTATION PLAN:

Presuming that Environmental Clearance is to be obtained at the stage of lease renewal only, application for obtaining EC was initially submitted to MoEFCC in 2014 and subsequently mining operations were stopped as per MoEFCC directions, Terms of Reference under violation category was applied for GO 211, GO 76 & TOR under violation category was obtained.

However, in compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 from these 2 leases without environmental clearance.

NOC is issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and its given vide Annexure-3A and 3C respectively for GO 211 and 76. Hence, no separate remediation plan and natural & community resource augmentation plan is provided for these 2 leases (GO 211 & GO 76) .

However, more emphasize is given for the following activities as part of the EMP measures in chapter - IV:

- Establishment of surface runn off management structures around the mine, dump
- Reclamation of inactive dumps
- Augmentation of natural resources like rainwater harvesting, solar power utilization
- Providing various developmental activities for the local communities.

In case of GO 1086 the lease area is < 5 ha, and it doesnot require EC prior to 2016. There is no limestone production from year 2014-15 and as such it is not a violation case. NOC is issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and its given vide Annexure-3B for GO 1086.

11.8 CONCLUSION:

By systematic and scientific mining adhering to all the statutory norms and enforcing and strictly implementing the above said mitigation measures mentioned in this report, no adverse impact is envisaged. The proposed mining project will benefit this region in the fields of potential





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOONDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

employment opportunities, improved per capita income for local people, improved social welfare facilities in respect of education, medical healthcare systems, etc. in its own way and also revenue to Government through royalty, taxes etc.

* * * * *



CHAPTER - XII

DISCLOSURE OF CONSULTANTS ENGAGED



CHAPTER 12

DISCLOSURE OF CONSULTANTS ENGAGED

Creative Engineers & Consultants, Chennai is an **NABL** accredited testing laboratory and **NABET** accredited EIA consultancy. Established over 25 years ago, this company has steadily made good strides in the environmental impact assessment fields, and is also one of the first companies to get accredited by NABET as an Accredited Consultant Organization as early as 2011. Creative Engineers & Consultants has to its credit, successful completion of numerous EIA/EMP reports, grant of environmental clearances and periodic environmental monitoring works. Presently, the company has been accredited by NABET as a 'Category-A' organization for the sectors of Mining of Minerals (opencast only), Thermal Power Plants, Mineral Beneficiation and Cement Plants with the accreditation valid upto 23.12.2026. The team of experienced professionals that are a part of this organization has been detailed below.

Table 12.1: List of People Involved

EXPERT NAME	QUALIFICATION	POSITION	EXPERIENCE
Mr. P. Giri	AMIE (Mining)	EIA Coordinator & Functional area Expert (AP,NV,HW),	Over 30 years of experience in EIA/EMP report, mine plan preparation, including modeling
Mr. K. Shankar	M.Sc (Geology). PGMEMG	Functional area Expert (GEO, HG, SHW, RH) & IBM approved RQP.	Over 25 years of experience in EIA/EMP report, Mine plan, hydrological report preparation
Mr.S.S.Rajendran	M.Sc. (Pharmaceutical Chemistry)	Lab head	More than 9 years of experience in Environmental laboratory.
Mr. R. Babu raj	M.A (Sociology), B.Com(Y.L&Cost), ITI, Advance Diploma in Computer application	Functional Area Expert (Socio Economy)	Over 15 years of experience in dispersion modeling, computer applications. Specialized in CAD and computer software, applications. 5years experience in the field of socio economy





**COMBIENED DRAFT EIA/EMP REPORT FOR MOTHAIYANUR LIMESTONE MINES
(GO.211, GO 1086 & GO 76) OF M/S. THE INDIA CEMENTS LIMITED IN
CHINNAGOUNDANUR VILLAGE, SANKARI TALUK, SALEM DISTRICT, TAMIL NADU.**

EXPERT NAME	QUALIFICATION	POSITION	EXPERIENCE
			and its allied report preparation.
Mr. B. Govindaraman	B.Sc.	Field technician	Over 20 years of field monitoring & data collection experience
Dr.B.Swamynathan	M.Sc (Ecology & Environmental Sciences), M.Phill (Botany), Ph.D (Ecology & Environmental Sciences)	EIA Coordinator and Functional Area Expert (EB,SC,LU and AP)	More than 10 years of experience in Environment and allied fields.
Ms. G. Sandhya	B. Tech Chemical Engineering M.Tech Environmental Engineering	EIA Coordinator, Functional Area Expert (AQ, WP)	Over 6 years experience in preparation of EIA/EMP reports



CHAPTER-XIII

REMEDICATION PLAN AND NATURAL & COMMUNITY RESOURCE AUGMENTATION PLAN



CHAPTER 13

ASSESSMENT OF ECOLOGICAL DAMAGE, REMEDIATION PLAN AND NATURAL AND COMMUNITY RESOURCE AUGMENTATION PLAN

Presuming that Environmental Clearance is to be obtained at the stage of lease renewal only, application for obtaining EC was initially submitted to MoEFCC in 2014 and subsequently mining operations were stopped as per MoEFCC directions, Terms of Reference under violation category was applied for GO 211 and GO 76 as TOR under violation category was obtained.

In compliance with the Honorable Supreme Court of India order dated 02.08.2017 in W.P.No 114/2014, It is observed that there is no excess limestone production and transportation based on the highest production made during the year 1993-94 from these 2 leases during the period 2000-01 to 2017-18 without environmental clearance. (Past production details are enclosed as Annexure-14A, 14B and 14C for G.O.211, 1086 and 76 respectively)

However for G.O.211, credible action plan was initiated by TNPCB vide Case No.82/2023 (CNR No.TNSA-09-000-435-2023) in Hon'ble Judicial Magistrate Court, Sankagiri and based on the judgement (**Annexure-15**) dated 31.05.2023 a penalty of Rs.1.0 Lakh was already deposited (**Annexure-16**).

NOC is issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and its given vide Annexure-3A and 3C respectively for GO 211 and 76.

Hence , no separate remediation plan and natural & community resource augmentation plan is provided for these 2 leases (GO 211 & GO 76). However, more emphasize is given for the following activities as part of the EMP measures in chapter - IV:

- Establishment of surface run off management structures around the mine, dump
- Reclamation of inactive dumps
- Augmentation of natural resources like rainwater harvesting, solar power utilization
- Providing various developmental activities for the local communities.

In case of GO 1086 the lease area is < 5 ha, and it doesnot require EC prior to 2016. There is no limestone production from year 2014-15 and as such it is not a violation case. NOC is issued by Commissionerate of Geology & Mining, Guindy, Chennai in this regard and its given vide Annexure-3B for GO 1086.

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ANNEXURES

GOVERNMENT OF TAMIL NADU

Abstract

MINES AND MINERALS - Mining Lease - Limestone -
Salem District - Sankari Taluk - Chinnagoundanur Village -
S.No.15/1 etc. - Over an extent of 50.84.0 Hectares of
patta lands - Mining lease renewal application of Tvl.India
Cements Limited - Grant of renewal of mining lease - Orders-
Issued.

INDUSTRIES (MMD.I) DEPARTMENT

G.O.(3D) No.211

Dated: 11th December, 1997.

Read:

1. From M/s. India Cements Limited, Sankari,
dated 15.7.1993.
2. From the Collector of Salem, District, letter
D.Dis.No.1960/93/Mines-A, dated 28.12.1993.
3. From the Director of Geology and Mining,
letter Rc.No.1720/B2/94, dated 19.12.1994
and dated 27.2.1995.
4. Government Letter No.021/MMD.I/95-6,
Industries, dated 10.10.1996.
5. From the Government of India, Ministry of Mines,
New Delhi, letter No.4/5/97-MIV, dated 28.10.1997.

ORDER:

Tvl.India Cements Limited, has applied on
22.7.1993 for second renewal of mining lease for limestone
over an extent of 125.65 acres of patta lands in S.No.15/1
etc. in Chinnagoundanur Village, Sankari Taluk, Salem
District, for a period of 20 years.

2. The Collector of Salem District has stated that
in G.O.Ms.No.3360, Industries, dated 30.6.1964, the applicant
firm was granted original mining lease for limestone for a
period of 20 years over an extent of 125.65 acres in
S.No.15/1 etc. in Chinnagoundanur Village, Sankari Taluk,
Salem District. Subsequently, their first renewal lease
was granted in G.O.Ms.No.449, Industries, dated 19.7.1989
for 10 years with effect from 29.12.1984 over the above
mentioned same area. The first renewal lease expired
on 28.12.1994. The firm sent an application on 22.7.1993
in time for second renewal of the above lease.

3. The Commissioner of Geology and Mining has
stated that as per the latest approved Mining Plan for
second renewal, the geological reserves are estimated
as 2.40 Metric Tonnes for a depth of 40 metres and the
mineral reserves at 1.77 metres for a depth of 30 metres.

...2.

These reserves of limestone will meet the requirement of Company's plants situated at Sankari and Sankarnagar for another 30 years. The area applied for in second renewal is patta lands and they stand in the name of applicant firm. Since the area is not contiguous as required by Section 6(1)(c) of the Mines and Minerals (Regulation and Development) Act, 1957, the Commissioner of Geology and Mining has stated that its relaxation is required from the Government of India. He has further stated that the total mining lease area for limestone now under the possession of the applicant firm is 3688.77 acres. Since this area exceeds the ceiling limit of 10 sq. kilometre, (2471 acres) relaxation of rule as mentioned in section 6(1)(b) is also required.

4. The Government after examining the mining lease application and have decided to grant second renewal of mining lease for limestone over an extent of 125.25 acres (50.84.0 Hectares) of patta lands in S.No.15/1 etc. in Chinnagoundanur Village, Sankari Taluk, Salem District in favour of M/s. India Cements Limited for a period of 20 years and accordingly addressed the Government of India for their approval. The Government of India in their letter fifth read above have conveyed their approval under Section 8(2) and relaxation under section 6(1)(a) and section 6(1)(c) of the Mines and Minerals (Regulation and Development) Act, 1957 to the grant of second renewal of mining lease for limestone over an extent of 50.84.0 Hectares in Chinnagoundanur Village, Sankari Taluk, Salem District in favour of M/s. India Cements Limited for a period of ten years.

5. In exercise of the powers conferred under Section 10(3) of the Mines and Minerals (Regulation and Development) Act, 1957, the Governor of Tamil Nadu hereby sanctions the grant of second renewal of mining lease for limestone in favour of Tvl. India Cements Limited over an extent of 50.84.0 Hectares of patta lands in S.No.15/1 etc. of Chinnagoundanur Village, Sankari Taluk, Salem District, for a period of 10(ten) years and relaxation under Section 6(1)(b) and Section 6(1)(c) of the Mines and Minerals (Regulation and Development) Act, 1957, subject to the conditions in sub-rule (1) of rule 27 of the Mineral Concession Rules, 1960 and the Appendix to this order.

6. The rates of royalty, dead rent and surface rent shall be as follows:-

Royalty: Limestone.

- | | |
|---|-----------------------------------|
| a) L.D. Grade (less than 1.5 per cent silica content. | Rs. 50/- (Rupees fifty only) |
| b) Others. | Rs. 32/- (Rupees Thirty two only) |

per tonne.

...3.

Dead Rent:

First year of the lease.	... Nil.
Second to fifth year of lease.	... Rs.60/- (Rupees Sixty only). per hectare. per annum.
Sixth to tenth year of lease.	... Rs.120/- (Rupees One hundred and twenty only) Per hectare. Per annum.
Eleventh year of lease and onwards.	... Rs.180/- (Rupees One hundred and eighty only) per hectare. per annum.

The rates of royalty, dead rent etc. are liable to such changes as may be notified from time to time.

Surface rent and water rate:

At such rates as the land revenue and other cesses assessable on the land are paid.

7. The applicant firm should pay a deposit of Rs.2000/- (Rupees Two thousand only) as prescribed in rule 32 of the Mineral Concession Rules, 1960 before the lease deed is actually executed.

8. The terms and conditions stated in this order are subject to such further modifications, additions and alterations as may be included in the lease deed when finalised.

9. The Collector of Salem District is requested to take necessary further action for the execution of the lease deed in the prescribed form. As soon as the deed is executed the date of such execution should be reported to the Government and the Director of Geology and Mining. The Collector is also requested to ensure compliance by the applicant firm of the amended provisions of the Mines and Minerals (Regulation and Development) Act, 1957 and Mineral Concession Rules, 1960 and other applicable Acts and Rules including Forest (Conservation) Act, 1980.

(By order of the Governor)

M. S. SRINIVASAN
SECRETARY TO GOVERNMENT

- To: The Collector of Salem District, Salem. (w.e.) By RPAD.
 - The Director of Geology and Mining, Chennai. 32.
 - Pvt. India Cements Limited, Dhun Building, 827, Anna Salai, Chennai. 2.
 - The Secretary to Govt. of India, Ministry of Mines, 'D' Wing, III Floor, Shastri Bhavan, New Delhi. 110001.
 - The Controller of Mines, Govt. of India, IBM, No. 29, Industrial Suburbs, II Stage, Bangalore. 22.
 - The Regional Controller of Mines, IBM, C4A, CGO Complex, Bowant Nagar, Chennai. 90.
 - Copy to the Industries (P.F. II) Department, Chennai. 9.
 - Copy to Chief Minister's office, Chennai. 9.
- forwarded/hy order

Section Officer

R. J. 12-12-97
12-12-97

2

GOVERNMENT OF TAMILNADU

Abstract

Mines - Mining Lease - Limestone and Kankar - Salem District - Sankari Taluk - over an extent of 12.02 acres in Chinnagoundanur village - Grant of application of M/s India Cements Limited - Rejection - Revision application filed under rule 54 of the Mineral Concession Rules, 1980 - Further orders passed.

INDUSTRIES DEPARTMENT

G.O.Ms.No.1086

Dated 21st September, 1977

Read also

G.O.Ms.No.1470, Industries dated 16-12-75

Read again:-

From the Government of India, Ministry of Steel and Mines (Department of Mines) letter No.1(137)/76-MIV, dt. 7-5-77 and dt. 12-7-77

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ORDER:

In the G.O. read above, the mining lease application of M/s India Cements Limited, Sankari for limestone and Kankar over an extent of 12.02 acres in Chinnagoundanur village of Sankari Taluk of Salem District was rejected on the ground that they were already holding mining lease in excess of the limits prescribed under Section 6(1)(5) of the Mines and Minerals (Regulation and Development) Act, 1957 and there was no need to grant further areas. Against the above orders of this Govt, M/s India Cements Ltd filed a revision application before the Govt. of India stating that they have two major cement plants in Tamilnadu, that they have almost completed extraction of limestone near the areas in question and that they are in immediate need of the raw material. The grounds put forth by M/s India Cements Limited were examined in consultation with Director of Industries and Commerce who reported that though M/s India Cements Ltd were already holding areas in excess of the prescribed limits, they require additional reserves of limestone for their cement plant at Sankari. The Director of Industries and Commerce recommended the grant of mining lease to the company. The Govt of India were, therefore, informed that this Govt have no objection to reconsider the matter and grant mining lease to M/s India Cements Limited over the areas. They were also requested to pass appropriate orders on the revision application. In their final order No.520/77 dated 29-4-77, the Govt. of India set aside the rejection order of this Govt. contained in the G.O. read above. In their letter dated 12-7-77 the Govt of India have also relaxed the rules for holding excess areas and authorised in exercise of powers conferred under the proviso to Section, 6(1) of the said Act, the grant of the area in question, for mining lease, to M/s India Cements Limited, in the interests of mineral development in Tamilnadu.

2. In exercise of the powers conferred under Section 10(5) of the Mines and Minerals (Regulation and Development) Act, 1957 (Central Act of 1957), the Governor of Tamilnadu hereby sanctions the grant to M/s India Cements Limited of a mining lease for limestone and Kankar for a period of twenty years over an extent of 12.02 acres as detailed in Appendix I to this order in Chinnagoundanur village of Sankari Taluk of Salem District, subject to the conditions specified in Appendix II to this order.

1086

3. The rates of royalty, dead rent and surface rent shall be as follows:-

<u>Royalty:</u>	<u>Government lands</u>	<u>Patta lands</u>
Limestone	Two rupees and fifty paise per tonne	One rupee and twenty five paise per tonne
Dead Rent		
First year	Nil	Nil
2nd Year to 5th Year	Rs.12.50 per hectare per annum	Rs.6.25 per hectare per annum
6th Year to 10th "	Rs.25.00 per hectare per annum	Rs.12.50 per hectare per annum
11th year onwards	Rs.37.50 per hectare per annum	Rs.18.75 per hectare per annum

Surface rent and water rate: At such rate as the Land Revenue and cesses assessable on the land are paid.

3. The applicant should pay a deposit of Rs.1000/- as prescribed in Rule 32 of the Mineral Concession Rules, 1960 before the lease is actually executed.

2. The terms and conditions stated in this order are subject to such further modifications, additions and alterations as may be included in the lease deed when finalised.

5. The Collector of Salem is requested to take necessary further action for the execution of the lease deed. As soon as the deed is executed, the date of such execution should be reported to the Govt. and the Director of Industries and Commerce.

/By order of the Governor)
K.Venkatesan
Secretary to Govt.

To
The Director of Industries and Commerce, Madras-32 (w.e)
The Collector of Salem.

M/s India Cements Limited, 175/1, Anna Salai, Madras-2.
Copy to the Controller, Indian Bureau of Mines, New Secretariat Buildings, Nagpur
Copy to the Regional Inspector of Mines, Oorgaum, Kolar Gold Field, Karnataka State.
Copy to the Secretary to Govt. of India, Ministry of Steel and Mines (Department of Mines) New Delhi

/forwarded by order/

Sd/-
Section officer.

. 3

District: Salem

APPENDIX I

Taluk: Sankari

Village	S.No.	Extent(Acres)	Classification	
Chihnagoundamur	17	2.03	Path Porambok	
	23/1	0.64	Path Poramboke	
	24/1	0.59	Path Poramboke	
	25/1	0.12	Path Poramboke	
	33/1B Pt	2.05	Patta Dry	
	33/2	0.35	Patta Dry	
	33/3	0.17	Patta Dry	
	33/4	2.28	Patta Dry	
	51/2B Pt	2.00	Patta Dry	
	52/5 Pt	0.85	Patta Dry	
	153/2 Pt	0.96	Patta Dry	
	Total		12.02 acres	

Sd/- K.Venkatesan
Secretary to Government

/forwarded by order/

Sd/-
Section Officer

Appendix II

Clause No.1 to 15 as per earlier G.O.Ms.in Appendix II

Clause No.16 :- The lessee should not prevent the public from using the path running in S.Nos. 15, 16, 155 and 156 which are patta lands of the lessee.

K.Venkatesan
Secretary to Government

/forwarded by order/

Sd/-
Section Officer

True copy

GOVERNMENT OF TAMIL NADU

ABSTRACT

Mines and Minerals - Mining Lease - Limestone and Kankar - Salem district, Sankari taluk - Chinnagoundanur village - Over an extent of 19.77 acres - Second renewal application of Tvl. India Cements Ltd, Sankari, Salem district - Orders - Issued.

INDUSTRIES(D.I)DEPARTMENT

G.O.Ms.No.76.

Dated: 8.2.1989.

Read again:

- i. G.O.Ms.No.1504, Industries, Labour and Cooperative dated 13.3.62.
- ii. G.O.Ms.No.271, Industries, dated 9.3.83.

Read also:

- i. From Tvl. India Cements Limited, Mining Lease renewal application dated 1.9.87.
- ii. From Collector, Salem, Lr.No.D.Dis.2520/87 (Mines.A) dated 18.3.88.
- iii. From Govt.of India, Ministry of Steel & Mines (Department of Mines) New Delhi, Lr.No.2/21/24/88-MV dt.4.8.88.
- iv. From Director of Geology and Mining, Lr.No.Rc.No.6273/B4/88 dt.25.8.88.
- v. From Collector, Salem, Lr.No.L.Dis.2129/88 dt.9.9.88.
- vi. From Govt.of India, Ministry of Steel & Mines (Department of Mines) New Delhi, Lr.No.4(74)/88-MV dt.5.1.89.
- vii. From Tvl. India Cements Ltd, Lr.No.S/T/MIN/3908 dt.17.1.89

ORDER

Tvl. India Cements Limited, Sankari, Salem district were holding a mining lease for limestone and Kankar over an extent of 19.77 acres in S.Nos.48, 63 and 66 of Chinnagoundanur village, Sankari taluk, Salem district. The above mentioned lease was sanctioned in the G.O. first read above for a period of 20 years and first renewed in the G.O. second read above for a period of 6 years. The period of mining lease expired on 9.9.88.

2. Tvl. India India Cements Limited, Sankari, Salem District have applied for the second renewal of the mining lease held by them for a further period of 10 years from 10.9.88. The Government have examined the mining lease renewal application in consultation with the Collector, Salem and Director of Geology and Mining and they have decided to renew the mining lease granted to Tvl. India Cements Limited over the area mentioned in para 1 above for a further period of 10 years from 10.9.88.

3. The Government of India (Department of Mines) have conveyed their approval under Section 8(2) of the Mines and Minerals (Regulation & Development) Act, 1957 for the grant of second renewal of mining lease for limestone and Kankar over an extent of 19.77 acres in Chinnagoundanur village, Sankari taluk, Salem district in favour of Tvl. India Cements Limited, Sankari, Salem district for a period of 10 years.

4. In exercise of the powers conferred under Section 10(3) of the Mines and Minerals (Regulation & Development) Act, 1957, the Governor of Tamil Nadu hereby sanctions the grant of second renewal to Tvl. India Cements Limited, Sankari taluk, Salem district of a mining lease for limestone and Kankar for a further period of ten years from 10.9.88 over an extent of 19.77 acres in S. Nos. 48, 63 and 66 of Chinnagoundanur village, Sankari taluk, Salem district. subject to the conditions mentioned in sub-rule (1) of rule 27 of Mineral Concession Rules, 1960 and also to the conditions specified in the Appendix to this order.

5. The rates of royalty, dead rent and surface rent shall be as follows:-

Royalty Limestone - Ten Rupees per tonne.

Dead rent Rs. 90/- (Rupees Ninety only) per hectare per annum.

Surface rent and water rate At such rates as the land revenue and cesses assessable on the land are paid.

6. The applicant company should pay a deposit of Rs. 2000/- (Rupees Two thousand only) as prescribed in rule 32 of the Mineral Concession Rules, 1960, before the lease deed is actually executed.

7. The terms and conditions stated in this order are subject to such further modifications, additions and alterations as may be included in the lease deed when finalised.

8. The Collector, Salem district is requested to take necessary further action for the execution of lease deed. As soon as the deed is executed, the date of such execution should be reported to the Government and the Director of Geology and Mining.

(BY ORDER OF THE GOVERNOR)

K.A. NAMBIAR,
Special Commissioner and Secretary to Government.

To
The Director of Geology and Mining, Quindy, Madras-32.

p. t. o.

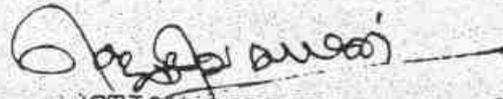
/3/

To
The Collector, Salem (with records by RPAD) .
✓ Ml. India Cements Limited, "Dhun Building", 827, Annasalai,
Madras-2.

Copy to:

- The Secretary Govt. of India, Ministry of Steel and Mines
(Department of Mines), New Delhi.
- The Controller General, Indian Bureau of Mines, New Secretariat,
Building, Nagpur. Kolar Gold Field,
- The Regional Inspector of Mines, ~~K. C. D.~~ Karnataka State,
- The Industries (B) department, Madras-9.
sf/scs.

/forwarded/by order/


SECTION OFFICER.


W. K. S. 17/12/89



RS 5000/. The India cements Ltd
Saulkari west



தமிழ் நாடு எண்: 3627
தேதி: 15-5-98

S. R. ...
Mmm
S. R. ...
Collector, Salem

SANCTIONED IN G.O.(3D)No.211, INDUSTRIES (MMD1) DEPARTMENT
DATED: 11-12-1997 FOR THE PERIOD OF TEN YEARS FROM 29-12-1994
TO 28-12-2004.

FORM - K

(See Rule 31)

THIS INDENTURE made this 9th day of June
1998 between the Governor of Tamil Nadu (hereinafter
referred to as the " State Government " which expression
shall where the context so admits be deemed to include
the successors and assigns) of the one part and Thiruvallur
India Cements Limited, a company registered under the
Indian Companies Act, 1956 and having its registered
office at " Dhun Building " 827, Anna Salsai, Chennai-600 002

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

21/160

Collector, SALEM.



RS 5000/. The Indica Cements Ltd

Sankari west

SR Srinivasan

S.V. Sankar.

உரிமம் எண்: 1/1953

தமிழ் நாடு எண்: 36.28

தேதி: 15-5-98

:: 2 ::

(hereinafter referred to as " the lessee " which expression shall where the context so admits be deemed to include its successors and permitted assigns) of the other part.

WHEREAS THE lessee has applied to the State Government in accordance with the Mineral Concession Rules, 1960 (hereinafter referred to as the said Rules) for second renewal of mining lease for Limestone in respect of the lands described in Part I of the Schedule hereunder written and has deposited with the State Government the sum of Rs.2,000/- as security deposit on 16-5-98 and the sum of Rs. NIL for meeting the preliminary expenses for a mining lease.

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE.

3/160

M. M. Sankar
COLLECTOR, SALEM.



RS 5000/. The Sankari west
India Cement Ltd,

தமிழ் நாடு எண்: 3629
தேதி: 15.5.98

J. R. Srinivasan

M. V. Sankar
சென்னை எண்: 1.1953

:: 3 ::

WITNESSETH that in consideration of the rents and royalties, covenants and agreements by and in these presents and the Schedule hereunder written reserved and contained and on the part of the lessee to be paid observed and performed, the State Government (with the approval of the Central Government) hereby grants and demises unto lessee.

All those the mines beds/veins seams of Limestone (here state the mineral or minerals) (hereinafter and in the Schedule referred to as the said minerals) situated lying and being in or under the lands which are referred to in Part I of the said Schedule, together with the liberties, powers and privileges to be exercised

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

4/160

M. Sankar
COLLECTOR, SALEM.



RS 5000 The India Cements Ltd
Sambhar west

S. R. Srinivasan



தமிழ்நாடு எண்: 3630
தேதி: 15.5.98

B. V. Sankar
உதவி எண்: 1/1953

:: 4 ::

or enjoyed in connection herewith which are mentioned in Part II of the said Schedule subject to the restrictions and conditions as to the exercise and enjoyment of such liberties, powers and privileges which are mentioned in Part III of the said Schedule EXCEPT and reserving out of this demise unto the State Government the liberties, power and privileges mentioned in Part IV of the said Schedule TO HOLD the premises hereby granted and demised unto the lessee from the 29th December 1994 for the term of Ten years thence next ensuing YIELDING AND PAYING therefore unto the State Government the several rents and royalties

For THE INDIA CEMENTS LTD.,

[Signature]
GENERAL MANAGER,
LESSEE:

7/60 *[Signature]*
COLLECTOR, SALEM. 9898



RS 5000 / The Indea Cements Ltd

Sankari west

SR Srinivasan
mm
S. V. Sankar
சென்னை: 11



3631
15.598

:: 5 ::

mentioned in Part V of the said Schedule at the respective times therein specified subject to the provisions contained in Part VI of the said Schedule and the lessee hereby covenants with the State Government as in Part VII of the said Schedule is expressed and the State Government hereby covenants with the lessee as in Part VIII of the said Schedule as expressed AND it is hereby mutually agreed between the parties hereto as in Part IX of the said Schedule is expressed.

IN WITNESS WHEREOF these presents have been executed in manner hereunder appearing the day and year first above written.

The Schedule above referred to.

For THE INDIA CEMENTS LTD.,

[Signature]
GENERAL MANAGER.

6/160

[Signature]
COLLECTOR, SALEM.



Rs 5000/, The India Cements Ltd
Sankari West

சுமீழ் நாடு எண்: 3614
தேதி: 14.5.98

S. V. சங்கரி.
உரிமம் எண்: 1/1953

:: 6 ::

PART-I

The Area of this lease.

Location and area of the lease:-

All that tract of lands situated at Chinnagoundanur village, Sankari Taluk, Salem District in the Registration District of Namakkal, Sub district Sankari being Cadestral Survey Nos. 15/1 (1.56.5 Hectares), 16/2(4.24.0 Hectares) 18 (3.21.5 Hectares) 19/3 (2.14.5 Hectares) 19/5B (0.70.0 Hectare) 20/2B(1.60.0 Hectare) 21 (7.24.5 Hectare) 22/1(1.88.5 Hectares) 23/2 (2.72.0 Hectares) 24/2 (2.25.0 Hectares) 24/4 (0.34.5 Hectares) 25/2 (2.74.0 Hectares) 32 (3.15.0 Hectares) 33/1A (0.93.0Hectare) 34/1 (4.26.5 Hectares) 37/1 (1.77.5 Hectares) 50/8(Part) (0.70.0 Hectare) 51/2B (2.38.5 Hectares) 52/6B (0.96.0 Hectare) 54/3B (0.91.0 Hectare) 55/4 (1.00.0 Hectare)

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

2/60 M. N. S. 2008
COLLECTOR, SALEM.



RS 5000/. The India Cements Ltd

Sankari west

SR Srinivasan

தமிழ் நாடு எண்: 3615

நெகி: 14.5.98

S. V. சங்கரீ.

உரிமம் எண்: 1/1953

:: 7 ::

62/4 (1.87.0 Hectares) 64/4A (0.18.0 Hectare) 67/1A
(0.92.5 Hectare) 68/1 (0.40.5 Hectare) 154/1 (0.26.5
Hectare) and 154/2 (0.47.0 Hectare) containing an area
of 50.84.0 Hectares of Chinnagoundanur village or
wheresbout delineated on the plan hereto annexed and
thereon coloured Red and Green and bounded as
follows:-

Name of the District	: Salem.
Name of the Taluk	: Sankari.
Name of the Village	: Chinnagoundanur.

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE.

8/160 M. M. 2698
COLLECTOR, SALEM.



Rs 5000/. The India Cements Ltd
Sankari west



தமிழ் நாடு எண்: 3616
தேதி: 14.5.98

S. V. Sankar
S. V. சங்கர்.
உரிமம் எண்: 1/1953

:: 8 ::

Survey Number	Extent in Hectares.	Surface Rent. Rs. P.	BOUNDARIES			
			North by S.No.	East by S.No.	South by S.No.	West by S.No.
15/1	1.56.5		V.No. 36 Devanna goundanur	16/2 17	17	15/3
16/2	4.24.0		16/1	166	17 154	15/1
18	3.21.5		17	153 154	153 21	19/3 19/5B
19/3	2.14.5		17	18	19/5A 19/5B	19/1 19/2
19/5B	0.70.0		19/3	18 21	20/2B	19/5A
20/2B	1.60.0		19/5A 19/5B	21	20/4 21	20/2A 20/7

For THE INDIA CEMENTS LTD.,

[Signature]
GENERAL MANAGER.
LESSEE.

9/160 *[Signature]* 28 98
COLLECTOR, SALEM.



Rs 5000/- The India Cements Ltd
Sankari west



தமிழ் நாடு எண்: 3617

தேதி: 14.5.98

SR. Srinivasan

S. V. சங்கீர்ப்.

உரிமம் எண்: 1/1953

:: 9 ::

Survey Number	Extent in Hectares.	Surface Rent. Rs. P.	BOUNDARIES			
			North by S.No.	East by S.No.	South by S.No.	West by S.No.
21	7.24.5		19/5B 18 20/2B 153 22	22/1	23/1 24/1 25/1	20/2B 26
22/1	1.88.5		153/2 152/1	22/2	21	21
23/2	2.72.0		23/1	151	23/4A 23/3B 34/1	24/1 23/1 34/1
24/2	2.25.0		24/1	24/1	24/4	25/2
24/4	0.34.5		24/2	35/1	33/2 33/4 34/1	25/2

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

10/160 Mr. Srinivasan 28 28
COLLECTOR, SALEM.



Rs 1000/. The Indica Cements Ltd
Sankari west

தமிழ் நாடு எண்: 3634
தேதி: 15.5.98

S. F. Sankari
உரிமம் எண்: 1/1953

:: 11 ::

Survey Number	Extent in Hectares.	Surface Rent. Rs. P.	BOUNDARIES			
			North by S.No.	East by S.No.	South by S.No.	West by S.No.
50/8 (Part)	0.70.0		50/6 50/7 50/10	50/8	48	51/2B 52/6B
51/2B	2.38.5		51/2A 34/1	50/1 50/2 50/5 50/6 50/8 34/1	52/1 52/4 52/5 52/6B	51/1B 51/2A
52/6B	0.96.0		52/5 52/6A 52/7A 51/2B	50/8	48	54/2
54/3B			54/3A	48	66	55/4

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

12/11/53 M. Sankari
COLLECTOR, SALEM.



Rs 1000/- The India Cements Ltd

Sankari west

தமிழ் நாடு எண்: 3635

தேதி: 15.5.98

S. V. சங்கரீ,

உறுதி எண்: 1/1953

:: 12 ::

Survey Number	Extent in Hectares	Surface Rent. Rs. P.	BOUNDARIES			
			North by S.No.	East by S.No.	South by S.No.	West by S.No.
55/4	1-00-0		55/2 55/3	54/3B	66	62/4
62/4	1-87-0		62/1 62/3B 62/3C 62/3A	55/4	62/6 63	V.No. 40 Alsthur 62/3B 62/3A 62/2 62/1
64/4A	0-18-0		63	65/1	64/4B	64/3
67/1A	0-92-5		48 66	68/1 68/2	67/1B	66
68/1	0-40-5		48	48	68/2	67/1A
154/1	0-26-5		17	154/2	153/3	18
154/2	0-47-0		154/3	154/4	153/3	154/1
Total	50-84-0					

hereinafter referred to as " the said lands ".

For THE INDIA CEMENTS LTD.,

LESSEE:

GENERAL MANAGER.

13/11/98
COLLECTOR, SALEM.



Rs 1000/. The India Cements Ltd
Sankar, West

S. V. Sankar
S. V. சங்கரர்.

உரிமம் எண்: 1/1953

தமிழ் நாடு எண்: 3633
தேதி: 15.5.98

:: 14 ::

inclines drifts levels waterways, airways and other works (and to use maintain deepen or extent any existing works of the like nature in the said lands).

To bring and use machinery equipment etc:-

3. Liberty and power for or in connection with any of the purposes mentioned in this part to erect, construct, maintain and use on or under the said lands any engines, machinery, plant, dressing floors, furnaces, coke ovens, brick-kilns, workshops, store-houses, hungalows, godowns, sheds and other buildings and other works and conveniences of the like nature on or under the said lands.

To make roads and ways etc and use existing roads and ways:-

4. Liberty and power for or in connection with any of the purposes mentioned in this part to make any tramways, railways, roads, aircraft landing grounds and other ways in

For THE INDIA CEMENTS LTD.,

[Signature]
GENERAL MANAGER.
LESSEE:

17/60 *[Signature]* 8898
COLLECTOR, SALEM.



Rs 20/. The India Cements Ltd
Sankari west

தமிழ் நாடு எண்: 3636
தேதி: 15.5.98

:: 15 ::

[Signature]
D: V. சங்கரீ.
உரிமை எண்: 1/1953

or over the said lands and to use maintain and go, and
repass with or without horses, cattle, wagons, aircrafts,
locomotives or other vehicles over the same (or any
existing tramways roads and other ways in or over the
said lands) on such conditions as may be agreed to.

To get building and road materials, etc:-

5. Liberty and power for or in connection with any
of the purposes mentioned in this part to quarry and
get stone gravel and other building and road materials
and clay and to use and employ the same and to manufacture
such clay into bricks or tiles and to use such bricks or
tiles but to sell any such material bricks or tiles.

To use water from streams etc:-

6. Liberty and power for or in connection with any of
the purpose mentioned in this part but subject to the right
of any existing or future lessees and with the written

For WME INDIA CEMENTS LTD.,

[Signature]
GENERAL MANAGER.
LESSEE:

16/160/10. *[Signature]* 2898
COLLECTOR, SALEM.

permission of Collector to appropriate and use water from any streams water courses, springs or other sources in or upon the said lands and to divert step up or dam any such stream or water-course and collect to impound any such water and to make construct and maintain any water-course culverts, drains or reservoirs but not as so to deprive any cultivated lands, villages, buildings or watering places for livestock of a reasonable supply of water as before accustomed nor in any way to foul or pollute any stream or springs. Provided that the lessee shall not interfere with the navigation in any navigable stream nor shall divert such stream without the previous written permission of the State Government.

To use land for stacking, heaping, depositing purposes:-

7. Liberty and power to enter upon and use a sufficient part of the surface of the said lands for the purpose of stacking, heaping, storing or depositing therein any produce of the mines or works carried on and any tools, equipment, earth and materials and substances dug or raised under the liberties and powers mentioned in this part.

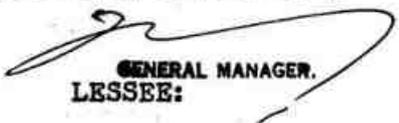
Beneficiation and conveying away of production:-

8.(a) Liberty and power to enter upon and use a sufficient part of the said lands to beneficiate any ore produced from the said lands and to carry away such beneficiated ore.

To make coke (to be used in case of coal only):-

(b) Liberty and power upon the said lands to convert into coke any coal or coal dust produced from the said lands and to carry away such coke.

For VME INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

12/10/10

COLLECTOR, SALEM.

To clear brushwood and to fell and utilise trees, etc.

9. Liberty and power for or in connection with any of the purposes mentioned in this part and subject to the existing rights of others and save as provided in clause 3 of Part III of this Schedule to clear undergrowth and brushwood and to fell and utilise any trees or timber standing or found on the said lands provided that the State Government may ask the lessee to pay for any trees or timber felled and utilised, by him at the rates specified by the Collector or the State Government.

PART - III

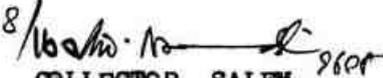
Restrictions and Conditions as to the exercise of the Liberties, Powers and Privileges in Part-II.

No building etc. upon certain places:

1. No building or thing shall be erected, set up or placed and no surface operations shall be carried on in or upon any public pleasure ground, burning or burial ground or place held sacred by any class of persons or any house or village site, public road or other place which the State Government may determine as public ground nor in such a manner as to injure or prejudicially affect any buildings works property or rights of other persons and no land shall be used for surface operations which is already occupied by persons other than the State Government for works or purposes not included in this lease. The lessee shall not also interfere with any right of way, well or tank.

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE.

18/10/60

COLLECTOR, SALEM.

Permission for surface operations in a land not already in use.

2. Before using for surface operations any land which has not already been used for such operations, the lessee shall give to Collector or the District two calendar months previous notice in writing specifying the name or other description of the situation and the extent of the land proposed to be so used and the purpose for which the same is required and the said land shall not be so used if objection is issued by the Collector within two months after the receipt by him of such notice unless the objections so stated shall on reference to the State Government be annulled or waived.

To cut trees in unreserved lands:-

3. The lessee shall not without the express sanction of the Collector cut down or injure any timber or trees of the said lands but may without such sanction clear away any brushwood or undergrowth which interferes with any operations authorised by these presents. The Collector of the State Government may require the lessee to pay for any trees or timber felled and utilised by him/them at the rates specified by the Collector of the District.

To enter upon reserved forests:-

4. Notwithstanding anything in this Schedule contained the lessee shall not enter upon any reserved forest included in the said lands without previous sanction in writing of the District Forest Officer nor fell, cut and use any timber or trees without obtaining

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

13/10/60

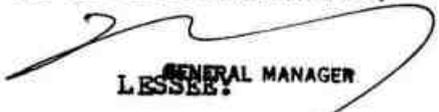
COLLECTOR, SALEM.

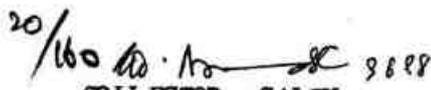
the sanction in writing of that Officer nor otherwise than in accordance with such conditions as the State Government may prescribe.

No mining operations within 50 metres of public works etc:-

5. The lessee shall not work or carry on or allow to be worked or carried on any mining operations at or to any point within a distance of 50 metres from any railway line except with the previous written permission of the Railway Administration concerned or under or beneath any ropeway or any ropeway trestle or station, except under and in accordance with the written permission of the authority owning the ropeway or from any reservoir, canal or other public works such as public roads and buildings or inhabited site except with the previous written permission of the Collector or any other officer authorised by the State Government in this behalf and otherwise than in accordance with such instructions, restrictions and conditions either general or Special which may be attached to such permission. The said distance of 50 metres shall be measured in the case of railway, reservoir or canal horizontally from the outer toe of the bank or the outer edge of the cutting as the case may be and in case of a building horizontally from the plinth thereof. In the case of village roads no working shall be carried on within a distance of 10 metres of the outer edge of the cutting except with the previous permission of the Collector or any other officer duly authorised by the State Government in this behalf and otherwise than in accordance with such directions, restrictions and additions, either general or special, which may be attached to such permission.

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER
LESSEE.

20/60

COLLECTOR, SALEM.

carry away minerals other than the said minerals and any other substances and for those purposes to sink, ~~drive~~, make, erect, construct, maintain and use such pits, shafts, inclines, drifts, levels and other lines, waterways, airways, water courses, drains, reservoirs, engines, machinery, plant, buildings canals, tramways, railways, roadways and other works and conveniences as may be deemed necessary or convenient.

PROVIDED THAT in the exercise of such liberty and power no substantial hindrance or interference shall be caused to or with the liberties, powers and privileges of the lessee under these presents and that fair compensation (as may be mutually agreed upon or in the event of disagreement as may be decided by the State Government) shall be made to the lessee for all loss or damage sustained by the lessee by reason or in consequence of the exercise of such liberty and power.

To make railways and roads:-

2. Liberty and power for the State Government or any lessee or person authorised by it in that behalf to enter into and upon the said lands and to make upon over or through the same any railways, tramways, roadways or pipelines for any purpose other than those mentioned in Part II of these presents and to get from the said lands stones, gravel, earth and other materials for making, maintaining and repairing such railways, tramways and roads or any existing railways and roads and to send and reposs at all times with or without horses, cattle or other ~~wild~~ animals, carts, wagons, carriages, locomotives or other vehicles over or along any such railways, tramways,

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

22/160
M. N. S. S. S. S.
COLLECTOR, SALEM.

road lines and other ways for all purposes and as occasion may require, provided that in the exercise of such liberty and power by such other lessee or person no substantial hindrance or interference shall be caused to or with the liberties, powers and privileges of the lessee under these presents and that fair compensation as may be mutually agreed upon or in the event of disagreement as may be decided by the State Government shall be made to the lessee for all loss or damage substantial hindrance or interference shall be caused to or with the exercise by such lessee or person of such liberty and power.

PART - V

Rents and royalties reserved by this lease.

To pay dead rent or royalty whichever is higher:

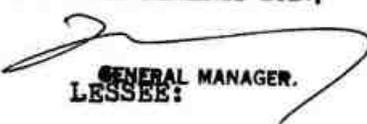
1. The lessee shall pay, for every year except the first year of the lease, dead rent as specified in clause 2 of this Part:

Provided that, where the holder of such mining lease becomes liable under section 9 of the Act, to pay royalty for any mineral removed or consumed by him or by his agent, manager, employee, contractor or sub-lessee from the leased area, he shall be liable to pay either such royalty or the dead rent in respect of that area, whichever is higher.

Rate and mode of payment of dead rent:-

2. Subject to the provisions of clause 1 of this part, during the subsistence of the lease, the lessee shall pay the State Government annual dead rent for

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GENERAL MANAGER.
LESSEE:

23/160


COLLECTOR, SALEM.

the lands demised and described in Part I of this Schedule at the rate of the time being specified in the Third Schedule to the Act, in such manner as may be specified in this behalf by the State Government.

Dead Rent:

First year of the lease. ; NIL
Second year to fifth year : Rs. 60/- (Rupees Sixty only) of lease. per hectare per annum.
Sixth to tenth year of lease: Rs. 120/- (Rupees One hundred and Twenty only) per hectare per annum.
Eleventh year of lease and : Rs. 180/- (Rupees One hundred and Eighty only) per hectare onwards. per annum.

Rate and mode of payment of royalty:

3. Subject to the provision of clause 1 of this part, the lessee shall during the subsistence of this lease pay to the State Government at such times and in such manner as the State Government may prescribe royalty in respect of any mineral/minerals removed by him/them from the leased areas at the rate for the time being specified in the Second Schedule to the Mines and Minerals (Regulation and Development) Act, 1957.

Royalty: Limestone.

- a) L.D. Grade (less than 1.5 : Rs. 50/- (Rupees Fifty only) percent silica content. per tonne.
b) Others : Rs. 32/- (Rupees Thirty two only) per tonne.

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

24/160/110-110-9508
COLLECTOR, SALEM.

Pay of surface rent and water rate.

4. The lessee shall pay rent and water rate to the State Government in respect of all parts of the surface of the said lands which shall from time to time be occupied or used by the lessee under the authority of these presents at the rate prescribed in Revenue Standing Order per annum per hectare of the area so occupied or used and so in proportion for any area less than a hectare during the period from the commencement of such occupation or used until the area shall cease to be so occupied or used and shall as far as possible restore the surface land so used to its original condition. Surface rent and water rate shall be paid as hereinbefore detailed in clause 2: PROVIDED THAT NO such rent/water rate shall be payable in respect of the occupation and use of the area comprised in any roads or ways to which the public have full right of access.

PART - VI

Provisions relating to the rents and royalties.

Rent and royalties to be free from deduction etc:-

1. The rent, water rate and royalties mentioned in Part V of this Schedule shall be paid free from any deduction to the State Government at any Government Treasury and in such manner as the State Government may prescribe PROVIDED ALWAYS and it is hereby agreed that Rs.2000/- the balance standing to the credit of the lessee on account of the deposit made by him/them as a licensee over an area which included the said lands shall be retained and accepted by the State Government in satisfaction of the rents and royalties mentioned in Part V until they reach that amount.

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

25/10/60 Mr. M. S. 968
COLLECTOR, SALEM.

Mode of computation of royalty:

2. For the purposes of computing the said royalties the lessee shall keep a correct account of the mineral/minerals produced and despatched. The accounts as well as the weight of the mineral/minerals in stock or in the process of export may be checked by an officer authorised by the Central or State Government.

Here specify the mode of arriving at sale price/ prices at pits mouth of minerals/mineral prevailing rate time to time.

Course of action if rents and royalties are not paid in time.

3. Should any rent, royalty or other sums due to the State Government under the terms and conditions of these presents be not paid by the lessee within the prescribed time, the same, together with simple interest due thereon at the rate of twenty four percent per annum may be recovered on a certificate of such officer as may be specified by the State Government by general or special order, in the same manner as an arrear of land revenue.

PART - VII

The Covenants of Lessee/Lessees.

Lessee to pay rents and royalties, taxes, etc:-

1. The lessee shall pay the rent, water rate and royalties reserved by this lease at such times and in the manner provided in PARTS V and VI of these presents and shall also pay and discharge all taxes, rates,

For WME INDIA CEMENTS LTD.,


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LESSEE.

26/10/60
No. No. 968
COLLECTOR, SALEM.

assessments and impositions whatsoever being in the nature of public demands which shall from time to time be charged, assessed or imposed by the authority of the Central and State Governments upon or in respect of the premises and works of the lessee in common with other premises and works of a like nature except demands for land revenues.

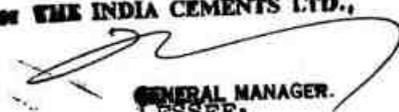
To maintain and keep boundary marks in good order:-

2. The lessee shall at his own expense erect and at all times maintain and keep in repair boundary marks and pillars according to the demarcation to be shown in the plan annexed to this lease. Such marks and pillars shall be sufficiently clear of the shrubs and other obstructions to allow easy identification.

To commence operations within a year and work in a workman-like manner.

3. The lessee shall commence operation within one year from the date of execution of the lease and shall thereafter at all times during the continuance of this lease search for, win, work and develop, the said minerals without voluntary intermission in a skilful and workman-like manner and as prescribed under clause 12 hereinafter without doing or permitting to be done any unnecessary or avoidable damage to the surface of the said lands or the crops buildings structures or other property thereon, For the purposes of this clause operations shall include the erection of machinery, laying of a tramway or construction of a road in connection with the mine.

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

27/160 
COLLECTOR, SALEM.

To indemnify Government against all claims:-

4. The lessee shall make and pay such reasonable satisfaction and compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him in exercise of the powers granted by this lease and shall indemnify and keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any such damage, injury or disturbance and all costs and expenses in connection therewith.

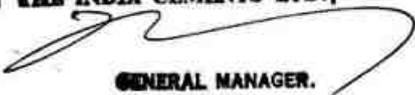
To secure and keep in good condition pits, shafts, etc:-

5. The lessee shall during the subsistence of this lease well and sufficiently secure and keep ~~any~~ open with timber or other durable means all pits, shafts and workings that may be made or used in the said lands and make and maintain sufficient fences to the satisfaction of the State Government round every such pit, shaft or working whether the same is abandoned or not and shall during the same period keep all workings in the said lands except such as may be abandoned accessible free from water and foul air as far as possible.

To strengthen and support the mine to necessary extent:-

6. The lessee shall strengthen and support to the satisfaction of the Railway Administration concerned or the State Government, as the case may be any part of the mine which in its opinion requires such strengthening or support for the safety of any railway, reservoir, canal, road and any other public works or structures.

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

28/10/60
Collector, SAL EM.

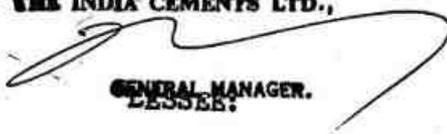
is discovered in the leased area, the lessee shall not win and dispose of such mineral unless such mineral is included in the lease or a separate lease is obtained therefor.

To keep records and accounts regarding production and employees etc:-

10. The lessee shall at all time during the said term keep or cause to be kept at an office to be situated upon or near the said lands correct and intelligible books of accounts which shall contain accurate entries showing from time to time:-

- (1) Quantity and quality of the said mineral/minerals realised from the said lands.
- (2) Quantity of the various qualities of ores beneficiated or converted (for example coal converted into coke).
- (3) Quantities of the various qualities of the said mineral/minerals sold and exported separately.
- (4) Quantities of the various qualities of the said mineral/minerals otherwise disposed of and the manner and purpose of such disposal.
- (5) The prices and all other particulars of all sales of said mineral/minerals.
- (6) The number of persons employed in the mines or works or upon the said lands specifying nationality qualifications and pay of the technical personnel.
- (7) Such other facts, particulars and circumstances as the Central or the State Governments may from time to time require and shall also furnish free of charge to such officers and at such times as the Central and State Governments may appoint true

For VME INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE.

30/10/62
M. M. R. S. S.
COLLECTOR, SALEM.

and correct abstract of all or any such books of accounts and such information and returns to all or any of the matters aforesaid as the State Government may prescribe and shall at all reasonable times allow such officers as the Central Government or State Government shall in that behalf appoint to enter into and have free access to the said officers for the purpose of examining and inspecting the said books of accounts, plans and records and to make copies thereof and make extracts therefrom.

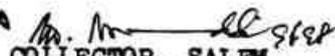
To maintain plans, etc:-

11. The lessee shall at all times during the said term maintain at the mine office correct intelligible up-to-date and complete plans and sections of the mines in the said lands. They shall show all the operations and workings and all the trenches, pits and drillings made by him/them in the course of operations carried on by him/them under the lease, faults and other disturbances encountered and geological data and all such plans and sections shall be amended and filled up by and from actual surveys to be made for that purpose at the end of twelve months of any period specified from time to time and the lessee shall furnish free of charge to the Central and State Governments true and correct copies of such plans and sections whenever required. Accurate records of all trenches, pits and drillings shall show:-

- (a) The subsoil and strata through which they pass.
- (b) Any mineral encountered.
- (c) Any other matter of interest and all data required by the Central and State Governments, from time to time.

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

31/160

COLLECTOR, SALEM.

The lessee shall allow any officer of the Central or the State Government authorised in this behalf by the Central Government, to inspect the same at all reasonable times. He/they shall also supply when asked for by the State Government/the Coal Controller the Director-General Geological Survey of India the Controller General, Indian Bureau of Mines, a composite plan of the area showing thickness, dip, inclination, etc of all the seams as also the quantity of reserves qualitywise.

11A. The lessee shall pay a wage not less than the minimum wage prescribed by the Central or State Government from time to time:

11B. The lessee shall comply with provisions of the Mines Act, 1952 and the rules made thereunder.

11C. The lessee shall take measures for the protection of environment like planting of trees, reclamation of land, use of pollution control devices, and such other measures, as may be prescribed by the Central or State Government, from time to time at his own expense.

11D. The lessee shall pay compensation to the occupier of the land on the date and in the manner laid down in these rules.

11E. The lessee shall, in the matter of employment, give preference to the tribals and to the persons who become displaced because of the taking up of mining operations.

Act 67 of 1957:-

12. The lessee shall be bound by such rules as may be issued from time to time by the Government of India under section 18 of the Mines and Minerals (Regulation

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.

82/60 
COLLECTOR, SALEM.

and Development) Act, 1957 (Act 67 of 1957) and shall not carry on mining or other operations under the said lands in any way other than as prescribed under these rules.

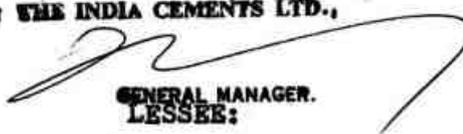
To provide weighing machine:-

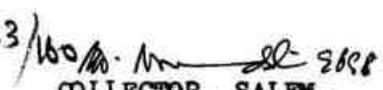
13. Unless specifically exempted by the State Government the lessee shall provide and at all times keep at or near the pit head or each of the pit heads at which the said minerals shall be brought to bank a properly constructed and efficient weighing machine and shall weigh or cause to be weighed thereon all the said minerals, from time to time, brought to bank, sold, exported and converted and also the converted products and shall at the close of each day cause the total weights, ascertained by such means of the said minerals, ores products raised, sold, exported and converted during the previous twenty-four hours to be entered in the aforesaid books of accounts. The lessee shall permit the State Government at all times during the said term or employ and person or persons to be present at the weighing of the said minerals as aforesaid and to keep accounts thereof and to check the accounts kept by the lessee. The lessee shall give specifying the date previous notice in writing to the Collector or every such measuring or weighing in order that he or some officer on his behalf may be present thereat.

To allow test of weighing machine.

14. The lessee shall allow any person or persons appointed in that behalf by the State Government at any time or times during the said term to examine and test every weighing machine to be provided and kept as aforesaid and the weights used therewith in order to ascertain

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

33/160

COLLECTOR, SALEM.

whether the same respectively are correct and in good repair and order and if upon any such examination or testing any such weighing machine or weights shall be found incorrect or out of repair or order the State Government may require that the same be adjusted, repaired and put in order by and at the expense of the lessee and if such requisition be not complied with within fourteen days after the same shall have been made, the State Government may cause such weighing machine or weights to be adjusted, repaired and put in order and the expense of so doing shall be paid by the lessee to the State Government on demand and if upon any such examination or testing as aforesaid any error shall be discovered in any weighing machine or weights to be prejudice of the State Government such error shall be regarded as having existed for three calendar months previous to the discovery thereof or from the last occasion of so examining and testing the same weighing machine and weights in case such occasion shall be within such period of three months and the said rent and royalty shall be paid and accounted for accordingly.

To pay compensation for injury of third parties:-

15. The lessee shall make and pay reasonable satisfaction and compensation for all damage, injury or disturbance or person or property which may be done by or on the part of lessee in exercise of the liberties and power granted by these presents and shall at all times save harmless and keep indemnified the State Government from and against all suits, claims and demands which may be brought or made by any person or persons in respect of any such damage, injury or disturbance.

For WHE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE.

34/160

COLLECTOR, SALEM.

Not to obstruct working of other minerals:-

16. The lessee will exercise the liberties and powers hereby granted in such a manner as to offer no unnecessary or reasonably avoidable obstruction or interruption to the development and working within the said lands of any minerals not included in this lease and shall at all times afford to the Central and State Government and to the holders of prospecting licences or mining leases in respect of any such minerals or any minerals within any land adjacent to the said lands as the case may be reasonable means of access and safe and convenient passage upon and across the said lands to such minerals for the purpose of getting working, developing and carrying away the same provided that the lessee shall receive reasonable compensation for any damage or injury which he/they may sustain by reason or in consequence of the use of such passage by such lessees or holders of prospecting licences.

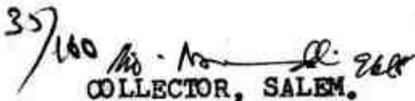
Transfer of lease:-

17.(1) The lessee shall not, without the previous consent in writing of the State Government.

- (a) assign, sublet, mortgage, or in any other manner, transfer the mining lease, or any right, title or interest therein, or
- (b) enter into or make any arrangement, contract or understanding whereby the lessee/lessees will or may be directly or indirectly financed to a substantial extent by, or under which the lessee's operations or undertakings will or may be substantially controlled by, any person or body of persons other than the lessee.

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE.

35/160

COLLECTOR, SALEM.

Provided that the State Government shall not give its written consent unless -

- (a) the lessee has furnished an affidavit along with his application for transfer of the mining lease specifying therein the amount that he has already taken or proposes to take as consideration from the transferee;
- (b) the transfer of the mining lease is to be made to a person or body directly undertaking mining operations.

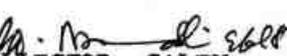
2) Without prejudice to the above provisions, the lessee may, subject to the conditions specified in the proviso to Rule 35 of said Rules, transfer this lease or any right, title or interest therein, to a person who has filed an affidavit stating that he has filed up-to-date income tax returns, paid income tax assessed on him and paid the income tax on the basis of self-assessment as provided in the Income Tax Act, 1961 (43 of 1961) on payment of five hundred rupees to the State Government.

Provided that the lessee/ lessees shall make available to the transferee the original or certified copies of all plans of abandoned workings in the area and in a belt 65 metres wide surrounding it.

Provided further that where the mortgagee is an Institution or a Bank or a Corporation specified in Schedule V, it shall not be necessary for any such Institution or Bank or Corporation to meet with the requirement relating to income tax and the said valid clearance certificate.

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

36/160/M. No. 
COLLECTOR, SALEM.

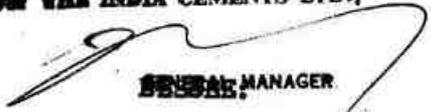
(3) The State Government, may, by order in writing determine the lease at any time if the lessee have in the opinion of the State Government, committed a breach of any of the above provisions or has/have transferred the lease or any right, title or interest therein otherwise than in accordance with clause (2):

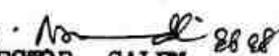
Provided that no such order shall be made without giving the lessee a reasonable opportunity of stating his/their case.

Not to be financed or controlled by a Trust, Corporation Firm or person.

18. The lessee shall not be controlled and the lessee shall not allow themselves to be controlled by any Trust, Syndicate, Corporation, Firm or person except with the written consent of the Central Government. The lessee shall not enter into or make any arrangement compact or understanding whereby the lessee will or may be directly or indirectly financed by or under which the lessee's operations or undertakings will or may be carried on directly or indirectly by or for the benefit of or subject to the control of any Trust, Syndicate, Corporation, Firm or person unless with the written sanction given prior to such arrangement compact or understanding being entered into or made of the Central Government and any or every such arrangement compact or understanding as aforesaid (entered into or made with such sanction as aforesaid) shall only be entered into or made and shall always be subject to an express condition binding upon the other party or parties thereto that on the occasion of a state of emergency of which

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GENERAL MANAGER

37/60/10. No.  28 28
COLLECTOR, SALEM.

the President of India in his discretion shall be the sole judge it shall be terminable if so required in writing by the State Government and shall in the event of any such requisition being made by forthwith thereafter determined by the lessee accordingly.

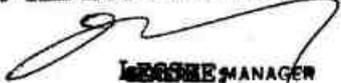
Lessee shall deposit any additional amount necessary.

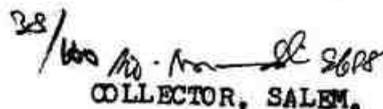
19. Whenever the security deposit of Rs.2000/- or any part thereof or any further sum hereafter deposited with the State Government in replenishment thereof shall be forfeited or applied by the Central or State Government pursuant to the power in hereinafter declared in that behalf the lessee shall deposit with the State Government such further sum as may be sufficient with the unappropriated part thereof to bring the amount in deposit with the State Government upto the sum of Rs.1,000/-.

Delivery of workings in good order to State Governments after determination of lease:-

20. The lessee shall at the expiration or sooner determination of the said term or any renewal thereof deliver upto the State Government all mines, pits, shafts, inclines, drifts, levels, waterways, airways and other works now existing or hereafter to be sunk or made on or under the said lands except such as have been abandoned with the sanction of the State Government and in any ordinary and fair course of working all engines, machinery, plant, buildings, structures, other works and conveniences which at the commencement of the said term where upon or under the said lands and all such machinery set up by the lessee below ground which cannot be removed without causing injury to the mines or work under the said lands (except such of the same as may with the sanction of the State Government have become disused) and all buildings and

For THE INDIA CEMENTS LTD.,


LESSEE, MANAGER

28/10/68

COLLECTOR, SALEM.

structures of brick or stone erected by lessee above ground level in good repair order and condition and fit in all respects for further working of the said minerals.

Right of pre-emption.

21(a) the State Government shall, from time to time and all times during the said term have the right (to be exercised by notice in writing to the lessee or pre-emption of the said minerals (and all products thereof) lying in or upon the said lands hereby demised and or elsewhere under the control of the lessee and the lessee shall with all possible expenditure deliver all minerals or products or minerals purchased by the State Government under the powers conferred by this provisions in the quantities at the times in the manner and at the place specified in the notice exercising the said right.

(b) Should the right of pre-emption conferred by this present provision be exercised and vessel chartered to carry the minerals or products thereof procured on behalf of the State Government or the Central Government be detained on demurrage at the port of loading the lessee shall pay the amount due for demurrage according to the terms of the charter party of such vessel unless the State Government shall be satisfied ~~with~~ that the delay is due to cause beyond the Control of the lessee.

(c) The price to be paid for all minerals or products of minerals taken in pre-emption by the State Government in exercise of the right hereby conferred shall be the fair market price prevailing at the time of pre-emption provided that in order to assist in arriving at the said fair market price the lessee shall if so required furnish to the State Government particulars of the quantities,

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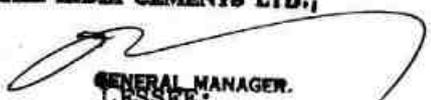
LEASER, MANAGER.

38/100/M. No. 2685
COLLECTOR, SALEM.

descriptions and prices of the said minerals or products thereof sold to other customers and of charters entered into for freight and carriages of the same and shall produce to such officer or officers as may be directed by the State Government original or authenticated copies of contracts and charter parties entered into for the sale or freightage of such minerals or products.

(d) In the event of the existence of a State of War or emergency (of which existence and President of India shall be the sole judge and a notification to this effect in the Gazette of India shall be conclusive proof) the State Government with the consent of the Central Government shall from time to time and all times during the said term have the right (to be exercised by a notice in writing to the lessee forthwith take possession and control of the works, plant, machinery and premises of the lessee on or in connection with the said lands or operations under this lease and during such possession or control the lessee shall conform to and obey all directions given by or on behalf of the Central Government or State Government regarding the use or employment of such works, plants, premises and minerals: PROVIDED THAT fair compensation which shall be determined in default of agreement by the State Government shall be paid to the lessee for all loss or damage sustained by him/them by reason or in consequence of the exercise of the powers conferred by this clause and PROVIDED ALSO that the exercise of such powers shall not determine the said term hereby granted or affect the terms and provisions of these presents further than may be necessary to give effect to the provisions of this clause.

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GENERAL MANAGER.
LESSEE:

40/160

COLLECTOR, SALEM.

Employment of foreign national:-

22. The lessee shall not employ, in connection with the mining operations any person who is not an Indian national except with the previous approval of the Central Government.

Recovery of expenses incurred by the State Government.

23. If any of the works or matters which in accordance with the covenants in that behalf hereinbefore contained are to be carried or performed by the lessee be not so carried out or performed within the time specified in that behalf, the State Government may cause the same to be carried out or performed and the lessee shall pay the State Government on demand all expenses which shall be incurred in such carrying out or performance of the same and the decision of the State Government as to such expenses shall be final.

Furnishing of geophysical data:-

24. The lessee/lessees shall furnish:

- (a) all geophysical data relating to mining fields, or engineering and ground water surveys, such as anomaly maps, sections, plans, structures, contour maps, logging, collected by him/them during the course of mining operations to the Director-General Geological Survey of India, Calcutta;
- (b) all information pertaining to investigations of radioactive minerals collected by him/them during course of mining operations to the Secretary, Department of Atomic Energy, New Delhi.

Data or information referred to above shall be furnished every year reckoned from the date of commencement of the period of the mining lease.

WILSON INDIA CEMENTS LTD.,

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LESSEE:

41/10/90
COLLECTOR, SALEM.

PART-VIII

The Covenants of the State Government.

Lessee may hold and enjoy rights quietly.

1. The lessee paying the rents, water rate and royalties hereby reserved and observing and performing all the covenants and agreements herein contained and on the part of the lessee to be observed and performed shall and may quietly hold and enjoy the rights and premises hereby demised for and during the term hereby granted without any lawful interruption from or by the State Government, or any person rightfully claiming under it.

Acquisition of land of third parties and compensation thereof.

2. If in accordance with the provision of clause 4 of Part VII of this Schedule the lessee shall offer to pay to an occupier of the surface of any part of the said lands compensation for any damage or injury which may arise from the proposed operations of the lease and the said occupier shall refuse his consent to the exercise of the right and powers reserved to the State Government and demised to the lessee by these presents and the lessee shall report the matter to the State Government and shall deposit with it the amount offered as compensation and if the Central/State Government are satisfied that the amount of compensation offered is fair and reasonable or if it is not so satisfied and the lessee shall have deposited with it such further amount as the State and Central Governments shall consider fair and reasonable the State Government shall order the

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GENERAL MANAGER
LESSEES

4/10

COLLECTOR, SALEM.

occupier to allow the lessee to enter the land and to carry out such operations as may be necessary for the purpose of this lease. In assessing the amount of such compensation the State Government shall be guided by the Principles of the Land Acquisition Act.

To renew:-

The mining lease is renewable in terms of the provisions of the Act and the rules made thereunder.

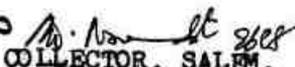
Provided that the State Government may for reasons to be recorded in writing reduce the area applied for.

If the lease is in respect of minerals specified in the First Schedule to the Act, renewal will be subject to the Prior approval of the Central Government .

If the lessee be desirous of taking a renewed lease of the premises hereby demised or of any parts of them for a further term from the expiration of the term hereby granted and is otherwise eligible, he/they shall prior to expiration of the last mentioned term give to the State Government twelve calendar months previous notice in writing and shall pay the rent, rates and royalties hereby granted. The State Government on receipt of application for renewal, shall consider it in accordance with the provisions of the Act and the rules made thereunder and shall pass orders as it deems fit. If renewal is granted the State Government will at the expense of the lessee and upon his executing ~~for~~ and delivering to the State Government if required a counterpart thereof execute and deliver to the lessee/lessees a renewed lease of the said premises or part thereof for the further term of Twenty years at such rents, rates and royalties and on such

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

43/160

COLLECTOR, SALEM.

terms and subject to such rents, rates and royalties and on such terms and subject to such covenants and agreements, including this present covenant to renew as shall be in accordance with the Mineral Concession Rules, 1960, applicable to Limestone on the day next following the expiration of the term hereby granted.

Liberty to determine the lease:-

4. The lessee may at any time determine this lease by giving not less than 12 calendar months notice in writing to the State Government or to such officer, or authority as the State Government may specify in this behalf and upon the expiration of such notice provided that the lessee shall upon such expiration render and pay all rents, water rates, royalties, compensation for damages and other moneys which may then be due and payable under these presents to the lessor or any other persons or persons and shall deliver these presents to the State Government then this lease and the said term and the liberties, powers and privileges hereby granted shall absolutely cease and determine but without prejudice to any right or remedy of the lessor in respect of any breach of any of the covenants or agreements contained in these presents.

4-A. The State Government may on an application made by the lessee permit him to surrender one or more minerals from the lease which is for a group of minerals on the ground that deposits of that mineral have since exhausted or depleted to such an extent that it is no longer possible to work the minerals economically, subject to the condition that the lessee:-

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER
LESSEE:

44/160

COLLECTOR, SALEM.

- (a) Makes an application for such surrender of mineral at least six months before the intended date of surrender; and
- (b) Gives an undertaking that he will not cause any hindrance in the working of the minerals so surrendered by any other person who is subsequently granted a mining lease for that mineral.

Refund of security deposits:-

5. On such date as the State Government may elect within 12 calendar months after the determination of this lease or of any renewal thereof, the amount of the security deposit paid in respect of this lease and then remaining in deposit with the State Government and not required to be applied to any of the purposes mentioned in this lease shall be refunded to the lessee. No interest shall run on the security deposit.

PART - IX

General Provisions.

Obstructions to inspection:-

1. In case the lessee or his/their transferee/assignee does/do not allow entry or inspection by the officers authorised by the Central or State Government under clauses (1), (j) of (1) of sub rule (1) of rule 27 of said Rules, the State Government shall give notice in writing to the lessee requiring him/them to show cause within such time as may be specified in the notice why the lease should not be determined and his/their security deposit forfeited; and if the lessee fails to show cause within the aforesaid time to the satisfaction of the State Government, the State Government may determine the lease and forfeit the whole or part of the security deposit.

For WHE INDIA CEMENTS LTD.,


GENERAL MANAGER
LESSEE:

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COLLECTOR, SALEM.

lessee or be deemed a breach of this lease, in so far as such failure is considered by the said Government to arise from force majeure, and if through force majeure the fulfilment by the lessee of any of the terms and conditions of this lease be delayed, the period of such delay shall be added to the period fixed by this lease. In this clause the expression " Force Majeure " means act of God, war, insurrection, riot, civil commotion, strike, earthquake, tide, storm, tidal wave, flood, lightning, explosion, fire, earthquake and any other happening which the lessee could not reasonably prevent or control.

Lessee to remove his/their properties on the expiry of lease.

5. The lessee having first paid discharged rents, rates and royalties payable by virtue of these presents may at the expiration or sooner determination of the said term or within six calendar months thereafter (unless the lease shall be determined under clauses 1 and 2 of this Part and in that case at any time not less than three calendar months nor more than six calendar months after such determination) taken down and remove for his/their own benefit all or any engines, machinery, plant, buildings, structures, tramways, railways and other works, erections and conveniences which may have been erected, set up or placed by the lessee in or upon the said lands and which the lessee is not bound to deliver to the State Government under clause 20 of Part VII of this Schedule and which the State Government shall not desire to purchase.

For THE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

47/160
COLLECTOR, SALEM.

Forfeiture of property left more than six months after
determination of lease:-

6. If at the end of six calendar months after the expiration or sooner determination of the said term under the provision contained in clause 4 of Part VIII of this Schedule become effective there shall remain in or upon the said lands any engines, machinery, plant, buildings, structures, tramways, railways and other work, erections, and conveniences or other property which are not required by the lessee in connection with operations in any other lands held by him/them under prospecting licence or mining lease the same shall if not removed by the lessee within one calendar month after notice in writing requiring their removal has been given to the lessee by the State Government be deemed to become the property of the State Government and may be sold or disposed of in such manner as the State Government shall deem fit without liability to pay any compensation or to account to the lessee in respect thereof.

Notices:

7. Every notice by these presents required to be given to the lessee shall be given in writing to such person resident on the said lands as the lessee may appoint for the purpose of receiving such notices and if there shall have been no such appointment then every such notice shall be sent to the lessee by registered post addressed to the lessee at the address recorded in this lease or at such other address in India as the lessee may from time to time in writing to the State Government designate for the receipt of notice and every such service shall be deemed to

For THE INDIA CEMENTS LTD.

GENERAL MANAGER.
LESSEE:

42/160
M. A. K. SARKAR
COLLECTOR, SALEM.

be proper and valid service upon the lessee and shall not be questioned or challenged by him/them.

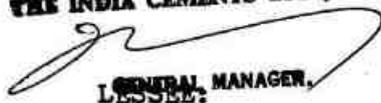
Immunity of State Government from liability to pay compensation.

8. If in any event the orders of the State Government are revised, reviewed or cancelled by the Central Government in pursuance of proceedings under Chapter VII of the Mineral Concession Rules, 1960, the lessee shall not be entitled to compensation for any loss sustained by the lessee in exercise of the powers and privileges conferred upon him by these presents.

8A. The lease is executed at Salem the capital town of the State of Tamil Nadu and subject to the provision of Article 226 of the Constitution of India, it is hereby agreed upon by the lessee and the lessor that in the event of any dispute in relation to the area under lease, condition of lease, the dues realisable under the lease and in respect of all matters touching the relationship of the lessee and the lessor, the suits (or appeals) shall be filed in the Civil Courts at Chennai and it is hereby expressly agreed that neither party shall be competent to file a suit or bring any action or file any petition at any place other than the Courts named above.

9. For the purpose of stamp duty the anticipated royalty from the demised land is Rs.7,68,000/-

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER,
LESSEE.

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10. The lessee shall strictly comply with the provisions of labour legislations such as:-

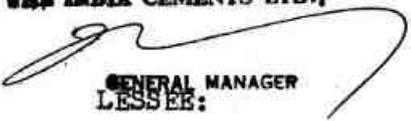
- 1) Minimum Wages Act 1948 and Central Rules, 1950.
- 2) Payment of Wages Act 1936 and Mines rules 1955.
- 3) Equal Remuneration Act and Central Rules 1976.

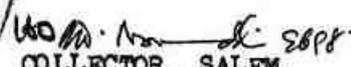
The lessee shall pay minimum rates of wages fixed by the Government to the labourers and furnish a certificate every month before 10th of the following month to the District Collector that these wages are being paid. Non furnishing of this certificate will be taken as a violation of the conditions of this agreement. The lessee should maintain the required registers as per labour laws. Any contravention of the provisions shall attract legal proceedings.

Additional Conditions stipulated in G.O.(3D)No.211, Industries (MMD1) Department, dated 11-12-1997.

The transport permit (with despatch slip, if necessary in the case of bulk permits) may be issued at the request of the lessee on collection of royalty for the quantity of mineral mined from the leasehold area and ready to be transported. No bulk permit for larger quantity in anticipation of Mining of the minerals should be issued, as this may lead to advance collection of royalty which was objected to by the Government of India, unless the lessee is willing to pay in advance for his own convenience. The accounts relating to the Collection of actual royalty or dead rent should be reconciled at the end of the year before 10th January of the succeeding year.

For VEE INDIA CEMENTS LTD.,


GENERAL MANAGER
LESSEE:

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COLLECTOR, SALEM.

2. The lessee shall pay before the expiry of the lease or its sooner determination by either part of amount equal to the annual dead rent or such high amount as may be fixed by the Collector of the District in his discretion as compensation for damage to the land covered by the lease;

3. The lessee shall not fall trees, if any, without the previous permission of the Collector and if it is found that he has fell any trees without such permission he shall pay the value, of the trees together with a compounding fee subject to a maximum of ten times the value of the said trees;

4. The lessee shall not operate on the surface of any area prohibited by any authority by laying out roads, erecting buildings, machinery etc., without the previous permission of such authority of the State Government.

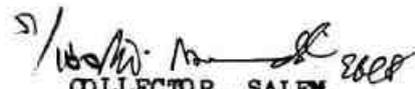
5. The lessee shall not use land for surface occupation without giving proper notice to the Collector.

6. The lessee shall provide and shall keep at all times at or near the pit head full equipment of weighing machines or modern type to the satisfaction of the Collector for weighing the minerals collected by him;

7. The lessee will exercise the liberties and powers hereby granted in such manner as to offer no unnecessary or reasonable avoidable obstruction or interruption to the development and working of any minerals not included in

For WME INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE:

51/160/10/10

COLLECTOR, SALEM.

this lease and will at all times afford to the Governor and to the holder of prospecting licences or mining leases in respect of any such minerals or any minerals within any lands adjacent passage upon and across the said lands to such minerals for the purpose of getting working, developing and carrying away the same;

8. The lessee shall take such precautions as are necessary to secure pits and shafts by putting up wire fencing or such other protection to the satisfaction of the Collector to prevent accidents;

9. That on the occurrence of any accident the lessee shall report such accident immediately to the nearest police station, the nearest factory Inspector and the Labour Commissioner.

10. The lessee shall execute an indemnity bond to Government against the claims of third parties.

11. The lessee will at the expiration or sooner determination of the said term deliver upto the Governor all mines pits shafts, including drifts, levels, waterways airways and other work (now existing) the resafter to be sunk or made under the said lands (except such as may have been abandoned with the sanction of the Government or in any ordinary and fair courses of working) and all (engine, machinery, plant, building, structures and other work and conveniences which at the commencement of the said terms were upon or under the said lands and all) Engines, Machinery, Plant and fixtures set by the lessee below ground levels which cannot be removed without causing injury to any mines or works under the said lands (except such of the same as may with the sanction of the

For WHEE INDIA CEMENTS LTD.,

GENERAL MANAGER.
LESSEE:

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COLLECTOR, SALEM.

Governor have become discussed and all buildings and structures of brick or stone executed by the lessee above ground level in good repair order and condition and fit in all respects for further working of the said minerals.

12. If after the determination of the lease there shall remain in or upon the said lands any engines, machinery, plant, buildings, structures, transways, railways and other works, erections and conveniences of minerals or minerals ores other property which the lessee is entitled to remove from the land the same shall, if not removed by the lessee within one calendar month after notice in writing requiring their removal is given to the lessee by the Collector be deemed to become the property of the Government of Tamil Nadu and may be sold in such manner as they shall deem fit without ability to pay and compensation or to account to the lessee in respect thereof.

13. In the event of existence of state of war or of grave national emergency (of which the President of India shall be the sole judge and a notification to this effect in the Gazette of India shall be conclusive proof) the Governor after notice in writing to the lessee under the hand of any Secretary to Government of his intention so to do may forthwith taken possession of and assume control of the works, plant and machinery and premises of the lessee at or in connection with the said mines and may pre-empt at prices fixed by the Governor all the minerals and all products thereon extracted from or lying upon the said mines during such possession or control and the

For THE INDIA CEMENTS LTD.,


GENERAL MANAGER
LESSEE:

58/

COLLECTOR, SALEM.

lessees shall confirm and obey all directions given by or on behalf of the Governor regarding the use of employment of such works, plants, premises provided that a fair compensation which shall be determined by the Governor and shall be paid to the lessee for all loss or damage sustained by reasons or in consequences of the exercise of the powers shall not determine the said terms hereby granted or affect the terms and provisions of these presents further than may be necessary to give effect to the provisions of this clause.

14.(a) the lessee shall not enter upon or commence prospecting or mining operations in any reserve forest situated upon the said land without thirty days previous notice in writing to the District Forest Officer not without obtaining any written sanction of that officer nor otherwise than in accordance with such conditions as that Officer may in his absolute discretion prescribed.

(b) the area within the served forest limits must be demarcated by a declared fire line of 40 feet with which will be cut and kept cleared by the Forest Department at the expense of the lessee;

(c) the lessee must at all times permit the Forest Department to enter upon the land for the purpose of maintaining or repairing existing boundary lines within the area, and must pay the cost of such maintenance of repair as determined by the District Forest Officer;

For WHE INDIA CEMENTS LTD.,


GENERAL MANAGER.
LESSEE.

54/167
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COLLECTOR, SALEM.

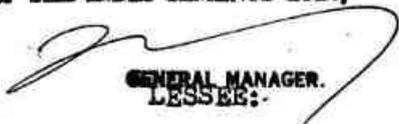
(d) the lessee must taken suitable precautions to prevent fire from spreading into the adjoining reserve forest from the land and if such fires accidentally occurs he must render all possible assistance in putting them out;

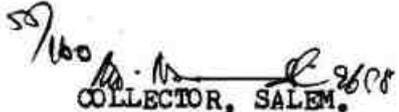
(e) the lessee shall not cut any trees or growth on the area granted in excess of 20 percent of the number of trees on the whole area under the lease without the previous permission of the District Forest Officer and the value of such trees, etc., shall be paid for by the lessee at rates to be fixed by the District Forest Officer, he must not deface or interfere with any boundary stone or marks, if any boundary mark is accidentally damaged, he must bring the matter immediately to the notice of the Range Officer.

15. The lessee shall keep the stock of beryl or any other prescribed substance under section 3 of the Atomic Energy Act No. XXIX of 1948, if they occur in the property covered by the lease with a view to making them available to the Government of India.

16. Quarterly and Annually returns should be submitted in the prescribed format by the Owner(lessee) Agent or Manager of the mines to the Directorate of General of Mines Safety, Coorgum Region, Coorgum and to the respective Officers.

For WHE INDIA CEMENTS LTD.,

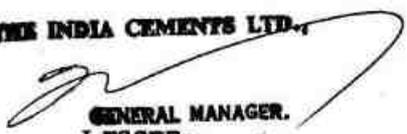

GENERAL MANAGER.
LESSEE:-

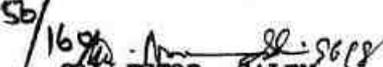
59/160

COLLECTOR, SALEM.

IN WITNESS WHEREOF these presents have been executed
in the manner hereunder appearing the day and year first
above written.

Signed by the Collector of Salem for and on behalf
of the Governor in the presence of.

For THE INDIA CEMENTS LTD.


GENERAL MANAGER.
LESSEE:

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COLLECTOR, SALEM.

WITNESSES

1.

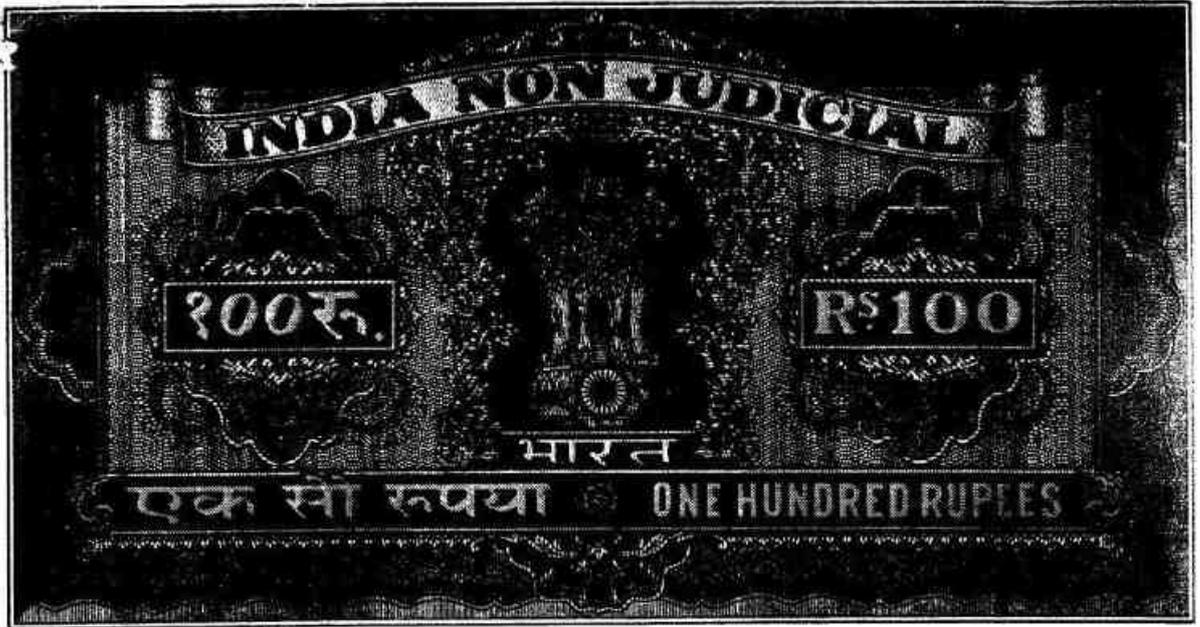

DEPUTY DIRECTOR,
Dept. of Geology & Mining
SALEM.

T. NATARAJAN S/O K. THANGAVELU

2.


SPECIAL TAHSILDAR,
(MINES)
SALEM.

T. KALIYUGANATHAN S/O K. THALAIMUTHU.



3



சமீபத்தில்
 2684 பிளா. சி. 3. 7. 8.
 1974. 03. 03. கையா. சி.
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 சி. 1974. 03. 03. கையா. சி. 1974. 03. 03. கையா. சி.

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 சி. 1974. 03. 03. கையா. சி.
 சி. 1974. 03. 03. கையா. சி.

THIS INDENTURE made this 20th day of March 1978 between the Governor of Tamil Nadu (hereinafter referred to as the State Government which expression shall where the context so admits be deemed to include the successor and assigns) of the one part and Thiruvallur India Cements Limited, 175/1, Anna Salai Madras-2 (hereinafter referred to as the "lessee" which expression shall where the context so admits be deemed to include all the said partners their respective heirs, executors, legal representatives and permitted assigns) of the other part.

WHEREAS THE LESSEE has applied to the State Government in accordance with the Mineral Concession Rules, 1960 (hereinafter referred to as the said Rules) for a mining

K. A. Subramanian
 LESSEE

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 COLLECTOR, SALEM



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 மது...
 1977

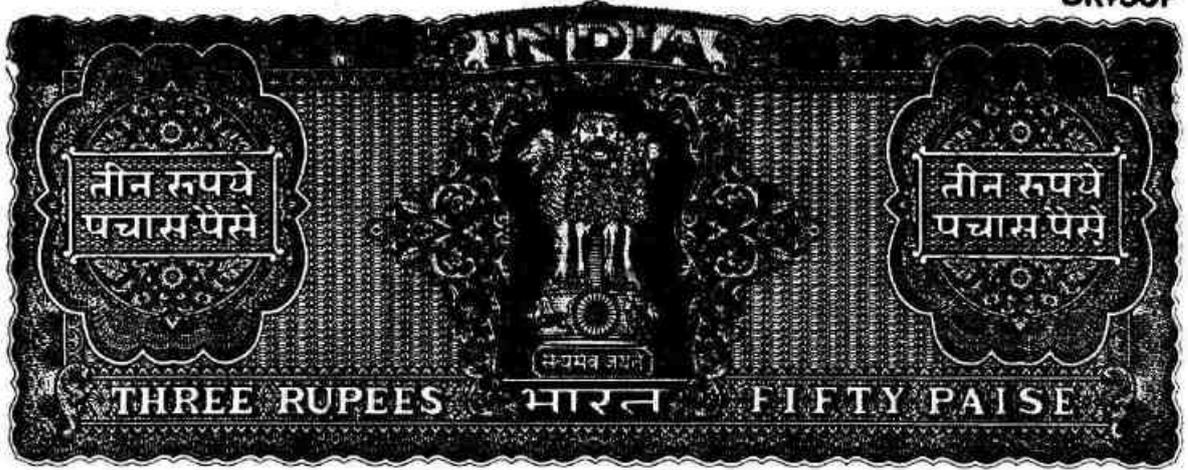
ம. அ. கு.
 கிழக்கு மாவட்டம்,
 சேலம்.

: 3:

in the schedule referred to as the said minerals) situated
 lying and being in or under the lands which are referred
 to in Part I of the said Schedule, together with the
 liberties, powers and privileges to be exercised or
 enjoyed in connection herewith which are mentioned in
 Part II of the said Schedule subject to the restrictions
 and conditions as to the exercise and enjoyment of such
 liberties, powers and privileges which are mentioned in
 Part III of the said Schedule EXCEPT and reserving out of
 this demise unto the State Government the liberties powers
 and privileges mentioned in Part IV of the said Schedule
 TO HOLD the premises hereby granted and demise unto the
 lessee from the 20th day March 1978
 for the terms of 20 years thence next ensuing YIELDING

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 LESSEE 3/150

COLLECTOR, SALEM



Handwritten text in Tamil and English, including a date '2-3-78' and a signature.

A large handwritten signature or scribble.

Handwritten text: 'சா. டி. அ. கு. விற்பகையாளர், சங்கரீ'.

: 4 :

AND PAYING therefor unto the State Government the several rents and royalties mentioned in Part V of the said Schedule at the respective time therein specified subject to the provisions contained in Part VI of the said Schedule and the lessee hereby covenants with the State Government as in Part VII of the said Schedule is expressed and the State Government hereby covenants with the lessee as in Part VIII of the said schedule as expressed AND it is hereby mutually agreed between the parties hereto as in PART IX of the said Schedule is expressed.

IN WITNESS WHEREOF these presents have been executed in manner hereunder appearing the day and year first above written.

The schedule above referred to

Handwritten signature of the lessee.

LESSEE

4/150

Handwritten signature of the collector.

COLLECTOR, SALEM

PART I

THE AREA OF THIS LEASE

Location and area of the LEASE

All that tract of lands containing an area of 12.02 acres (4.86.5 Hectares) or thereabouts delineated on the plan hereto annexed and thereon coloured and bounded as follows:

Name of the District : Salem			Name of the Taluk: Sankari			
Village	S.No.	Extent	BOUNDARIES			
			N	S	E	W
Chinna-goundanur	17	2.03	15,16	18,19 154	154	14
	23/1	0.64	21, 22	23/2	22	24
	24/1	0.59	21	24/2	21, 35	24/2,3
	25/1	0.12	21	25/2	24	26
	33/1B part	2.05	33/2	33/1B part	33/ 2,3,4	33/1A
	33/2	0.33	24	33/3	33/4	33/1B
	33/3	0.17	33/2	33/4	33/4	33/1B
	33/4	2.28	24, 34	51	34	33/2,3,1B
	51/2B part	2.00	33	51/3	51/3	51/2B part
	52/5 part	0.85	51	52/6B	52/6B	52/4,5
153/2	0.96	153/1 3	22, 152	153/4	153/2 part	
		<u>12.02</u>	acres or 4.86.5 Hectares			

Herein after referred as to as "the said lands"

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COLLECTOR, SALEM

:6:
P A R T II

LIBERTIES POWERS AND PRIVILEGES TO BE EXERCISED AND ENJOYED BY THE LESSEE SUBJECT TO THE RESTRICTIONS AND CONDITIONS IN PART III

1. TO ENTER UPON LAND AND SEARCH FOR, WIN WORK, ETC:

Liberty and power at all times during the term hereby demised to enter upon the said lands and to search for mine bore dig drill or win work dress process convert, carry away and dispose of the said mineral/minerals.

2. TO SINK DRIVE AND MAKE PITS SHAFTS AND INCLINES ETC

Liberty and power for or in connection with any of the purposes mentioned in this part to sink, drive, make maintain and use in the said lands any pits shafts, inclines, drifts, levels waterways airways and other works (and to use maintain, deepen or extend any existing works of the like nature in the said lands)

3. TO BRING TO USE MACHINERY, EQUIPMENT, ETC - Liberty and power for or in connection with any of the purposes mentioned in this part to erect, construct, maintain and use on or under the said lands any engines, machinery, plant, dressing floors, furnaces, coke ovens, brick kilns, workshops, store houses, bungalows, godowns, sheds and other buildings and other works and conveniences of the like nature on or under the said lands.

4. TO MAKE ROADS AND WAYS ETC AND USE EXISTING ROADS AND WAYS

Liberty and power for or in connection with any of the purposes mentioned in this part to make any tramways, railways, roads, aircraft landing grounds and other ways in or over the said lands and to use maintain and go and repass with or without houses, cattle, wagons, aircrafts, locomotives or other vehicles over the same (or any existing tramways, railways, roads and other ways

K. A. Subramanyam

LESSEE 6/150


COLLECTOR, SALEM

in or over the said lands) on such conditions as may be agreed to.

5. To get building and road materials etc., - Liberty and power for or in connection with any of the purposes mentioned in this part to quarry and get stone gravel and other building and road materials and clay and to use and employ the same and to manufacture such clay into bricks or tiles and to use such bricks or tiles but not to sell any such materials, bricks or tiles.

6. TO USE WATER FROM STREAMS ETC: -Liberty and power for or in connection with any of the purposes mentioned in this part but subject to the right of any existing or future lessees and with the written permission of Collector to appropriate and use water from any streams, watercourses, springs or other sources in or upon the said lands and to divert, stepup, or dam any such stream or watercourse and collect or impound any such water and to make, construct and maintain any watercourse, culverts, drains or reservoirs but not as to deprive any cultivated lands, villages, buildings or watering places for livestock of a reasonable supply of water as before accustomed nor in any way to foul or pollute any streams or springs: Provided that the lessee shall not interfere with the navigation in any navigable stream nor shall divert such stream without the previous written permission of the State Government.

7. TO USE LAND FOR STACKING, HEAPING, DEPOSITING PURPOSES
Liberty and power to enter upon and use a sufficient part of the surface of such lands for the purpose of stacking,

K. S. Subramanyam

7/150

LESSEE

COLLECTOR, SALEM

heaping, storing or depositing therein any produce of the mines or works carried on and any tools, equipment, earth and materials and substances dug or raised under the liberties and powers mentioned in this part.

8. BENEFICIATION AND CONVEYING AWAY OF PRODUCTION(a)

Liberty and power to enter upon and use a sufficient part of the said lands to beneficiate any ore produced from the said lands and to carry away such beneficiated ore.

TO MAKE COKE (TO BE USED IN CASE OF COAL ONLY)-(b) Liberty and power upon the said lands to convert into coke any coal or coal-dust produced from the said lands and to carry away such coke.

9. TO CLEAR BRUSHWOOD AND TO FELL AND UTILISE TREES, ETC

Liberty and power for or in connection with any of the purposes mentioned in this part and subject to the existing rights of others and save as provided in clause 3 of Part III of this Schedule to clear undergrowth and brushwood and to fell and utilise any trees or timber standing or found on the said lands provided that the state Government may ask the lessee to pay for any trees or timber felled and utilised, by him at the rates specified by the Collector or the State Government

PART III

RESTRICTIONS AND CONDITIONS AS TO THE EXERCISE OF THE LIBERTIES POWERS AND PRIVILEGES IN PART II

1. NO BUILDING ETC., UPON CERTAIN PLACES - No buildings or thing shall be erected, set up or placed and no surface

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COLLECTOR, SALEM

operations shall be carried on in or upon any public pleasure ground, burning or burial ground or place held sacred by any class of persons or any house or village site, public road or other place which the State Government may determine as public ground nor in such a manner as to injure or prejudicially affect any buildings, works, property or rights of other persons and no land shall be used for surface operations which is already occupied by persons other than the State Government for works or purposes not included in this lease. The lessee shall not also interfere with any right of way, well or tank.

2. PERMISSION FOR SURFACE OPERATIONS IN A LAND NOT ALREADY IN USE: Before using for surface operations any land which has not already been used for such operations the lessee shall give to the Collector of the District two calendar months' previous notice in writing specifying the name or other description of the situation and the extent of the land proposed to be so used and the purpose for which the same is required and the said land shall not be so used if objection is issued by the Collector within two months after the receipt by him of such notice unless the objections so stated shall, on reference to the State Government be annulled or waived.

3. TO CUT TREES IN UNRESERVED LANDS: The lessee shall not without the express sanction of the Collector cut down or injure any timber or trees on the said lands but may without such sanction clear away any brushwood or undergrowth which interferes with any operations authorised by these present. The Collector or the State Government may require the lessee to pay for any wood or timber felled and utilised by him at

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LESSEE

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COLLECTOR, SALEM

the rates specified by the Collector of the District.

4. TO ENTER UPON RESERVED FORESTS: Not withstanding anything in this Schedule contained the lessee shall not enter upon any reserved forest included in the said lands without previous sanction in writing of the District Forest Officer nor fell, cut and use any timber or trees without obtaining the sanction in writing of that officer nor otherwise than in accordance with such conditions as the State Government may prescribe.

5. NO MINING OPERATIONS WITHIN 50 METRES OF PUBLIC WORKS ETC
The lessee shall not work or carry on or allow to be worked or carried on any mining operations at or to any point within a distance of 50 metres from any railway line except with the previous written permission of the Railway Administration concerned or from any reservoir, canal or other public works such as public roads and buildings or inhabited site except with the previous written permission of the Collector or any other officer authorised by the State Government in this behalf and otherwise than in accordance with such instructions, restrictions and conditions either general or special which may be attached to such permission. The said distance of 50 metres shall be measured in the case of railway reservoir or canal horizontally from the outer toe of the bank of the outer edge of the cutting as the case may be and in case of a building horizontally from the plinth thereof. In the case of village roads no working shall be carried on within a distance of 10 metres of the outer edge of the cutting except with the previous permission of the Collector or any other Officer duly authorised

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by the State Government in this behalf and otherwise than in accordance with such directions, restrictions and additions either general or special, which may be attached to such permission.

EXPLANATION: For the purposes of this clause the expression 'Railway administration' shall have the same meaning as it is defined to have in the Indian Railway Act, 1890 by Clause(6) of section 3 of that Act. 'Public Road' shall mean a road which has been constructed by artificially surfaced as distinct from a track resulting from repeated use. Village road will include any track shown in the Revenue record as Village road.

6. FACILITIES FOR ADJOINING GOVERNMENT LICENCES AND LEASES

The lessee shall allow existing and future holders of Government licences or leases over any land which is comprised in or adjoins or is reached by the lessee reasonable facilities of access thereto

PROVIDED THAT no substantial hindrance or interference shall be caused by such holders of licences or leases to the operations of the lessee under these presents and fair compensation (as may be mutually agreed upon or in the event of disagreement as may be decided by the State Government) shall be made to the lessee for loss or damage sustained by the lessee by reason of the exercise of this liberty.

PART IV

LIBERTIES POWERS AND PRIVILEGES RESERVED TO THE STATE GOVERNMENT

1. TO WORK OTHER MINERALS: - Liberty and power for the State Government or to any lessee or persons authorised by it in that behalf to enter into and upon the said lands and to search for win work, dig, get, raise, dress, process, convert and carry away minerals other than the said minerals and any other substances

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and for those purposes to sink, drive, make erect, construct, maintain and use such pits, shafts, inclines drifts, levels and other lines, waterways, airways, water courses, drains, reservoirs, engines, machinery, plant, building, canals, tranways, railways, roadways and other works and conveniences as may be deemed necessary or convenient.

PROVIDED THAT in the exercise of such liberty and power no substantial hindrance or interference shall be caused to or with the liberties powers and privileges of the lessee under these presents and that fair compensation (as may be mutually agreed upon or in the event of disagreement as may be decided by the State Government) shall be made to the lessee for all loss or damage sustained by the lessee by reason or in consequences of the exercise of such liberty and power.

2. TO MAKE RAILWAYS AND ROADS: Liberty and power for the State Government or any lessee or person authorised by it in that behalf to enter into and upon the said lands and to make upon over or through the same any railways, tramways, roadways or pipelines for any purpose other than those mentioned in PART II of these presents and to get from the said lands, stones, gravels, earth, and other materials for making maintaining and repairing such railways, tramways and roads or any existing railways and roads and to go and repass at all time with or without horses, cattle or other animals, carts, wagons, carriages, locomotives or other vehicles over or along any such railways, tramways, roads, lines and other ways for all purposes and as occasions may require provided that in the exercise of such liberty and power by such other lessee or person no substantial hindrance or interference shall be caused to or

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with the liberties, powers and privileges of the lessee under these presents and that fair compensation (as may be mutually agreed upon or in the event of disagreement as may be decided by the State Government) shall be made to the lessee for all loss or damage sustained by the lessee by reason or in consequence of the exercise by such lessee or person of such liberty and power.

PART V

RENTS AND ROYALTIES RESERVED BY THIS LEASE

1. TO PAY DEAD RENT OR ROYALTY WHICHEVER IS GREATER:

The lessee shall pay for every year except the first year of the lease yearly dead rent as specified in clause 2 of this Part in respect of each mineral

Provided that the lessee shall be liable to pay the dead rent or royalty in respect of each mineral whichever is higher in amount but not both.

2. RATE AND MODE OF PAYMENT OF DEAD RENT: Subject to the provision of clause 1 of this part during the subsistence of the lease, the lessee shall pay to the State Government annual dead rent at the following rate or such revised rate which may be communicated in writing to the lessee by the State Government per mineral per hectare of the lands demised and described in Part I of this Schedule.

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Name of Minerals : Limestone and Kankar

	Dead rent fixed per hectare	Area of demised land	Dead rent payable	Total dead rent payable a year
1st year	nil	nil	nil	nil
2nd year to 5th year	Rs.6.25 per hectare per annum	3.49.5 hectares or 8.64 acres	87.36	21.84
	Rs.12.50 per hectare per annum	1.37.0 hectares or 3.38 acres	68.52	17.13
6th year to 10th year	Rs.12.50 per hectare per annum	3.49.5 hectares or 8.64 acres	218.45	43.69
	Rs.25.00 per hectare per annum	1.37 hectares or 3.38 acres	171.25	34.25
11th year to 20th year	Rs.18.75 per hectare per annum	3.49.5 hectares or 8.64 acres	655.30	65.53
	Rs.37.50 per hectare per annum	1.37 hectares or 3.38 acres	513.80	51.38

Royalty

	<u>Govt. Land</u>	<u>Pattaland</u>
a) Limestone & Kankar	Rs.2.50 per tonne	Rs.1.25 per tonne

3. RATE AND MODE OF PAYMENT OF ROYAL-TY: Subject to the provision of clause 1 of this part, the lessee shall during the subsistence of this lease pay to the State Government at such times and in such manner as the State Government may prescribe royalty in respect of any mineral removed by him from the leased area at the rate for the time being specified in the Second Schedule to the Mines and Minerals (Regulation and Development) Act 1957

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4. PAYMENT OF SURFACE RENT AND WATER RATE: The lessee shall pay rent and water rate to the State Government in respect of all parts of the surface of the said lands which shall from time to time be occupied or used by the lessee under the authority of these presents at the rate of Re.1/- and @ Re.0.31 per acre, and cesses assessable on the land and Rs. nil respectively per annum per hectare of the area so occupied or used and so in proportion for any area less than an hectare during the period from the commencement of such occupation or use until the area shall cease to be so occupied or used and shall as far as possible restore the surface land so used to its original condition. Surface rent and water rate shall be paid as hereinbefore detailed in clause 2 PROVIDED THAT NO such rent water rate shall be payable in respect of the occupation and use of the area comprised in any roads or ways to which the public have full right of access.

PART VI

PROVISIONS RELATING TO THE RENTS AND ROYALTIES

1. RENT AND ROYALTIES TO BE FREE FROM DEDUCTION ETC: -

The rent, water rate and royalties mentioned in Part V of this schedule shall be paid free from any deductions to the State Government at Sankari and in such manner as the State Government may prescribe PROVIDED ALWAYS and it is hereby agreed that Rs.1,000/- the balance standing to the credit of the lessee on account of the deposit made by him as a licensee over an area which included the said lands shall be retained and accepted by the State Government in satisfaction of the rents and royalties mentioned in Part V until they reach that amount.



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2. MODE OF COMPUTATION OF ROYALTY: For the purposes of computing the said royalties the lessee shall keep a correct account of the mineral/minerals produced and despatched. The accounts as well as the weight of the mineral/minerals in stock or in the process of export may be checked by an Officer authorised by the Central or State Government.

Here specify the mode of arriving at sale price/prices at pit's mouth of mineral/minerals.

3. COURSE OF ACTION IF RENTS AND ROYALTIES ARE NOT PAID IN TIME
Should any rent, royalty or other sums due to the State Government under the terms and conditions of these presents be not paid by the lessee within the prescribed time, the same together with interest due thereon at the rate of ten percent per annum may be recovered on a certificate of such officer as may be specified by the State Government by general or special order, in the same manner as an arrear of land revenue -

PART VII

THE COVENANTS OF THE LESSEE

1. LESSEE TO PAY RENTS AND ROYALTIES, TAXES, ETC: - The lessee shall pay the rent, water rate and royalties reserved by this lease at such times and in the manner provided ⁱⁿ PARTS V AND VI of these presents and shall also pay and discharge all taxes, rates, assessments and impositions whatsoever being in the nature of public demands which shall from time to time be charged, assessed or imposed by the authority of the Central and State Governments upon or in respect of the premises and works of the lessee in common with other premises and works of a like nature except demands for land revenues.

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2. TO MAINTAIN AND KEEP BOUNDARY MARKS IN GOOD ORDER -

The lessee shall at his own expense erect and at all times maintain and keep in repair boundary marks and pillars according to the demarcation to be shown in the plan annexed to this lease. Such marks and pillars shall be sufficiently clear of the shrubs and other obstructions as to allow easy identification.

3. TO COMMENCE OPERATIONS WITHIN A YEAR AND WORK IN A WORKMAN LIKE MANNER -

Unless the State Government for good cause permits otherwise, the lessee shall commence operation within one year from the date of execution of the lease and shall thereafter at all time during the continuance of this lease search for, work and develop the said minerals without voluntary intermission in a skill-ful and workman-likemanner and as prescribed under clause 12 hereinafter without doing or permitting to be done any unnecessary or avoidable damage to the surface of the said lands or the crops, buildings, structures or other property thereon. For the purposes of this clause operations shall include the erection of machinery, laying of a tramway or construction of a road in connection with the mine.

4. TO INDEMNIFY GOVERNMENT AGAINST ALL CLAIMS -

The lessee shall make and pay such reasonable satisfaction and compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him in exercise of the powers granted by this lease and shall indemnify and keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any

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such damage, injury or disturbance and all costs and expenses in connection therewith.

5. TO SECURE AND KEEP GOOD CONDITION PITS, SHAFTS, ETC -

The lessee shall during the subsistence of this lease well and sufficiently secure and keep open with timber or other durable means all pits, shafts and workings that may be made or used in the said lands and make and maintain sufficient fences to the satisfaction of the State Government round every such pit, shaft or working whether the same is abandoned or not and shall during the same period keep all workings in the said lands except such as may be abandoned accessible free from water and foul air as far as possible.

6. TO STRENGTHEN AND SUPPORT THE MINE TO NECESSARY EXTENT

The lessee shall strengthen and support to the satisfaction of the Railway Administration concerned or the State Government as the case may be, any part of the mine which in its opinion requires such strengthening or support for the safety of any railway, reservoir, canal, road and any other public works or structures.

7. TO ALLOW; INSPECTION OF WORKINGS: The lessee shall allow any officer authorised by the Central Government or the State Government in that behalf to enter upon the premises including any building excavation or land comprised in the lease for the purpose of inspecting, examining surveying prospecting and making plans thereof, sampling and collecting a data and the lessee shall with proper person employed by the lessee and acquainted with the mines and work, effectually assist the Officer, agents, servants and workmen in conducting every such inspection and shall afford them all facilities,

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information connected with the working of the mines which they may reasonably require and also shall and will conform to and observe all orders and regulations which the Central and State Governments as the result of such inspection or otherwise may from time to time see fit to impose.

8. TO REPORT ACCIDENT: The lessee shall without delay send to the Collector a report of any accident causing death or serious bodily injury or serious injury to property or seriously affecting or endangering life or property which may occur in the course of the operations under this lease.

9. TO REPORT DISCOVERY OF OTHER MINERALS: The lessee shall report to the State Government the discovery in the leased area of any mineral not specified in the lease within sixty days of such discovery along with full particulars of the nature and position of each such find. If any mineral not specified in the lease is discovered in the leased area, the lessee shall not win and dispose of such mineral unless such mineral is included in the lease or a separate lease is obtained therefor.

10. TO KEEP RECORDS AND ACCOUNTS REGARDING PRODUCTION AND EMPLOYEES ETC: - The lessee shall at all time during the said term keep or cause to be kept an office to be situated upon or near the said lands correct and intelligible books of accounts which shall contain accurate entries showing from time to time,

1. Quantity and quality of the said mineral realised from the said lands.

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2. Quantity of the various qualities of ores beneficiated or converted (for example coal converted into coke)
3. Quantities of the various qualities of the said mineral sold and exported separately.
4. Quantities of the various qualities of the said mineral otherwise disposed of and the manner and purpose of such disposal.
5. The prices and all other particulars of all sales of said mineral.
6. The number of persons employed in the mines or works on upon the said lands specifying nationality, qualifications and pay of the technical personnel.
7. Such other facts, particulars and circumstances as the Central or the State Government may from time to time require and shall also furnish free of charge to such officers and at such times as the Central and State Governments may appoint true and correct abstract of all or any such books of accounts and such information and returns to all or any of the matters aforesaid as the State Government may prescribe and shall at all reasonable time allow such officers as the Central Government or State Government shall in that behalf appoint to enter into and have free access to the said officers for the purpose of examining and inspecting the said books of accounts, plans and records and to make copies thereof and make extracts therefrom.
11. TO MAINTAIN PLANS ETC: The lessee shall at all time during the said term maintain at the mine office correct, intelligible

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COLLECTOR, SALEM

upto date and complete plans and sections of the mines in the said lands. They shall show all the operations and workings and all the trenches, pits and drillings made by him in the course of operations carried on by him under the lease faults and other disturbances encountered and geological data and all such plans and sections shall be amended and filled up by and from actual surveys to be made for that purpose at the end of twelve months or any period specified from time to time and the lessee shall furnish free of charge to the Central and State Governments true and correct copies of such plans and sections whenever required. Accurate records of all trenches, pits and drillings shall show.

- a. The sub soil and strata through which they pass
 - b. Any mineral encountered
 - c. Any other matter of interest and all data required
- by the Central and State Governments from time to time

The lessee shall allow any officer of the Central or the State Government, authorised in this behalf by the Central Government to inspect the same at all reasonable times. He shall also supply when asked for by the State Government a composite plan of the area showing thickness, dip, inclination, etc., of all the seams as also the quantity of reserves quality-wise.

- ✓ 12. Act 67 to 1957: The lessee shall be bound by such rules as may be issued from time to time by the Government of India under section 18 of the Mines and Minerals (Regulations and Development) Act 1957 (Act 67 of 1957) and shall not carry on mining or other operations under the said lease in any way other than as prescribed under these rules.

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13. TO PROVIDE WEIGHING MACHINES: Unless specifically exempted by the State Government the lessee shall provide and at all time keep at or near the pit head or each of the pit heads at which the said minerals shall be brought to bank a properly constructed and efficient weighing machine and shall weigh, or cause to be weighed thereon all the said minerals from time to time brought to bank sold, exported and converted and also the converted products and shall at the close of each day cause the total weights, ascertained by such means of the said minerals, ores, products raised, sold, exported and converted during the previous twenty four hours to be entered in the aforesaid books of accounts. The lessee shall permit the State Government at all time during the said term to employ any person or persons to be present at the weighing of the said minerals as aforesaid and to keep accounts thereof and to check the accounts kept by the lessee. The lessee shall give fifteen days previous notice in writing to the Collector of every such measuring or weighing in order that some officer on his behalf may be present thereat.

14. TO ALLOW TEST OF WEIGHING MACHINE: The lessee shall allow any person or persons appointed in that behalf by the State Government at any time or times during the said term to examine and test every weighing machine to be provided and kept as aforesaid and the weights used therewith in order to ascertain whether the same respectively are correct and in good repair and order and if upon any such examination or testing any such weighing machine or weights shall be found incorrect or out of repair or order the State Government may require that the same be adjusted repaired and put in order by and at the expense of the lessee/lessees and if such requisition be not complied with

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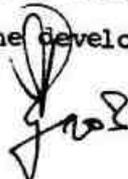
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within fourteen days after the same shall have been made, the State Government may cause such weighing machine or weights to be adjusted, repaired, and put in order and the expense of so doing shall be paid by the lessee/lessees to the State Government on demand and if upon any such examination or testing as aforesaid any error shall be discovered in any weighing machine or weights to the prejudice of the State Government such error shall be regarded as having existed for three calendar months previous to the discovery thereof or from the last occasion of so examining and testing the same weighing machine and weights in case such occasion shall be within such period of three months and the said rent and royalty shall be paid and accounted for accordingly.

15. TO PAY COMPENSATION FOR INJURY OF THIRD PARTIES: The lessee/lessees shall make and pay reasonable satisfaction and compensation for all damage, injury or disturbance of person or property which may be done by or on the part of lessee/lessees in exercise of the liberties and power granted by these presents and shall at all times save harmless and keep indemnified the State Government from and against all suits, claims and demands which may be brought or made by any person or persons in respect of any such damage, injury or disturbance.

16. NOT TO OBSTRUCT WORKING OF OTHER MINERALS: The lessee/lessees will exercise the liberties and powers hereby granted in such a manner as to offer no unnecessary or reasonably avoidable obstruction or interruption to the development and

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COLLECTOR, SALEM

working within the said lands of any minerals not included in this lease and shall at all time afford to the Central and State Governments and to the holders of prospecting licences or mining leases in respect of any such minerals or any minerals within any land adjacent to the said lands as the case may be reasonable means of access and safe and convenient passage upon and across the said lands to such minerals for the purpose of getting, working, developing and carrying away the same provided that the lessee/lessees shall receive reasonable compensation for any damage or injury which he/they may sustain by reason or in consequence of the use of such passage by such lessees or holders of prospecting licences.

17. TRANSFER OF LEASE: (1) The lessee/lessees shall not, without the previous consent in writing of the State Government, which in the case of a mining lease in respect of any mineral specified in the First Schedule to the Act shall not be given except after previous approval of the Central Government.

a) assign, sublet, mortgage or in any other manner, transfer the mining lease, or any right, title or interest therein, or

b) enter into or make any arrangement, contract or understanding whereby the lessee/lessees will or may be directly or indirectly financed to a substantial extent by or under which the lessee's/lessees' operations or undertakings will or may be substantially controlled by, any person or body of persons other than the lessee/lessees.

2) Without prejudice to the above provisions, the lessee/lessees

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may, subject to the conditions specified in the proviso to rule 35 of said Rules transfer this lease or any right, title or interest therein, to a person holding a certificate of approval and an income-tax clearance certificate from the Income-Tax concerned, on payment of a fee of rupees one hundred to the State Government.

Provided that the lessee/lessees shall make available to the transferee the original or certified copies of all plans of abandoned working in the area and in a belt 65 metres wide surrounding it.

(3) The State — Government may, by order in writing, determine the lease at any time if the lessee/lessees has/have in the opinion of the State Government committed a breach of any of the above provisions or has/have transferred the lease or any right, title or interest therein otherwise than in accordance with clause (2):

Provided that no such order shall be made without giving the lessee/lessees a reasonable opportunity of stating his/their case.

18. NOT TO BE FINANCED OR CONTROLLED BY A TRUST, CORPORATION, FIRM OR PERSONS:- The lease shall not be controlled and the lessee/lessees shall not allow themselves to be controlled by any Trust, Syndicate, Corporation, Firm or person except with the written consent of the Central Government. The lessee/lessees shall not enter into or make any arrangement, compact or understanding whereby the lessee/lessees will or may be directly or indirectly financed by or under which the lessee/lessees' operations or undertakings will or may be carried on directly or indirectly by or for the benefit of or subject to the control

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airways and other works now existing or hereafter to be sunk or made on or under the said lands except such as have been abandoned with the sanction of the State Government and in any ordinary and fair course of working all engines, machinery, plant, buildings, structures, other works and conveniences which at the commencement of the said term were upon or under the said lands and all such machinery set up by the lessee/lessees below ground which cannot be removed without causing injury to the mines or works under the said lands (except such of the same as may with the sanction of the State Government have become disused) and all buildings and structures of bricks or stone erected by the lessee/lessees above ground level in good repair order and condition and fit in all respects for further working of the said mines and the said mineral.

21. RIGHT OF PRE-EMPTION - (a) The State Government shall from time to time and all times during the said term have the right (to be exercised by notice in writing to the lessee/lessees of pre-emption of the said minerals (and all products thereof) lying in or upon the said lands hereby demised or elsewhere under the control of the lessee/lessees and the lessee/lessees shall with all possible expedition deliver all minerals or products or minerals purchased by the State Government under the power conferred by this provision in the quantities at the times in the manner and at the place specified in the notice exercising the said right.

(b) Should the right of pre-emption conferred by this present provision be exercised and a vessel chartered to carry the minerals or products thereof procured on behalf of the State Government or the Central Government, be retained on demurrage

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at the port of loading the lessee/lessees shall pay the amount due for demurrage according to the terms of the charter party of such vessel unless the State Government shall be satisfied that the delay is due to causes beyond the control of the lessee/lessees.

c) The price to be paid for all minerals or products of minerals taken in pre-emption by the State Government in exercise of the right hereby conferred shall be the fair market price prevailing at the time of pre-emption PROVIDED THAT in order to assist in arriving at the said fair market price the lessee/lessees shall if so required furnish to the State Government for the confidential information of the Government particulars of the quantities, descriptions and prices of the said minerals or products thereof sold to other customers and of charters entered into for freight for carriage of the same and shall produce to such officer or officers as may be directed by the State Government original or authenticated copies of contracts and charter parties entered into for the sale or freightage of such minerals or products.

d) In the event of the existence of a state of war or emergency (of which existence of President of India shall be the sole judge and a notification to this effect in the Gazettee of India shall be conclusive proof), the State Government with the consent of the Central Government shall from time to time and all times during the said term have the right (to be exercised by a notice in writing to the lessee/lessees) forthwith take possession and control of the works, plant, machinery and premises of the lessee/lessees on or in connection with the said lands or operations under this lease and during such possession or control the lessee/lessees shall conform to and obey all directions given by or on

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behalf of the Central Government or State Government regarding the use or employment of such works, plants, premises and minerals PROVIDED THAT fair compensation which shall be determined in default of agreement by the State Government shall be paid to the lessee/lessees for all loss or damage sustained by him/them by reason or in consequence of the exercise of the powers conferred by this clause and PROVIDED ALSO that the exercise of such powers shall not determine the said term hereby granted or affect the terms and provisions of these presents further than may be necessary to give effect to the provisions of this clause.

22. EMPLOYMENT OF FOREIGN NATIONAL: The lessee shall not employ in connection with the mining operations any person who is not an Indian National except with the previous approval of the Central Government.

23. RECOVERY OF EXPENSES INCURRED BY THE STATE GOVERNMENT: If any of the works or matters which in accordance with the covenants in that behalf hereinbefore contained are to be carried or performed by the lessee be not so carried out or performed within the time specified in that behalf the State Government may cause the same to be carried out or performed and the lessee/lessees shall pay to the State Government on demand all expenses which shall be incurred in such carrying out or performance of the same and the decision of the State Government as to such expenses shall be final.

24. FURNISHING OF GEOPHYSICAL DATA: The lessee/lessees shall furnish:

- a) all geophysical data relating to mining fields or engineering and ground water surveys, such as

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anomaly maps, sections, plans, structures, contour maps, logging, collected by him during the course of mining operations to the Director, Geological survey of India, Calcutta.

- b) All information pertaining to investigations of radioactive minerals collected by him during the course of mining operations to the Secretary, Department of Atomic Energy, New Delhi.

Data or information referred to above shall be furnished every year reckoned from the date of commencement of the period of the mining lease.

P A R T V I I I

THE COVENANTS OF THE STATE GOVERNMENT

1. LESSEE: LESSEES MAY HOLD AND ENJOY RIGHTS QUIETLY:

The lessee paying the rents, water rate and royalties hereby reserved and observing and performing all the covenants and agreements herein contained and on the part of the lessee to be observed and performed shall and may quietly hold and enjoy the rights and premises hereby demised for and during the term hereby granted without any unlawful interruption from or by the State Government, or any person rightfully claiming under it.

2. ACQUISITION OF LAND OF THIRD PARTIES AND COMPENSATION THEREON:

If in accordance with the provision of clause 4 of PART VII of this Schedule the lessee shall offer to pay to an occupier of the surface of any part of the said lands compensation for any damage or injury which may arise from the proposed operations of the lessee and the said occupier shall refuse his consent to the exercise of the right and powers reserved to the State Government and demised to the lessee by these presents and the

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lessee shall report the matter to the State Government and shall deposit with it the amount offered as compensation and if the State Government are satisfied that the amount of compensation offered is fair and reasonable or if it is not so satisfied and the lessee shall have deposited with it such further amount as the State and Central Governments shall consider fair and reasonable the State Government shall order the occupier to allow the lessee, to enter the land and to carry out such operations as may be necessary for the purpose of this lease. In assessing the amount of such compensation the State Government shall be guided by the principles of the Land Acquisition Act.

3. TO RENEW: Where the mining lease related to any mineral not specified in the First Schedule to the Act, it shall be renewable for one period not exceeding the period specified in sub-section (2) of section 8 of the option of the lessee. Provided that the State Government may for reasons to be recorded in writing reduce the area applied for.

If the lease is in respect of minerals specified in the First Schedule to the Act, renewal will be subject to the prior approval of the Central Government.

If the lessee be desirous of taking a renewed lease of the premises hereby demised or of any part or parts of them for a further term from the expiration of the term hereby granted and is otherwise eligible, he shall prior to the expiration of the last mentioned term, give to the State Government six calendar months' previous notice in writing and shall pay the rates, rates and royalties hereby reserved and shall observe

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COLLECTOR, SALEM

and perform the several covenants and agreements herein contained and on the part of the lessees to be observed and performed upto the expiration of the term hereby granted. The State Government on receipt of application for renewal, shall consider it in accordance with rule 28 of the said rules and shall pass orders as it deems fit. If renewal is granted, the State Government will at the expense of the lessee and upon his executing and delivering to the State Government if required a counterpart thereof execute and deliver to the lessee a renewed lease of the said premises or part thereof for the further term of twenty years at such rents, rates and royalties and on such terms and subject to such rents, rates and royalties and on such terms and subject to such covenants and agreements including this present covenant to renew as shall be in accordance with the Mineral concession Rules, 1960, applicable to Limestone and Kankar on the day next following the expiration of the term hereby granted.

4. LIBERTY TO DETERMINE THE LEASE: The lessee may at any time determine this lease by giving not less than 12 calendar months' notice in writing to the State Government or to such Officer, or authority as the State Government may specify in this behalf and up on the expiration of such notice provided that the lessee shall upon such expiration render and pay all rents, water rates, royalties, compensation for damages and other moneys which may then be due and payable under these presents to the lessor or any other person or persons and shall deliver these presents to the State Government then this lease and the said term and the liberties, powers and privileges hereby granted.

K. S. Subramanian

LESSEE

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COLLECTOR, SALEM

shall absolutely cease and determine but without prejudice to any right or remedy of the lessor in respect of any breach of any of the covenants or agreements contained in these presents.

4. A. The State Government may, on an application made by the lessee, permit him to surrender one or more minerals from his lease which is for a group of minerals on the ground that deposits of that mineral have since exhausted or depleted to such an extent that it is no longer possible to work the mineral economically, subject to the condition that the lessee:-

- a. makes an application for such surrender of mineral at least six months before the intended date of surrender and
- b. gives an undertaking that he will not cause any hindrance in the working of the mineral so surrendered by any other person who is subsequently granted a mining lease for that mineral.

5. REFUND OF SECURITY DEPOSITS: On such date as the State Government may elect within 12 calendar months after the determination of this lease or of any renewal thereof, the amount of the security deposit paid in respect of this lease and then remaining in deposit with the State Government and not required to be applied to any of the purposes mentioned in this lease shall be refunded to the lessee. No interest shall

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COLLECTOR, SALEM

run on the security deposit.

PART IX

GENERAL PROVISION

1. **OBSTRUCTIONS TO INSPECTION:** In case the lessee or his transferee does not allow entry or inspection by the Officers authorised by the Central or State Government under clauses (i), (j) or (l) of sub rule (1) of rule 27 of the said rules, the State Government shall give notice in writing to the lessee requiring him to show cause within such time as may be specified in the notice why the lease should not be determined and his security deposit forfeited and if the lessee fails to show cause within the aforesaid time to the satisfaction of the State Government, the State Government may determine the lease and forfeit the whole or part of the security deposit.

2. **PENALTY IN CASE OF DEFAULT IN PAYMENT OF ROYALTY AND BREACH OF COVENANTS:** If the lessee or his/their transferee or assignee makes any default in payment of rent or water rate or royalty as required by section 9 of the Act or commits a breach of any of the conditions and covenants other than those referred to in covenant (1) above the State Government shall give notice to the lessee requiring him to pay the rent, water rate, royalty or remedy the breach, as the case may be within sixty days from the date of receipt of the notice and if the rent, water rate and royalty are not paid or the breach is not remedied within such period the State Government may without prejudice to any proceedings that may be taken against him determine the lease and forfeit the whole or part of the security deposit.

~~PENALTY FOR REPEATED BREACHES OF COVENANTS:~~ In cases of repeated

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breaches of covenants and agreements by the lessee for which notice has been given by the State Government in accordance with clauses (1) and (2) aforementioned on earlier occasion, the State Government without giving any further notice may impose such penalty not exceeding twice the amount of the annual dead rent specified in clause 2 Part V.

4. FAILURE TO FULFIL THE TERMS OF LEASES DUE TO 'FORCE MAJEURE'

Failure on the part of the lessee to fulfil any of the terms and conditions of this lease shall not give the Central or State Government any claim against the lessee or be deemed a breach of this lease, in so far as such failure is considered by the said Government to arise from force majeure and if through force majeure the fulfilment by the lessee of any of the terms and conditions of this lease be delayed, the period of such delay shall be added to the period fixed by this lease. In this clause the expression "force majeure" means act of God war, insurrection, riot, civil commotion strike, tide, storm, tidal, wave, flood, lightning, explosion, fire, earthquake, and any other happening which the lessee could not reasonably prevent or control.

5. LESSEE TO REMOVE HIS PROPERTIES ON THE EXPIRY OF LEASE:

The lessee having first paid and discharged rents, rates and royalties payable by virtue of these presents may at the expiration of sooner determination of the said term or within six calendar months thereafter unless the lease shall be determined under clauses 1 and 2 of this Part and in that case at any time not less than three calendar months nor more than

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LESSEE



COLLECTOR, SALEM

six calendar months after such determination) take down and remove for his own benefit all or any engines, machinery, plant, buildings, structures, tramways, railways and other work erections and conveniences which may have been erected, set up or placed by the lessee in or upon the said lands and which the lessee is not bound to deliver to the State Government under clause 20 of part VII of this schedule and which the State Government shall not desire to purchase.

6. FORFEITURE OF PROPERTY LEFT MORE THAN SIX MONTHS AFTER DETERMINATION OF LEASE: If at the end of six calendar months after the expiration or sooner determination of the said term under the provision contained in clause 4 of Part VIII of this Schedule become effective there shall remain in or upon the said land any engines, machinery, plant, buildings, structures, tramway railways and other work erections and conveniences or other property which are not required by the lessee in connection with operations in any other lands held by him under prospecting licence or mining lease, the same shall if not removed by the lessee within one calendar month after notice in writing requiring their removal has been given to the lessee by the State Government be deemed to become the property of the State Government and may be sold or disposed of in such manner as the State Government shall deem fit without liability to pay any compensation or to account to the lessee in respect thereof.

7. NOTICES: Every notice by these presents required to be given to the lessee shall be given in writing to such person resident on the said lands as the lessee may appoint for the purpose of receiving such notices and if there shall have been no such

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COLLECTOR, SALEM

appointment then every such notice shall be sent to the lessee by registered post addressed to the lessee at the address recorded in this lease or at such other address in India as the lessee may from time to time in writing to the State Government designate for the receipt of notices and every such service shall be deemed to be proper and valid service upon the lessee and shall not be questioned or challenged by him.

8. IMMUNITY OF STATE GOVERNMENT FROM LIABILITY TO PAY COMPENSATION:- If in any event the orders of the State Government are revised, reviewed or cancelled by the Central Government in pursuance of proceedings under Chapter VII of the Mineral Concession Rules, 1960, the lessee shall not be entitled to compensation for any loss sustained by the lessee in exercise of the powers and privileges conferred upon him by these presents.

9. For the purpose of stamp duty the anticipated royalty from the demised land is Rs. 522.42 per year.

CONDITIONS IN APPENDIX II OF G.O. MS. No. 1086 (INDUSTRIES DEPT.)

DT. 21-9-1977:

1. The lessee shall pay rents and royalties in any Government Treasury before the 10th January of every year;

2. The lessee shall pay before the expiry of the lease or its sooner determination by either party an amount equal to the annual dead rent or such higher amount as may be fixed by the Collector of the District in his discretion as compensation for damage to the land covered by the lease;

3. The lessee shall not fall trees, if any, without the previous permission of the Collector and if it is found that

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COLLECTOR DISTRICT

he has felled any trees without such permission he shall pay the value of the trees together with a compounding fee subject to a maximum of ten times the value of the said trees;

4. The lessee shall not operate on the surface of any area prohibited by any authority by laying out roads, erecting buildings, machinery etc., without the previous permission of such authority or the State Government;

5. The lessee shall not use land for surface occupation without giving proper notice to the Collector;

6. The lessee shall provide and shall keep at all times at or near the pit head full equipment of weighing machines of modern type to the satisfaction of the Collector for weighing the minerals collected by him;

7. The lessee will exercise the liberties and powers hereby granted in such a manner as to offer no unnecessary or reasonably avoidable obstruction or interruption to the development and working of any minerals not included in this lease and will at all times afford to the Governor and to the holder of prospecting licences or mining leases in respect of any such minerals of any minerals within any lands adjacent passage upon and across the said lands to such minerals for the purpose of getting working, developing and carrying away the same;

8. The lessee shall take such precautions as are necessary to secure pits and shafts by putting up wire fencing or such other protection to the satisfaction of the Collector to prevent accidents;

9. That on the occurrence of any accident the lessee shall

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COLLECTOR, SALEM

report such accident immediately to the nearest police station the nearest factory Inspector and the Labour Commissioner;

10. The lessee shall execute an indemnity bond to Government against the claims of third parties.

11. The lessee will at the expiration or sooner determination of the said term deliver upto the Governor all mines pits, shafts, including drifts, levels, waterways, airways and otherwork (now existing) hereafter to be sunk or made under the said lands (except such as may have been abandoned with the sanction of the Governor or in any ordinary and fair course of working) and all (engines, machinery plant, buildings, structures and other work and conveniences which at the commencement of the said terms were upon or under the said lands and all) engines, machinery, plant and fixtures set by the lessee below ground level which cannot be removed without causing injury to any mines or works under the said lands (except such of the same as may with the sanction of the Governor have become disused) and all buildings and structures of brick or stone erected by the lessee above ground level in good repair order and condition and fit in all respects for further working of the said minerals.

12. If after the determination of the lease there shall remain in or upon the said lands any engines, machinery plant, buildings, structures, tramways, railways and other works, erections and conveniences or minerals or mineral ores other property which the lessee is entitled to remove from the land the same shall, if not removed by the lessee within one calendar month after notice in writing requiring their removal is given to the lessee by the Collector be deemed to become the property of the Government

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with such conditions as that officer may in his absolute discretion prescribe:

(b) the area within the reserved forest limits must be demarcated by a declared fire line of 40 feet width which will be cut and kept cleared by the Forest Department at the expense of the lessee;

(c) the lessee must at all times permit the Forest Department to enter upon the land for the purpose of maintaining or repairing existing boundary lines within the area and must pay the cost of such maintenance or repair as determined by the District Forest Officer;

(d) the lessee must take suitable precautions to prevent fires from spreading into the adjoining reserve forest from the land and if such fires accidentally occur he must render all possible assistance in putting them out.

(e) the lessee shall not cut any trees or growth on the area granted in excess of 20 per cent of the number of trees on the whole area under the lease without the previous permission of the District Forest Officer and the value of such trees, etc., shall be paid for by the lessee at rates to be fixed by the District Forest Officer, he must not deface or interfere with any boundary stone or marks; if any boundary mark is accidentally damaged, he must bring the matter immediately to the notice of the Range Officer.

15. the lessee should keep the stock of beryl or any other "prescribed substance" under Section 3 of the Atomic Energy Act, No. XXIX of 1948, if they occur in the property covered by the lease with a view to making them available to the Government of India.

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COLLECTOR, SALEM

16. The lessee should not prevent the public from using the path running in S.Nos. 15, 16, 155 and 156, which are patta lands of the lessee.

In witness whereof these presents have been executed in the manner hereunder appearing the day and year first above written.

Signed by the Collector
of Salem for and on
behalf of the Governor
of Tamil Nadu in the
presence of

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COLLECTOR, SALEM
(LESSOR)

K. S. Subramanyam

LESSEE

WITNESS



PERSONAL ASSISTANT (GENERAL)
TO THE COLLECTOR, SALEM.

GOVERNMENT OF TAMIL NADU

ABSTRACT

Mines and Minerals - Mining Lease - Limestone and Kankar - Salem district, Sankari taluk - Chinnagoundanur village - Over an extent of 19.77 acres - Second renewal application of Tvl. India Cements Ltd, Sankari, Salem district - Orders - Issued.

INDUSTRIES(D.I)DEPARTMENT

G.O.Ms.No.76.

Dated: 8.2.1989.

Read again:

- i. G.O.Ms.No.1504, Industries, Labour and Cooperative dated 13.3.62.
- ii. G.O.Ms.No.271, Industries, dated 9.3.83.

Read also:

- i. From Tvl. India Cements Limited, Mining Lease renewal application dated 1.9.87.
- ii. From Collector, Salem, Lr.No.D.Dis.2520/87 (Mines.A) dated 18.3.88.
- iii. From Govt.of India, Ministry of Steel & Mines (Department of Mines) New Delhi, Lr.No.2/21/24/88-MV dt.4.8.88.
- iv. From Director of Geology and Mining, Lr.No.Rc.No.6273/B4/88 dt.25.8.88.
- v. From Collector, Salem, Lr.No.L.Dis.2129/88 dt.9.9.88.
- vi. From Govt.of India, Ministry of Steel & Mines (Department of Mines) New Delhi, Lr.No.4(74)/88-MV dt.5.1.89.
- vii. From Tvl. India Cements Ltd, Lr.No.35T/MIN/3908 dt.17.1.89

ORDER

Tvl. India Cements Limited, Sankari, Salem district were holding a mining lease for limestone and Kankar over an extent of 19.77 acres in S.Nos.48, 63 and 66 of Chinnagoundanur village, Sankari taluk, Salem district. The above mentioned lease was sanctioned in the G.O. first read above for a period of 20 years and first renewed in the G.O. second read above for a period of 6 years. The period of mining lease expired on 9.9.88.

2. Tvl. India India Cements Limited, Sankari, Salem District have applied for the second renewal of the mining lease held by them for a further period of 10 years from 10.9.88. The Government have examined the mining lease renewal application in consultation with the Collector, Salem and Director of Geology and Mining and they have decided to renew the mining lease granted to Tvl. India Cements Limited over the area mentioned in para 1 above for a further period of 10 years from 10.9.88.

3. The Government of India (Department of Mines) have conveyed their approval under Section 8(2) of the Mines and Minerals (Regulation & Development) Act, 1957 for the grant of second renewal of mining lease for limestone and Kankar over an extent of 19.77 acres in Chinnagoundanur village, Sankari taluk, Salem district in favour of Tvl. India Cements Limited, Sankari, Salem district for a period of 10 years.

4. In exercise of the powers conferred under Section 10(3) of the Mines and Minerals (Regulation & Development) Act, 1957, the Governor of Tamil Nadu hereby sanctions the grant of second renewal to Tvl. India Cements Limited, Sankari taluk, Salem district of a mining lease for limestone and Kankar for a further period of ten years from 10.9.88 over an extent of 19.77 acres in S. Nos. 48, 63 and 66 of Chinnagoundanur village, Sankari taluk, Salem district. subject to the conditions mentioned in sub-rule (1) of rule 27 of Mineral Concession Rules, 1960 and also to the conditions specified in the Appendix to this order.

5. The rates of royalty, dead rent and surface rent shall be as follows:-

Royalty Limestone - Ten Rupees per tonne.

Dead rent Rs. 90/- (Rupees Ninety only) per hectare per annum.

Surface rent and water rate At such rates as the land revenue and cesses assessable on the land are paid.

6. The applicant company should pay a deposit of Rs. 2000/- (Rupees Two thousand only) as prescribed in rule 32 of the Mineral Concession Rules, 1960, before the lease deed is actually executed.

7. The terms and conditions stated in this order are subject to such further modifications, additions and alterations as may be included in the lease deed when finalised.

8. The Collector, Salem district is requested to take necessary further action for the execution of lease deed. As soon as the deed is executed, the date of such execution should be reported to the Government and the Director of Geology and Mining.

(BY ORDER OF THE GOVERNOR)

K.A. NAMBIAR,
Special Commissioner and Secretary to Government.

To
The Director of Geology and Mining, Quindy, Madras-32.

p. t. o.

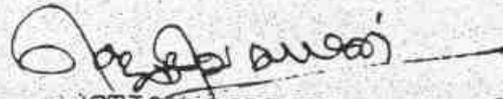
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To
The Collector, Salem (with records by RPAD) .
✓ Ml. India Cements Limited, "Dhun Building", 827, Annasalai,
Madras-2.

Copy to:

- The Secretary Govt. of India, Ministry of Steel and Mines
(Department of Mines), New Delhi.
- The Controller General, Indian Bureau of Mines, New Secretariat,
Building, Nagpur. Kolar Gold Field,
- The Regional Inspector of Mines, ~~K. C. D.~~ Karnataka State,
- The Industries (B) department, Madras-9.
sf/scs.

/forwarded/by order/


SECTION OFFICER.


17/12/89



THE INDIA CEMENTS LIMITED.,

SANKARI WEST

REVIEW OF MINING PLAN INCLUDING **PROGRESSIVE MINE CLOSURE PLAN OF** **MOTHAIYANUR LIMESTONE MINE**

**GO: 211, OVER AN EXTENT OF 50.84 HECTARES,
 INCHINNAGOUNDANUR VILLAGE, SANKARI TALUK,
 SALEM DISTRICT,
 TAMIL NADU-637303**

(SUBMITTED UNDER RULE 17(1) OF MCR 2016)

TEXT & PLATES

COMPANY REG. NO	IBM/613/2011
MINE CODE	38TMN11073
NAME OF THE MINE	MOTHAIYANUR LIMESTONE MINE
NAME OF THE MINERAL	LIMESTONE
LEASE AREA	50.84 HECTARES (NON-FOREST)
CATEGORY	A (FULLY MECHANISED MINE)
DISTRICT	SALEM
STATE	TAMILNADU
SCHEME PERIOD	2024-25 TO 2028-2029
QUALIFIED PERSON	S.NATARAJAN

By e-mail

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE REGIONAL CONTROLLER OF MINES, CHENNAI**

No. TN/SLM/LST/ROMP-1727.MDS.

Dt : 15/12/2023

Shri/M/s. The India Cements Limited ,

Coromandel Towers, 93, Santhome High Road, Karpagam Avenue, Raja Annamalai Puram, Chennai, MOTHAIYANUR (55.74 H.(S) (63394201)

Sub Approval of Review of Mining Plan (including Progressive Mine Closure Plan) for Mothaiyanur Limestone Mine over an extent of 50.84 hectares in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamilnadu State submitted by M/s. The India Cements Limited under Rule 17(2) of MCR, 2016.

Ref : (i) Your online submission of draft Review of Mining Plan in MPAS portal on 21.09.2023 in respect of aforesaid M.L.Area.
(ii) This office letter of even no. dated 31.10.2023.
(iii) Your online submission of final Review of Mining Plan document in MPAS portal on 14.12.2023 in respect of aforesaid ML area.

Sir,

In exercise of the powers delegated to me under Rule 16 of Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 vide Gazette Notification No. S.O. 1857(E) dated 18.5.2016, I hereby accord approval for the above said Review of Mining Plan (including Progressive Mine Closure Plan) for **Limestone** mineral. This approval is subject to the following conditions:

A. General Conditions:

- 1) That the Review of Mining Plan (including Progressive Mine Closure Plan) is approved without prejudice to any other law applicable to the mine/area from time to time whether made by the Central Government, State Government or any other authority.
- 2) That this approval of the Review of Mining Plan (including Progressive Mine Closure Plan) does not in any way imply the approval of the Government in terms of any other provision of the Mines & Mineral (Development & Regulation) Act, 2015 or the Mineral Concession Rules, 2016 or any other law including Forest (Conservation) Act, 1980, Environment Protection Act, 1986 and the rules made there under.
- 3) That this Review of Mining Plan (including Progressive Mine Closure Plan) is approved without prejudice to any other order or direction from any court of competent jurisdiction.
- 4) Provisions of the Mines Act, 1952 and Rules & Regulations made thereunder including submission of notice of opening, appointment of manager and other statutory officials as required by the Mines Act, 1952 shall be complied with.
- 5) The Provisions made under MM(D&R) Act, 2015 (Amended) and Rules made thereunder shall be complied with.
- 6) The contents of circular No. 2/2010 issued by the Chief Controller of Mines, IBM, Nagpur vide his letter No. 11013/3/MP/90-CCOM Vol. VII dated 06.04.2010 shall be complied with.
- 7) The execution of Mining Plan / Review of Mining Plan shall be subjected to vacation of prohibitory orders / notices, if any.
- 8) This approval of mining operations and associated activities is restricted to the mining lease area only. The mining lease area is as shown on the statutory plans under rule 32 of Mineral Conservation and Development Rules, 2017, by the lessee. Indian Bureau of Mines does not take any responsibility regarding correctness of the boundaries of the lease shown on the ground with reference to the lease map and other plans furnished by the lessee.
- 9) The Environmental Monitoring Cell of the Company shall continue monitoring ambient air quality, dust fall rate, water quality, soil sample analysis and noise level measurements on various stations established for the purpose both in the core zone and buffer zone, as per Department of Environment guidelines and keeping in view IBM's Circular No.3/92, season-wise every year or by engaging preferably the services of an Environmental laboratory approved by MOEF/CPCB. The data so generated shall be maintained in a bound paged register kept for the purpose and the same shall be made available to the inspecting officer on demand.

10) If anything is found to be concealed as required by the Mines Act in the contents of Review of Mining Plan and proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.

11) Yearly report as required under Rule 26(2) of MCDR,2017 setting forth the extent of protection and rehabilitation works carried out as envisaged in the approved progressive mine closure plan and if there is any deviations, reasons thereof shall be submitted before 1st July of every year to the regional office, IBM , Chennai.

12) The Review of Mining Plan is approved for the proposals contained therein and as applicable from 01.04.2024 for the mining activities to be carried out within the mining leasehold. The earlier instances of irregular mining/illegal mining, if any, shall not be regularized through the approval of this document.

13) The financial assurance submitted should be renewed before expiry of the same.

14) In case mining lease falls within a radius of 10 kms. of National Park/Sanctuary, recommendations of NBWL have to be obtained as per the orders of the Hon'ble Supreme Court in I.A. No. 460/2004.

15) This approval is subject to the mining operations as per the proposals shall be carried out only after obtaining necessary clearances from MOEF, Pollution Control Board, Forest Department etc.

16) This approval is subject to submission of DGPS Plan duly authenticated by the State Government and submission of modifications in the approved Mining Plan if, consequent to the authentication of DGPS Survey Plan, any change in mining lease area is accepted by the State Government. (MOTHAYANUR (55.74 H.(S) (68394201)

17) This approval is subject to the conditions as per the directions given in W.P.(c) No. 114/2014 given by the Hon'ble Supreme Court of India should be taken care while implementing the proposals given in the PMCP part of the documents.

B. Special Conditions:

It shall be mandatory for the project proponent, abstracting ground water, to obtain **No Objection Certificate** from Central Ground Water Authority or, the concerned State/Union Territory Ground Water Authority, as the case may be.

Encl: Soft copy of approval letter of approved Review of Mining Plan.

Yours faithfully,

(G.C.Sethi)

Regional Controller of Mines

Copy forwarded for information to Shri. S.Natarajan, Qualified Person, The India Cements Limited, Sankari West, Salem- 637 303.

(G.C. Sethi)

Regional Controller of Mines

Not on first two copies:

Copy forwarded for kind information to:

- 1) The Commissioner, Department of Geology & Mining, Government of Tamilnadu, Guindy, Chennai - 600 032.
- 2) The Controller of Mines (SZ), Indian Bureau of Mines, Bengaluru.
- 3) The Director of Mines Safety, DGMS, Chennai Region, Chennai.

(G.C. Sethi)

Regional Controller of Mines



THE INDIA CEMENTS LIMITED.,
SANKARI WEST
REVIEW OF MINING PLAN INCLUDING
PROGRESSIVE MINE CLOSURE PLAN OF
MOTHAIYANUR LIMESTONE MINE

GO: 1086, OVER AN EXTENT OF 4.86.5 HECTARES,
INCHINNAGOUNDANUR VILLAGE, SANKARI TALUK,
SALEM DISTRICT,
TAMIL NADU-637303
(SUBMITTED UNDER RULE 17(1) OF MCR 2016)

TEXT & PLATES

COMPANY REG. NO	IBM/613/2011
MINE CODE	38TMN1112
NAME OF THE MINE	MOTHAIYANUR LIMESTONE MINE
NAME OF THE MINERAL	LIMESTONE
LEASE AREA	4.86.5 HECTARES (NON-FOREST)
CATEGORY	A (FULLY MECHANISED MINE)
DISTRICT	SALEM
STATE	TAMILNADU
SCHEME PERIOD	2023-24 TO 2027-2028
QUALIFIED PERSON	S.NATARAJAN

By e-mail

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE REGIONAL CONTROLLER OF MINES, CHENNAI**

No. TN/SLM/LST/ROMP-1698.MDS

Dt : 19/12/2022

Shri/M/s. The India Cements Limited ,
Coromandel Towers, 93, Santhome High Road, Karpagam Avenue, Raja Annamalai Puram, Chennai

Sub: Approval of Review of Mining Plan (including Progressive Mine Closure Plan) for Chinnagoundanur Limestone Mine over an extent of 4.865 hectares in Chinnagoundanur Village, Sankari Taluk, Salem District, Tamilnadu submitted by M/s. The India Cements Limited under Rule 17(1) of MCR, 2016.

Ref : (i) Your online submission of draft Review of Mining Plan in MPAS portal on 28.09.2022 in respect of aforesaid M.L.Area.
(ii) This office letter of even no. dated 02.11.2022
(iii) Your online submission of final Review of Mining Plan document in MPAS portal on 12.12.2022 in respect of aforesaid ML area.

Sir,

In exercise of the powers delegated to me under Rule 16 of Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 vide Gazette Notification No. S.O. 1857(E) dated 18.5.2016, I hereby accord approval for the above said Review of Mining Plan for **Limestone** mineral only. This approval is subject to the following conditions.

A. General Conditions:

- 1) That the Review of Mining Plan (including Progressive Mine Closure Plan) is approved without prejudice to any other law applicable to the mine/area from time to time whether made by the Central Government, State Government or any other authority.
- 2) That this approval of the Review of Mining Plan (including Progressive Mine Closure Plan) does not in any way imply the approval of the Government in terms of any other provision of the Mines & Mineral (Development & Regulation) Act, 2015 or the Mineral Concession Rules, 2016 or any other law including Forest (Conservation) Act, 1980, Environment Protection Act, 1986 and the rules made there under.
- 3) That this Review of Mining Plan (including Progressive Mine Closure Plan) is approved without prejudice to any other order or direction from any court of competent jurisdiction.
- 4) Provisions of the Mines Act, 1952 and Rules & Regulations made thereunder including submission of notice of opening, appointment of manager and other statutory officials as required by the Mines Act, 1952 shall be complied with.

- 5) The Provisions made under MM(D&R) Act, 2015 (Amended) and Rules made thereunder shall be complied with.
- 6) The contents of circular No. 2/2010 issued by the Chief Controller of Mines, IBM, Nagpur vide his letter No. 11013/3/MP/90-CCOM Vol. VII dated 06.04.2010 shall be complied with.
- 7) The execution of Mining Plan / Review of Mining Plan shall be subjected to vacation of prohibitory orders / notices, if any.
- 8) This approval of mining operations and associated activities is restricted to the mining lease area only. The mining lease area is as shown on the statutory plans under rule 32 of Mineral Conservation and Development Rules, 2017, by the lessee. Indian Bureau of Mines does not take any responsibility regarding correctness of the boundaries of the lease shown on the ground with reference to the lease map and other plans furnished by the lessee.
- 9) The Environmental Monitoring Cell of the Company shall continue monitoring ambient air quality, dust fall rate, water quality, soil sample analysis and noise level measurements on various stations established for the purpose both in the core zone and buffer zone, as per Department of Environment guidelines and keeping in view IBM's Circular No.3/92, season-wise every year or by engaging preferably the services of an Environmental laboratory approved by MOEF/CPCB. The data so generated shall be maintained in a bound paged register kept for the purpose and the same shall be made available to the inspecting officer on demand.
- 10) If anything is found to be concealed as required by the Mines Act in the contents of Review of Mining Plan and proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.
- 11) Yearly report as required under Rule 26(2) of MCDR,2017 setting for the extent of protection and rehabilitation works carried out as envisaged in the approved progressive mine closure plan and if there is any deviations, reasons thereof shall be submitted before 1st July of every year to the regional office, IBM , Chennai.
- 12) The Review of Mining Plan is approved for the proposals contained therein and as applicable from 01.04.2023 for the mining activities to be carried out within the mining leasehold. The earlier instances of irregular mining/illegal mining, if any, shall not be regularized through the approval of this document.
- 13) The financial assurance submitted should be renewed before expiry of the same.
- 14) In case mining lease falls within a radius of 10 kms. of National Park/Sanctuary, recommendations of NBWL have to be obtained as per the orders of the Hon'ble Supreme Court in I.A. No. 460/2004.
- 15) This approval is subject to the mining operations as per the proposals shall be carried out only after obtaining necessary clearances from MOEF, Pollution Control Board, Forest Department etc.
- 16) This approval is subjected to the extension of the validity of the mining lease by the State government as per Section 8A(5) of MMDR Act, 2015 (Amended).
- 17) This approval is subject to submission of DGPS Plan duly authenticated by the State Government and submission of modifications in the approved Mining Plan if, consequent to the authentication of DGPS Survey Plan, any change in mining lease area is accepted by the State Government.
- 18) This approval is subject to the conditions as per the directions given in W.P.(c) No. 114/2014 given by the Hon'ble Supreme Court of India should be taken care while implementing the proposals given in the PMCP part of the documents.

B. Special Conditions:

It shall be mandatory for the project proponent, abstracting ground water, to obtain **No Objection Certificate** from Central Ground Water Authority or, the concerned State/Union Territory Ground Water Authority, as the case may be.

Yours faithfully,

(G. C. Sethi)

Regional Controller of Mines

Copy forwarded for information to Shri.S.Natarajan, Qualified Person, Chief Manager, The India Cements Limited., Sankari Works. Sankari West, (P.O.), Salem - 637303.

(G. C. Sethi)

Regional Controller of Mines

Not on first two copies:

Copy forwarded for kind information to:

- 1) The Commissioner, Department of Geology & Mining, Government of Tamilnadu, Guindy, Chennai - 600032.
- 2) The Controller of Mines (SZ), Indian Bureau of Mines, Bangalore.
- 3) The Director of Mines Safety, DGMS, Chennai Region, Chennai.

(G. C. Sethi)

Regional Controller of Mines

Approved



THE INDIA CEMENTS LIMITED.,
SANKARI WEST

REVIEW OF MINING PLAN INCLUDING
PROGRESSIVE MINE CLOSURE PLAN OF
MOTHAIYANUR LIMESTONE MINE

GO: 76, OVER AN EXTENT OF 8.00.5 HECTARES,
IN CHINNAGOUNDANUR VILLAGE, SANKARI TALUK,
SALEM DISTRICT,
TAMIL NADU-637303

(SUBMITTED UNDER RULE 17(1) OF MCR 2016)

VOLUME I

TEXT

COMPANY REG. NO	IBM/613/2011
MINE CODE	38TMN11017
NAME OF THE MINE	MOTHAIYANUR LIMESTONE MINE (SOUTH)
NAME OF THE MINERAL	LIMESTONE
LEASE AREA	8.00.5 HECTARES (NON-FOREST)
CATEGORY	A (FULLY MECHANISED MINE)
DISTRICT	SALEM
STATE	TAMILNADU
SCHEME PERIOD	2022-23 TO 2026-27
QUALIFIED PERSON	G RAJESH

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE REGIONAL CONTROLLER OF MINES**

Telephone no. 044-24914461/1570
Telefax no. 044-24911295
Email ID: ro.chennai@ibm.gov.in

C-4-A Rajaji Bhavan
CGO complex, Besant Nagar
Chennai – 600 090.

No. TN/SLM/LST/ROMP-1678.MDS

Dated: 07/12/2021
IS

To
✓ Smt. Lakshmi Aparna Srikumar
Nominated Owner
M/s. The India Cements Limited
Sankari Works, Sankari West P.O.
Salem District – 637 303.

Sub. : Approval of Review of mining plan along with PMCP of Mothaiyanur Limestone mine (South) over an area of 8.005 hect in Chinnagoundanur Village, Sankari Taluk, Salem District (38TMN11017), submitted by M/s. The India Cements Limited under Rule 17(1) of MCR, 2016.

Ref. : 1) Your letter No.ICL/SKD/MINES/2021/75 dt.29.10.2021.
2) This office letter of even number dated 17.11.2021.
3) Your letter No.ICL/SKD/MINES/2021/90 dt.29.11.2021.

Sir,

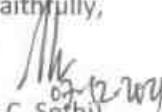
In exercise of the powers delegated to me under Rule 16 of Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 vide Gazette Notification No. S.O. 1857(E) dated 18.5.2016, I hereby accord approval for the above said Review of Mining Plan for Limestone mineral only. This approval is subject to the following conditions.

- 1) That the Review of Mining Plan (including Progressive Mine Closure Plan) is approved without prejudice to any other law applicable to the mine/area from time to time whether made by the Central Government, State Government or any other authority.
- 2) That this approval of the Review of Mining Plan (including Progressive Mine Closure Plan) does not in any way imply the approval of the Government in terms of any other provision of the Mines & Mineral (Development & Regulation) Act, 2015 or the Mineral Concession Rules, 2016 or any other law including Forest (Conservation) Act, 1980, Environment Protection Act, 1986 and the rules made there under.
- 3) That this Review of Mining Plan (including Progressive Mine Closure Plan) is approved without prejudice to any other order or direction from any court of competent jurisdiction.
- 4) Provisions of the Mines Act, 1952 and Rules & Regulations made thereunder including submission of notice of opening, appointment of manager and other statutory officials as required by the Mines Act, 1952 shall be complied with.
- 5) The Provisions made under MM(D&R) Act, 2015 (Amended) and Rules made thereunder shall be complied with.
- 6) The contents of circular No. 2/2010 issued by the Chief Controller of Mines, IBM, Nagpur vide his letter No. 11013/3/MP/90-CCOM Vol. VII dated 06.04.2010 shall be complied with.
- 7) The execution of Mining Plan / Review of Mining Plan shall be subjected to vacation of prohibitory orders / notices, if any.
- 8) This approval of mining operations and associated activities is restricted to the mining lease area only. The mining lease area is as shown on the statutory plans under rule 32 of Mineral Conservation and Development Rules, 2017, by the lessee. Indian Bureau of Mines does not take any responsibility regarding correctness of the boundaries of the lease shown on the ground with reference to the lease map and other plans furnished by the lessee.

- 9) The Environmental Monitoring Cell of the Company shall continue monitoring ambient air quality, dust fall rate, water quality, soil sample analysis and noise level measurements on various stations established for the purpose both in the core zone and buffer zone, as per Department of Environment guidelines and keeping in view IBM's Circular No.3/92, season-wise every year or by engaging preferably the services of an Environmental laboratory approved by MOEF/CPCB. The data so generated shall be maintained in a bound paged register kept for the purpose and the same shall be made available to the inspecting officer on demand.
- 10) If anything is found to be concealed as required by the Mines Act in the contents of Review of Mining Plan and proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.
- 11) Yearly report as required under Rule 26(2) of MCDR,2017 setting for the extent of protection and rehabilitation works carried out as envisaged in the approved progressive mine closure plan and if there is any deviations, reasons thereof shall be submitted before 1st July of every year to the regional office, IBM , Chennai.
- 12) The Review of Mining Plan is approved for the proposals contained therein and as applicable from 01.04.2022 for the mining activities to be carried out within the mining leasehold. The earlier instances of irregular mining/illegal mining, if any, shall not be regularized through the approval of this document.
- 13) The financial assurance submitted should be renewed before expiry of the same.
- 14) In case mining lease falls within a radius of 10 kms. of National Park/Sanctuary, recommendations of NBWL have to be obtained as per the orders of the Hon'ble Supreme Court in I.A. No. 460/2004.
- 15) This approval is subject to the mining operations as per the proposals shall be carried out only after obtaining necessary clearances from MOEF, Pollution Control Board, Forest Department etc
- 16) This approval is subjected to the extension of the validity of the mining lease by the State government as per Section 8A(5) of MMDR Act 2015(Amended)
- 17) This approval is subject to submission of DGPS Plan duly authenticated by the State Government and submission of modifications in the approved Mining Plan if, consequent to the authentication of DGPS Survey Plan, any change in mining lease area is accepted by the State Government.
- 18) This approval is subject to the conditions as per the directions given in W.P.(c) No. 114/2014 given by the Hon'ble Supreme Court of India should be taken care while implementing the proposals given in the PMCP part of the documents.

Encl. Copy of the approved Review of Mining Plan with PMCP.

Yours
faithfully,


(G.C. Sethi)

Regional Controller of Mines

Copy for information to:-

1. Shri G. Rajesh, Qualified person, M/s.The India Cements Limited,Sankari West,Salem – 637 303.
2. The Commissioner of Geology & Mining, Government of Tamilnadu, Guindy, Chennai – 600 032 along with copy of the approved Review of Mining Plan.

Encl : As above.


(G.C. Sethi)

Regional Controller of Mines

COMMISSIONERATE OF GEOLOGY AND MINING

From

Thiru.J.Jayakanthan, I.A.S.,
Commissioner of Geology and Mining,
Guindy,
Chennai – 600 032.

To

Tvl. The India Cements Limited,
Coromandel Towers,
93, Santhome High Road,
Karpagam Avenue,
R.A.Puram, Chennai- 600 028.

Rc. No.337/MM9/2023 dated: 08.02.2023

Sir,

Sub: Mines and Minerals-Major Mineral – Limestone – Salem District and Sankari Taluk – Chinnagoundanur Village –Mining lease granted over an extent of 50.84.0 Hectares in SF.No.15/1, 16/2 etc., of patta lands to Tvl.The India Cements Limited, Salem – Mining operations carried out without Environmental Clearance– Requested to issue “No Objection Certificate” – Certificate based on the Hon’ble Supreme Court order – order issued - Reg.

- Ref: 1) G.O. 3(D) (Ms.)No.211 Industries Department, dated 11.12.1997.
2) Hon’ble Supreme Court of India order dated 02.08.2017 in W.P.No.114/2014.
3) Deputy Director Letter Rc.No.333/2017/MinesA/ dated: 27.07.2017.
4) Representation of Tvl. India Cements Ltd., dated: 11.01.2023 addressed to the Commissioner of Geology and Mining.

Kind attention is invited to the references cited.

2) In order to comply the Hon’ble Supreme Court of India order dated 02.08.2017 in W.P.No.114/2014, production details verified, M/s. The India Cements Limited has not produced and transported excess metric tonnes of Limestone based on the highest production made during the year 1993-94 from the subject area during the period from 2000-01 to 2017-18 without Environmental Clearance.

3) In the circumstances, since Tvl. The India Cements Limited has not produced and transported excess metric tonnes of Limestone based on the highest production made during the year 1993-94 from the subject area during the period from 2000-01 to 2017-18 there is no violation of EIA Notification 2006 hence **“No Objection Certificate” is hereby issued in favour of Tvl. The India Cements Limited** so as to obtain Environmental Clearance from the MoEF&CC/ SEIAA-TN for the Limestone Mines situated over an extent of 50.84.0 Hectares of patta land in S.F.No. 15/1, 16/2 etc., in Chinnagoundanur Village, Sankari Taluk and Salem District without prejudice to any other Mining Dues that may arise in future.


Commissioner of Geology and Mining
8/4/2017

Copy to

1. The Additional Chief Secretary to Government,
Industries, Investment Promotion & Commerce Department,
Secretariat, Chennai-9.
2. State Environment Impact Assessment Authority, Tamil Nadu
Panagal Building, No.1, Jeenis Road,
Saidapet, Chennai - 600 015.
3. The District Collector,
Salem.

COMMISSIONERATE OF GEOLOGY AND MINING

From

Thiru.J.Jayakanthan, I.A.S.,
Commissioner of Geology and Mining,
Guindy,
Chennai – 600 032.

To

Tvl. The India Cements Limited,
Coromandel Towers,
93, Santhome High Road,
Karpagam Avenue,
R.A.Puram, Chennai- 600 028.

Rc. No.338/MM9/2023 dated: 08.02.2023

Sir,

Sub: Mines and Minerals-Major Mineral - Limestone -
Salem District and Sankari Taluk- Chinnagoundanur
Village -Mining lease granted over an extent of
4.86.5 Hectares in SF.No.33/1B(P) etc., of patta and
poramboke lands to Tvl.The India Cements Limited,
Salem - Requested to issue "No Objection Certificate"
- Certificate issued - Reg.

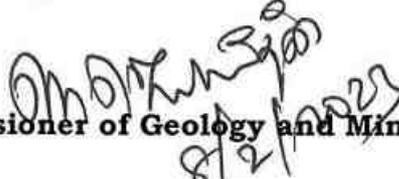
- Ref: 1) G.O. 3(D) (Ms.)No.1086 Industries Department,
dated 21.09.1977.
2) Hon'ble Supreme Court of India order dated
02.08.2017 in W.P.No.114/2014.
3) Deputy Director Letter Rc.No.333/2017/MinesA/
dated: 27.07.2017.
4) Representation of Tvl. India Cements Ltd., dated:
11.01.2023 addressed to the Commissioner of
Geology and Mining.

Kind attention is invited to the references cited.

2) In order to comply the Hon'ble Supreme Court of India order dated 02.08.2017 in W.P.No.114/2014, it is observed that, the mining lease granted to M/s. The India Cements Limited is less than 5 Hects and it does not require Environmental Clearance prior to 2016. Based on the production details furnished by the Deputy Director, Salem it is observed that, there is no Limestone production from the year 2014-15 onwards.

3) The Government vide G.O.(4D) No.3, Industries(MMA.1) Department dated: 15.02.2021 has declared the said lease as 'not lapsed'.

4) In the circumstances, since Tvl. The India Cements Limited had not produced and transported Limestone from 2014-15 onwards there is no violation of EIA Notification 2006, hence **"No Objection Certificate"** is hereby issued in favour of Tvl. **The India Cements Limited** so as to obtain Environmental Clearance from the MoEF&CC/SEIAA-TN for the Limestone Mines situated over an extent of 4.86.5 Hectares of patta and Poramboke land in S.F.No. 33/1B(P) etc., in Chinnagoundanur Village, Sankari Taluk and Salem District without prejudice to any other Mining Dues that may arise in future.


Commissioner of Geology and Mining

Copy to

1. The Additional Chief Secretary to Government,
Industries, Investment Promotion & Commerce Department,
Secretariat, Chennai-9.
2. State Environment Impact Assessment Authority, Tamil Nadu
Panagal Building, No.1, Jeenis Road,
Saidapet, Chennai - 600 015.
3. The District Collector,
Salem.

COMMISSIONERATE OF GEOLOGY AND MINING

From

ThiruJ.Jayakanthan, I.A.S.,
Commissioner of Geology and Mining,
Guindy,
Chennai - 600 032.

To

Tvl. The India Cements Limited,
Coromandel Towers,
93, Santhome High Road,
Karpagam Avenue,
R.A.Puram, Chennai- 600 028.

Rc. No.336/MM9/2023 dated:08.02.2023

Sir,

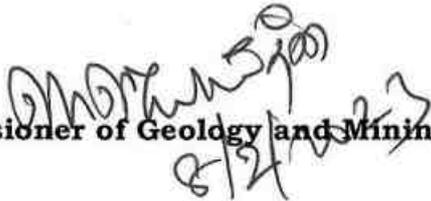
Sub: Mines and Minerals-Major Mineral - Limestone - Salem District and Sankari Taluk - Chinnagoundanur Village -Mining lease granted over an extent of 8.00.5 Hectares in SF.No.48, 63 and 66 of poramboke lands to Tvl.The India Cements Limited, Salem -Mining operations carried out without Environmental Clearance - Violation of EIA Notification 2006 - Requested to issue "No Objection Certificate" - Certificate based on Hon'ble Supreme Court order - order issued - Reg.

- Ref: 1) G.O. 3(D) (Ms.)No.76 Industries Department, dated 08.02.1989.
2) Hon'ble Supreme Court of India order dated 02.08.2017 in W.P.No.114/2014.
3) Deputy Director Letter Rc.No.333/2017/MinesA/ dated: 27.07.2017.
4) Representation of Tvl. India Cements Ltd., dated: 11.01.2023 addressed to the Commissioner of Geology and Mining.

Kind attention is invited to the references cited.

2) In order to comply the Hon'ble Supreme Court of India order dated 02.08.2017 in W.P.No.114/2014, production details verified, M/s. The India Cements Limited has not produced and transported excess metric tonnes of Limestone based on the highest production made during the year 1993-94 from the subject area during the period from 2000-01 to 2017-18 without Environmental Clearance.

3) In the circumstances, since Tvl. The India Cements Limited has not produced and transported excess metric tonnes of Limestone based on the highest production made during the year 1993-94 from the subject area during the period from 2000-01 to 2017-18 there is no violation of EIA Notification 2006, hence **“No Objection Certificate” is hereby issued in favour of Tvl. The India Cements Limited** so as to obtain Environmental Clearance from the MoEF&CC/ SEIAA-TN for the Limestone Mines situated over an extent of 8.00.5 Hectares in SF.No.48, 63 and 66 in Chinnagoundanur Village, Sankari Taluk and Salem District without prejudice to any other Mining Dues that may arise in future.


Commissioner of Geology and Mining

Copy to

1. The Additional Chief Secretary to Government,
Industries, Investment Promotion & Commerce Department,
Secretariat, Chennai-9.
2. State Environment Impact Assessment Authority, Tamil Nadu
Panagal Building, No.1, Jeenis Road,
Saidapet, Chennai - 600 015.
3. The District Collector,
Salem.

POPULATION BREAKUP & LITERACY LEVEL WITHIN THE BUFFER ZONE AS PER 2011 CENSUS Annexure-4

Sl.No	Name of village	Rural / urban	HOUSE HOLDS	POPULATION			POPULATION BELOW 6 AGE GROUP			SCHEDULE CASTE			SCHEDULE TRIBE			LITRERATES			ILLITRERATES		
				TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
0-2 KM	Sankari Taluk, Salem District																				
1	Chinnakavundanur	Rural	1993	6819	3497	3322	543	276	267	1801	958	843	0	0	0	4133	2411	1722	2686	1086	1600
2	Alathur	Rural	651	2318	1205	1113	169	90	79	676	366	310	0	0	0	1330	807	523	988	398	590
	Sub Total A		2644	9137	4702	4435	712	366	346	2477	1324	1153	0	0	0	5463	3218	2245	3674	1484	2190
2-5 KM	Sankari Taluk, Salem District																				
3	Devanakavandanur	Rural	2417	8925	4613	4312	774	433	341	2206	1152	1054	0	0	0	5288	3037	2251	3637	1576	2061
4	Katteri	Rural	2621	9379	4788	4591	831	419	412	1833	942	891	10	5	5	5780	3311	2469	3599	1477	2122
5	Virachchipalayam	Rural	352	1272	631	641	79	42	37	482	255	227	0	0	0	803	445	358	469	186	283
6	Sanniyasipatti Ag.	Rural	648	2212	1099	1113	185	89	96	548	268	280	1	1	0	1601	878	723	611	221	390
7	Arasiramani (TP)	Urban	3970	14834	7665	7169	1195	637	558	1074	538	536	1	1	0	8634	5226	3408	6200	2439	3761
8	Thevur (TP)	Urban	2423	8548	4415	4133	727	392	335	1893	984	909	3	3	0	5146	3084	2062	3402	1331	2071
	Tiruchengode Taluk, Namakkal Dist																				
9	Pallakkapalayam	Rural	1285	6315	3521	2794	318	162	156	1632	858	774	1	1	0	4540	2821	1719	1775	700	1075
10	Sowdapuram	Rural	499	1725	858	867	134	65	69	341	163	178	0	0	0	998	572	426	727	286	441
11	Padaiveedu (TP)	Urban	2965	10451	5238	5213	914	448	466	3573	1827	1746	0	0	0	6660	3805	2855	3791	1433	2358
	Sub Total B		17180	63661	32828	30833	5157	2687	2470	13582	6987	6595	16	11	5	39450	23179	16271	24211	9649	14562
5-10 KM	Omalur Taluk, Salem District																				
12	Panikkanur	Rural	288	989	530	459	82	48	34	246	137	109	0	0	0	597	358	239	392	172	220
13	Pappambadi	Rural	2584	10284	5458	4826	1050	552	498	408	216	192	0	0	0	5899	3580	2319	4385	1878	2507
14	Desavilakku	Rural	4384	19188	10317	8871	2351	1286	1065	670	353	317	0	0	0	9149	5668	3481	10039	4649	5390
	Sankari Taluk, Salem District																				
15	Kaveripatti	Rural	1568	5842	3087	2755	543	304	239	308	158	150	0	0	0	2908	1824	1084	2934	1263	1671
16	Koneripatti	Rural	1408	5233	2729	2504	446	232	214	409	197	212	0	0	0	2677	1620	1057	2556	1109	1447
17	Kaveripatti Agraharam	Rural	898	3095	1644	1451	281	151	130	39	23	16	0	0	0	1548	967	581	1547	677	870
18	Manjakalpatti	Rural	862	3161	1662	1499	312	180	132	704	370	334	0	0	0	1922	1125	797	1239	537	702
19	Vettukkadupatti	Rural	79	303	154	149	24	15	9	53	29	24	0	0	0	198	114	84	105	40	65
20	Aiveli	Rural	910	3363	1744	1619	332	172	160	1276	678	598	0	0	0	2377	1363	1014	986	381	605
21	Pullakkavundampatti	Rural	814	2662	1324	1338	196	104	92	353	182	171	0	0	0	1445	865	580	1217	459	758
22	Pullakkavundampatti Agraharam	Rural	1004	3633	1878	1755	283	146	137	1233	647	586	0	0	0	1985	1162	823	1648	716	932
23	Morur	Rural	2739	9568	4847	4721	829	452	377	3135	1607	1528	0	0	0	6386	3635	2751	3182	1212	1970
24	Sankari (TP)	Urban	8122	29467	14912	14555	2660	1383	1277	5505	2815	2690	33	17	16	22034	11966	10068	7433	2946	4487
	Tiruchengode Taluk, Namakkal Dist																				
25	Kumarapalayam Agraharam	Rural	3642	12963	6591	6372	1160	590	570	1400	723	677	4	2	2	8878	4953	3925	4085	1638	2447
26	Modamangalam	Rural	1061	3461	1732	1729	333	172	161	252	133	119	4	2	2	2126	1246	880	1335	486	849
27	Modamangalam Agraharam	Rural	505	1657	834	823	153	76	77	590	291	299	0	0	0	1050	600	450	607	234	373
28	Karuveppampatti	Rural	2350	8128	4124	4004	857	448	409	2616	1328	1288	5	4	1	5519	3064	2455	2609	1060	1549
29	Anangur	Rural	1573	5795	2693	3102	467	261	206	1594	758	836	0	0	0	3971	2012	1959	1824	681	1143
30	Kaliyanur	Rural	2677	9185	4658	4527	881	453	428	1157	597	560	0	0	0	5594	3183	2411	3591	1475	2116
31	Kaliyanur Agraharam	Rural	432	1436	718	718	109	56	53	134	65	69	0	0	0	830	506	324	606	212	394
32	Samayasangili Agraharam	Rural	1427	5018	2541	2477	424	221	203	974	488	486	10	5	5	3312	1884	1428	1706	657	1049
33	Pallipalayam Agraharam (Part)	Rural	796	3281	1535	1746	276	158	118	624	287	337	0	0	0	2313	1128	1185	968	407	561
34	Kumarapalayam (M)	Urban	20439	71594	35906	35688	6095	3126	2969	3172	1587	1585	28	11	17	51648	28214	23434	19946	7692	12254
35	Ellandaikuttai (CT)	Urban	4600	16160	8258	7902	1567	817	750	2357	1189	1168	26	15	11	10180	5808	4372	5980	2450	3530
	Sub Total C		65162	235466	119876	115590	21711	11403	10308	29209	14858	14351	110	56	54	154546	86845	67701	80920	33031	47889
	Total (A+B+C)		84986	308264	157406	150858	27580	14456	13124	45268	23169	22099	126	67	59	199459	113242	86217	108805	44164	64641

*Source: District Primary Cences Abstract, Salem and Namakkal district of Tamilnadu State-2011

OCCUPATIONAL STRUCTURE WITHIN THE BUFFER ZONE AS PER 2011 CENSUS

Annexure-5

Sl.No	Name of village	Rural / Urban	MAIN WORKERS		CULTIVATORS		AGRI LABOURS		HOUSE HOLD		OTHERS		MARGINAL WORKERS		NON WORKERS	
			MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
0- 2 KM	Sankari Taluk, Salem District															
1	Chinnakavundanur	Rural	2042	1091	424	347	608	415	23	11	987	318	293	556	1162	1675
2	Alathur	Rural	809	545	288	226	156	227	2	3	363	89	3	11	393	557
	Sub Total A		2851	1636	712	573	764	642	25	14	1350	407	296	567	1555	2232
2 - 5 KM	Sankari Taluk, Salem District															
3	Devanakavandanur	Rural	2698	2121	807	636	819	1081	65	142	1007	262	307	239	1608	1952
4	Katteri	Rural	3150	2028	482	282	330	385	191	185	2147	1176	83	210	1555	2353
5	Virachchipalayam	Rural	381	190	83	60	15	15	1	11	282	104	41	118	209	333
6	Sanniyasipatti Ag.	Rural	600	221	64	51	32	29	15	10	489	131	90	48	409	844
7	Arasiramani (TP)	Urban	4169	3317	825	760	1567	1618	159	222	1618	717	608	566	2888	3286
8	Thevur (TP)	Urban	2655	1888	581	568	621	637	112	178	1341	505	214	294	1546	1951
	Tiruchengode Taluk, Namakkal Dist															
9	Pallakkapalayam	Rural	1348	907	372	357	187	190	16	20	773	340	191	289	1982	1598
10	Sowdapuram	Rural	567	538	175	193	277	293	11	7	104	45	4	11	287	318
11	Padaiveedu (TP)	Urban	3115	1637	307	245	626	580	30	46	2152	766	189	283	1934	3293
	Sub Total B		18683	12847	3696	3152	4474	4828	600	821	9913	4046	1727	2058	12418	15928
5-10 KM	Omalur Taluk, Salem District															
12	Panikkanur	Rural	238	217	97	94	63	99	1	0	77	24	98	34	194	208
13	Pappambadi	Rural	3135	1512	411	237	431	508	547	193	1746	574	155	293	2168	3021
14	Desavilakku	Rural	5987	3426	1133	704	1116	1230	657	244	3081	1248	194	299	4136	5146
	Sankari Taluk, Salem District															
15	Kaveripatti	Rural	1848	1401	303	197	1061	1042	20	29	464	133	157	97	1082	1257
16	Koneripatti	Rural	1626	1449	374	341	825	922	27	22	400	164	181	36	922	1019
17	Kaveripatti Agraharam	Rural	1038	908	118	107	819	770	6	5	95	26	50	77	556	466
18	Manjakalpatti	Rural	993	445	168	49	223	275	46	27	556	94	38	35	631	1019
19	Vettukkadupatti	Rural	55	9	0	0	0	0	0	0	55	9	55	101	44	39
20	Aiveli	Rural	896	429	159	123	215	179	17	19	505	108	174	200	674	990
21	Pullakkavundampatti	Rural	928	855	260	252	255	321	57	124	356	158	27	40	369	443
22	Pullakkavundampatti Agraharam	Rural	1158	784	80	57	603	498	55	52	420	177	11	11	709	960
23	Morur	Rural	2923	1564	411	253	568	752	102	102	1842	457	143	282	1781	2875
24	Sankari (TP)	Urban	8385	2920	276	212	618	817	66	133	7425	1758	593	414	5934	11221
	Tiruchengode Taluk, Namakkal Dist															
25	Kumarapalayam Agraharam	Rural	4215	2480	477	240	288	330	87	90	3363	1820	61	121	2315	3771
26	Modamangalam	Rural	1145	832	114	126	40	58	14	13	977	635	13	18	574	879
27	Modamangalam Agraharam	Rural	552	349	72	47	94	99	5	6	381	197	15	35	267	439
28	Karuveppampatti	Rural	2581	1217	260	203	295	488	14	35	2012	491	111	145	1432	2642
29	Anangur	Rural	1673	1551	360	211	219	455	20	9	1074	876	43	37	977	1514
30	Kaliyanur	Rural	2885	2014	259	146	213	279	49	46	2364	1543	212	241	1561	2272
31	Kaliyanur Agraharam	Rural	448	350	148	112	123	166	3	3	174	69	49	44	221	324
32	Samayasangili Agraharam	Rural	1698	1138	382	330	344	476	2	14	970	318	5	8	838	1331
33	Pallipalayam Agraharam (Part)	Rural	996	1039	100	92	116	155	6	7	774	785	118	54	421	653
34	Kumarapalayam (M)	Urban	22903	13107	124	88	128	129	855	912	21796	11978	534	562	12469	22019
35	Ellandaikuttai (CT)	Urban	5207	3035	213	174	456	604	98	122	4440	2135	158	230	2893	4637
	Sub Total C		73513	43031	6299	4395	9113	10652	2754	2207	55347	25777	3195	3414	43168	69145
	Total (A+B+C)		95047	57514	10707	8120	14351	16122	3379	3042	66610	30230	5218	6039	57141	87305

*Source: District Primary Cences Abstract, Salem and Namakkal district of Tamilnadu State-2011

EDUCATIONAL FACILITIES WITHIN THE BUFFER ZONE AS PER 2011 CENSUS (For Rural villages)

Annexure-6

DISTANCE	VILLAGE NAME	Govt Primary School (Numbers)	Govt Middle School (Numbers)	Govt Secondary School (Numbers)	Govt Senior Secondary School (Numbers)	Govt Arts and Science Degree College (Numbers)	Govt Engineering College (Numbers)	Govt Medicine College (Numbers)	Govt Management Institute (Numbers)	Govt Polytechnic (Numbers)	Govt Vocational Training School/ITI (Numbers)
0- 2 KM	Sankari Taluk, Salem District										
1	Chinnakavundanur	3	2	0	0	0	0	0	0	0	0
2	Alathur	1	1	0	0	0	0	0	0	0	0
2 - 5 KM	Sankari Taluk, Salem District										
3	Devanakavandanur	5	1	0	0	0	0	0	0	0	0
4	Katteri	6	0	0	0	0	0	0	0	0	0
5	Virachchipalayam	1	0	0	0	0	0	0	0	0	0
6	Sanniyasipatti Ag.	1	0	0	0	0	0	0	0	0	0
	Tiruchengode Taluk, Namakkal Dist										
7	Pallakkapalayam	1	1	1	1	0	0	0	0	0	0
8	Sowdapuram	1	1	1	1	0	0	0	0	0	0
5-10 KM	Omalur Taluk, Salem District										
9	Panikkanur	1	0	0	0	0	0	0	0	0	0
10	Pappambadi	5	1	1	1	0	0	0	0	0	0
11	Desavilakku	7	7	0	0	0	0	0	0	0	0
	Sankari Taluk, Salem District										
12	Kaveripatti	3	3	1	0	0	0	0	0	0	0
13	Koneripatti	3	2	0	0	0	0	0	0	0	0
14	Kaveripatti Agraharam	1	0	0	0	0	0	0	0	0	0
15	Manjakalpatti	2	0	0	0	0	0	0	0	0	0
16	Vettukkadupatti	0	0	0	0	0	0	0	0	0	0
17	Aiveli	2	0	0	0	0	0	0	0	0	0
18	Pullakkavundampatti	1	1	0	0	0	0	0	0	0	0
19	Pullakkavundampatti Agraharam	1	0	0	0	0	0	0	0	0	0
20	Morur	4	1	0	0	0	0	0	0	0	0
	Tiruchengode Taluk, Namakkal Dist										
21	Kumarapalayam Agraharam	4	1	1	0	0	0	0	0	0	0
22	Modamangalam	1	1	1	1	0	0	0	0	0	0
23	Modamangalam Agraharam	1	1	1	1	0	0	0	0	0	0
24	Karuveppampatti	3	1	0	0	0	0	0	0	0	0
25	Anangur	2	1	1	0	0	0	0	0	0	0
26	Kaliyanur	1	1	0	0	0	0	0	0	0	0
27	Kaliyanur Agraharam	1	1	0	0	0	0	0	0	0	0
28	Samayasangili Agraharam	3	0	0	0	0	0	0	0	0	0
29	Pallipalayam Agraharam (Part)	3	3	1	1	0	0	0	0	0	0

*Source: District Primary Cences Abstract, Salem and Namakkal district of Tamilnadu State-2011

MEDICAL FACILITIES WITHIN THE BUFFER ZONE AS PER 2011 CENSUS (For Rural villages)

Annexure-7

Sl.No	Name of village	*MEDI_FAC	Community Health Centre (Numbers)	Primary Health Centre (Numbers)	Primary Health Sub Centre (Numbers)	Maternity And Child Welfare Centre (Numbers)	TB Clinic (Numbers)	Hospital Allopathic (Numbers)	Hospital Alternative Medicine (Numbers)	Dispensary (Numbers)	Veterinary Hospital (Numbers)	Mobile Health Clinic (Numbers)	Family Welfare Centre (Numbers)
0- 2 KM	Sankari Taluk, Salem District												
1	Chinnakavundanur	1	0	1	1	1	1	0	0	1	1	0	1
2	Alathur	1	0	0	1	0	0	0	0	0	1	0	0
2 - 5 KM	Sankari Taluk, Salem District												
3	Devanakavandanur	1	0	1	1	1	1	0	0	1	0	0	1
4	Katteri	1	0	0	1	0	0	0	0	0	1	0	0
5	Virachchipalayam	0	0	0	0	0	0	0	0	0	0	0	0
6	Sanniyasipatti Ag.	1	0	0	1	0	0	0	0	0	0	0	0
	Tiruchengode Taluk, Namakkal Dist												
7	Pallakkapalayam	1	0	0	3	1	0	0	0	0	1	0	0
8	Sowdapuram	1	0	0	1	0	0	0	0	0	0	0	0
5-10 KM	Omalur Taluk, Salem District												
9	Panikkanur	0	0	0	0	0	0	0	0	0	0	0	0
10	Pappambadi	1	0	2	8	2	2	0	0	2	0	0	2
11	Desavilakku	1	0	3	8	2	3	0	0	3	0	0	3
	Sankari Taluk, Salem District												
12	Kaveripatti	1	0	0	1	0	0	0	0	0	0	0	0
13	Koneripatti	1	0	0	1	0	0	0	0	0	0	0	0
14	Kaveripatti Agraharam	1	0	0	1	0	0	0	0	0	0	0	0
15	Manjakalpatti	1	0	0	1	1	0	0	0	0	0	0	0
16	Vettukkadupatti	0	0	0	0	0	0	0	0	0	0	0	0
17	Aiveli	1	0	0	1	0	0	0	0	0	0	0	0
18	Pullakkavundampatti	1	0	0	2	0	0	0	0	0	1	0	0
19	Pullakkavundampatti Agraharam	1	0	0	1	0	0	0	0	0	0	0	0
20	Morur	1	0	1	1	1	1	0	0	1	1	0	1
	Tiruchengode Taluk, Namakkal Dist												
21	Kumarapalayam Agraharam	1	0	2	1	2	2	0	0	2	2	0	2
22	Modamangalam	1	0	1	1	1	1	0	0	1	1	0	1
23	Modamangalam Agraharam	0	0	0	0	0	0	0	0	0	0	0	0
24	Karuveppampatti	1	0	0	1	0	0	0	0	0	0	0	0
25	Anangur	1	0	0	1	1	0	0	0	0	1	0	0
26	Kaliyanur	1	0	0	1	0	0	0	0	0	0	0	0
27	Kaliyanur Agraharam	1	0	0	1	0	0	0	0	0	0	0	0
28	Samayasangili Agraharam	1	1	1	6	1	1	0	0	1	0	0	1
29	Pallipalayam Agraharam (Part)	1	0	0	3	0	0	0	0	0	0	0	0

*Source: www.censusindia.gov.in - Census of India 2011 Tamil Nadu State

Note:

*MEDI_FAC: 1- Available (A); 2- Not available (NA)

INFRASTRUCTURAL FACILITIES AVAILABLE IN THE STUDY AREA (As Per Census Data 2011) (For Rural villages)
Annexure-8

S.No	Name of village	Tap Water-Treated	Covered Well	Hand Pump	Tube Wells /Borehole	Spring	River/Canal	Tank/Pond/Lake	Post Office	Sub Post Office	Post And Telegraph Office	Telephone (landlines)	Public Bus Service	Railway Station	Commercial Bank	Cooperative Bank	Agricultural Credit Societies	Agricultural Marketing Society
0- 2 KM	Sankari Taluk, Salem District																	
1	Chinnakavundanur	1	1	2	1	2	2	2	2	1	2	1	1	2	2	1	1	2
2	Alathur	1	1	1	1	1	2	2	2	1	2	1	1	2	2	2	1	2
2 - 5 KM	Sankari Taluk, Salem District																	
3	Devanakavandanur	1	1	2	1	1	2	1	2	1	2	1	1	2	2	2	1	2
4	Katteri	1	1	1	1	2	2	2	2	2	2	1	1	2	2	1	1	2
5	Virachchipalayam	1	1	2	1	2	2	1	2	1	2	1	2	1	2	2	2	2
6	Sanniyasipatti Ag.	1	1	1	1	2	1	1	2	1	2	2	1	2	2	2	2	2
	Tiruchengode Taluk, Namakkal Dist																	
7	Pallakkapalayam	1	1	1	1	2	1	2	1	2	1	1	1	2	2	2	2	2
8	Sowdapuram	1	1	1	1	2	2	2	2	1	2	1	1	2	2	2	2	2
5-10 KM	Omalur Taluk, Salem District																	
9	Panikkanur	1	2	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2
10	Pappambadi	1	1	1	1	2	2	2	1	1	1	1	1	2	1	1	2	1
11	Desavilakku	1	1	1	1	2	2	2	2	1	2	1	1	2	2	2	1	2
	Sankari Taluk, Salem District																	
12	Kaveripatti	1	1	1	1	2	2	2	2	1	2	1	1	2	2	2	2	2
13	Koneripatti	1	1	1	1	1	2	2	2	1	2	1	1	2	2	2	2	2
14	Kaveripatti Agraharam	1	1	1	1	2	1	2	2	2	2	1	2	2	2	1	1	2
15	Manjakalpatti	1	1	1	1	2	1	1	2	1	2	1	1	2	2	2	2	2
16	Vettukkadupatti	2	2	1	1	2	2	2	2	2	2	1	1	2	2	2	2	2
17	Aiveli	1	1	2	1	2	2	2	2	2	2	1	2	1	2	2	1	2
18	Pullakkavundampatti	1	1	2	1	2	2	2	2	1	2	1	1	2	2	2	1	2
19	Pullakkavundampatti Agraharam	1	1	1	1	2	1	2	2	2	2	1	1	2	2	2	2	2
20	Morur	1	1	1	1	2	2	2	2	2	2	1	1	1	2	2	1	2
	Tiruchengode Taluk, Namakkal Dist																	
21	Kumarapalayam Agraharam	1	1	1	1	2	2	1	2	1	2	1	1	2	2	2	2	2
22	Modamangalam	1	1	1	1	1	2	2	2	1	2	1	1	2	2	2	2	2
23	Modamangalam Agraharam	1	2	1	1	2	2	2	2	2	2	1	1	2	2	2	2	2
24	Karuveppampatti	1	1	1	1	2	2	2	2	1	2	1	1	2	2	2	2	2
25	Anangur	1	1	1	1	2	2	2	2	1	2	1	1	1	2	1	1	2
26	Kaliyanur	1	1	1	1	2	2	2	2	1	2	1	1	2	1	2	1	2
27	Kaliyanur Agraharam	1	1	1	1	2	2	2	2	2	2	1	1	2	2	2	2	2
28	Samayasangili Agraharam	1	1	1	1	2	1	2	2	1	2	1	1	2	2	2	2	2
29	Pallipalayam Agraharam (Part)	1	1	1	1	2	2	2	1	2	1	1	1	2	2	2	2	2

*Source: www.censusindia.gov.in - Census of India 2011 Tamil Nadu State

Note:

1 – Available (A); 2 - Not available (NA)



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Annexure-9

(NABET ACCREDITED, NABL ACCREDITED TESTING LABORATORY,
DEPARTMENT OF INDUSTRIES AND COMMERCE REGISTERED COMPANY)

AMBIENT AIR QUALITY

Project	:	Mothaiyanur Limestone Mines (GO.211,1086& 76) of The India Cements Limited
Name of the Location	:	Mothaiyanur Limestone Mine
Station Code	:	A1

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	05.12.23	45.5	21.4	5.4	10.9
2	06.12.23	41.6	19.6	4.4	9.9
3	16.12.23	40.7	19.1	4.2	9.7
4	17.12.23	41.9	19.7	4.5	10.1
5	19.12.23	49.5	24.3	6.3	11.9
6	20.12.23	46.7	22.9	5.7	11.3
7	30.12.23	43.1	20.3	4.8	10.3
8	31.12.23	46.3	22.7	5.6	11.2
9	02.01.24	47.5	23.3	5.9	11.5
10	03.01.24	48.2	23.6	6.1	11.6
11	13.01.24	42.3	19.9	4.6	10.1
12	14.01.24	45.1	21.2	5.3	10.8
13	16.01.24	51.2	25.1	6.5	13.1
14	17.01.24	48.4	23.7	6.1	11.7
15	27.01.24	41.3	19.4	4.3	9.8
16	28.01.24	44.8	21.1	5.2	10.7
17	30.01.24	42.7	20.1	4.7	10.2
18	31.01.24	45.9	22.5	5.5	11.1
19	10.02.24	43.5	20.4	4.9	10.4
20	11.02.24	48.7	23.9	6.2	11.8
21	13.02.24	44.3	20.8	5.1	10.6
22	14.02.24	43.9	20.6	5.1	10.5
23	24.02.24	49.9	24.5	6.4	12.5
24	25.02.24	47.1	23.1	5.8	11.4
	MIN	40.7	19.1	4.2	9.7
	AVE	45.4	21.8	5.4	11.0
	MAX	51.2	25.1	6.5	13.1

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

F. Pal

Prepared by



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DEPARTMENT OF INDUSTRIES AND COMMERCE REGISTERED COMPANY)

AMBIENT AIR QUALITY

Project	:	Mothaiyanur Limestone Mines (GO.211,1086& 76) of The India Cements Limited
Name of the Location	:	Mothaiyanur Village
Station Code	:	A2

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	05.12.23	47.2	22.2	5.4	11.3
2	06.12.23	49.6	24.3	6.0	11.9
3	16.12.23	44.1	20.7	4.6	10.4
4	17.12.23	46.1	21.7	5.1	10.9
5	19.12.23	43.2	20.3	4.4	10.2
6	20.12.23	44.9	21.1	4.8	10.6
7	30.12.23	51.6	25.3	6.4	12.4
8	31.12.23	45.6	21.4	5.0	10.8
9	02.01.24	46.7	21.9	5.3	11.2
10	03.01.24	48.9	24.0	5.8	11.7
11	13.01.24	44.4	20.9	4.7	10.5
12	14.01.24	48.2	22.7	5.6	11.5
13	16.01.24	45.2	21.2	4.9	10.7
14	17.01.24	48.4	22.7	5.7	11.6
15	27.01.24	53.4	26.2	6.7	14.5
16	28.01.24	50.7	24.8	6.2	12.2
17	30.01.24	51.9	25.4	6.5	12.5
18	31.01.24	50.4	24.7	6.1	12.1
19	10.02.24	43.6	20.5	4.5	10.3
20	11.02.24	46.4	21.8	5.2	11.1
21	13.02.24	49.2	24.1	5.9	11.8
22	14.02.24	47.6	22.4	5.5	11.4
23	24.02.24	52.5	25.7	6.6	13.7
24	25.02.24	51.2	25.1	6.3	12.3
	MIN	43.2	20.3	4.4	10.2
	AVE	48.0	23.0	5.6	11.6
	MAX	53.4	26.2	6.7	14.5

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

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AMBIENT AIR QUALITY

Project	:	Mothaiyanur Limestone Mines (GO.211,1086& 76) of The India Cements Limited
Name of the Location	:	Reddipalayam Village
Station Code	:	A3

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	07.12.23	48.9	24.1	6.0	11.7
2	08.12.23	50.5	24.8	6.4	12.3
3	14.12.23	46.5	21.9	5.4	11.1
4	15.12.23	49.3	24.2	6.1	11.8
5	21.12.23	50.9	25.1	6.5	12.7
6	22.12.23	48.1	23.6	5.8	11.5
7	28.12.23	45.2	21.3	5.1	10.7
8	29.12.23	47.6	22.5	5.7	11.4
9	04.01.24	43.7	20.6	4.7	10.3
10	05.01.24	46.9	22.1	5.5	11.2
11	11.01.24	52.8	25.9	6.7	13.9
12	12.01.24	47.3	22.3	5.6	11.3
13	18.01.24	44.1	20.8	4.8	10.4
14	19.01.24	51.7	25.4	6.6	12.9
15	25.01.24	42.5	20.1	4.4	9.9
16	26.01.24	45.7	21.6	5.2	10.8
17	01.02.24	44.5	21.1	4.9	10.5
18	02.02.24	49.7	24.4	6.2	11.9
19	08.02.24	43.3	20.4	4.6	10.2
20	09.02.24	44.9	21.2	5.0	10.6
21	15.02.24	42.9	20.2	4.5	10.1
22	16.02.24	46.1	21.8	5.3	10.9
23	23.02.24	50.2	24.6	6.3	12.1
24	24.02.24	48.5	23.8	5.9	11.6
	MIN	42.5	20.1	4.4	9.9
	AVE	47.2	22.7	5.6	11.3
	MAX	52.8	25.9	6.7	13.9

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

Prepared by



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CREATIVE ENGINEERS & CONSULTANTS

(NABET ACCREDITED, NABL ACCREDITED TESTING LABORATORY,
DEPARTMENT OF INDUSTRIES AND COMMERCE REGISTERED COMPANY)

AMBIENT AIR QUALITY

Project	:	Mothaiyanur Limestone Mines (GO.211,1086& 76) of The India Cements Limited
Name of the Location	:	Nallampalaiyam Village
Station Code	:	A4

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	07.12.23	47.3	22.3	5.1	11.5
2	08.12.23	49.7	23.5	5.7	12.7
3	14.12.23	53.7	26.5	6.7	14.7
4	15.12.23	52.9	26.1	6.5	14.3
5	21.12.23	49.3	23.3	5.6	12.5
6	22.12.23	46.7	22.0	5.0	11.3
7	28.12.23	50.9	25.1	6.0	13.2
8	29.12.23	53.3	26.3	6.6	14.5
9	04.01.24	46.1	21.8	4.8	10.9
10	05.01.24	51.3	25.3	6.1	13.5
11	11.01.24	48.1	22.7	5.3	11.9
12	12.01.24	52.1	25.7	6.3	13.9
13	18.01.24	50.5	23.8	5.9	13.1
14	19.01.24	52.6	25.9	6.4	14.1
15	25.01.24	48.5	22.9	5.4	12.1
16	26.01.24	54.5	26.9	6.8	15.1
17	01.02.24	45.6	21.5	4.7	10.7
18	02.02.24	47.8	22.6	5.2	11.7
19	08.02.24	46.5	21.9	4.9	11.1
20	09.02.24	51.7	25.5	6.2	13.7
21	15.02.24	48.9	23.1	5.5	12.3
22	16.02.24	55.7	27.5	6.9	15.9
23	23.02.24	45.3	21.4	4.6	10.5
24	24.02.24	50.1	23.6	5.8	12.9
	MIN	45.3	21.4	4.6	10.5
	AVE	50.0	24.0	5.8	12.8
	MAX	55.7	27.5	6.9	15.9

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

Q. Pal

Prepared by



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AMBIENT AIR QUALITY

Project	:	Mothaiyanur Limestone Mines (GO.211,1086& 76) of The India Cements Limited
Name of the Location	:	Gopalanur Village
Station Code	:	A5

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	09.12.23	51.2	25.1	6.2	13.4
2	10.12.23	48.9	23.0	5.6	12.2
3	12.12.23	55.9	27.4	6.8	14.8
4	13.12.23	53.2	26.1	6.5	14.2
5	23.12.23	45.6	21.4	4.8	10.6
6	24.12.23	46.9	22.0	5.1	11.2
7	26.12.23	46.4	21.8	5.1	11.2
8	27.12.23	52.7	25.8	6.4	13.8
9	06.01.24	48.2	22.6	5.4	11.8
10	07.01.24	50.4	23.7	6.1	13.1
11	09.01.24	45.3	21.3	4.7	10.4
12	10.01.24	48.4	22.9	5.5	12.1
13	20.01.24	56.3	27.6	6.9	15.1
14	21.01.24	50.3	23.6	5.9	12.8
15	23.01.24	44.7	21.0	4.6	10.2
16	24.01.24	50.8	23.9	6.1	13.2
17	03.02.24	46.2	21.7	4.9	10.8
18	04.02.24	49.2	23.1	5.7	12.4
19	06.02.24	54.4	26.7	6.7	14.6
20	07.02.24	47.2	22.2	5.2	11.4
21	17.02.24	52.4	25.7	6.3	13.6
22	18.02.24	53.6	26.3	6.6	14.4
23	20.02.24	47.6	22.4	5.3	11.6
24	21.02.24	49.6	23.3	5.8	12.6
	MIN	44.7	21.0	4.6	10.2
	AVE	49.8	23.8	5.8	12.6
	MAX	56.3	27.6	6.9	15.1

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

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AMBIENT AIR QUALITY

Project	:	Mothaiyanur Limestone Mines (GO.211,1086& 76) of The India Cements Limited
Name of the Location	:	Chinna Mothaiyanur Village
Station Code	:	A6

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	09.12.23	54.2	25.5	6.1	12.3
2	10.12.23	57.6	28.2	6.6	12.9
3	12.12.23	49.8	23.4	5.3	11.5
4	13.12.23	53.4	25.1	5.9	12.2
5	23.12.23	58.2	28.5	6.7	13.1
6	24.12.23	55.2	27.0	6.2	12.5
7	26.12.23	48.1	22.6	4.9	11.2
8	27.12.23	51.1	24.0	5.5	11.7
9	06.01.24	46.8	22.0	4.8	10.9
10	07.01.24	50.4	23.7	5.4	11.6
11	09.01.24	61.1	29.9	7.1	16.3
12	10.01.24	56.4	27.6	6.4	12.7
13	20.01.24	47.4	22.3	4.9	11.1
14	21.01.24	52.8	24.8	5.8	12.1
15	23.01.24	59.4	29.1	6.9	14.5
16	24.01.24	55.8	27.3	6.3	12.6
17	03.02.24	48.6	22.8	5.1	11.3
18	04.02.24	51.6	24.3	5.6	11.8
19	06.02.24	60.6	29.7	6.9	15.7
20	07.02.24	57.3	28.1	6.5	12.8
21	17.02.24	49.2	23.1	5.2	11.4
22	18.02.24	52.2	24.5	5.7	11.9
23	20.02.24	58.8	28.8	6.8	13.2
24	21.02.24	54.6	26.8	6.1	12.4
	MIN	46.8	22.0	4.8	10.9
	AVE	53.8	25.8	5.9	12.5
	MAX	61.1	29.9	7.1	16.3

Note: BDL – Below Detectable Limit, DL: Detectable Limit.


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WATER QUALITY DATA

Project Name :	Mothaiyanur Limestone Mines (GO.211,1086& 76) of The India Cements Limited	
Location Name :	Location Code	Location Name
	W1	Mothaiyanur Limestone Mine
	W2	Mothaiyanoor
	W3	Reddipalayam
	W4	Nallampalaiyam
	W5	Gopalanur
	W6	Chinna Mothaiyanur

S. No.	Parameter	Unit	W1	W 2	W 3	W 4	W5	W6	*Permissible Limits
1	pH	-	7.36	7.66	7.89	7.35	7.54	7.75	6.5-8.5
2	Electrical Conductivity	µmhos/cm	436	1045	370	2075	1914	1442	-
3	Odor	-	AGREEABLE						
4	Turbidity	NTU	<1	<1	<1	<1	<1	<1	5.0
5	Total Hardness as CaCO ₃	mg/L	165	470	155	529	529	539	600
6	Calcium Hardness CaCO ₃	mg/L	112	294	104	216	225	323	-
7	Magnesium Hardness CaCO ₃	mg/L	52.9	176.4	51.0	314	304	216	-
8	Calcium Ca	mg/L	44.7	118	41.6	86.2	90.2	129	200
9	Magnesium Mg	mg/L	12.7	42.3	12.2	75.3	72.9	51.7	100
10	Alkalinity CaCO ₃	mg/L	72.5	216	41.2	421	470	118	600
11	Chloride Cl ⁻	mg/L	43.1	176	33.3	269	235	333	1000
12	Sulphate SO ₄ ²⁻	mg/L	68.5	101.5	71.9	379	371	129	400
13	Iron Fe	mg/L	0.02	0.02	0.02	0.06	0.06	0.04	0.3
14	Nitrate NO ₃	mg/L	BDL	2.45	BDL	5.64	BDL	BDL	45

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S. No.	Parameter	Unit	W1	W 2	W 3	W 4	W5	W6	*Permissible Limits
15	Fluoride F	mg/L	0.44	0.62	0.52	0.68	0.61	0.56	1.5
16	Total Dissolved Solids	mg/L	262	628	224	1246	1150	866	2000
17	Free Residual Chlorine Cl ⁻	mg/L	BDL(DL-0.2)	BDL(DL-0.2)	BDL(DL-0.2)	BDL(DL-0.2)	BDL(DL-0.2)	BDL(DL-0.2)	1.0
18	Manganese Mn	mg/L	BDL(DL-0.05)	BDL(DL-0.05)	BDL(DL-0.05)	BDL(DL-0.05)	BDL(DL-0.05)	BDL(DL-0.05)	0.3

Note: * The water quality of the collected ground water samples were found to be within the prescribed permissible limits of IS: 10500:2012 Norms for Drinking in the absence of an alternative source.


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தமிழ்நாடு வனத்துறை

அனுப்புதல்
G.M. சரவணமுத்து,
வனச்சரக அலுவலர்,
மேட்டுர் வனச்சரகம்,
மேட்டுர்.

பெறுதல்
SR. துணைதலைவர், (உற்பத்தி)
இந்திய சிமெண்ட் நிறுவனம்,
சங்ககிரி.

ந.க.எண் : 148 / 2016 நாள் : 13.07.2016

அன்புள்ள,

பொருள் : தூரியமலைகாப்புக்காடு - தூரியமலைகாப்புக்காடு பகுதியில்
உள்ள தாவரயினம் மற்றும் விலங்கினம் விபரம்
தெரிவித்தல் - தொடர்பாக

பார்வை : ICL / SKD / Mines / 2016 / நாள் : 23.06.2016

மேற்காண் பார்வையில் கண்ட கடிதத்தில் தாங்கள் கோரியிருந்த
விபரத்தினை பின்வருமாறு தெரிவிக்கிறேன். எங்களது தூரியமலைகாப்புக்காட்டில்
கீழ்க்கண்ட தாவரயினமும், விலங்கினமும் உள்ளது. அதன் விபரம் பின்வருமாறு.

தாவரயினம்

- 1.வேம்பு, 2.பொரசு, 3. ஊஞ்சை, 4.வாகை, 5.வெல்வேல், 6.கொடைவேல்,
- 7.பரம்பை, 8.ஆயான், 9.பாலை, 10.தனக்கை, 11.வாக்கன், 12.தகரை

விலங்கினம்

- 1.மான், 2.மயில், 3.முயல், 4.உரும்பு

அன்புடன்
14/7
வனச்சரக அலுவலர்,
மேட்டுர் வனச்சரகம்,
மேட்டுர்
09/8



காரிநாடு தமில்நாடு TAMILNADU 21.09.2022

CU 594677

THE INDIA CEMENTS LIMITED
SANKARI WEST

V. சீதாராமன்
மா.ந.நீதிமன்ற முத்திரைதாள்
பெறப்பெய்தலுடன், துறையுள்
L.C.No. 15203/82

UNDERTAKING AFFIDAVIT

I, Thiru A.Veerabagu aged about 53 years, Vice President (Manufacturing) of The India Cements Ltd. having my address at A1 ICL Colony, Sankari west, Salem District., do hereby state on solemn affirmation under-

We have planned to obtain Environmental Clearance for the following projects:

- Mothaiyanur Limestone Mines (G.O.211) over an area of 50.84Ha in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu for the production capacity of 0.5 MTPA.

For THE INDIA CEMENTS LTD.,

(A. VEERABAGU)
VICE PRESIDENT (MFG)



Signed before me

S. CHRISTOPHER M.A., B.L.
ADVOCATE & NOTARY,
37, OLD IDAPPADY ROAD,
SANKARI DJRG-637 301,
SALEM DIST, TAMIL NADU.

- Mothaiyanur Limestone Mines (G.O.1086) over an area of 4.865Ha in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu for the production capacity of 0.012 MTPA.
- Mothaiyanur Limestone Mines (G.O.76) over an area of 8.005Ha in Chinnagoundanur village, Sankari taluk, Salem district, Tamil Nadu for the production capacity of 0.061 MTPA.

We undertake to commit to comply with all the statutory requirements and judgments of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No.114 of 2014 in the matter of the common cause versus Union of India and Ors. Before grant of ToR/ EC and I am also to commit, not to repeat any such violation in future. In case of any violation of the above the ToR/Environmental Clearances shall be liable to be terminated forthwith.

For THE INDIA CEMENTS LTD.,


(A. VEERABAGU)
VICE PRESIDENT (MFG)

Signed before me


22-05-2024
S. CHRISTOPHER M.A., B.L.,
ADVOCATE & NOTARY,
37, OLD IDAPPADY ROAD,
SANKARI DURG-637 301,
SALEM DIST, TAMIL NADU.



District : Salem

Survey No : 15

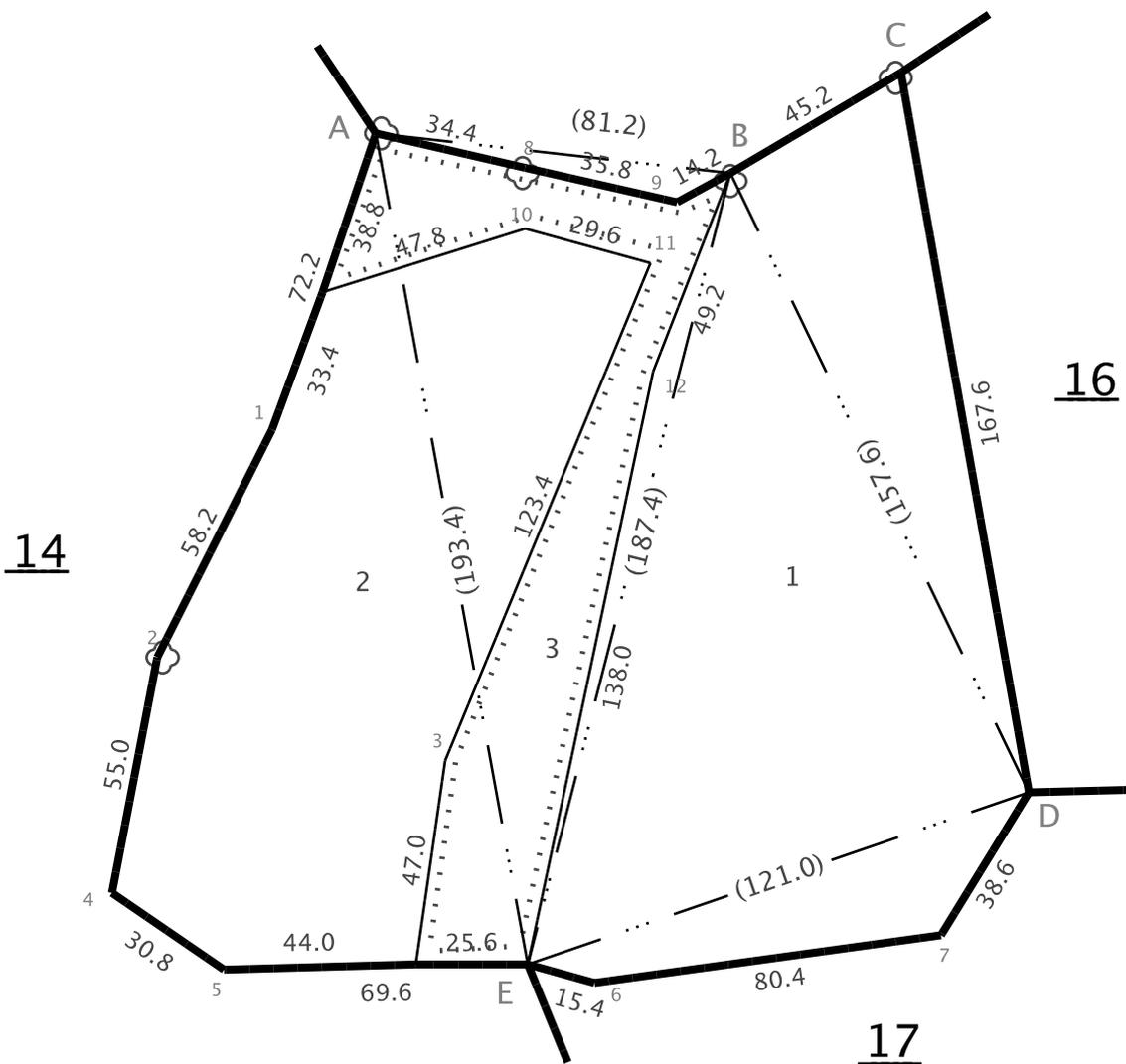
Taluk : Sankari

Area : Hect 03 Ares 22.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1720

V.No.13.DEVANAKAVUNDANUR



District : Salem

Survey No : 16

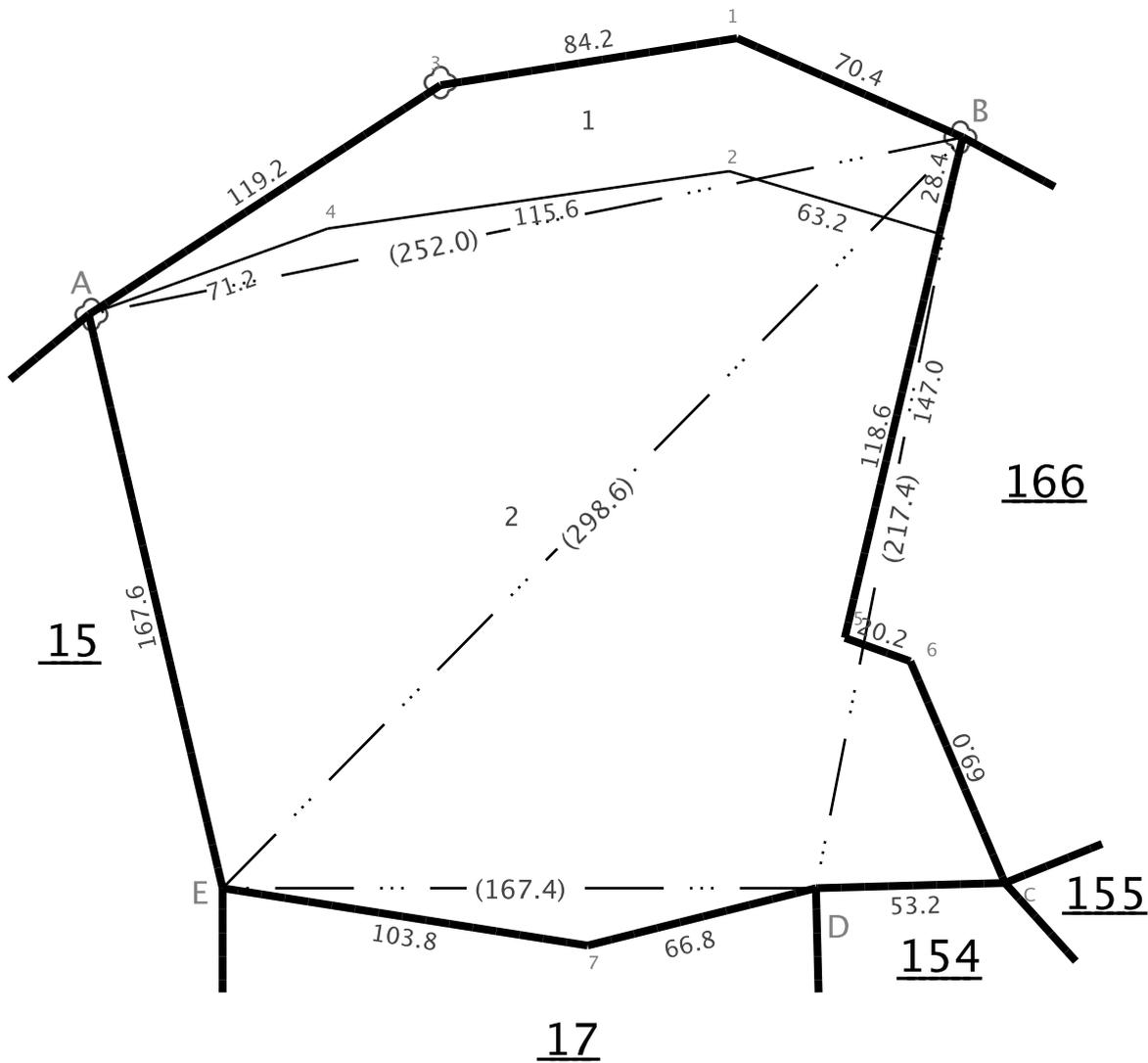
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Area : Hect 04 Ares 92.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2098

V.NO 13 DEVANAKAVUNDANUR



District : Salem

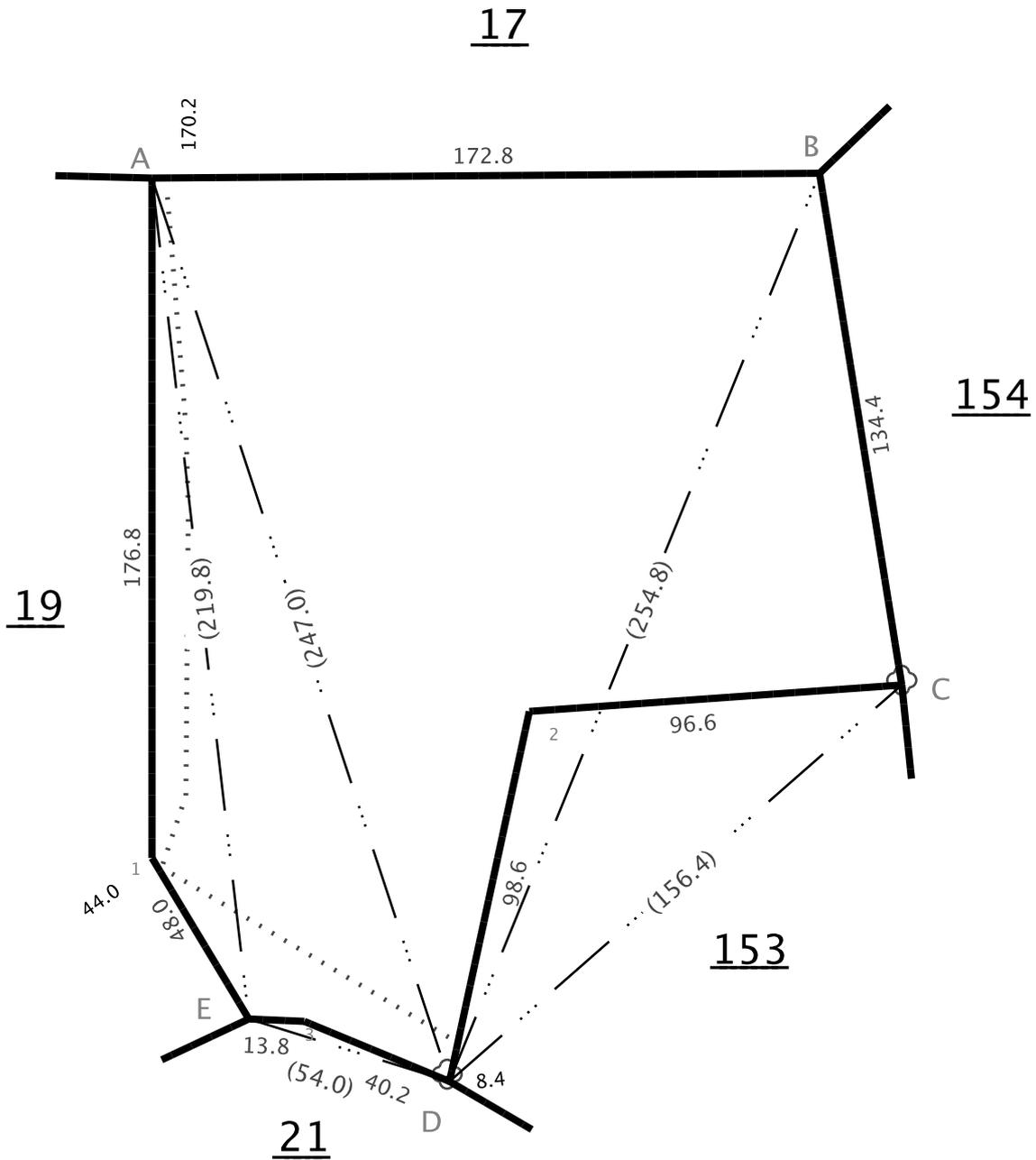
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Taluk : Sankari

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Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1772



District : Salem

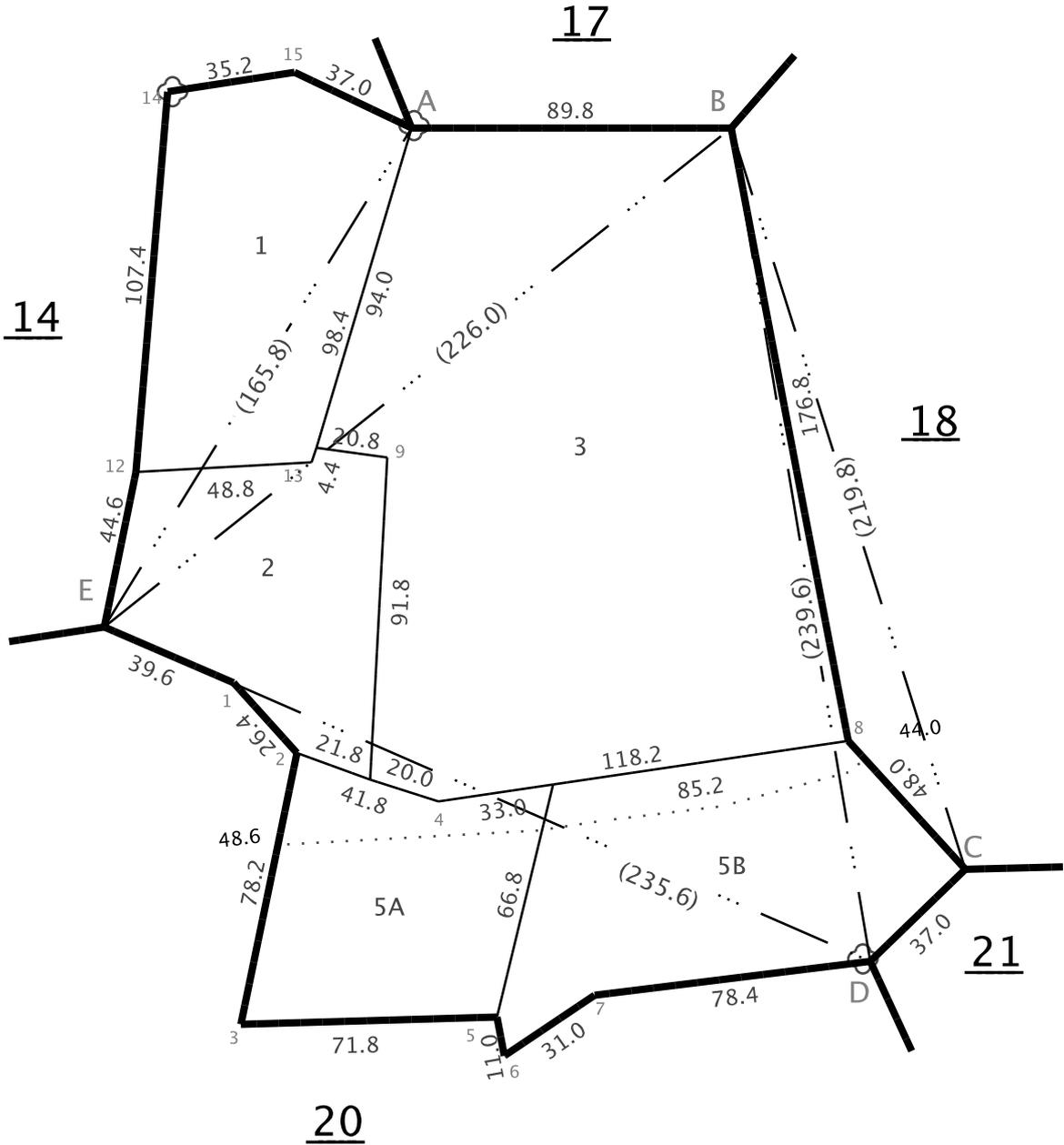
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Taluk : Sankari

Area : Hect 04 Ares 47.50

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1942



District : Salem

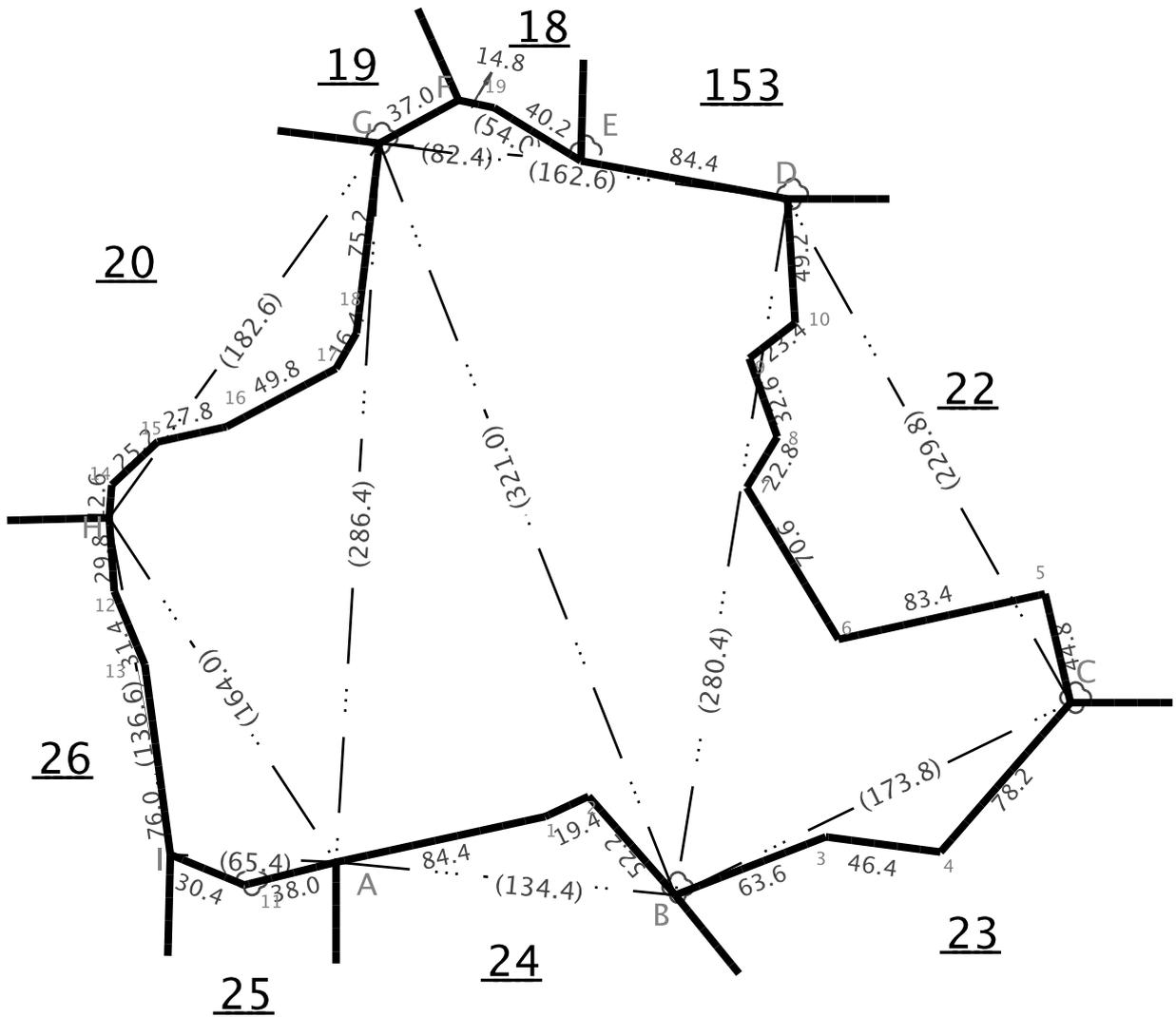
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Taluk : Sankari

Area : Hect 07 Ares 24.50

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2853



District : Salem

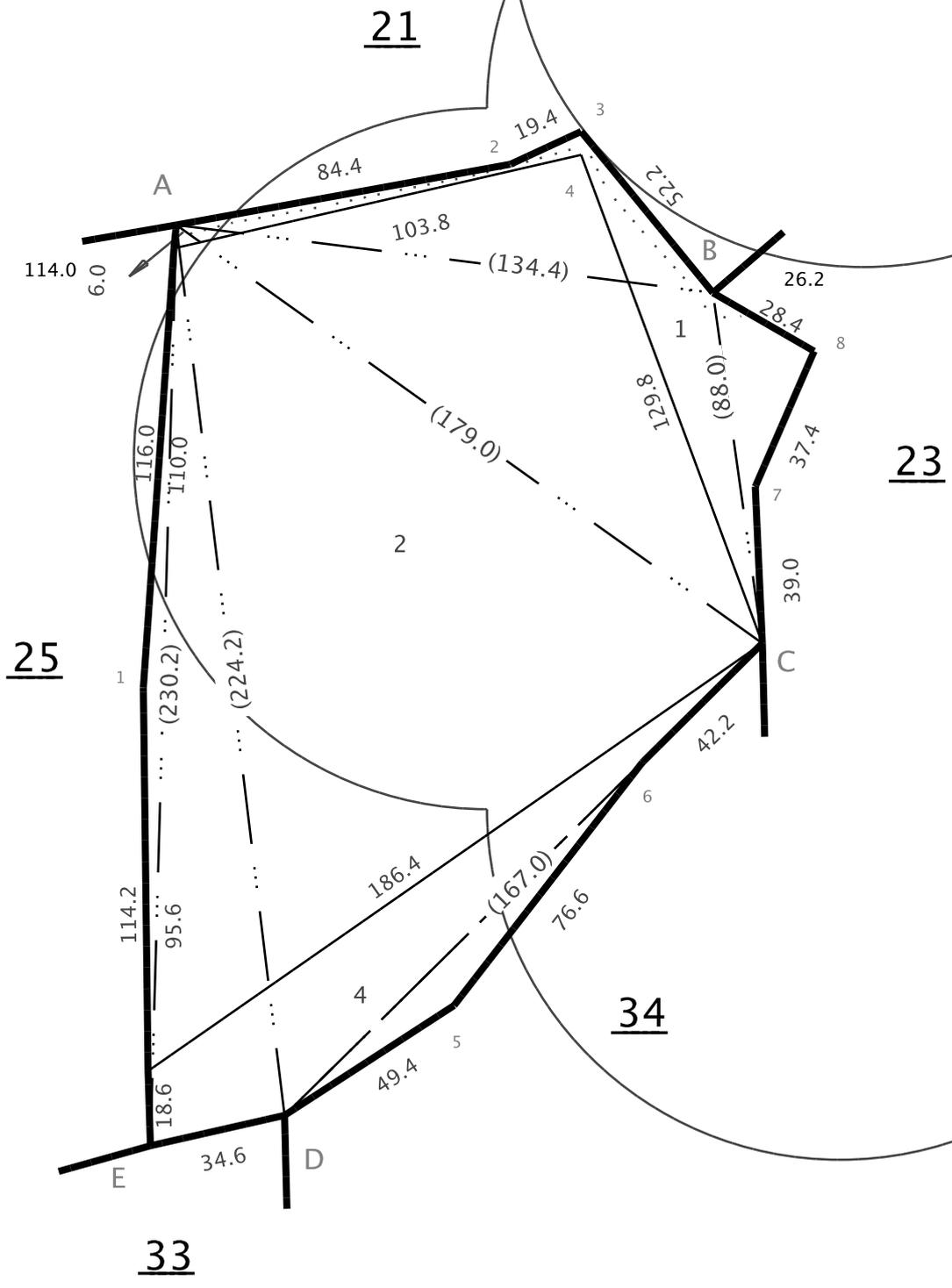
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Taluk : Sankari

Area : Hect 02 Ares 83.50

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1653



District : Salem

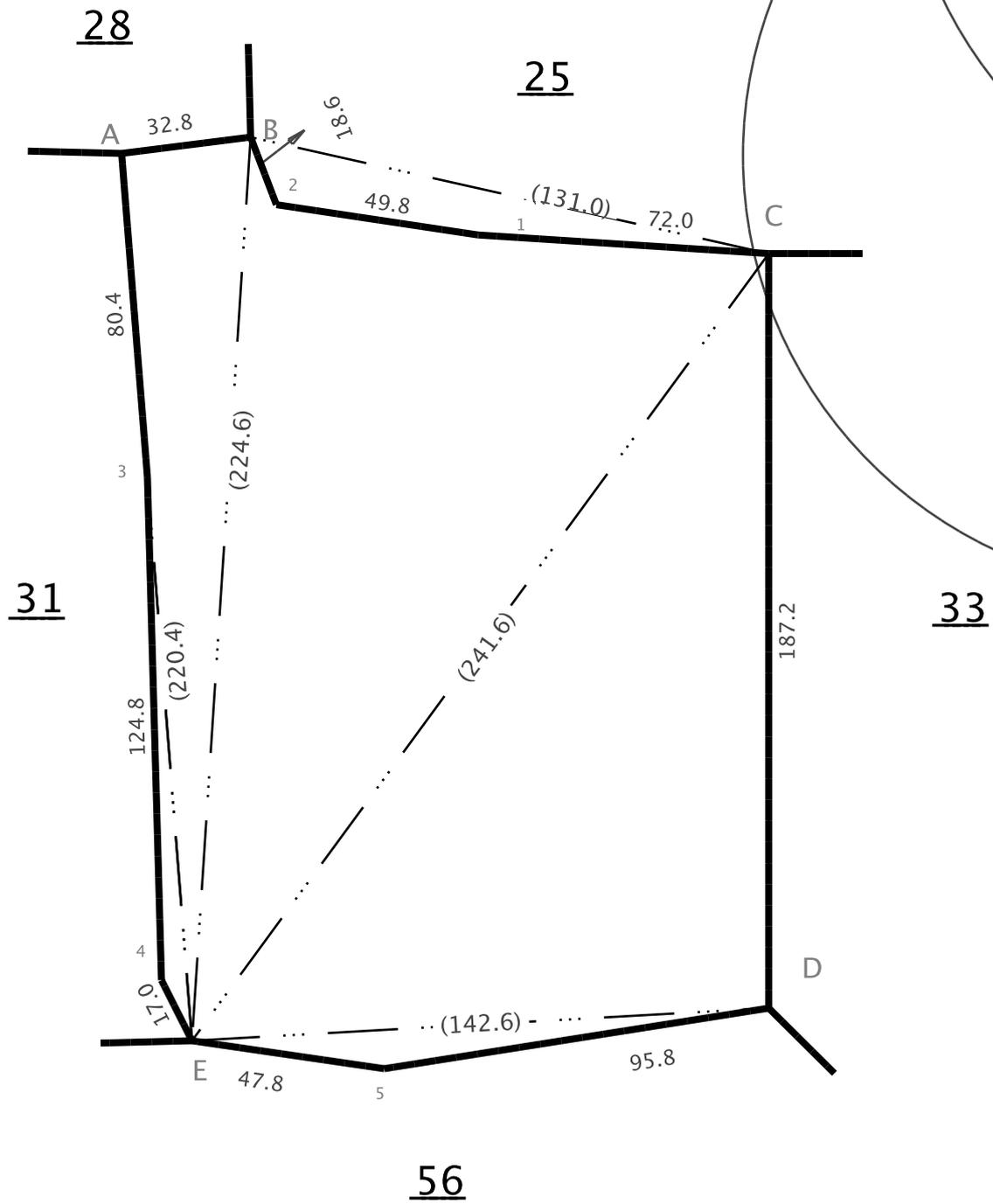
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Village : CHINNAKAVUNDANUR [37]

Survey No : 32

Area : Hect 03 Ares 15.00

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District : Salem

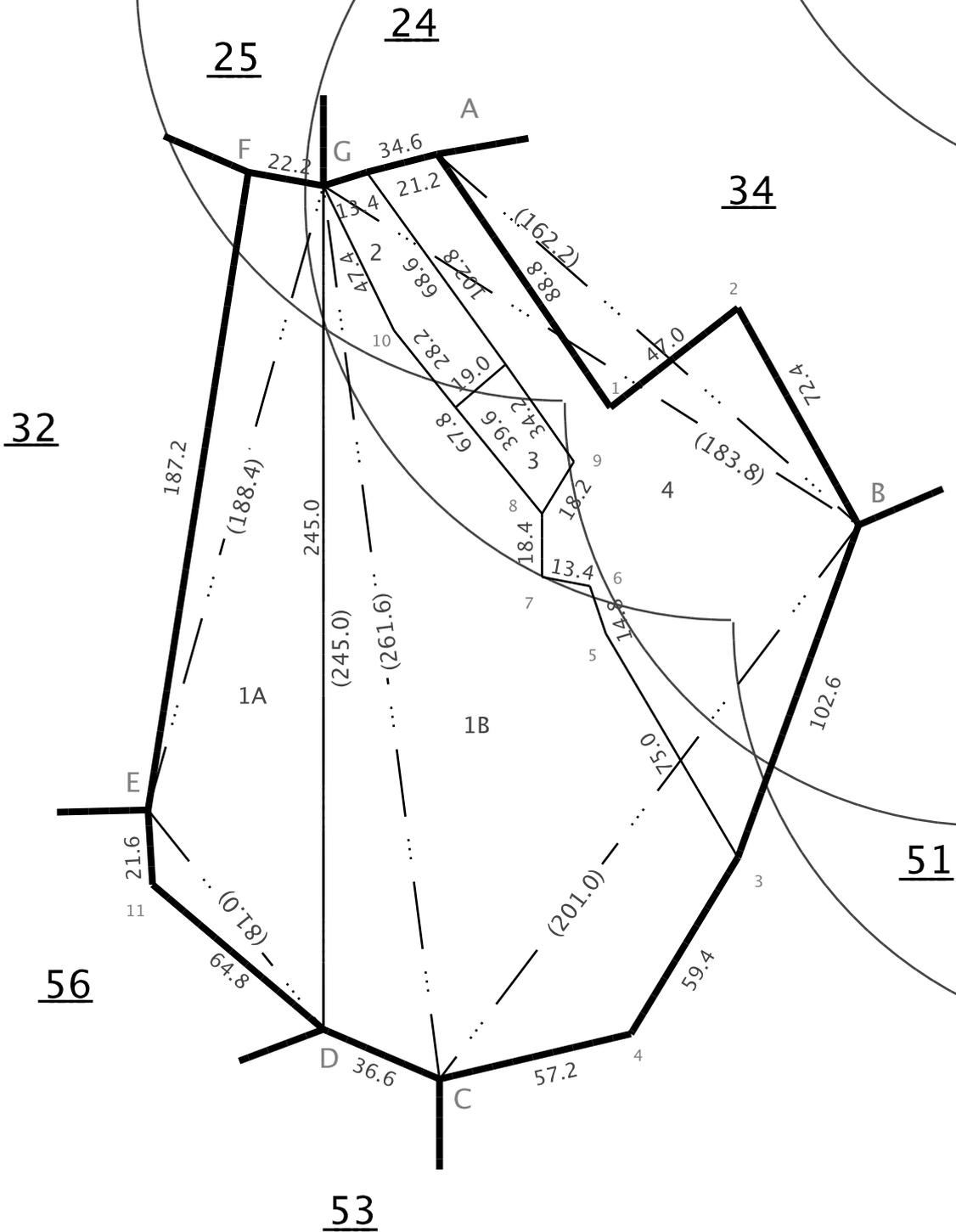
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Taluk : Sankari

Area : Hect 03 Ares 71.50

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1860



District : Salem

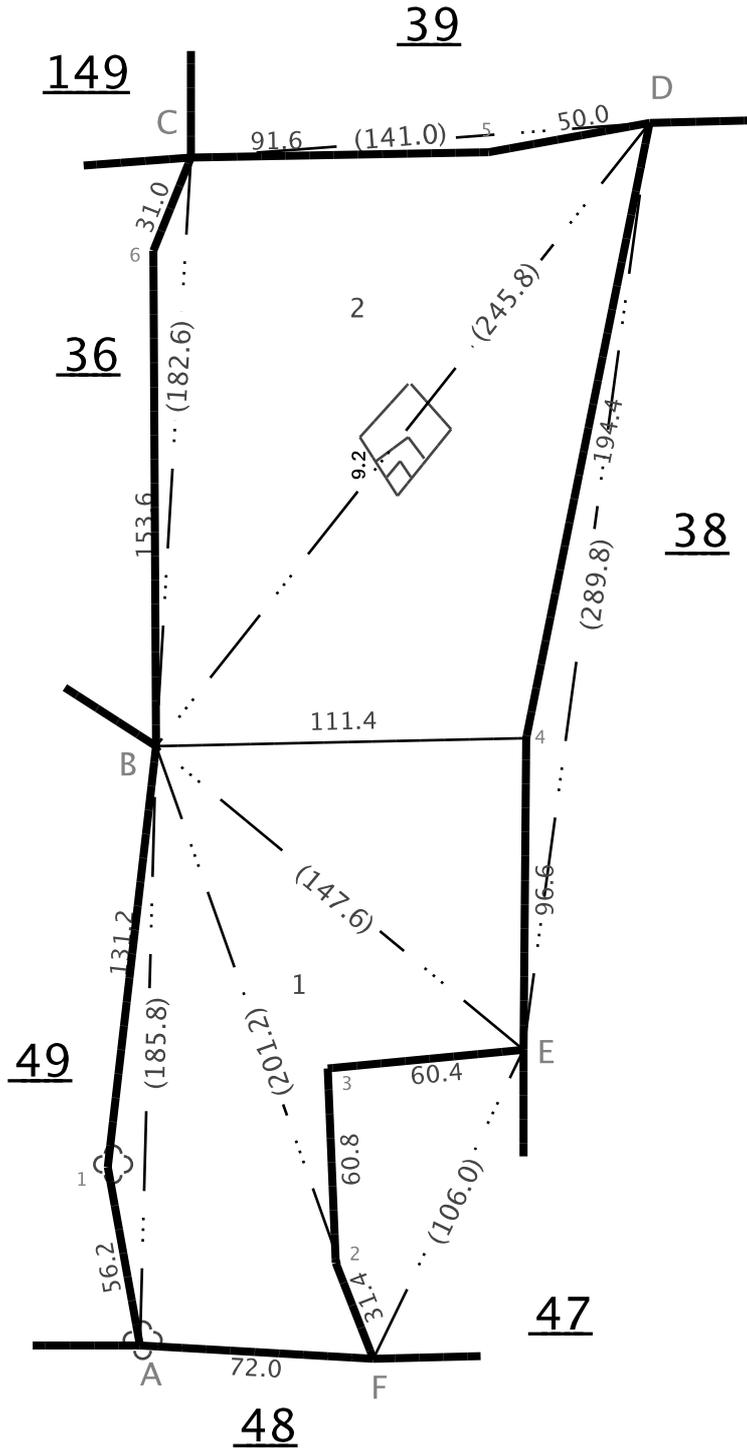
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Taluk : Sankari

Area : Hect 04 Ares 14.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2338



Date of Issue: 02-01-2018 10:06:55

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A-155

mv240 v250.004

District : Salem

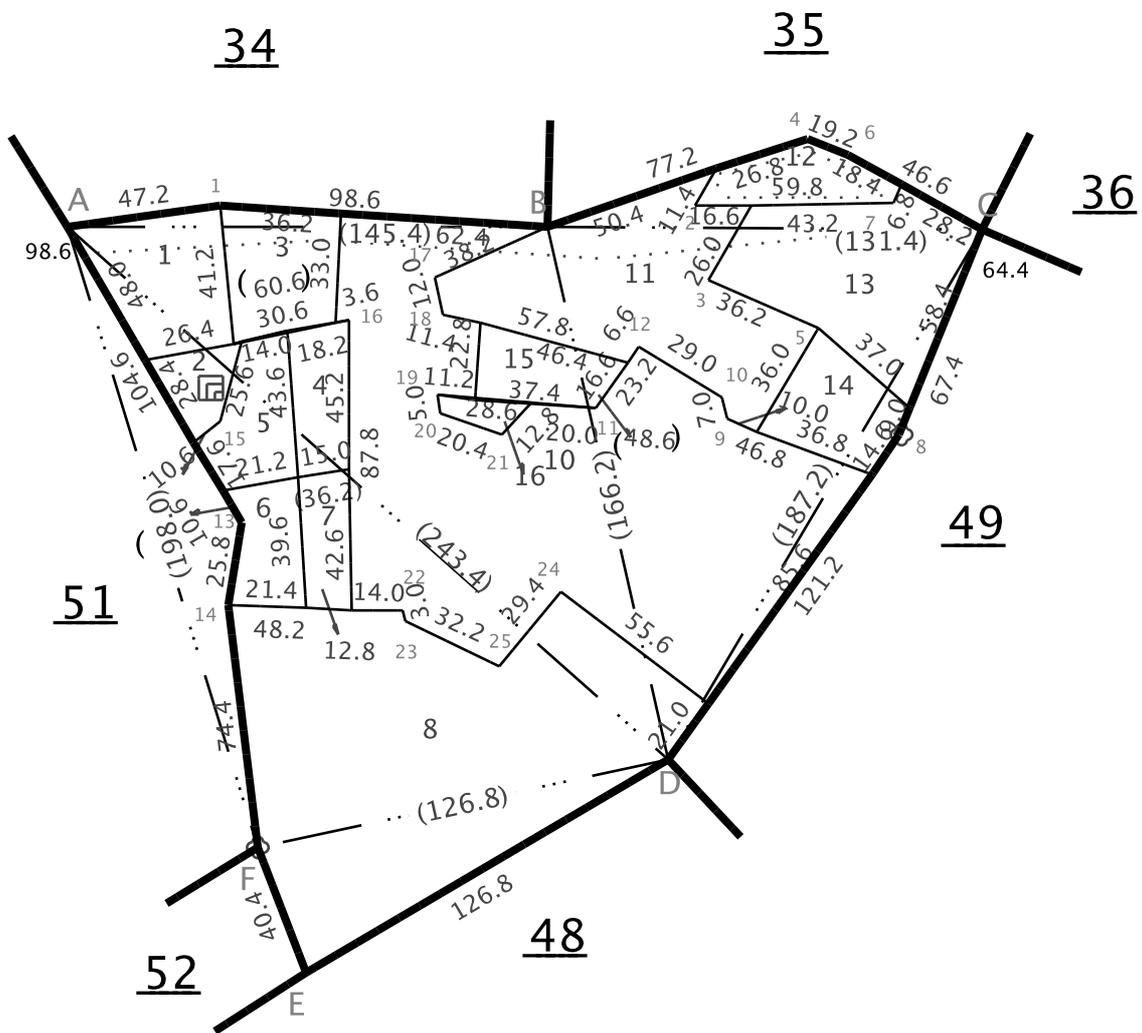
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Taluk : Sankari

Area : Hect 03 Ares 78.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2294



District : Salem

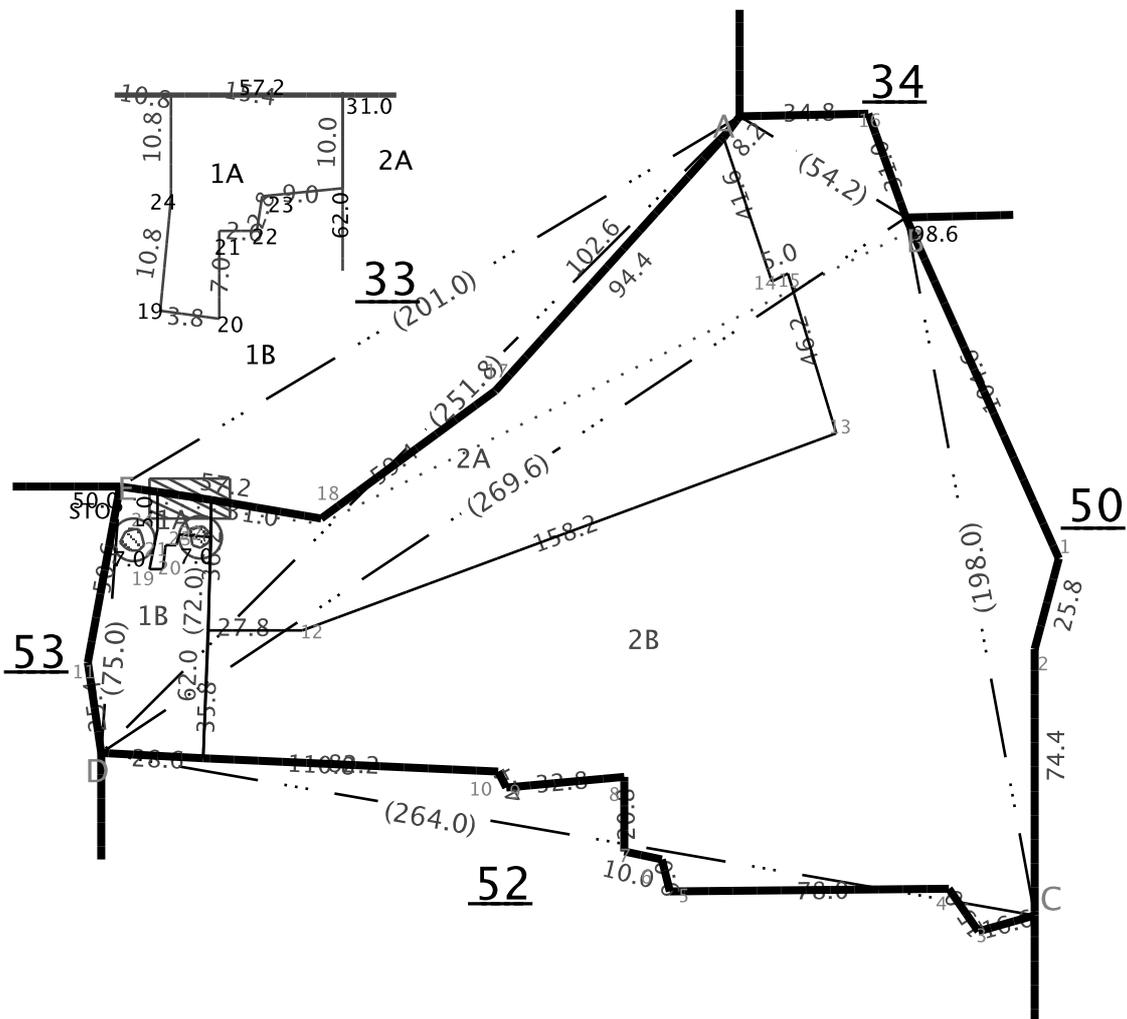
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Taluk : Sankari

Area : Hect 03 Ares 50.00

Village : CHINNAKAVUNDANUR [37]

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Date of Issue: 02-01-2018 10:27:57

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A-157

mv240 v250.004

District : Salem

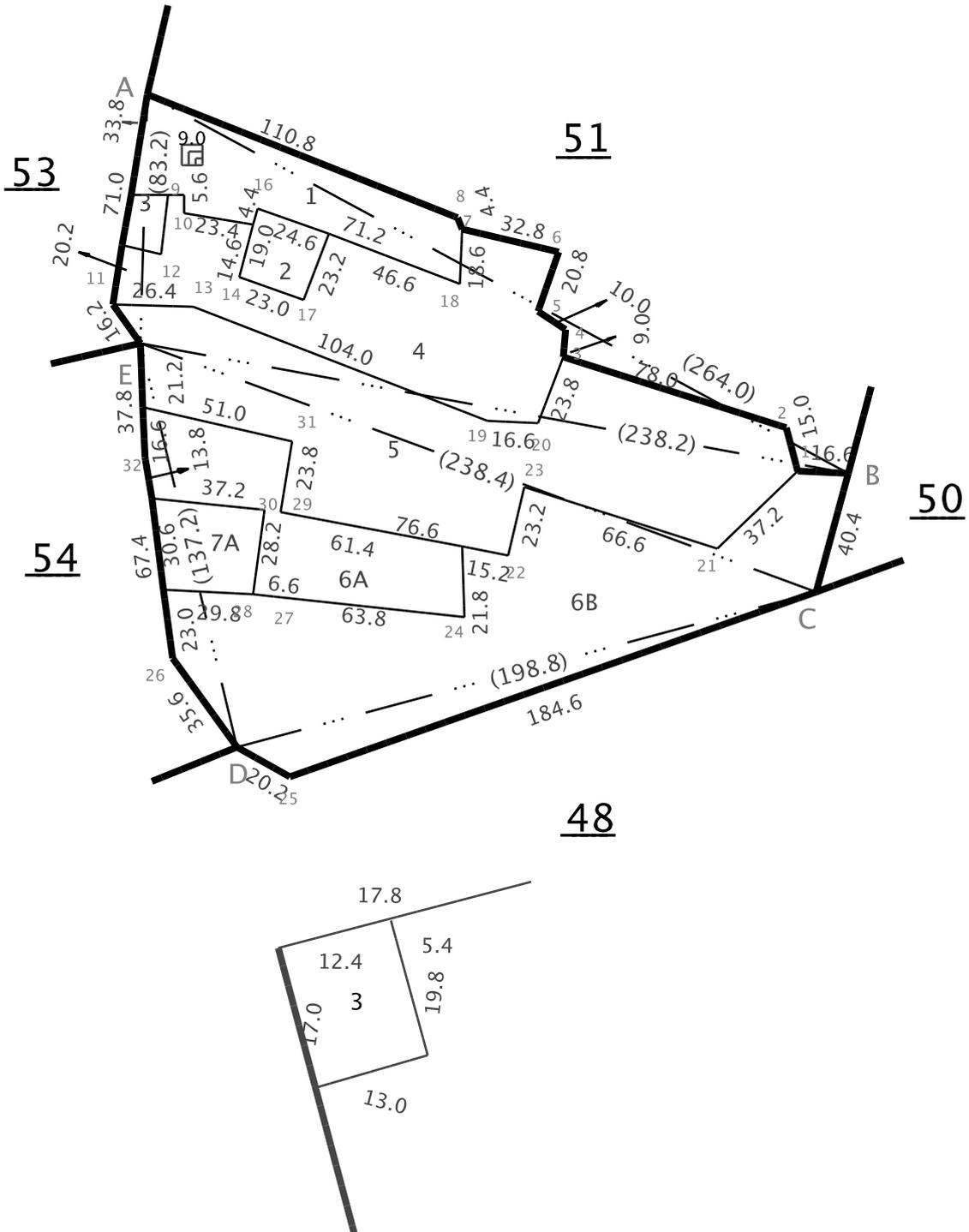
Survey No : 52

Taluk : Sankari

Area : Hect 03 Ares 15.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2148



District : Salem

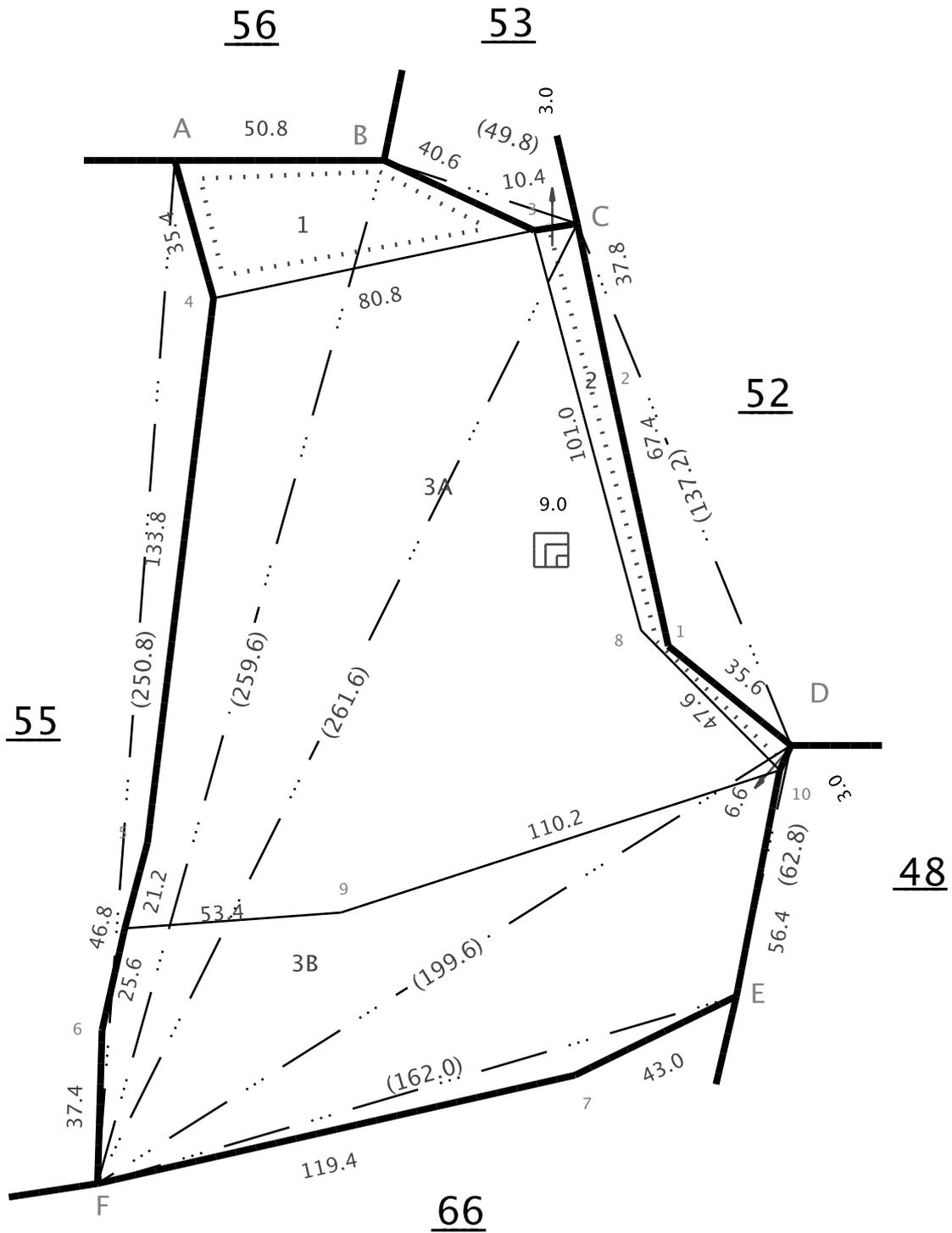
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Taluk : Sankari

Area : Hect 02 Ares 93.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1564



Date of Issue: 02-01-2018 10:30:07

CollabLand : National Informatics Centre

A-159

mv240 v250.004

District : Salem

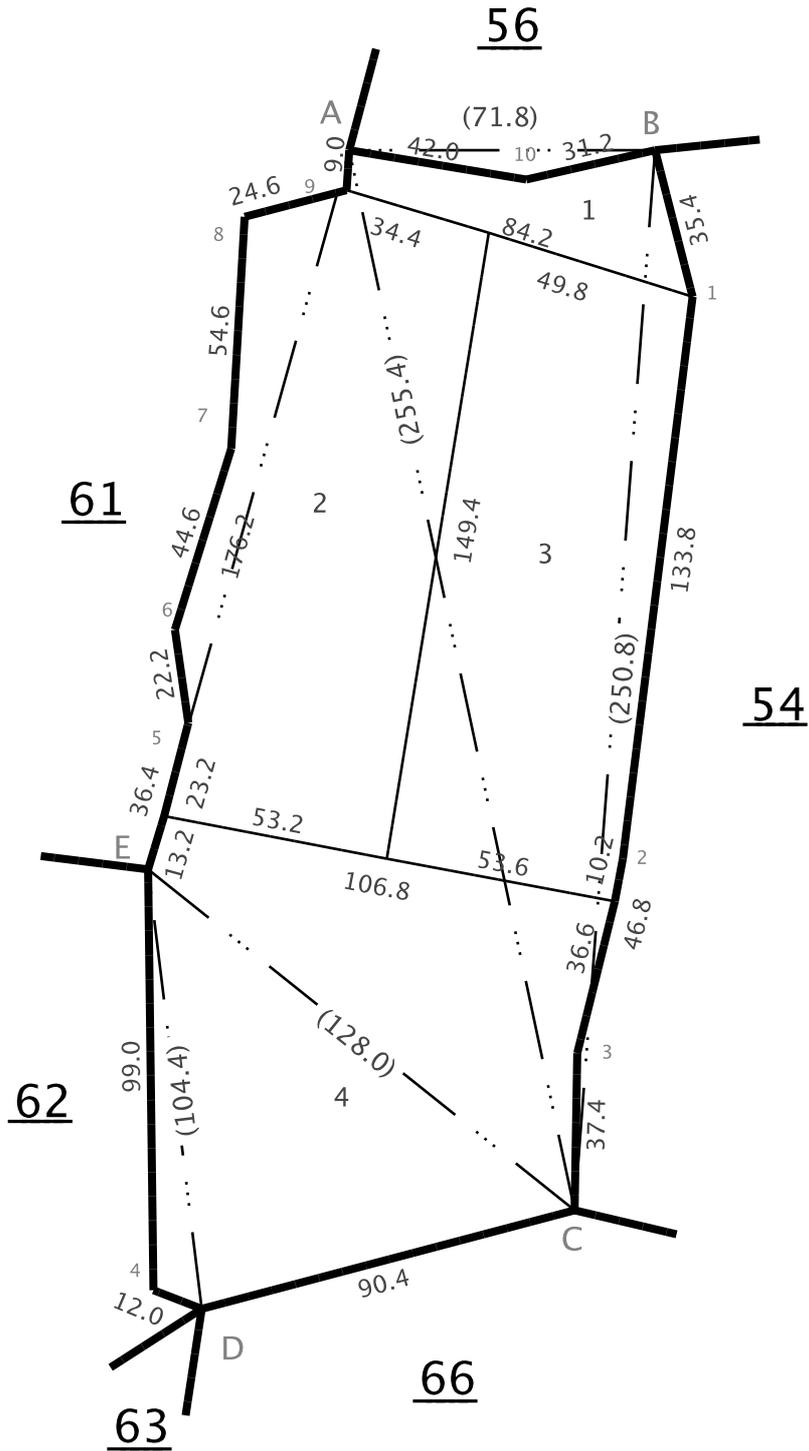
Survey No : 55

Taluk : Sankari

Area : Hect 02 Ares 73.50

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1781



District : Salem

Survey No : 62

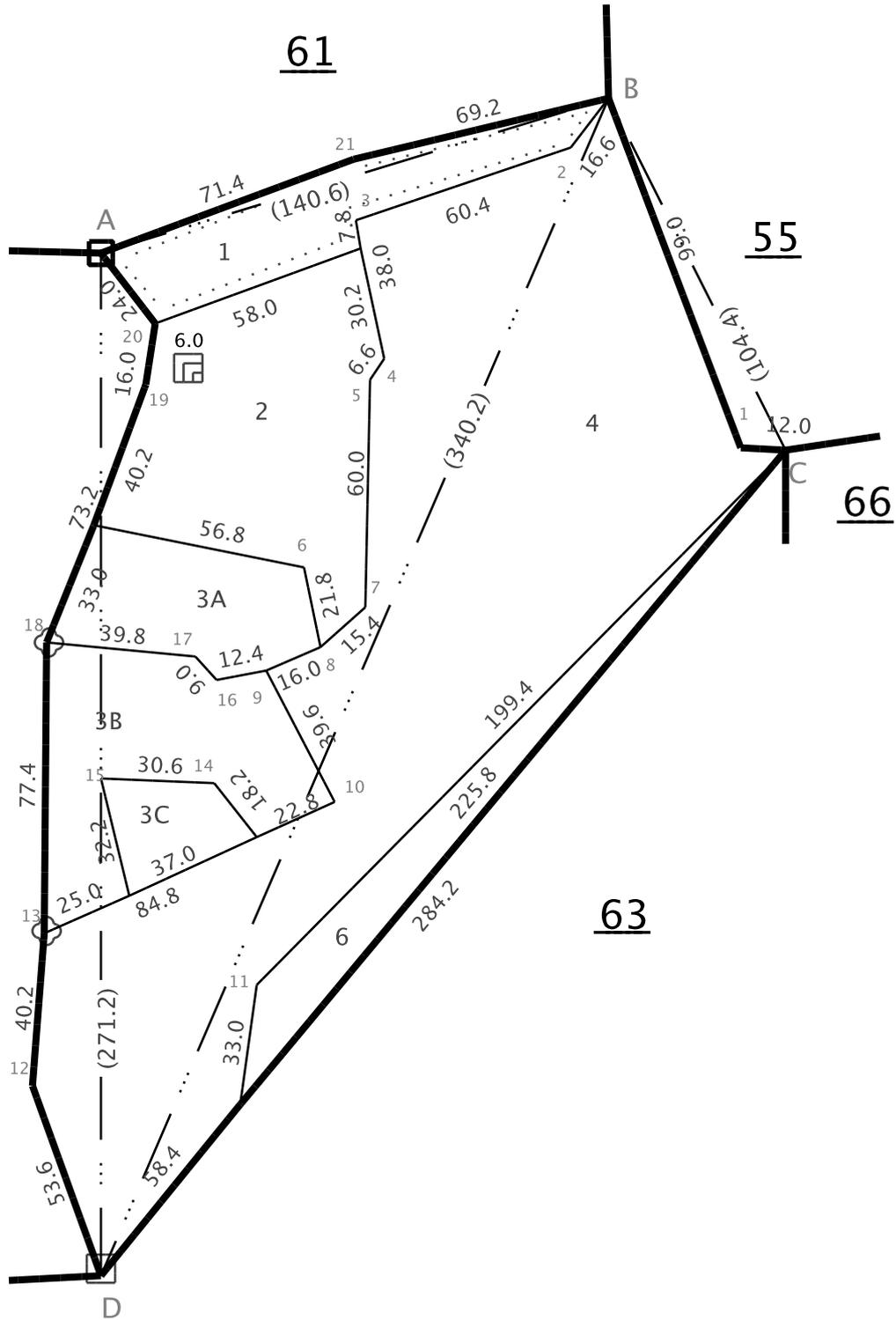
Taluk : Sankari

Area : Hect 03 Ares 41.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1765

V NO:10 ALATTUR



Date of Issue: 02-01-2018 10:37:11

CollabLand : National Informatics Centre

A-161

mv240 v250.004

District : Salem

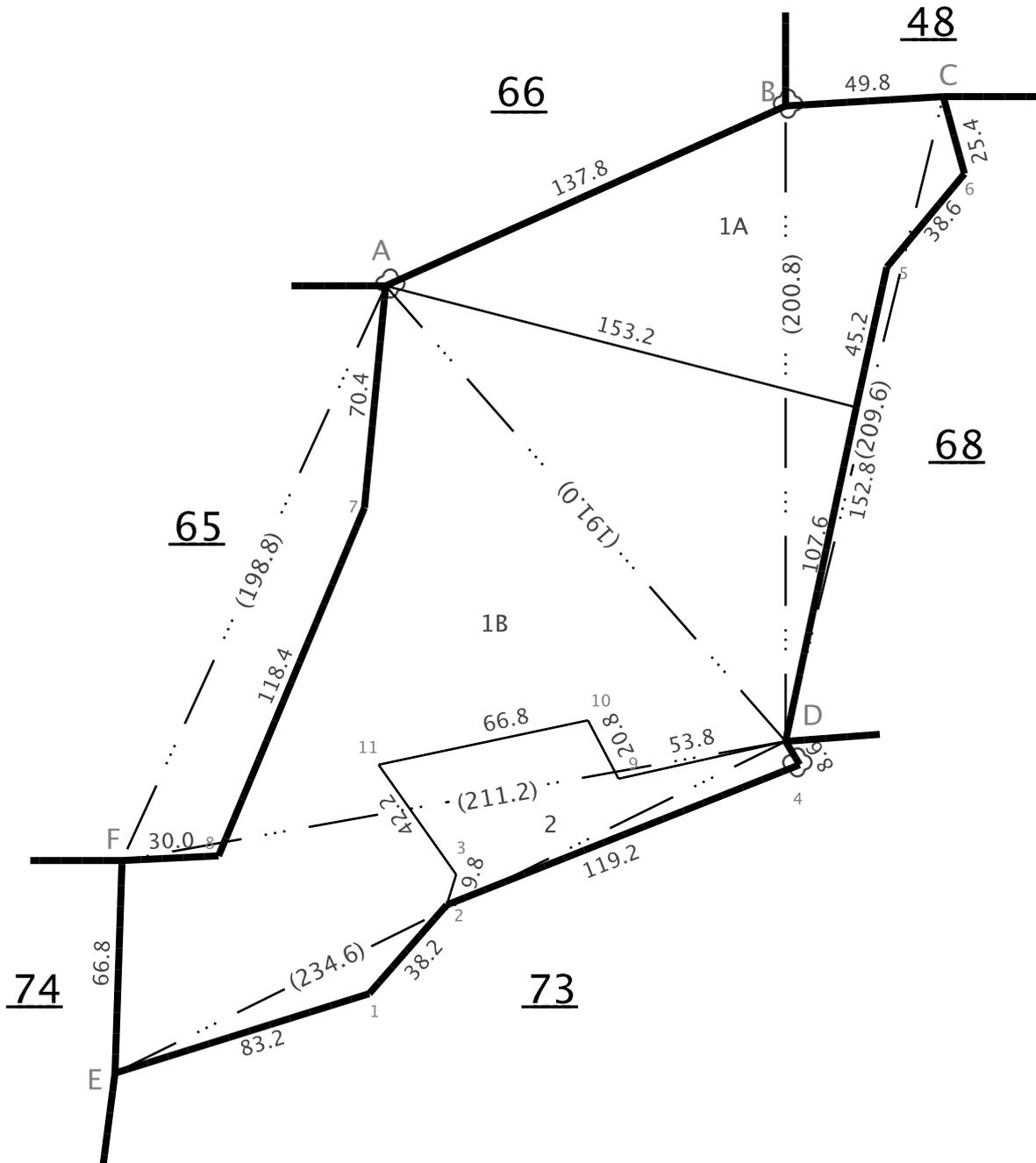
Survey No : 67

Taluk : Sankari

Area : Hect 03 Ares 88.50

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2088



District : Salem

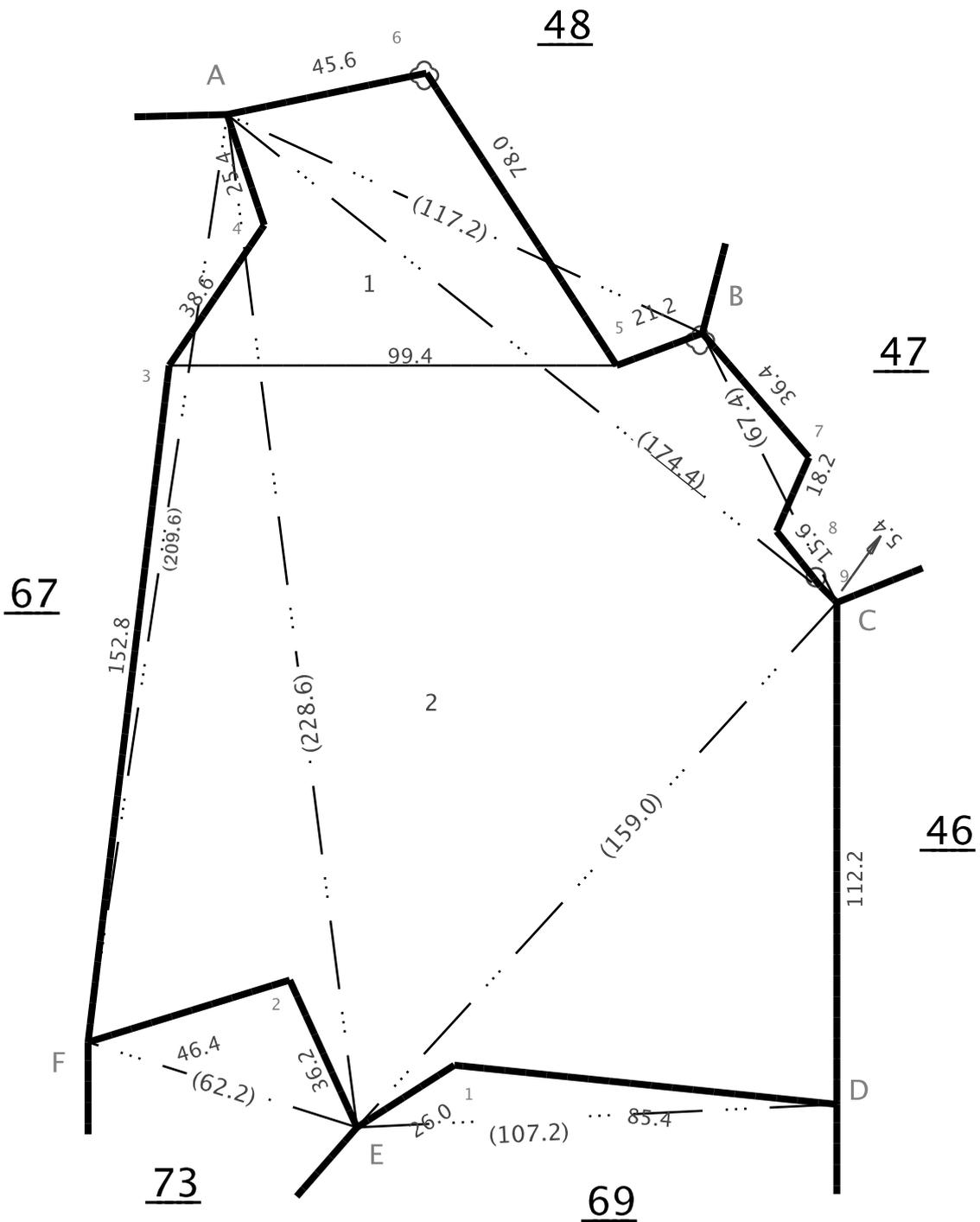
Survey No : 68

Taluk : Sankari

Area : Hect 02 Ares 83.50

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 1462



Date of Issue: 02-01-2018 10:42:07

CollabLand : National Informatics Centre

A-164

mv240 v250.004

District : Salem

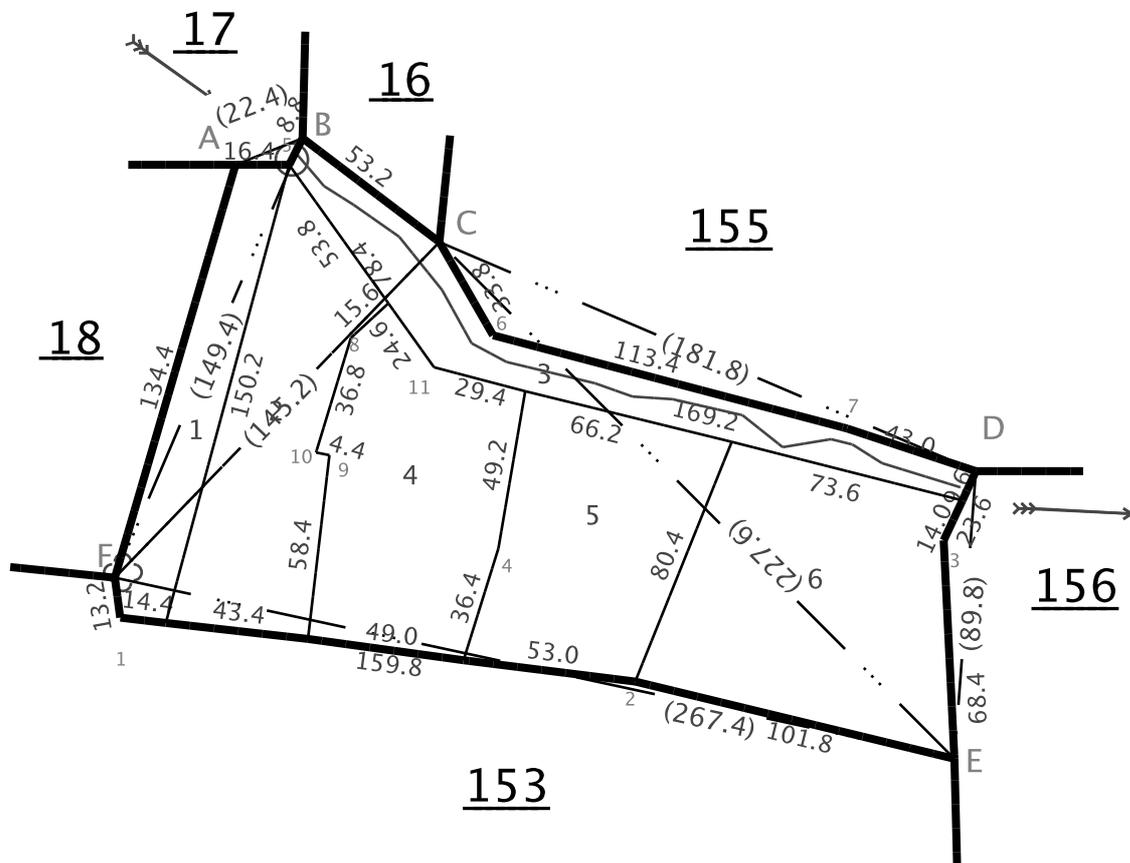
Survey No : 154

Taluk : Sankari

Area : Hect 02 Ares 74.50

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2358



Date of Issue: 04-01-2018 14:57:56

Survey and Settlement Department, Government of Tamil Nadu

District : Salem

Survey No : 63

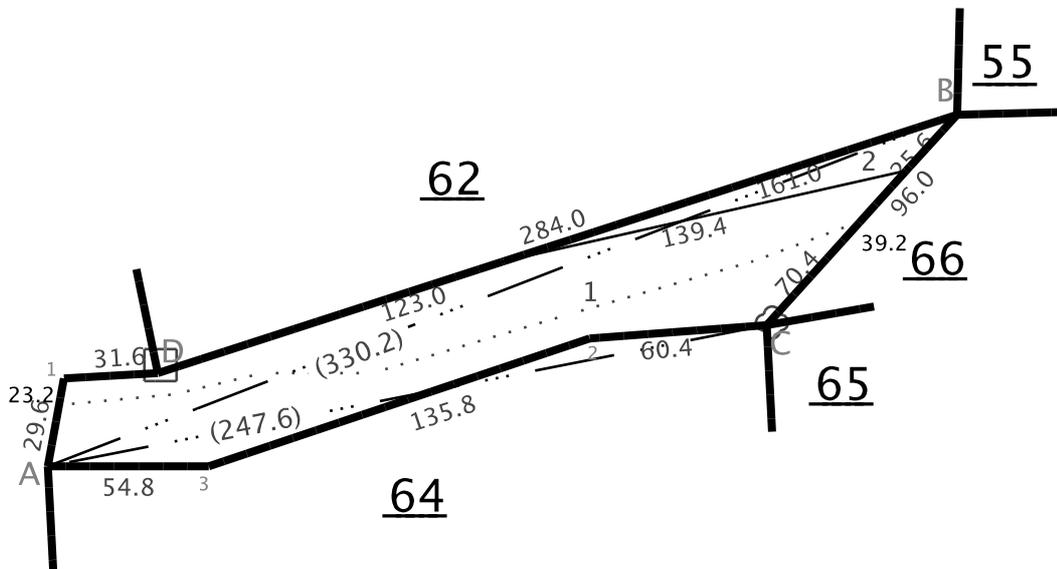
Taluk : Sankari

Area : Hect 01 Ares 9.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2574

V NO:10 ALATTUR



District : Salem

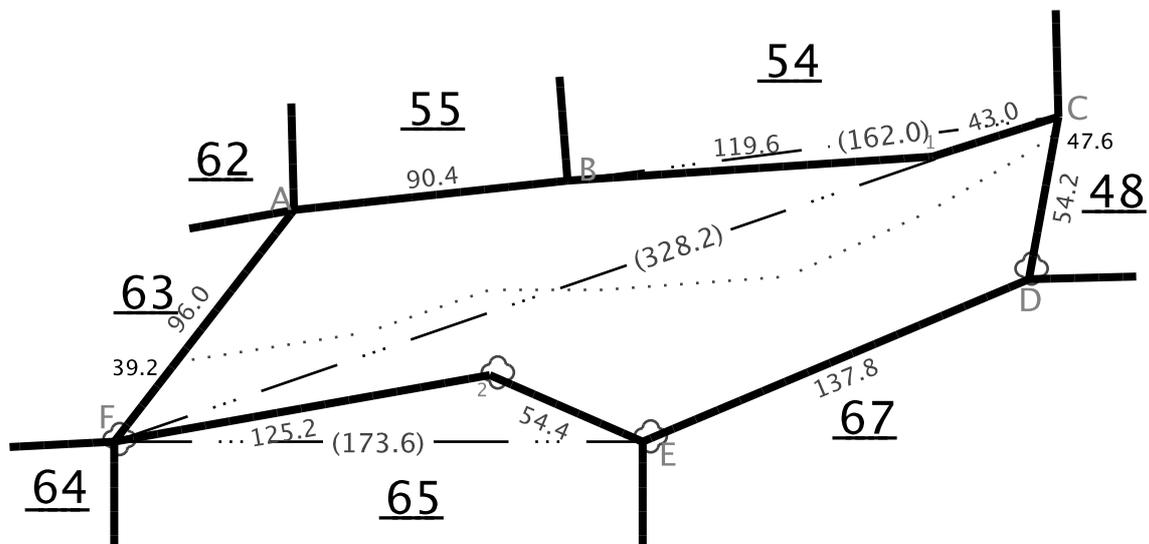
Survey No : 66

Taluk : Sankari

Area : Hect 01 Ares 83.00

Village : CHINNAKAVUNDANUR [37]

Scale : 1 : 2493



அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	15	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	1	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	15-1	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 56.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	3.88
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	16	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	2	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	16-2	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	4 - 24.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	10.50
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	18	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	-	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	18	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	3 - 21.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.50
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	19	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	3	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	19-3	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	2 - 14.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	5.34
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டனூர்

1. புல எண்	19	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	5B	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	19-5B	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 70.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.54
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	20	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	2B	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	20-2B	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 60.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.24
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 40729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	21	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	-	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	21	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	7 - 24.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	5.62
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 40729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டனூர்

1. புல எண்	22	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	1	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	22-1	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 88.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.44
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 40729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	23	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	2	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	23-2	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	2 - 72.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	6.71
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 40729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	24	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	2	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	24-2	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	2 - 25.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	5.55
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 40729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டனூர்

1. புல எண்	24	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	4	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	24-4	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 34.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.26
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 40729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	25	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	2	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	25-2	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	2 - 74.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	6.81
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 40729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	32	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	-	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	32	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	3 - 15.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.44
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 50729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	33	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	1A	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	33-1A	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 93.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.71
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 50729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	34	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	1	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	34-1	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	4 - 26.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	3.32
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 50729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டனூர்

1. புல எண்	37	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	1	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	37-1	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 77.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.36
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 50729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	50	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	8	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	50-8	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 91.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.75
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	இந்தியா சிமென்ட் லிமி டெட் சென்னை
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 70729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	51	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	2B	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	51-2	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	2 - 38.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	5.86
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 70729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	54	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	3B	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	54-3	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 91.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.70
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 70729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	55	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	4	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	55-4	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 0.0
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.49
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 70729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	62	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	4	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	62-4	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 87.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.50
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 80729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	64	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	4A	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	64-4	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 18.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.45
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 80729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டனூர்

1. புல எண்	67	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	1A	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	67-1A	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 92.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.70
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 80729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டூர்

1. புல எண்	68	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	1	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	68-1	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 40.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.31
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 80729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டனூர்

1. புல எண்	52	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	6B	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	52-6	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 96.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.39
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 70729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டனூர்

1. புல எண்	154	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	1	10. மண் தரம்	12
3. பழைய புல உட்பிரிவு எண்	154-1	11. தீர்வை (ரூ - ஹெ)	0.76
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 26.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.20
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : சேலம்

வட்டம் : சங்ககிரி

கிராமம் : சின்னாக்கவுண்டனூர்

1. புல எண்	154	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	2	10. மண் தரம்	8
3. பழைய புல உட்பிரிவு எண்	154-2	11. தீர்வை (ரூ - ஹெ)	2.47
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 47.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.16
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	36
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.இந்தியாசிமென்ட் லிட் சென்னை

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30729 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

From	To
Dr. A.Kalaiselvan., Ph.D., Deputy Director, Dept. of Geology and Mining, Collectorate, Salem -636 001.	Tvl. The India Cements Limited, Sankari Works, Sankari West Post, Salem-637 303.

Roc. 333/2017/Mines A/ Dated .07.2017.

Sir.,

Sub: Mines and Minerals - Salem District - Major Mineral - Limestone lease granted to Tvl. The India Cements Limited - Sankari Taluk - Chinnagoundanur Village - Poramboke land S.F.Nos 48, 63 and 66 over an extent of 8.00.5 Hects. - Limestone Production details requested - For obtaining Environmental Clearance from MOEF&CC - Details Furnished - Reg.

Ref: 1. G.O.3(D) No.(Ms) No.76 Industries Department dated 08.02.1989.
2. Tvl. The India Cements Limited, Sankari Works, Sankari letter No. ICL/ SKD/ Mines/ 2017/ 117 dated 13.07.2017.

In the reference 1st cited, 2nd renewal lease was granted to Tvl. India Cements Limited, Sankari for mining Limestone in poramboke lands of S.F.Nos.48 (5.08.0), 63 (1.09.0) and 66 (1.83.0) over an extent of 8.00.5 Hectres in Chinnagoundanur Village, Sankari Taluk for a period of 20 years from 10.09.1988 to 09.09.1998. 3rd renewal applied on 21.08.1997.

In the reference 2nd cited, Tvl. ICL Sankari has requested to furnish the production details of Limestone of Tvl. ICL from for the above areas from 1992-93 to 2016-17 for obtaining Environmental Clearance from MoEF & CC.

In this connection, the details of Limestone production for the above area for the period of 1992-93 to 2016-17 in respect of Tvl. The India Cements Limited, Sankari is furnished below as per our office records.

Sl. No.	Year	Limestone Production in M.T G.O. No.76
1	1992-93	22353.57
2	1993-94	63351.60
3	1994-95	60986.10
4	1995-96	4600.10
5	1996-97	1066.30
6	1997-98	1920.44
7	1998-99	2780.32
8	1999-00	4344.64
9	2000-01	2215.95
10	2001-02	2329.84
11	2002-03	542.02
12	2003-04	0
13	2004-05	806.86
14	2005-06	100.98
15	2006-07	0
16	2007-08	240.20
17	2008-09	0
18	2009-10	103.15
19	2010-11	336.78
20	2011-12	284.13
21	2012-13	0
22	2013-14	4324.35
23	2014-15	0
24	2015-16	0
25	2016-17	0

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Deputy Director,
Dept. of Geology and Mining,
Salem.

27/10/12

From

Dr. A.Kalaiselvan., Ph.D.,
Deputy Director,
Dept. of Geology and Mining,
Collectorate,
Salem -636 001.

To

Tvl. The India Cements Limited,
Sankari Works,
Sankari West Post,
Salem-637 303.

Roc. 333/2017/Mines A/ Dated .07.2017.

Sir,

Sub: Mines and Minerals - Salem District – Major Mineral – Limestone lease granted to Tvl. The India Cements Limited – Sankari Taluk – Chinnagoundanur Village – Patta land S.F.Nos 15/1, 16/2 etc over an extent of 50.84.0 Hects. – Limestone Production details requested - For obtaining Environmental Clearance from MOEF&CC – Details Furnished – Reg.

- Ref: 1. G.O.3(D) No.(Ms) No.211 Industries Department dated 11.12.1997.
2. Tvl. The India Cements Limited, Sankari Works, Sankari letter No. ICL/ SKD/ Mines/ 2017/ 117 dated 13.07.2017.

In the reference 1st cited, 2nd renewal lease was granted to Tvl. India Cements Limited, Sankari for mining Limestone in patta lands of S.F.Nos.15/1, 16/2, 18, 19/3, 19/4, 19/5B, 20/2B, 22/1, 23/2, 23/3A, 24/2, 24/3, 24/4, 25/2, 25/3, 25/4, 32, 33/1A, 34/1, 34/5, 37/1, 37/3, 37/4, 50/8, 9, 10, 51/2B, 51/3, 52/6B, 52/7B, 54/3B, 55/4, 62/4, 5, 64/4A, 67/A, 68/1, 154/1 and 154/2 over an extent of 50.85.0 Hectres in Chinnagoundanur Village, Sankari Taluk for a period of 20 years from 29.12.1994 to 28.12.2004. 3rd renewal applied on 30.06.2003.

In the reference 2nd cited, Tvl. ICL Sankari has requested to furnish the production details of Limestone of Tvl. ICL from for the above areas from 1992-93 to 2016-17 for obtaining Environmental Clearance from MoEF & CC.

In this connection, the details of Limestone production for the above area for the period of 1992-93 to 2016-17 in respect of Tvl. The India Cements Limited, Sankari is furnished below as per our office records.

Sl. No.	Year	Limestone Production in M.T G.O. No.211
1	1992-93	61779.37
2	1993-94	22190.58
3	1994-95	25916.50
4	1995-96	52658.30
5	1996-97	28392.96
6	1997-98	1958.38
7	1998-99	5225.26
8	1999-00	3247.64
9	2000-01	3304.39
10	2001-02	2278.98
11	2002-03	550.28
12	2003-04	0
13	2004-05	924.48
14	2005-06	459.76
15	2006-07	0
16	2007-08	1340.04
17	2008-09	0
18	2009-10	811.78
19	2010-11	1585.45
20	2011-12	1449.41
21	2012-13	0
22	2013-14	2493.23
23	2014-15	0
24	2015-16	0
25	2016-17	0

[Handwritten Signature]
27/2/17

Deputy Director,
Dept. of Geology and Mining,
Salem.

[Handwritten Signature]
27/2/12

From

Dr. A.Kalaiselvan., Ph.D.,
Deputy Director,
Dept. of Geology and Mining,
Collectorate,
Salem -636 001.

To

Tvl. The India Cements Limited,
Sankari Works,
Sankari West Post,
Salem-637 303.

Roc. 333/2017/Mines A/ Dated .07.2017.

Sir,

Sub: Mines and Minerals - Salem District – Major Mineral – Limestone lease granted to Tvl. The India Cements Limited – Sankari Taluk – Chinnagoundanur Village – Patta and Poramboke lands S.F.Nos 33/1B(P) etc over an extent of 4.86.0 Hects. – Limestone Production details requested - For obtaining Environmental Clearance from MOEF&CC – Details Furnished – Reg.

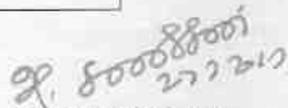
- Ref: 1. G.O. 3(D) No.(Ms) No.1086 Industries Department dated 21.09.1977.
2. Tvl. The India Cements Limited, Sankari Works, Sankari letter No. ICL/ SKD/ Mines/ 2017/ 117 dated 13.07.2017.

In the reference 1st cited, mining lease was granted to Tvl. India Cements Limited, Sankari for mining Limestone in patta and poramboke lands of S.F.Nos. 33/1B(P), 33/2, 3, 4, 51/2A(P), 52/5(P), 153/2 (P), 17, 23/1, 24/1 and 25/1 over an extent of 4.86.5 Hectres in Chinnagoundanur Village, Sankari Taluk for a period of 20 years from 20.03.1978 to 19.03.1998. Renewal applied on 17.02.1997.

In the reference 2nd cited, Tvl. ICL Sankari has requested to furnish the production details of Limestone of Tvl. ICL from for the above areas from 1992-93 to 2016-17 for obtaining Environmental Clearance from MoEF & CC.

In this connection, the details of Limestone production for the above area for the period of 1992-93 to 2016-17 in respect of Tvl. The India Cements Limited, Sankari is furnished below as per our office records.

Sl. No.	Year	Limestone Production in M.T G.O. No.1086
1	1992-93	0
2	1993-94	0
3	1994-95	0
4	1995-96	0
5	1996-97	0
6	1997-98	2027.78
7	1998-99	2837.40
8	1999-00	4233.14
9	2000-01	1143.44
10	2001-02	2290.96
11	2002-03	541.70
12	2003-04	0
13	2004-05	781.48
14	2005-06	103.84
15	2006-07	0
16	2007-08	215.28
17	2008-09	0
18	2009-10	70.120
19	2010-11	132.70
20	2011-12	173.31
21	2012-13	0
22	2013-14	685.88
23	2014-15	0
24	2015-16	0
25	2016-17	0


 Deputy Director,
 Dept. of Geology and Mining,
 Salem.


 27/12/12

நீதித்துறை நடுவர் நீதிமன்றம் எண்.1, சங்ககிரி

முன்னிலை : திரு. எஸ்.ஆர்.பாபு, பி.ஏ., பி.எல்.,

நீதித்துறை நடுவர் எண்.1, சங்ககிரி

2023 ஆம் ஆண்டு மே மாதம் 31-ஆம் நாள் புதன்கிழமை

ஆண்டுப்பட்டிகை வழக்கு எண். 82 / 2023

(CNR.No. TNSA-09-000435-2023)

K. செந்தில் விநாயகம்,

மாவட்ட சுற்றுச்சூழல் பொறியாளர்,

தமிழ்நாடு மாசு கட்டுப்பாட்டு வாரியம்,

சேலம் மாவட்டம்.

...

புகார்தாரர்

/எதிராக/

S.K.பழனியப்பன்,

இணை தலைவர் (உற்பத்தி),

தி/ள். இந்தியா சிமெண்ட்ஸ்,

(முத்தையனூர் சுண்ணாம்பு கல்)

சின்னகவுண்டனூர் கிராமம்,

சங்ககிரி தாலுக்கா, சேலம் மாவட்டம்

...

எதிரி

இவ்வழக்கு கடந்த 29.03.2023 அன்று இந்நீதிமன்ற வழக்கு கோப்பிற்கு

எடுக்கப்பட்டு இதுநாள்வரை இந்நீதிமன்ற பரிசீலனையிலிருந்து, இறுதியாக என்

முன்னிலையில் விசாரணைக்கு வந்தபோது, குற்றமுறையீட்டாளர் தரப்பில்

கே.செந்தில் விநாயகம், மாவட்ட சுற்றுச்சூழல் பொறியாளர், சேலம் அவர்களும்,

எதிரிதரப்பில் கற்றறிந்த வழக்கறிஞர் திரு. வி. ரமேஷ், அவர்கள் ஆஜராகியும் செய்த

வாதங்கள் மற்றும் வழக்கு ஆவணங்களை பரிசீலனை செய்து இன்று இந்நீதிமன்றம்

வழங்கும்,

தீர்ப்புரை

சேலம் மாவட்டம், சங்ககிரி தாலுக்கா, சங்ககிரி மேற்கு, தி/ள்.இந்தியா சிமெண்ட்ஸ் லிமிடெட் (முத்தையனூர் சுண்ணாம்பு கல்) என்ற பெயரில் நிறுவனத்தை நடத்திவரும் எதிரி, சுற்றுச்சூழல் அனுமதி பெறாமல் தொடர்ந்து நிறுவனத்தின் நடவடிக்கை மேற்கொள்ளப்பட்ட குற்றத்திற்காக எதிரியின் மீது சுற்றுச்சூழல் பாதுகாப்பு சட்டம் 1986 பிரிவு 15 உ/இ 16 மற்றும் 19(a) ன் கீழ் குற்றம் எனவும், சுற்றுச்சூழல் தாக்க மதிப்பீடு 2006 ன் கீழ் விதிமீறல் எனவும், தமிழ்நாடு மசுக்கட்டுப்பாட்டு வாரிய சேலம் மாவட்ட சுற்றுச்சூழல் பொறியாளர் புகார் தாக்கல் செய்துள்ளார்.

2) இவ்வழக்கில் எதிரிக்கு அழைப்பாணை அனுப்பப்பட்டு, எதிரி இந்நீதிமன்றத்தில் ஆஜரானதிற்கு பின்னிட்டு, கு.வி.மு.ச பிரிவு-204 ன் கீழ் இவ்வழக்கின் நகல்கள் இலவசமாக வழங்கப்பட்டு, எதிரிக்கு எதிரான பிரிவுகள்- 15 உ/இ 16 மற்றும் 19(a) சுற்றுச்சூழல் பாதுகாப்பு சட்டம் 1986-ன் கீழான குற்றங்கள் பற்றி வினவியபோது, எதிரி குற்றத்தை மறுத்தார். ஆகவே புகார்தாரர் தர்ப்பு விசாரணைக்கு உத்தரவிடப்பட்டது.

3) புகார்தாரர்தர்ப்பில், எதிரி மீதான குறுச்சாட்டுக்களை வணைவதற்கு ஏதுவாக புகார்தாரரை புகார்தாரர் தர்ப்பு சாட்சி-1 ஆக விசாரிக்கப்பட்டு புகார்தாரர் தர்ப்பில் பு.சா.ஆ.1 முதல் அ.சா.ஆ.18 வரையிலான சான்றாவணங்கள் குறியீடு செய்யப்பட்டுள்ளன.

4) புகார்தாரர்தரப்பு சாட்சியத்தின் சுருக்கம் பின்வருமாறு:-

4.1) புகார்தாரர் தற்போது தமிழ்நாடு மாசு கட்டுப்பாட்டு வாரியம், சேலம் மாவட்டத்தில் மாவட்ட சுற்றுச்சூழல் பொறியாளராக பணியாற்றி வருவதாகவும், நாமக்கல் மாவட்டம், குமாரபாளையம், தமிழ்நாடு மாசுகட்டுப்பாட்டு வாரியம் அலுவலகத்தின் மறுசீரமைப்பின் காரணமாக இவ்வழக்கு கோப்பின் நடவடிக்கைகளை மேற்கொள்ள சேலம் மாவட்டம், தமிழ்நாடு மாசுகட்டுப்பாட்டு வாரிய அலுவலகத்திற்கு வழக்கு கோப்பினை மாற்றம் செய்துள்ளதாகவும், மாவட்ட சுற்றுச்சூழல் பொறியாளர் ஆகிய தான் நீர் (மாசு தடுப்பு மற்றும் கட்டுப்பாடு) சட்டம் 1974, பிரிவு 50, மற்றும் காற்று (மாசு தடுப்பு மற்றும் கட்டுப்பாடு) சட்டம், 1981, பிரிவு 44 மற்றும் சுற்றுச்சூழல் (பாதுகாப்பு) சட்டம் 1986 பிரிவு 21 மற்றும் இந்திய தண்டனை சட்டம் 1860, பிரிவு 21 ஆகிய பிரிவுகளில் வறையறுக்க பட்டுள்ளதின் படி ஒரு அரசு அதிகாரி என்றும்,

4.2) எதிரியானவர் சேலம் மாவட்டம், சங்ககிரி தாலுக்கா, சின்னகவுண்டனூர் கிராமம், S.F.No: 15/1,16/2,etc., இல் உள்ள கடந்த 11.12.1997 ஆம் தேதியிட்ட அரசு ஆணை G.O.Ms.3(D) No.211 Industries Department இன்படி தி/ள்.இந்தியா சிமெண்ட்ஸ் (முத்தையனூர் சுண்ணாம்பு கல்)என்ற பெயரில் ஒரு நிறுவனத்தை நடத்தி வருவதாகவும், இந்திய அரசின் சுற்றுச்சூழல் மற்றும் வன அமைச்சகம், 14.09.2006 ஆம் தேதி வெளியிட்டுள்ள அதன் Environmental Impact Assessment Notification, 2006 (EIA)இன் படி வெளியிடப்பட்ட தேதியிலிருந்து இதன் அறிவிப்பில் பட்டியலிடப்பட்டுள்ள புதிய திட்டங்களின் கட்டுமானங்கள் அல்லது

செயல்பாடுகள், செயல்முறை மற்றும் அல்லது தொழில்நுட்பத்தில் மாற்றத்துடன் கூடிய திறன் கூட்டல் உள்ளிட்டவை அட்டவணையில் கண்டுள்ளவாறு இந்தியாவின் எந்தப் பகுதியிலும் மத்திய அரசின் அல்லது State level Environment Impact Assessment Authority (SEIAA/TN) இன் முன் சுற்றுச்சூழல் அனுமதி (Prior Environmental Clearance)பெற்ற பின்னரே மேற்கொள்ள வேண்டும் என்றும்,

4.3) எதிரி நிறுவனத்தின் திட்டம் Environmental Impact Assessment Notification, 2006 (EIA)இல் குறிப்பிட்டுள்ள S.No.1(a) கனிமங்களை சுரங்கப்படுத்துதல் இன் கீழ் முன் சுற்றுச்சூழல் அனுமதி தேவைப்படும் திட்டங்கள் அல்லது செயல்பாடுகளின் பட்டியலில் உள்ளது என்றும், மேலும் இதன் படி எதிரி நிறுவனத்தின் திட்டம் மேற்படி அறிவிப்பில் **Category B** திட்டத்தின் கீழ் வருவதால் மத்திய அரசின் சுற்றுச்சூழல், வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகத்திடம் முன் சுற்றுச்சூழல் அனுமதி (Prior Environmental Clearance)பெற வேண்டியது கட்டாயம் என்றும், எதிரியின் நிறுவனம் கடந்த 28.05.2014 ஆம் தேதி தமது கடித எண் ICL/Mines/Sankari/Exp/TOR/MoEF-1 வாயிலாக மத்திய அரசின் சுற்றுச்சூழல், வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகத்திடம் (MoEF& CC) மேற்படி சேலம் மாவட்டம் சங்ககிரி தாலுக்கா சின்னாகவுண்டனூர் கிராமத்தில் உள்ள முத்தையனூர் சுண்ணாம்பு கல்குவாரியில் 50.84 ஹெக்டர் பரப்பளவு கொண்ட குத்தகை சுரங்க பகுதிக்கு 2,10,000 TPA உற்பத்தி திறனுக்கான சுற்றுச் சூழல் அனுமதிக்கான ToR (Terms of Reference) பெற்றதாகவும்,

4.4) எதிரியின் நிறுவனம் கடந்த 13 மற்றும் 14 ஆம் தேதி நவம்பர் மாதம் 2014 அன்று தங்களது சுற்றுச்சூழல் அனுமதிக்கான விண்ணப்பம் குறித்து Expert Appraisal Committee உடனான சந்திப்பில் தங்கள் தரப்பு விளக்கம் அளித்ததாகவும், அதில் Expert Appraisal Committee மேற்படி நிறுவனம் கடந்த 2006-2007 முதல் 2014-2015 வரை சுற்றுச்சூழல் (பாதுகாப்பு) சட்டம் 1986 இன் கீழ் வெளியிடப்பட்ட Environmental Impact Assessment Notification, 2006 (EIA)இன் படி முன் சுற்றுச்சூழல் அனுமதி (Prior Environmental Clearance) பெறாமல் இயங்கியதற்காக மேற்படி விண்ணப்பத்தை விதிமீறல் வழக்காக கருதியதாகவும், இதனிடையே மத்திய அரசின் சுற்றுச்சூழல், வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகம் (MoEF& CC) கடந்த 26.12.2014 ஆம் தேதி தமது அலுவலக கடித எண் J-11015/1068/2014-IA. II (M) வாயிலாக சுற்றுச் சூழல் பாதுகாப்பு சட்டம் 1986 பிரிவு 5 இன் கீழ் எதிரியின் நிறுவனத்திற்கு மேலே குறிப்பிட்டுள்ள விதி மீறல் குறித்து காரணம் கோரும் முகாந்திர கடிதம் (Show cause Notice) ஒன்றை அனுப்பி உள்ளதாகவும், மேலும் மேற்கூறிய வழிகாட்டுதல்களுக்கு இணங்குவதை உறுதி செய்வதற்கான கோரிக்கையுடன் சென்னையில் உள்ள தமிழ்நாடு மாசு கட்டுப்பாட்டு வாரிய தலைவர்(TNPCB) அவர்களுக்கும் இதன் ஒரு நகலை அனுப்பியுள்ளதாகவும்,

4.5) எதிரியின் நிறுவனம் கடந்த 20.01.2015 ஆம் தேதி காரணம் கோரும் முகாந்திர கடிதம் (Show cause Notice) க்கான தனது பதிலில் எதிரியின் நிறுவனம் தங்களது சுரங்கப் பணிகளை நிறுத்தி விட்டதாக தெரிவித்து உள்ளதாகவும், இதற்கிடையில் மத்திய அரசின் சுற்றுச்சூழல், வனம் மற்றும்

காலநிலை மாற்றம் அமைச்சகம் (MoEF& CC) கடந்த 12.12.2012 & 27.06.2013 ஆம்

தேதிகளில் வெளியிட்ட சுற்றறிக்கை மூலம் (சுற்றறிக்கை எண்: J-11013/41/2006-IA.II

(I) வாயிலாக சுற்றுச்சூழல் (பாதுகாப்பு) சட்டம், 1986 விதிமீறல் சம்பந்தமான

வழக்குகளை கையாள்வதற்கான வழிமுறைகளை வெளியிட்டுள்ளதாகவும், மேலும்

சம்பந்தப்பட்ட மாநில அரசு மேற்படி விதிமீறல்களுக்கு எதிராக தகுந்த சட்ட

நடவடிக்கை எடுத்த பின்னரே அவர்களது சுற்றுச்சூழல் அனுமதிக்கான

விண்ணப்பம் பரிசீலிக்கப்படும் என்றும் குறிப்பிட்டுள்ளதாகவும்,

4.6) தமிழ்நாடு அரசு சுற்றுச்சூழல் மற்றும் வன (EC3) துறை முதன்மை

செயலாளர் அவர்கள் சம்பந்தப்பட்ட எதிரியின் நிறுவன மீது சுற்றுச்சூழல் (பாதுகாப்பு)

சட்டம், 1986 பிரிவு 19 ன் கீழ் தேவையான சட்ட நடவடிக்கை எடுக்க கோரி தமிழ்நாடு

மாசு கட்டுப்பாடு வாரியம் உறுப்பினர் செயலர் அவர்களுக்கு கடந்த 12.05.2015 ஆம்

தேதியிட்ட கடித எண்: 6880/EC.3/2015-1 மற்றும் கடந்த 20.12.2017 ஆம் தேதியிட்ட

கடித எண்: 6880/EC3/2015-5 என்ற இலக்கமிட்ட கடிதங்களை அனுப்பியுள்ளார்

என்றும், மேலும் தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம், உறுப்பினர் செயலர் அவர்கள்

கடந்த 09.01.2018 ஆம் தேதியிட்ட முகாந்திர கடிதம் எண்.

T2/TNPCB/F.21766/SLM/2018 வாயிலாக சம்பந்தப்பட்ட தமிழ்நாடு மாசு கட்டுப்பாடு

வாரியம், மாவட்ட சுற்றுச்சூழல் பொறியாளரிடம் மேற்கண்ட சட்டத்தின் 19 வது

பிரிவின் அதிகாரத்தைப் பயன்படுத்தி விதிமீறல் குறித்த பிரிவு மீது நம்பகமான

நடவடிக்கை எடுக்கவும், விதிமீறல் நடந்த காலத்திற்கு மேற்கண்ட சட்டத்தின் பிரிவு

15 இன் கீழ் சட்ட நடவடிக்கை எடுக்கவும் வலியுறுத்தியதாகவும், எதிரியின் நிறுவனம்

Environmental Impact Assessment Notification, 2006 (EIA) இன் விதிகளை மீறுபவராகவும் மற்றும் சுற்றுச்சூழல் (பாதுகாப்பு) 1986 சட்டத்தின் பிரிவு 16 (1) உடன் படிக்கப்பட்ட பிரிவு 15 (1) இன் கீழ் ஒரு குற்றத்தைச் செய்தவராகவும்,

4.7) மத்திய அரசின் சுற்றுச்சூழல், வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகம் (MoEF& CC) கடந்த 14.03.2017 ஆம் தேதி வெளியிட்ட அறிவிப்பு எண்: S.O.804 (E) இன் பத்தி 7 & 8 இன் படி தேசிய பசுமை தீர்ப்பாயம் முதன்மை அமர்வானது கடந்த 12.12.2012 & 27.06.2013 ஆகிய தேதிகளில் வெளியிட்ட அலுவலக குறிப்புகளை ரத்து செய்தும், பத்தி 14 இன் படி விதிமீறல் திட்டங்களுக்கு மேலே உள்ள அறிவிப்பு வெளியிடப்பட்ட நாளிலிருந்து ஆறுமாத காலத்திற்குள் சுற்றுச்சூழல் அனுமதிக்கு விண்ணப்பிக்குமாறு அறிவுறுத்தப்பட்டதாகவும், அதன்படி எதிரியின் நிறுவனம் சுற்றுச்சூழல் அனுமதி வேண்டி மத்திய அரசின் சுற்றுச்சூழல், வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகத்திடம் (MoEF& CC) கடந்த 14.08.2017 ஆம் தேதி மீண்டும் விண்ணப்பித்து இருந்ததாகவும், மேற்படி விண்ணப்பம் கடந்த 19.12.2018 ஆம் தேதி State level Environment Impact Assessment Authority (SEIAA/TN)விற்கு அனுப்பப்பட்டு எதிரியின் நிறுவனம் மேற்படி State level Environment Impact Assessment Authority (SEIAA/TN) விடம் இருந்து கடந்த 12.07.2019 ஆம் தேதியிட்ட அதன் கடித எண்: SEIAA-TN/F.No.6733/SEAC/TOR-632/2019 வாயிலாக ToR (Terms of Reference) பெற்றுள்ளதாகவும்,

4.8) எதிரியின் நிறுவனம் அதன் உண்மையான உற்பத்தி விவரங்களை சேலம் மாவட்டம் கலெக்டர் அலுவலகத்தில் உள்ள புவியியல் மற்றும்

சுரங்கத்துறையிடமிருந்து கடந்த 27.07.2017 ஆம் தேதி அதன் கடித எண்:333/2017/Mines A வாயிலாக பெற்றுள்ளதாகவும், அதன்படி கடந்த 02.08.2017 ஆம் தேதி வெளியான உச்ச நீதிமன்ற உத்தரவின் படி கடந்த 2000-2001 காலம் முதல் 2016-17 காலம் வரையிலான வருடாந்திர உற்பத்தி அதன் ஆதார உற்பத்தியான 1993-1994 ஆம் வருடத்திய வருடாந்திர உற்பத்தி 22190.58 Tons க்கும் குறைவாக இருப்பதால் எதிரியின் நிறுவனத்திற்கு அபராதம் ஏதும் விதிக்கப்படவில்லை என்றும், மேற்படி நிறுவனத்தாரின் தடையின்மை சான்று செயலில் உள்ளது என்றும் சமர்ப்பிப்பதாகவும்,

4.9) சுற்றுச்சூழல் (பாதுகாப்பு) சட்டம் 1986 இன் கீழ் இயற்றப்பட்ட EIA அறிவிப்பு, 2006 மற்றும் இதன் சட்ட விதிகளை மேற்படி நிறுவனத்தின் ஆக்கிரமிப்பாளர் என்ற முறையில் விதிகளை மீறும் வகையில், முன் சுற்றுச்சூழல் அனுமதி பெறாமல், எதிரி சுரங்கத் தொழிலில் ஈடுபட்டுள்ளதால், எதிரி மீது மேற்படி சட்டம் பிரிவு 15 (1) இன் கீழ் ஐந்து ஆண்டுகள் வரை சிறைத்தண்டனை அல்லது ஒரு லட்சம் ரூபாய் வரை நீட்டிக்கக்கூடிய அபராதம் அல்லது இரண்டும் சேர்த்து தண்டனைக்குரிய குற்றங்களாக இருப்பதால் மேற்படி விதி மீறல்கள் குறித்து தக்க விளக்கம் அளிக்குமாறும் தவறும் பட்சம் தக்க சட்ட நடவடிக்கை எடுக்க இருப்பதாகவும் எதிரிக்கு கடந்த 16.12.2020 அன்று மேற்படி சங்கதிகள் அடங்கிய காரணம் கோரும் முகாந்திர கடிதம் (Show cause Notice) ஒன்று புகார்தாரர் அலுவலக நடைமுறைகள் எண்:F.No.107/DEE/TNPCB/KMP/Quarry/ 2020 வாயிலாக அனுப்பப்பட்டுள்ளதாகவும்,

4.10) எதிரியின் நிறுவனம் கடந்த 21.12.2020 ஆம் தேதி மேற் குறிப்பிட்ட காரணம் கோரும் முகாந்திர கடிதம் (Show cause Notice)க்கு தக்க பதிலளிக்க மேலும் 15 நாட்கள் கால அவகாசம் கோரி பதில் அனுப்பியிருந்ததாகவும், கடந்த 14.09.2006 ஆம் தேதி வெளியான மத்திய சுற்றுச்சூழல் வனம் மற்றும் காலநிலை மாற்றம் அமைச்சகம் (MoEF&CC) அறிவிப்பு எண். 1533 இன் படி சுரங்கத் திட்டங்கள் உட்பட அனைத்து புதிய திட்டங்கள் அல்லது செயல்பாடுகள் தற்போதுள்ள திட்டங்கள் அல்லது செயல்பாடுகளின் விரிவாக்கம், நவீனமயமாக்கும் திட்டங்களுக்கு முன் சுற்றுச்சூழல் அனுமதி தேவை என்றும், நடப்பு திட்டங்களுக்கு சுற்றுச்சூழல் அனுமதி (EC) பெற வேண்டிய கட்டாயம் இல்லை என்றும் குறிப்பிடப்பட்டு இருந்ததாகவும், இதனை தொடர்ந்து, தேசிய பசுமை தீர்ப்பாயம் (NGT) தனது 13.01.2015 ஆம் தேதியிட்ட தீர்ப்பின்படி, தற்போதுள்ள சுரங்க குத்தகைதாரர்களும் சட்டத்தின்படி உரிய அலுவலகத்தில் சுற்றுச்சூழல் அனுமதி (EC) ஐ பெற வேண்டும் என்று கூறியதாகவும்,

4.11) எதிரியின் நிறுவனம் சேலம் மாவட்டம், சங்ககிரி தாலுக்கா, சின்னாகவுண்டனூர் கிராமம் S.F.No: 15/1,16/2,etc., இல் உள்ள முத்தையனூர் சுண்ணாம்பு கல்குவாரி செயல்பாட்டினை கடந்த மார்ச் 2014 உடன் நிறுத்திவிட்டதாகவும், மேற்கூறிய கடிதத்தின்படி, எதிரியின் நிறுவனம் கடந்த 2014 மார்ச் மாதம் முதல் அதன் முழு சுரங்க நடவடிக்கையையும் நிறுத்திவிட்டதாக கூறியதாகவும், இந்நிலையில் எதிரிதரப்பு நிறுவனம் அளித்த விளக்கம் போதுமானதாக இல்லை என்றும், இதனால் மத்திய அரசின் சுற்றுச்சூழல், வனம்

மற்றும் காலநிலை மாற்ற அமைச்சகத்திடம் இருந்து சுற்றுச்சூழல் அனுமதி (EC) பெறுவதற்கு முன் அதன் சுரங்க செயல்பாடு இருக்கக்கூடாது, அவ்வாறு இருப்பின் அது சுற்றுச்சூழல் (பாதுகாப்பு) சட்டம், 1986 இன் பிரிவு 15 (1) ஐ மீறுவதாகும் என்றும், இதன்படி எதிரி ஐந்து ஆண்டுகள் வரை நீட்டிக்கக்கூடிய சிறைத்தண்டனை அல்லது ஒரு லட்சம் ரூபாய் வரையான அபராதம் அல்லது இரண்டும் சேர்த்துவரக்கூடிய ஒரு குற்றத்தை புரிந்துள்ளதாகவும், மேலும் சுற்றுச்சூழல் (பாதுகாப்பு) சட்டம், 1986 இன் பிரிவு 16 (1) இன் படி, எதிரி அவரது நிறுவனத்தின் மேற்குறிப்பிட்டுள்ள விதிமீறல்களுக்கு அதன் தினசரி அலுவல்களுக்கும் மற்றும் அதன் வணிகத்திற்கும் அவரே பொறுப்பானவர் என்றும் தமிழ்நாடு மாசுகட்டுப்பாட்டு வாரிய சேலம் மாவட்ட சுற்றுச்சூழல் பொறியாளர் அவர்கள் சாட்சியம் அளித்துள்ளார்.

- 5) புகார்தாரர்தரப்பு சாட்சியம் அ.சா.1 உடன் முடிக்கப்பட்டுள்ளது.
- 6) புகார்தாரர் தரப்பு சாட்சி மற்றும் சான்றாவணங்களை பரிசீலனை செய்து பார்த்தபோது, எதிரி குற்றம் புரிந்திருப்பதற்கான தோன்றக்கூடிய ஆதாரங்கள் இருந்ததால், எதிரி பிரிவு சுற்றுச்சூழல் பாதுகாப்புச்சட்டம் 1986 பிரிவு 15 உ/இ 16 - ன் கீழ் வினவியபோது, எதிரி குற்றத்தை ஒப்புக்கொண்டு குற்ற ஏற்பு மனு தாக்கல்செய்துள்ளார்.
- 7) இருதரப்பும் கேட்கப்பட்டது. ஆவணங்கள் பரிசீலிக்கப்பட்டது.
- 8) இவ்வழக்கில் தீர்மானிக்கப்பட வேண்டிய பிரச்சினை யாதெனில், எதிரியின் மீதான குற்றச்சாட்டுகள் புகார்தாரர் தரப்பில் தகுந்த சாட்சிய சான்றாவணங்கள் வாயிலாக சந்தேகத்திற்கிடமின்றி நிரூபிக்கப்பட்டுள்ளதா?

என்பதேயாகும்.

9) இவ்வழக்கில் புகார்தாரர்தரப்பு சாட்சியங்கள் மற்றும் குறியீடு செய்யப்பட்டுள்ள சான்றாவணங்களின்மூலம் எதிரியின் மீதான குற்றச்சாட்டுகள் நிரூபிக்கும் வண்ணம் உள்ளனவா என்று பார்க்கும்போது, இவ்வழக்கின் புகார், எதிரி சுற்றுச்சூழல் அனுமதி பெறாமல் தொடர்ந்து சுரங்க நடவடிக்கை மேற்கொள்ளப்பட்டதாகவும், எனவே எதிரி சுற்றுச்சூழல் தாக்க மதிப்பீடு 2006 ன் கீழ் மீறியுள்ளதாகவும் கூறி தமிழ்நாடு மாசுக்கட்டுப்பாட்டு வாரிய சேலம் மாவட்ட சுற்றுச்சூழல் பொறியாளரால் தனிப்புகார் தாக்கல் செய்யப்பட்டுள்ளது.

10) மாறாக இவ்வழக்கு குற்றத்தை எதிரி தம்மிச்சையாக ஒப்புக்கொண்டு குற்ற ஒப்புதல் மனு தாக்கல்செய்துள்ளார். புகார்தாரர்தரப்பில் விசாரிக்கப்பட்ட சாட்சியங்கள் மற்றும் குறியீடு செய்யப்பட்ட ஆவணங்களிலிருந்தும், ஒப்புக்கொள்ளப்பட்ட சங்கதிகள் குறித்து நிரூபிக்கப்பட தேவையில்லை என்பதன் அடிப்படையிலும், எதிரியின் மீதான குற்றச்சாட்டு புகார்தாரர் தரப்பில் இவ்வழக்கில் சந்தேகத்திற்கிடமின்றி நிரூபிக்கப்பட்டுள்ளது என்றே இந்நீதிமன்றம் முடிவுசெய்கிறது.

11) எனவே புகார்தாரர்தரப்பில் முன்னிலைப்படுத்தப்பட்ட சாட்சிகளின் சாட்சியங்களையும், சான்றாவணங்களையும் சீர்தூக்கி பார்த்தவகையில், எதிரி சுற்றுச்சூழல் அனுமதி பெறாமல் தொடர்ந்து நடவடிக்கை மேற்கொள்ளப்பட்டதாகவும், எதிரி சுற்றுச்சூழல் தாக்க மதிப்பீடு 2006 ன் கீழ் மீறியுள்ளதாகவும் எதிரியின் மீதான சுற்றுச்சூழல் பாதுகாப்பு சட்டம் 1986 பிரிவு 15 உ/இ

16 - ன் கீழான குற்றச்சாட்டுகள் சந்தேகத்திற்கிடமின்றி புகார்தாரர்தரப்பில் நிரூபிக்கப்பட்டுள்ளதாகவே இந்நீதிமன்றம் முடிவுசெய்கிறது.

12) இறுதியாக, எதிரி சுற்றச்சூழல் பாதுகாப்பு சட்டம் 1986, பிரிவுகள் 15 உ/இ 16 - ன் கீழ் குற்றவாளி என தீர்மானித்து, எதிரிக்கு பிரிவு 15 உ/இ 16 - ன் கீழான குற்றத்திற்கு அபராதமாக ரூ.1,00,000/- விதித்தும், அபராதம் கட்ட தவறினால் ஒருமாதம் மெய்க்காவல் சிறைத்தண்டனை விதித்தும், கு.வி.மு.ச பிரிவு 255(2)கீழ் தீர்ப்பளிக்கப்படுகிறது. மொத்த அபராதம் ரூ.1,00,000/-

இவ்வழக்கில் தடயப்பொருள் எதுவும் தாக்கல் இல்லை.

இந்த தீர்ப்புரை என்னால் நேரடியாக சுருக்கெழுத்து - தட்டச்சுருக்கு நேரடியாக சொல்லப்பட்டு, அவரால் கணினியில் தட்டச்சு செய்யப்பட்டு, பின்னர் என்னால் பிழைகள் நீக்கம் செய்யப்பட்டு, இன்று 2023 ஆம் ஆண்டு மே மாதம் 31 - ஆம் நாள் இத்திறந்த நீதிமன்றத்தில் அவையறிய பகரப்பட்டது.

நீதித்துறை நடுவர் எண் 1,
சங்ககிரி.

இணைப்பு:-

1).புகார்தாரர் தர்ப்பு சாட்சிகள்:-

பு.சா.1 செந்தில் விநாயகம், மாவட்ட சுற்றுச்சூழல் பொறியாளர்,,

2).புகார்தாரர் தர்ப்பு சான்றாவணங்கள்:-

- 1 பு.சா.ஆ.1 16.04.1987 Notification S.O. No.394 (E), published in Gazette No. 185.
- 2 பு.சா.ஆ.2 04.09.2013 Board proceedings No. 58.

- 3 பு.சா.ஆ.3 11.12.1997 G.O. Ms. 3(D) No. 211 Industries (MME-1) Department.
- 4 பு.சா.ஆ.4 14.09.2006 Environmental Impact Assessment Notification, 2006 (EIA).
- 5 பு.சா.ஆ.5 26.12.2014 Show Cause Notice issued vide MoEF Letter No. J-11015/1068/2014-IA. II (M).
- 6 பு.சா.ஆ.6 20.01.2015 Show Cause Notice Reply.
- 7 பு.சா.ஆ.7 12.12.2012 MoEF, Government of India circular No. J- & 11013/41/2006-IA.II (I).
27.06.2013
- 8 பு.சா.ஆ.8 12.05.2015 The Principal Secretary, Environment & Forest (EC3) Deaprtment, Chennai vide letter No. 6880/EC.3/2015-1.
- 9 பு.சா.ஆ.9 20.12.2017 The Principal Secretary, Environment & Forest (EC3) Deaprtment, Chennai vide letter No. 6880/EC3/2015-5.
- 10 பு.சா.ஆ.10 09.01.2018 The Member Secretary, Tamil Nadu Pollution Control Board, Chennai vide Memo No. T2/TNPCB/F.21766/SLM/2018.
- 11 பு.சா.ஆ.11 14.03.2017 MoEF& CC Notification No. S.O. 804 (E).
- 12 பு.சா.ஆ.12 12.07.2019 Terms of Reference Vide SEIAA letter No. SEIAA-TN/F.No. 6733/SEAC/TOR-632/2019.
- 13 பு.சா.ஆ.13 27.07.2017 Department of Geology and Mining, Collectorate, Salem vide Letter. No. 333/2017/Mines A/
- 14 பு.சா.ஆ.14 02.08.2017 Hon'ble Supreme Court Order.
- 15 பு.சா.ஆ.15 16.12.2020 Show cause notice
- 16 பு.சா.ஆ.16 21.12.2020 Show cause notice reply
- 17 பு.சா.ஆ.17 14.09.2006 MoEF Notification No. 1533.
- 18 பு.சா.ஆ.18 13.01.2015 National Green Tribunal (NGT) vide judgment

3).புகார்தாரர் தரப்பு சான்றுப்பொருட்கள்:-

இல்லை.

4).எதிரிதரப்பு சாட்சிகள், சான்றாவணங்கள்,சான்றுப்பொருட்கள்:-

இல்லை.

நீதித்துறை நடுவர் எண்.1,
சங்ககிரி.

குறிப்பு:-

- 1) தீர்ப்பின் முடிவு சம்பந்தப்பட்ட இருதரப்பினருக்கும் தெரிவிக்கப்பட்டது.
- 2) சாட்சிகள் யாரும் 3 முறைக்கு மேல் விசாரணைக்காக நிறுத்தி வைக்கப்படவில்லை.
- 3) தீர்ப்புநகல் எதிரிக்கு வழங்கப்பட்டது.

நீதித்துறை நடுவர் எண்.1,
சங்ககிரி.

COLLECTION OF AMBIENT AIR, WATER, NOISE & SOIL SAMPLES

