

TABLE OF CONTENTS

PLAN SUMMARY

PART 1 – PREFACE TO PLAN

1. INTRODUCTION	1
1.1. INTRODUCTION	1
1.2. PLAN BACKGROUND.....	1
1.3. REGIONAL APPROACH	3
1.4. LOCAL DEVELOPMENT FRAMEWORK.....	4
1.5. WASTE MANAGEMENT POLICY/LEGISLATION	4
1.5.1 <i>National Waste Management Policy</i>	4
1.5.2 <i>Relevant EU and National Legislation</i>	5
1.6. WASTE MANAGEMENT PLANNING.....	5
1.7. ELECTED MEMBER AND PUBLIC CONSULTATION/INVOLVEMENT	6
1.8. CONTENT OF THE PLAN.....	6
1.9. SOURCES OF DATA	7
1.10. DEFINITIONS	7
2. STUDY AREA.....	8
2.1. GENERAL DESCRIPTION OF THE AREA.....	8
2.2. TOPOGRAPHY.....	9
2.3. POPULATION.....	10
2.3.1 <i>Regional Population Distribution</i>	10
2.3.2 <i>Regional Population Trends</i>	11
2.4. AGRICULTURE/LAND USE	13
2.5. TRANSPORT INFRASTRUCTURE	14
2.6. GEOLOGY AND HYDROGEOLOGY.....	17
2.6.1 <i>Bedrock Geology</i>	17
2.6.2 <i>Overburden Geology</i>	18
2.6.3 <i>Hydrogeology</i>	18
2.7. HYDROLOGY.....	18
2.8. COMMERCE AND INDUSTRY	20
2.8.1 <i>Commerce</i>	20
2.8.2 <i>Manufacturing Industries</i>	21
2.8.3 <i>Integrated Pollution Control Sector Companies</i>	23
2.8.4 <i>The Shannon Free Airport Development Company Ltd.</i>	25
2.9. TOURISM	25

PART 2 - PRESENT POSITION REGARDING WASTE MANAGEMENT

3. WASTE GENERATION.....	26
3.1. INTRODUCTION	26
3.2. QUANTITIES OF WASTE ARISING IN THE LIMERICK / CLARE / KERRY REGION	26
3.2.1 <i>Total Waste Quantities</i>	26
3.2.2 <i>Hazardous Component of Waste Streams</i>	27
3.2.3 <i>Household Waste</i>	27
3.2.4 <i>Commercial Waste</i>	29
3.2.5 <i>Industrial Waste</i>	29
3.2.6 <i>Construction and Demolition Waste</i>	32
3.2.7 <i>Municipal Sludges</i>	32
3.2.8 <i>Industrial Sludges</i>	34
3.2.9 <i>Ash Residue</i>	35
3.2.10 <i>Litter/Street Sweepings</i>	35
3.2.11 <i>Mining & Quarrying</i>	36
3.2.12 <i>Agricultural</i>	36

3.2.13	Hazardous Component of Waste Arisings.....	37
3.2.14	Waste Oil	38
3.2.15	Priority Waste Streams	38
3.3	WASTE MOVEMENTS INTO / OUT OF THE LIMERICK / CLARE / KERRY REGION.....	39
3.4	WASTE COMPOSITION IN THE LIMERICK/CLARE/KERRY REGION.....	39
3.5	PACKAGING WASTE.....	40
4.	WASTE COLLECTION AND DISPOSAL.....	41
4.1	WASTE COLLECTION	41
4.1.1	Household and Commercial Waste	41
4.1.2	Local Authority Collection	41
4.1.3	Private Waste Collection.....	42
4.2	RECYCLING	43
4.2.1	Household Waste	43
4.2.2	Industrial and Commercial Waste Recycling.....	45
4.2.3	Special Waste/Priority Wastes	46
4.2.4	Construction/Demolition Waste	46
4.3	WASTE DISPOSAL.....	46
4.3.1	Waste Disposal Infrastructure	46
4.3.2	Summary of Waste Disposal	48
4.4	COSTS OF CURRENT WASTE MANAGEMENT SYSTEM	50
4.5	CLOSED LANDFILLS.....	52
5.	WASTE PREVENTION AND MINIMISATION.....	53
5.1	INTRODUCTION	53
5.2	WASTE MINIMISATION – LEGISLATIVE REQUIREMENTS.....	53
5.2.1	General.....	53
5.2.2	Waste Minimisation Programmes.....	54
5.3	CURRENT WASTE MINIMISATION INITIATIVES AT HOUSEHOLD/ COMMUNITY LEVEL.....	55
5.4	CURRENT WASTE MINIMISATION INITIATIVES AT INDUSTRY LEVEL	56
6.	DEFICIENCIES IN WASTE MANAGEMENT INFRASTRUCTURE	59
6.1	OVERVIEW	59
6.2	DEFICIENCIES IN INFORMATION ON WASTE QUANTITIES AND COMPOSITION	59
6.3	WASTE MINIMISATION	60
6.4	WASTE COLLECTION AND RECYCLING	60
6.5	COST RECOVERY.....	60
6.6	COMMUNITY ISSUES	61
6.7	LOCAL AUTHORITY STAFFING AND RESOURCES.....	61
6.8	INTEGRATED WASTE MANAGEMENT ON A REGIONAL BASIS.....	61

PART 3 - ANTICIPATED DEVELOPMENTS OVER THE PLAN PERIOD

7.	ANTICIPATED TRENDS/DEVELOPMENTS OVER THE PLAN PERIOD	63
7.1	TRENDS IN WASTE MANAGEMENT.....	63
7.2	TRENDS IN POPULATION DISTRIBUTION / GROWTH.....	63
7.3	HOUSEHOLD WASTE GENERATION	64
7.4	COMMERCIAL / INDUSTRIAL WASTE GENERATION.....	65
7.5	CONSTRUCTION / DEMOLITION WASTE GENERATION	66
7.6.1	LEGISLATION AND POLICY IN WASTE MANAGEMENT / ENVIRONMENTAL ISSUES.....	66
7.6.2	Recent Legislation	66
7.6.3	Pending Legislation	67
8.	RECENT DEVELOPMENTS IN WASTE MANAGEMENT IN IRELAND	69

8.1	COUNTY AND REGIONAL WASTE PLANNING	69
8.2	RECENT DEVELOPMENTS IN REGIONS NEIGHBOURING THE LIMERICK / CLARE / KERRY REGION	70
8.2.1	<i>County Galway</i>	70
8.2.2	<i>Connaught Region</i>	70
8.2.3	<i>Midlands Region</i>	71
8.2.4	<i>South East Region</i>	71
8.2.5	<i>Cork Region</i>	71
8.2.6	<i>Private Sector Development in Tipperary N.R.</i>	72
8.3	RECENT WASTE MANAGEMENT DEVELOPMENTS IN OTHER LOCAL AUTHORITY AREAS.....	72
8.3.1	<i>Pay by Weight Scheme – Cork County Council</i>	72
8.3.2	<i>Central Composting Scheme, Castle Morpeth Borough Council, Northumberland, UK</i>	72
8.3.3	<i>Case Study – Clean Washington Centre, Seattle</i>	73
9.	PUBLIC CONSULTATION PROCESS.....	75
9.1	INTRODUCTION	75
9.2	PUBLIC CONSULTATION.....	75
9.2.1	<i>Public Information Leaflet</i>	75
9.2.2	<i>Media Campaign</i>	75
9.2.3	<i>Written Submissions to the Limerick / Clare / Kerry Draft Waste Management Plan</i>	76
9.2.4	<i>Questionnaires</i>	79

PART 4 - WASTE MANAGEMENT POLICY

10.	WASTE MANAGEMENT POLICY FOR LIMERICK/CLARE/ KERRY REGION .	83
10.1	INTRODUCTION	83
10.2	DEVELOPMENT OF WASTE MANAGEMENT POLICY.....	83
10.3	INTEGRATED SCENARIO MODELLING	84
10.3.1	<i>Scenarios Considered</i>	84
10.3.2	<i>General Approach to Modelling</i>	85
10.4	COMPARISON OF SCENARIOS MODELLED	86
10.4.1	<i>Environmental Comparison</i>	86
10.4.2	<i>Waste Stream Considerations</i>	88
10.4.3	<i>Economic Comparison of Scenarios</i>	89
10.5	SCENARIO CHOSEN AS BASIS FOR WASTE MANAGEMENT IN THE REGION	90
10.6	WASTE MANAGEMENT POLICY DETAILS.....	94
11.	SPECIFIC OBJECTIVES OVER THE PLAN PERIOD.....	96
11.1	WASTE PREVENTION & MINIMISATION	96
11.2	WASTE COLLECTION	98
11.3	WASTE RECYCLING & RECOVERY	100
11.4	ENERGY RECOVERY	101
11.5	WASTE DISPOSAL FACILITIES.....	102
11.6	HAZARDOUS WASTE POLICY	103
11.6.1	<i>Specific Policy on Hazardous Waste</i>	104
11.7	LANDFILL AFTERCARE AND REMEDIATION	105
11.8	AGRICULTURAL WASTE POLICY	105
11.9	SLUDGE MANAGEMENT POLICY	107
11.10	PLANNING POLICY	107
11.11	MARKET CREATION POLICY	108
11.12	SUMMARY – WASTE STREAM TARGETS	108
12.	WASTE REGULATION AND SERVICE PROVISION	109
12.1	MONITORING AND IMPLEMENTATION OF THE PLAN	109
12.2	DATA COLLECTION AND REPORTING	109

12.3	ROLES AND RESPONSIBILITIES	110
12.3.1	<i>Local Authority</i>	110
12.3.2	<i>Other Public Authorities</i>	111
12.3.3	<i>Private Interests</i>	111
12.3.4	<i>Commerce and Industry</i>	113
12.3.5	<i>The Public</i>	114
12.4	IMPLEMENTATION OF SPECIFIC WASTE MANAGEMENT REGULATIONS ...	114
12.5	SERVICE ROLE	114
12.6	STAFFING AND ORGANISATIONAL REQUIREMENTS	115

PART 5 - IMPLEMENTATION OF WASTE MANAGEMENT POLICY OVER THE PLAN PERIOD

13.	IMPLEMENTATION OVER THE PLAN PERIOD.....	117
13.1	RESPONSIBILITIES OF WASTE SERVICES WITHIN LOCAL AUTHORITIES ...	117
13.2	REGULATION / ORGANISATION WITHIN LOCAL AUTHORITY	119
13.3	CONSULTATION AT NATIONAL LEVEL	119
13.4	CONSULTATION WITH OTHER LOCAL AUTHORITIES	119
13.5.1	<i>Community Involvement</i>	120
13.5.2	<i>Transfer Stations/Recycling Centre</i>	120
13.5.3	<i>Selection Criteria for the Siting of Biological Treatment Facilities</i>	121
13.5.4	<i>Thermal Treatment Facility</i>	121
13.5.5	<i>Landfills</i>	121
13.6	POLLUTER PAYS PRINCIPLE	121
13.7	COMMUNITY INVOLVEMENT	122
13.8	DYNAMIC PROCESS	122
13.9	PROXIMITY PRINCIPLE	122
13.10	BRING BANKS	122
14.	PACKAGING WASTE	123
14.1	INTRODUCTION	123
14.2	LEGISLATIVE ENVIRONMENT	123
14.2.1	<i>European Packaging Waste Directive</i>	123
14.2.2	<i>Waste Management (Packaging) Regulations, 1997</i>	123
14.3	REPAK	125
14.4	QUANTITIES OF PACKAGING WASTE ARISING	126
14.5	MANAGEMENT OF PACKAGING WASTE OVER THE PLAN PERIOD	126
14.5.1	<i>Packaging Waste from Households</i>	126
14.5.2	<i>Commercial/Industrial Sector</i>	127
15.	COST & FUNDING IMPLICATIONS OF THE WASTE MANAGEMENT PLAN	128
15.1	INTRODUCTION	128
15.1.1	<i>Average Annual Costs, Total Investments and Revenue</i>	128
15.1.2	<i>Anticipated Investments</i>	128
15.2	ECONOMIC INSTRUMENTS	129
15.2.1	<i>Market Creation</i>	130
15.2.2	<i>Evaluation of Instruments</i>	130
15.3	POLICY ON COST RECOVERY	132

APPENDIX A	GLOSSARY OF TERMS
APPENDIX B	LIST OF RELEVANT E.U. AND NATIONAL LEGISLATION
APPENDIX C	SOURCES OF INFORMATION
APPENDIX D	PUBLIC CONSULTATION PROGRAMME
APPENDIX E	RIVER CATCHMENT PROPOSALS
APPENDIX F	CITY/COUNTY MANAGERS APPROVALS