

Table of Contents

Abbreviation	11
Introduction	13
Part I – Plastics in the marine environment	19
A. Plastics	19
B. Definition of plastic pollution	23
C. Sources of marine plastic pollution	26
I. Land-based marine plastic pollution	26
II. Sea-based marine plastic pollution	30
III. Difficulties determining exact sources	32
D. Ecological impacts and distribution of plastic in the marine environment	33
I. Effects of marine plastic pollution	34
II. Distribution – a transboundary problem	37
1. The different maritime zones under UNCLOS	37
2. Distribution	42
E. The need for clean-up action – a persistent problem	45
I. The inadequacy of the regulatory framework and policy focusing on prevention	46
II. The long durability of plastic	49
F. Preliminary Conclusion	51
Part II – Primary obligation to clean-up	53
A. UNCLOS	53
I. Introduction to Part XII	57
II. UNCLOS as a living instrument	59
B. An obligation to clean-up deriving from an obligation to restore	61
I. The concept of restoration in International Environmental Law	61

II. Definition of restoration approaches	68
III. Remediation efforts	70
C. Treaty interpretation in general International Law	71
I. The rules on interpretation according to Art. 31 VCLT	71
1. Textual approach	72
2. Context	73
a. Subsequent agreements	74
b. Subsequent practice	75
c. Systemic integration	76
d. Evolutive or dynamic interpretation	77
3. Object and purpose	81
II. The rules on interpretation according to Art. 32 VCLT	82
D. Interpretation of norms in Part XII UNCLOS	84
I. The obligations to prevent, reduce and control pollution	85
1. Art. 194 and Art. 207 UNCLOS	88
2. Preliminary Conclusion	102
II. Global and regional cooperation under UNCLOS	102
1. Art. 199 UNCLOS Contingency plans against pollution	102
2. Art. 197, 200 UNCLOS The duty to cooperate	104
3. Preliminary Conclusion	108
III. The obligation to protect and preserve the marine environment	108
1. Art. 192 UNCLOS The general obligation to protect and preserve the marine environment	108
2. Art. 194 V UNCLOS The obligation to protect and preserve rare or fragile ecosystems	111
3. An expansive interpretation of UNCLOS	112
a. The South China Sea Award as a reference for an expansive interpretation of UNCLOS	113
b. Systemic and dynamic interpretation of UNCLOS	116
c. A positive obligation to clean-up through ecosystem restoration	120
E. Treaty amendment and modification	121
I. The formal amendment procedure provided by UNCLOS	121
II. Modification of UNCLOS through subsequent means	124
III. Modification through Soft Law	135

F. The content of an obligation to clean-up derived from an obligation to restore	140
I. Due diligence	140
1. Notification, consultation and Environmental Impact Assessment	144
2. Precautionary approach	146
3. Common but differentiated responsibilities	149
II. Informing the content through Soft Law	153
III. The applicability of active marine restoration to the problem of marine plastic pollution – practical thoughts	156
G. Preliminary Conclusion	159
Part III – Secondary obligations to clean-up	161
A. Applicable law <i>lex specialis v. lex generalis</i>	162
B. Responsibility and liability – working definitions	165
C. State responsibility in general International Law	167
I. Attribution to the State	168
II. Breach of an international obligation	169
III. Legal consequences	172
D. State responsibility for plastic pollution of the marine environment	176
I. Attribution to the State	176
II. Breach of an international obligation preventing marine pollution under UNCLOS	178
1. The need for environmental damage?	178
2. Due diligence	180
3. Shared responsibility	182
4. Common but differentiated responsibilities	184
III. Legal consequences	185
1. Environmental harm	186
2. The problem of causality – Overdetermination	188
3. Article 35 ARSIWA Restitution	192
IV. Invocation of responsibility	194
E. State liability for hazardous activities	197
F. Polluter Pays Principle	200

G. Preliminary Conclusion	203
Conclusion	205
Sources	209
Literature	209
Reports	218
Jurisprudence	220
Documents	222
Treaties	224