

TABLE OF CONTENTS

		Page
Title page		i
Table of contents		ii
List of tables		vi
List of figures		vii
List of abbreviations		viii
Non Technical Summary		ix
CHAPTER 1: INTRODUCTION		1
1.1	Project background	1
1.2	Aims and objectives	2
1.3	Brief on project proponent	3
1.4	Justification of project	4
	1.4.1 Environment Impact Assessment	6
CHAPTER 2: SITE DESCRIPTION		7
2.1	Project Site Location	7
	2.1.1 Extent of land and Ownership	7
2.2	Legal Requirements, Planning & Policies	7
	2.2.1 Environment Protection Act 2002	7
	2.2.2 National Development Plan	8
	2.2.3 Planning and Policies	9
	2.2.4 Zoning	9
2.3	Site Characteristics	10
	2.3.1 Fauna and Flora	10
	2.3.2 Existing features and land use	10
	2.3.2.1 Surrounding Environment	12
	2.3.3 Access road	14
	2.3.4 Geological, Topographical and Soil characteristics	16
	2.3.4.1 Topography	16
	2.3.4.2 Site geology and soil characteristics	16
	2.3.5 Water bodies and wetlands	16
	2.3.6 Surface water resources	16
	2.3.7 Groundwater resources	17
2.4	Climatic conditions	17
	2.4.1 Climate	17
	2.4.2 Temperature	17
	2.4.3 Rainfall	17
	2.4.4 Wind regime	18
CHAPTER 3: PROJECT DESCRIPTION		19
3.1	Project description	19
3.2	Type of project	19

3.3	Project activities		20
	3.3.1	De-rocking	20
	3.3.2	The stone crushing plant	21
	3.3.3	Stockpiles	21
	3.3.4	Technical Characteristics of the crusher	21
3.4	List of equipment		22
3.5	Infrastructure		22
	3.5.1	Administrative block	22
	3.5.2	Site office	22
	3.5.3	Maintenance workshop	22
	3.5.4	Personnel and labour force	22
	3.5.5	Power supply	23
	3.5.6	Domestic water supply	23
	3.5.7	Industrial water demand	23
	3.5.8	Telecommunication facilities	24
	3.5.9	Disposal of wastewater	24
		3.5.9.1 Domestic wastewater	24
		3.5.9.2 Industrial wastewater	25
	3.5.10	Solid waste disposal	26
		3.5.10.1 Domestic Wastes	26
		3.5.10.2 Industrial Wastes	26
	3.5.11	Diesel storage	26
3.6	Security		27
3.7	Hours of operation		27
3.8	Proposed implementation schedule		28
CHAPTER 4: METHOD OF ASSESSMENT OF BASELINE ENVIRONMENT			29
4.1	Introduction		29
4.2	Methodology for collection of Baseline information		29
	4.2.1 Noise assessment survey		29
4.3	Consultation		31
4.4	Identification of further studies		32
CHAPTER 5: PREDICTED ENVIRONMENTAL IMPACTS			33
5.1	Introduction		33
5.2	Impacts on Air Quality		33
5.3	Noise emissions		38
5.4	Traffic impacts		40
5.5	Generation of Solid waste		41
5.6	Water consumption		43
5.7	Liquid waste		45
5.8	Risk Assessment		46
	5.8.1	Risk to fire	46
	5.8.2	Spillage of diesel, used oil and chemical products	47

CHAPTER 6: MITIGATION MEASURES		48
6.1	Introduction	48
6.2	Impacts on air quality	48
6.3	Noise emissions	49
6.4	Traffic impacts	51
6.5	Generation of Solid waste	51
6.6	Liquid waste	53
6.7	Mitigation of risks	55
	6.7.1 Risk to fire	55
	6.7.2 Spillage of chemical products	57
	6.7.3 Diesel tanks	57
CHAPTER 7: RESIDUAL IMPACTS		58
7.1	Introduction	58
7.2	Residual impacts during the construction phase	58
7.3	De-commissioning	60
CHAPTER 8: SOCIO-CULTURAL AND SOCIO-ECONOMIC IMPACTS		62
CHAPTER 9 : ENVIRONMENTAL MANAGEMENT PLAN		63
9.1	Introduction	63
9.2	Objectives of the EMP	64
9.3	Potential impacts, their Mitigation and Monitoring plan	65
9.4	Emergency Response Plan	71
CHAPTER 10: ENHANCEMENT OPPORTUNITIES		72
CHAPTER 11 : ALTERNATIVE TO PROPOSED UNDERTAKING		73
11.1	Introduction	73
11.2	Alternatives to project	73
	11.2.1 Alternative location	73
	11.2.2 Alternative to proposed project	73
CHAPTER 12: CONCLUSION		75
References		
LIST OF ANNEXES		
1	Stop Order from the Ministry of Environment and Sustainable Development	
2	Business registration card and Certificate of incorporation	
3	Location plan	
4	Development Strategy Map	
5	Title deeds, Lease Agreement and Right of way agreement	
6	Land Use Map	

7	Contours Map
8	Geological Map
9	Agreement letters from owners of de-rocking sites
10	List of Equipment
11	Design of septic and absorption pit
12	Noise results and Location plan showing Noise monitoring points
13	The letter of consent and the list of the petitioners
14	Calculation for emission of TSP
15	Calculation for emission of air pollutants
16	Calculation for noise propagation
17	Flowchart for proposed contingency procedure