
CONTENTS

<i>Table of Cases</i>	xi
<i>Table of Legislation</i>	xv
Chapter 1—Environment, Enforcement and Deterrence	1
I Introduction	1
II Regulation: Compliance, Enforcement and Penalties	3
A Regulatory Techniques	3
B Compliance	5
i Compliance with What?	5
ii Desirable Levels of Compliance?	5
C Enforcement	8
i Defining Enforcement	8
ii Enforcement, Compliance and Cost-effectiveness Analysis	9
D Penalties and Sanctions	10
E Public v Private Enforcement	11
III Introducing the Deterrence Hypothesis	13
IV A Structural Overview	15
Chapter 2—A Theoretical Framework of Enforcement and Compliance	17
I Introduction	17
II Inducing Behavioural Change—The Deterrence Approach	19
A Introduction	19
B Becker's Deterrence Framework	20
i External Inducements v Unlawful Gains	20
ii Optimal Penalties under the Simple Deterrence Framework	24
C Optimal Deterrence—The 'Injury to Others' Framework	24
D Conclusion	26
III Deterrence-based Theories—A Critical Analysis	27
A Introduction	27
B The Deterrence Framework and Low-level Enforcement	28
C Alternative Compliance Rationales	30
D Explaining Non-compliance	33
E Practical Objections	35

Contents

F	Principled Objections	35
G	Expanding the Simple Deterrence Framework	36
IV	Conclusion	37
Chapter 3—Environmental Enforcement Strategies		39
I	Introduction	39
II	Deterrence and Compliance Enforcement Strategies	41
	A An Overview	41
	B The Deterrence v Compliance Debate	43
III	Tit-for-Tat Responsive Regulation and the Enforcement Pyramid	45
	A Game Theory and the Prisoner's Dilemma Game	45
	B Responsive Regulation	46
IV	Criticisms of Responsive Regulation	52
	A Policy/Conceptual Criticisms	52
	B Principled Objections	55
	C Practical Objections	57
V	Conclusion	57
Chapter 4—The Regulatory Landscape		61
I	Introduction	61
II	Australia	62
	A Introduction	62
	B The Institutional Framework	63
	i Federal Government	64
	ii State/Territorial Government	65
	iii Local Government	67
	iv State/Federal Tensions and Inter-Governmental Co-operation	68
	C The Legislative Framework	70
III	Canada	71
	A Introduction	71
	B The Institutional Framework	72
	i Federal Government	73
	ii Provincial Government	74
	iii Local Government	76
	iv Inter-governmental Co-operation and Consultation	77
	C The Legislative Framework	78
IV	England and Wales	79
	A Introduction	79

Contents

B	The Institutional Framework	80
i	Central Government	81
ii	Regulatory Agencies—The Environment Agency	82
iii	Local Government	85
C	The Legislative Framework	86
V	Conclusion	88
 Chapter 5—Environmental Enforcement Strategies in Australia, Canada, and England and Wales		91
I	Introduction	91
II	Australia	92
A	Introduction	92
B	The Department of Environment, Water, Heritage and the Arts (DEWHA)	93
C	Department of Environment and Climate Change (DECC) (NSW) and Environmental Protection Authority (EPA) (Victoria)	95
D	Conclusion	100
III	Canada	101
A	Introduction	101
B	Environment Canada	101
C	The Ministry of Environment (Ontario)	105
D	Conclusion	111
IV	England and Wales	112
A	The Enforcement Approach of the Environment Agency	112
B	Conclusion	116
V	Conclusion	116
 Chapter 6—Criminalising Polluting Behaviour: Models of Liability and Deterrence		119
I	Introduction	119
II	Deterrence, Rules of Liability and Perceptions of Crime	123
A	Introduction	123
B	Strict Liability: Friend or Foe?	124
C	The Real v Regulatory Crime Debate	129
D	Conclusion	130
III	Rules of Liability in Australia, Canada and England and Wales	131
A	Rules of Liability in Australian Pollution Control Regulation	131
i	Mens Rea Offences	132
ii	Strict Liability Offences	133

Contents

iii	Absolute Liability Offences	134
iv	Tiering Offences	134
B	Rules of Liability in Canadian Pollution Control Regulation	135
C	Rules of Liability in England and Wales	137
IV	Strengthening Deterrence? Corporate and Director Liability	140
A	Introduction	140
B	Corporate and Director Liability in Australia	142
C	Corporate and Director Liability in Canada	145
D	Corporate and Director Liability in England and Wales	148
V	Conclusion	150
Chapter 7—Judicial Sanctions and Deterrence		153
I	Introduction	153
II	Sentencing and Discretion	155
A	Introduction	155
B	Penological Principles	156
C	Sentencing Guidelines	158
III	Fines and Deterrence	159
A	Introduction	159
B	Legislative Provisions: An Overview	160
i	Australia	160
ii	Canada	161
iii	England and Wales	161
C	The Deterrent Impact of Fines: A Theoretical Perspective	163
D	Fines and Deterrence: A Practical Perspective	166
E	Improving the Deterrent Impact of Fines: Practical Solutions and Equity Fines	169
F	Conclusion	172
IV	Restricting the Freedom of Individual Offenders	173
A	Custodial and Suspended Sentences	173
B	Community Penalties and other Non-Custodial Sentencing Alternatives	177
V	‘Creative’ Sentencing Powers—An Overview	179
A	Introduction	179
B	The Development of Creative Sentencing	180
VI	Creative Sentencing Powers—Theory and Practice	184
A	Introduction	184
B	Monetary Sanctions	185
i	Costs and Compensation Orders	185

Contents

ii	Restoration, Remediation and Prevention Orders	187
iii	'Profit' and 'Forfeiture of Monetary Benefit' Orders	188
iv	Payments for Environmental Purposes	190
C	Publicity Sanctions	192
i	Introduction	192
ii	Strengths	193
iii	Weaknesses	195
iv	Designing a Sanction	197
v	Publicity Sanctions in Australia	198
vi	Publicity Sanctions in Canada	200
vii	Publicity Sanctions in England and Wales	201
D	Corporate Community Service	202
i	Introduction	202
ii	Strengths	203
iii	Weaknesses	204
iv	Designing the Sanction	205
v	Environmental Service Orders in Australia	206
vi	The Development of Environment Service Orders in England and Wales	208
E	Rehabilitative Sanctions	209
F	Conclusion	211
VII	Civil Enforcement	212
VIII	Conclusion	214
Chapter 8—	Administrative Sanctions and Deterrence	217
I	Introduction	217
II	Monetary Administrative Penalties	220
A	Introduction	220
B	Strengths and Weaknesses	221
C	Penalty Infringement Notices in Australia	223
D	Administrative Penalties in Canada	225
E	Monetary Administrative Penalties in England and Wales	229
III	Non-monetary Administrative Sanctions	234
A	Administrative Notices and Orders	234
i	Introduction	234
ii	Administrative Notices in Australian Pollution Control Regulation	235
iii	Administrative Notices in Canadian Pollution Control Regulation	237
iv	Statutory Notices in England and Wales	239



Contents

B Licence Suspension and Revocation	241
i Introduction	241
ii Licence Suspension and Revocation in Australian Pollution Control Regulation	242
iii Licence Suspension and Revocation in Canadian Pollution Control Regulation	242
iv Licence Suspension and Revocation in Pollution Control Regulation in England and Wales	243
C Environmental Audits	243
D Enforceable Undertakings	244
i Introduction	244
ii Enforceable Undertakings in Australian Pollution Control Regulation	247
iii Enforceable Undertakings in the UK	248
iv A Form of Enforceable Undertaking in Canadian Legislation—Environmental Protection Alternative Measures	249
IV Conclusion	252
Chapter 9—Conclusion	253
<i>Index</i>	259

