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‘The Tsunami of plastic: The adequacy of South Africa law to address the marine plastic crisis with the intervention of the international plastic treaty.’

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Submitted in partial fulfilment of Master of Laws Degree in Environmental Law

As the candidate’s supervisor, I agree to the submission of this thesis
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2025

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Gillian,
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Table of Contents

Abstract vi
Acronyms vii

CHAPTER 1: INTRODUCTION 1

1.1. Background 1

1.2. Statement of the problem 3

1.3. Research questions 4

1.4. Structure 5

CHAPTER 2: PLASTIC 7

2.1. Introduction 7

2.2.The problem with plastic 7

2.3.The pathways of plastic to the ocean 8

2.4.South Africa's oceans 9

2.5.South Africa's waste 9

2.6.Ecological depletion 10

2.7.Conclusion 11

CHAPTER 3: CONSTITUTIONAL AND STATUTORY FRAMEWORK 13

3.1.Introduction 13

3.2.Constitutional framework 13

3.3.Statutory framework 17

3.4.National framework 17

3.4.1. Introduction 17

3.4.2. Definitions 18

3.4.3. Relevant provisions 20

3.4.4. Conclusion 22

3.5.Waste legislation 22

3.5.1. Introduction 22

3.5.2. Definitions 24

3.5.3. Relevant provisions 27

3.5.4. Conclusion 29

3.6.Coastal and ocean legislation 30
3.6.1. Introduction 30
3.6.2. NEM: ICMA 30
3.6.3. The Marine Spatial Planning Act 34
3.6.4. National Environmental Management: Oceans Bill 36
3.7.Conclusion 39

CHAPTER 4: INTERNATIONAL PLASTIC TREATY 40
4.1.Introduction 40
4.2.Resolution 5/14 40
4.2.1. Introduction 40
4.2.2. The recital 41
4.2.3. The Intergovernmental Negotiating Committee 41
4.3.The Revised Zero Draft 44
4.3.1. Introduction 44
4.3.2. Part I: Preamble, Objectives, Definitions and Scope 44
4.3.3. Part II: Core Obligations, Control Measures and Voluntary Approaches 46
4.4.Conclusion 57

CHAPTER 5: ANALYSIS AND CONCLUSION 59
5.1.Introduction 59
5.2.Application of international law in South Africa 59
5.3.The Plastic Treaty v The South African Statutory Framework 61
5.3.1. Introduction 61
5.3.2. Production of plastic 61
5.3.3. Consumption of plastic 63
5.3.4. Disposal of plastic 64
5.3.5. Domesticating the Treaty 67
5.4.Conclusion 73

6. BIBLIOGRAPHY 75

Abstract

Plastic, a fossil fuel-based invention, is choking our planet with the consequence of depleting natural resources, exacerbating climate change, obliterating ecosystems and polluting our oceans all in the name of convenience. Little has been done legally to put an end to the plastic that is plaguing our oceans. However, international role players have identified plastic pollution as a crisis that requires urgent international intervention through the development of the International Plastic Treaty to eliminate plastic in the environment by 2040. This legally binding instrument will be the first of its kind and while there was intention to finalise the Treaty by December 2024, negotiations are still ongoing. These discussions have thus far contributed to the penning of a revised zero draft with provisions addressing the full life cycle of plastic.

On the other hand, South Africa's provisions relating to plastic and its resultant pollution are scattered throughout its environmental legislation, lacking cohesion and synergy. The Treaty specifically requires a holistic, full-lifecycle approach to the plastic pandemic, as it has identified that in order to combat marine plastic pollution, all facets of the plastic lifecycle need to be closely regulated. It is not sufficient for plastic pollution to be regulated without recognising that plastic production is the root cause of the tsunami of plastic that is drowning our planet.

While the provisions that deal with plastic pollution in South Africa are strewn across its existing statutory framework much like the plastic in our oceans, the conclusion is that South Africa can avoid drowning in this tsunami of plastic by enacting new legislation that takes an eco-centric approach rather than an anthropocentric one, acknowledging that the environment is just as important as socio-economic considerations when aiming to achieve sustainable development and by aligning with the elements of the Treaty in order to protect our planet.

Acronyms

AGU	American Geophysical Union
AJIL	American Journal of International Law
BCLR	Butterworths Constitutional Law Reports
CG1	Contact Group 1
CG2	Contact Group 2
CPP	Coastal Public Property
CSIR	Council of Scientific and Industrial Research
ECA	Environment Conservation Act 73 of 1989
EEZ	Exclusive Economic Zone
EPR	Extended Producer Responsibility
INC	Intergovernmental Negotiating Committee
IUCN	International Union for Conservation of Nature
JSTOR	Journal Storage
MSPA	Marine Spatial Planning Act 16 of 2018
NEM: ICMA	National Environmental Management: Integrated Coastal Management Act 24 of 2008
NEM: PPA	National Environmental Management: Plastic Pollution Act
NEM: WA	National Environmental Management: Waste Act 59 of 2008
NEMA	National Environmental Management Act 107 of 1998
NEMLAA	National Environmental Management Laws Amendment Act 2 of 2022
NEMO	National Environmental Management: Oceans bill
NWA	National Water Act 36 of 1998
NWMS	National Waste Management Strategy
POD	Potential Options Document
SDG	Sustainable Development Goals
SEMA	Specific Environmental Management Acts
UN	United Nations
UNCLOS	1982 United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
WWF	World Wildlife Fund For Nature

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

Oceans, through their interconnected nature, are collectively being destroyed and plagued by plastic. The alarming rates at which plastic is produced directly impact the amounts of plastic that pollute our oceans, with this figure estimated to be 300 million tons per annum.[1] Ecosystems are being threatened[2] which hinders the ocean's ability to produce oxygen[3] and thus directly impacts human wellbeing. [4] Plastic, being derived from fossil fuels[5] contributes to the 'climate catastrophe,'[6] which is why there is an urgent need for international law to take the reins and provide a solution to save our oceans and planet.

The ocean, under common law, is regarded as '*res omnium communes*' for the fact that the ocean cannot be owned[7] but instead falls under the custodianship of the State 'on behalf [and for the benefit of] the people of South Africa.'[8] South Africa, while drawing on international law relating to the sea[9] and having various fragmented statutes dealing with the ocean using a sector-based approach,[10] does not have specific legislation focusing on the protection of the ocean and, more specifically,[11] marine plastic pollution. This sector-based approach in South African legislation sees issues relating to the ocean being dealt with in a minuscule and isolated manner, which has the effect of disregarding the vastness of the ocean in a country whose

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[1] Anon 'Keeping South Africa's oceans clean is everyone's responsibility' (8 June 2018) *Department of forestry, fisheries and the environment* available at https://www.dffe.gov.za/mediarelease/2018world_ocenasday (accessed on 27 April 2023).
[2] T Naidoo, A Rajkaran & Sershen 'Impacts of plastic debris on biota and implications for human health: a South African perspective' (2020) 116(5/6) *South African Journal of Science* 43-46.
[3] L Zeldovich 'Is Plastic Pollution Depriving Us of Oxygen?' (4 June 2019) *JSTOR Daily* available at https://daily.jstor.org/is-plastic-pollution-depriving-us-of-oxygen/ (accessed on 19 May 2024).
[4] M.L Van Rensburg., S.L Nkomo., & T Dube 'The 'plastic waste era'; social perceptions towards single-use plastic consumption and impacts on the marine environment in Durban, South Africa' (2020) 114: 102132 *Applied Geography* at 2.
[5] Anon 'Fossil fuels & plastic' (undated) *Centre for International Environmental Law* available at https://www.ciel.org/issue/fossil-fuels-plastic/#:~:text=Over%2099%25%20of%20plastic%20is,in%20the%20US%20and%20beyond (accessed on 19 May 2024).
[6] Anon 'Plastic a lifeline for the fossil fuel industry?' (02 July 2021) *Deutsche Welle* available at https://plastic-pollution-crisis-and-fossil-fuel-industry.dw.com/ (accessed on 19 May 2024).
[7] ND King, HA Strydom and FP Retief (eds) *Fuggle and Rabie's Environmental Management in South Africa* 3ed (2018) at 631.
[8] South African Department of Environmental Affairs *White Paper: National Environmental Management Of The Ocean* (2014) at 19.
[9] ND King (fn 7 above at 624).
[10] White paper (fn 8 above at 19).
[11] ND King (fn 7 above at 632).

'ocean territory' exceeds that of the land.[12] By virtue of the amount of plastic in our oceans, it is clear that our oceans, in being plagued by plastic, are not being protected and preserved for future generations. The ocean is being lost to present generations who continue to pollute the seas.

In South Africa, the Constitution regards the environmental right as a fundamental human right.[13] Stemming from this is an array of 'specific environmental management Act[s]'[14] ('SEMAs') which serve to protect the many facets that the environment is comprised of. While this promotes conservation and protection of all aspects of the environment, the provisions remain scattered throughout these Acts,[15] especially insofar as they relate to marine plastic pollution. This dissertation will focus on the International Plastic Treaty[16] that is currently being developed by the United Nations to protect the ocean from plastic pollution, and will pay close attention to South Africa's legal framework to assess whether it has the means to domesticate the Treaty.

This dissertation will explore the various pieces of South African legislation to uncover that while existing laws do provide a framework to at least begin the entanglement of the International Plastic Treaty into South African law, its existing framework is falling short due to the fact that South Africa contributes 80,000 tons of marine plastic pollution yearly[17] despite its environmental legislation. If the laws were as great as they look on paper, then, in the writer's opinion, this figure should be drastically smaller. The Treaty will hit South Africa like a wave in a way that will highlight its shortcomings in terms of how it protects its marine environments, but it will also emphasise what is currently catered for and works well. This dissertation will address the ability of South African law to domesticate the Plastic Treaty in order to achieve the goal of the Treaty to eliminate plastic by 2040.[18] In doing so, this

[12] World Wildlife Fund for Nature 'A snapshot of the current state of South Africa's oceans' (2016) *World* available at https://www.wwf.org.za/?19001/Oceans-facts-and-futures-Valuing-South-Africas-ocean-economy (accessed on 15 October 2023).
[13] S 24 of the Constitution of the Republic of South Africa act 108 of 1996 (the 'Constitution').
[14] S 1 of the NEMA.
[15] White paper (fn 8 above at 6).
[16] United Nations Environment Assembly *End plastic pollution: towards an international legally binding instrument* UN resolution 5/14 UNEP (2 March 2022) at 1. Also referred to as resolution 5/14.
[17] Anon 'The legal, policy and institutional frameworks governing marine plastics in South Africa' (29 July 2020) *IUCN environmental law centre* at 3, available at https://www.iucn.org/sites/default/files/2022-08/webinar_report_south_africa_marine_plastics_marplasticcs.pdf (accessed on 27 April 2023) at 2.
[18] United Nations 'Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its first session' (28

dissertation will suggest the enactment of entirely new legislation in order to piece together the various provisions scattered across the SEMAs in order to see more tangible results. Additionally, this dissertation, in assessing South African laws relating to plastic in the ocean with the guidance of the Treaty, will also help re-align its legislation to the core value of sustainable development as enshrined in the Constitution.[19]

1.2 STATEMENT OF THE PROBLEM

South Africa, being the southernmost tip of Africa, has a coastline which extends over 3,000 km from the border of Namibia on the west coast to Mozambique on the east.[20] Though the water surrounding the country may be continuous, its legislation dealing with marine plastic pollution is fragmented, resulting in a lack of coordinated ocean management to prevent degradation and promote the conservation of marine environments.[21] The International Plastic Treaty, on the other hand, addresses the marine plastic crisis through a succinct and holistic approach.[22] This begs the question as to whether South African laws and policies relating to marine plastic pollution are adequate to tackle this tsunami of plastic that is plaguing our oceans, and give rise to the Treaty. South Africa has a multitude of laws reflecting the provisions of the Treaty in a scattered fashion, and despite the ocean bordering South Africa along its east, south and west coasts,[23] it has a limited and splintered statutory framework protecting a resource that not only holds the country in powerful stead in relation to the rest of the world, but that also has the ability to promote the triad[24] of sustainable development,[25] is underwhelming.

November – 2 December 2022) *UNEP/PP/INC.1/14* Annex II part I para 2 at 12. (The 'Treaty,' interchangeably referred to as the 'instrument').

[19] S 24 of the Constitution of the Republic of South Africa Act 108 of 1996.

[20] Anon 'Geography and climate' *South African Government* (undated) available at https://www.gov.za/about-sa/geography-and climate#:~:text=South%20Africa%20occupies%20the%20most,Mozambique%20on%20the%20Indian%20Ocean. (accessed on 29 April 2023).

[21] White paper (fn 8 above at 6).

[22] United Nations 'Revised draft text of the international legally binding instrument on plastic pollution, including in the marine environment' (28 December 2023) *UNEP/PP/INC.4/3* ('Revised zero draft') at 40.

[23] White paper (fn 8 above at 11).

[24] The triad of sustainable development incorporates the social, economic and environmental spheres of society.

[25] World Wildlife Fund for Nature 'A snapshot of the current state of South Africa's oceans' (fn 12 above).

Plastic in the ocean originates from leakages throughout its lifecycle, from the production phase to the consumption phase, and finally the disposal phase;[26] however, South African law focuses on reusing and recycling[27] rather than tackling the plastic issue at its source.[28] Since plastic is a threat at all phases of its life,[29] it is imperative that South African law improves its approach to address the full lifecycle of plastic instead of focusing only on managing plastics that are already in the system. The effects of plastic in the marine environment are a major concern because, without a healthy ocean, human life is at risk.[30] Seventy per cent of the Earth is made up of the ocean[31] and humans rely heavily on the ocean for 'food, jobs, climate regulation and oxygen.'[32] Marine life is also severely impacted by plastic, caused by 'ingestion, suffocation and entanglement.'[33] If proactive steps are not taken to combat the threat of plastic to marine environments, then human life will be severely threatened.[34]

1.3 RESEARCH QUESTIONS

Pursuant to the main focus of this dissertation, which evaluates the South African legal framework governing marine plastic pollution in comparison to the International Plastic Treaty, the following research questions also apply:

1.3.1 What legislation does South Africa presently have in place to tackle the marine plastic pollution crisis?

1.3.2 To what extent can these laws be applied to give effect to the Treaty?

1.3.3 Does the South African legal framework control and manage plastic pollution at the source?

1.3.4 How has South African law dealt with marine plastic pollution in the past?

1.3.5 What are the gaps in South Africa's legislation in relation to the Treaty?

1.3.6 To what extent is South African law aligned with the Treaty?

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[26] F Alpizar, F Carlsson & G Lansa et al. 'A framework for selecting and designing policies to reduce marine plastic pollution in developing countries' (2020) 109 *Environmental Science & Policy* 25-35.
[27] S 16 of Act 59 of 2008; Anon 'The legal, policy and institutional frameworks governing marine plastics in South Africa' (fn 17 above at 2).
[28] F Alpizar (fn 26 above at 28).
[29] Ibid at 28.
[30] Anon '5 reasons why a healthy ocean is linked to human rights' (9 December 2021) *United Nations Environment Program* available at https://www.unep.org/news-and-stories/story/5-reasons-why-healthy-ocean-linked-human-rights (accessed on 29 April 2023).
[31] Diane Boudreau 'All about the Ocean' (7 February 2023) *National Geographic* available at https://education.nationalgeographic.org/resource/all-about-the-ocean/ (accessed on 29 April 2023).
[32] Anon '5 reasons why a healthy ocean is linked to human rights' (fn 30 above).
[33] T Naidoo (fn 2 above at 43-46).
[34] Ibid at 46-47.

1.3.7 Is South Africa meeting the goals of sustainable development as enshrined in the Constitution?

1.4 STRUCTURE

Chapter 1 - This chapter begins by setting out the topic of this dissertation, which is the global marine plastic crisis and South Africa's contribution to the destruction of marine ecosystems. It continues by briefly touching on the research problem by highlighting the inadequacies that exist in South African legislation, resulting in a lack of protection of the natural world from plastic pollution. It explains that the International Plastic Treaty is currently being developed and that South Africa should domesticate the Treaty by enacting a new piece of legislation to consolidate its legislative approach to marine plastic pollution.

Chapter 2 - This chapter takes a closer look at plastic and the threat that it poses to the environment, ecosystems and human life. It unpacks the nature of plastic, the sources from which plastic finds its way to the ocean and highlights the manner in which plastic pollution exacerbates climate change.

Chapter 3 - This chapter is dedicated to laying out the constitutional and statutory frameworks that control, manage and regulate marine plastic pollution. It begins by unpacking the constitutional framework. After unpacking the constitutional framework, it turns to examine the statutory framework. This part of the chapter is divided into three subsections dealing, first, with the overarching legislation namely, the National Environmental Management Act ('NEMA'),[35] second, with pollution (waste) legislation namely, the National Environmental Management: Waste Act ('NEM: WA')[36] and last, with ocean and coastal legislation namely, the National Environmental Management: Integrated Coastal Management Act ('NEM: ICMA'),[37] the National Environmental Management: Oceans bill ('NEMO')[38]

[35] National Environmental Management Act 107 of 1998.
[36] National Environmental Management: Waste Act 59 of 2008.
[37] National Environmental Management: Integrated Coastal Management Act 24 of 2008.
[38] White paper (fn 8 above).

and the Marine Spatial Planning Act ('MSPA').[39] This chapter identifies the fragmented nature in which marine plastic pollution is currently addressed.

Chapter 4 - This chapter follows the development of the International Plastic Treaty from its resolution[40] to all pertinent meetings between November 2022 and November 2024. While the International Plastic Treaty is expected to be finalised by December 2024,[41] this dissertation is limited to the negotiations up until November 2024. This chapter lays out the provisions of the Revised Zero Draft[42] in order to draw comparisons to South African law.

Chapter 5 - This final chapter sets out the standard identified by the International Plastic Treaty that, in order to end plastic pollution, focus needs to be given to the production, consumption and disposal phases of plastic. South African law is then tested against this standard to see if its existing statutory framework has the capacity to domesticate the Treaty. This chapter briefly explains how a Treaty becomes law in South Africa and considers whether existing legislation can be amended to give rise to the Treaty or whether an entirely new act would need to be enacted. The writer makes a final finding that existing environmental laws are insufficient on their own to domesticate the Treaty and suggests that the National Environmental Management: Plastic Pollution Act (the 'NEM: PPA') be enacted. Finally, this chapter provides overall concluding remarks.

[39] Marine Spatial Planning Act 16 of 2018.
[40] United Nations Environment Assembly *End plastic pollution* (fn 16 above at 1).
[41] The meeting held on 1 December 2024, that was supposed to result in the culmination of the Treaty, was adjourned to August 2025 as negotiations are still ongoing.
[42] United Nations *UNEP/PP/INC.4/3* (fn 22 above).

CHAPTER TWO: PLASTIC

2.1 INTRODUCTION

Given that this dissertation focuses on the laws surrounding marine plastic pollution, it is important to understand the main role player in this discussion, namely plastic. The purpose of this chapter is to put into perspective why plastic is a problem, how it pollutes the oceans and what consequences it burdens the planet with. This chapter begins by unpacking the problem with plastic, followed by an explanation of how plastic enters the marine environment. Thereafter, this chapter provides context to South Africa's geographical location and insights into the country's waste problem, both of which contribute to the marine plastic pollution crisis. The penultimate paragraph explains how the production of plastic and the generation of plastic pollution have resulted in a rapid depletion of the Earth's natural resources. Lastly, the conclusion will provide a brief summary of the pertinent points made in this chapter.

2.2 THE PROBLEM WITH PLASTIC

Plastic is plaguing our oceans, and it is expected that 'by 2050 there could be more plastic than fish in the sea (by weight).'[43] There has been a rapid growth in the generation of plastic since the 1950s, with statistics indicating that the amount of plastic produced in the decade after the year 2000 was greater in those 10 years than the 40 years that preceded it.[44] Plastic and fossil fuels are toxically synonymous in that a single plastic product is comprised of 99 per cent of fossil fuels such as oil and gas.[45] Globally, an astonishing 300 million tonnes of plastic pollute our oceans annually.[46] South Africa contributes 80,000 tonnes of plastic to this figure due to poor waste management, which causes plastic to infiltrate our rivers and, ultimately, our oceans.[47]

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[43] World Wildlife Fund for Nature 'Will there be more plastic than fish in the sea?' (undated) available at https://www.wwf.org.uk/myfootprint/challenges/will-there-be-more-plastic-fish-sea (accessed on 27 April 2023).
[44] Anon 'Our planet is choking on plastic' (undated) *United Nations Environment Program* available at https://www.unep.org/interactives/beat-plastic pollution/?gclid=Cj0KCQjw3a2iBhCFARIsAD4jQB2n6U88PxNElXkq-Qe8eUlyYv426fN0dy8caljGLXLv_BPDC4CnQfIaAkyvEALw_wcB (accessed on 27 April 2023).
[45] Anon 'Plastic a lifeline for the fossil fuel industry' (fn 6 above).
[46] Anon 'Keeping South Africa's oceans clean is everyone's responsibility' (fn 1 above).
[47] Anon 'The legal, policy and institutional frameworks governing marine plastics in South Africa' (fn 17 above at 3).

Plastic in the ocean affects all kinds of marine life, including micro-organisms, fish, mammals, turtles and seabirds, who ingest and/or are suffocated by plastic debris.[48] This affects human life through the consumption of marine life that has ingested plastic[49] and by creating an environment that is detrimental to human health.[50] Both macroplastics[51] and microplastics[52] are toxic products that are harmful to the environment and all forms of life.[53] When plastic meets the environment, it is destructive, and the fate of ecosystems hangs in the balance.[54] Its durable nature makes it difficult for plastic to decompose,[55] and thus, it becomes part of the Earth's landscape. It causes death to animals by ingestion or suffocation; it inhibits ecosystems from functioning as they should;[56] and the natural beauty of the environment is lost to the plasticene.[57]

If measures are not taken to curb plastic waste generation, which ultimately becomes plastic pollution that plagues the marine environment, then current trends indicate that 'plastic pollution could double by 2030.' [58]

2.3 THE PATHWAYS OF PLASTIC TO THE OCEAN

Pollution in the ocean is derived from two sources. First, land-based sources such as stormwater run-off, dumping, as well as waste generated and littered on land that is carried by wind currents to river systems[59] and ultimately the ocean; and, second, marine-based sources such as fishing, mining and shipping.[60] One of the biggest contributors to marine pollution from land-based sources is plastic.[61] Plastic finds its way to the ocean through 'point sources' and 'non-point

[48] T Naidoo (fn 2 above at 43-46).
[49] Ibid at 46.
[50] M.L Van Rensburg (fn 4 above at 2).
[51] Macroplastics is a term used to describe larger pieces of plastic greater than 5mm in size.
[52] Microplastics is a term used to describe plastics that are less that 5mm in size either from being manufactured at that size or that are broken down from larger plastic items.
[53] C Verster, H Bouwman 'Landbased sources and pathways of marine plastics in a South African context' (2020) 116(5/6) *South African Journal of Science* 1-9 at 25.
[54] Ibid.
[55] Y Du, X Liu, X Dong et al. 'A review on marine plastisphere: biodiversity, formation, and role in degradation' (2022) 20 *Computational and Structural Biotechnology Journal* 975-988 at 976.
[56] C Verster (fn 53 above at 25).
[57] 'Plasticene' is a term used to describe an era on earth where a layer of plastic is found across the earth's natural landscape and to describe the implications that plastic has on the environment; LE Haram, et al. 'A Plasticene Lexicon' (2020) 150 *Marine Pollution Bulletin* 1-4 at 2.
[58] Y Du (fn 55 above at 976).
[59] C Verster (fn 53 above at 25).
[60] ND King (fn 7 above at 616).
[61] Ibid at 645.

sources.'[62] 'Point source' pollution is caused by a direct release of pollution into the sea, including the discharge of 'municipal wastewater,' oil spills and dumping at sea.[63] This type of pollution is easier to regulate since the source of the pollution is known, as opposed to non-point source pollution, which enters the ocean indirectly through 'storm-water run-off' and polluted rivers that transfer plastic to the ocean.[64] Plastic in the ocean also originates from leakages throughout its lifecycle, which may be divided into three phases, namely the production phase, the consumption phase and, finally, the disposal phase.[65]

2.4 SOUTH AFRICA'S OCEANS

South Africa, bordered by 3,000 km of ocean, sits on an ecological gold mine and is home to approximately '15 per cent of the world's known marine species.'[66] This wealth of marine biodiversity, together with the interconnectedness of all oceans and the functions that they perform, contributes momentously not only to South Africa but to the world at large and, therefore, needs to be protected.[67] Bearing in mind the vastness of the ocean that surrounds South Africa along its east, south and west coasts,[68] it is easy to understand why South Africa is such a large contributor of plastic to the global marine environment. Plastics that enter the ocean from South Africa's coastline 'migrate' due to water and air currents, and as such, the marine plastic pandemic is not 'constrained by national boundaries' and, consequently, has become a problem threatening the entire globe.[69]

2.5 SOUTH AFRICA'S WASTE

According to the 2020 National Waste Management Strategy ('NWMS'),[70] from the 55 million tons of waste generated in South Africa in 2017, only 11 per cent was 'diverted from landfill[s]' and used for a purpose other than disposal.[71] This figure of a mere 11 per cent, coupled with

[62] ND King (fn 7 above at 615).
[63] Ibid.
[64] Ibid.
[65] F Alpizar (fn 26 above at 25-33).
[66] White paper (fn 8 above at 11).
[67] Ibid.
[68] Ibid.
[69] SB Borrellea., CM Rochmanb., M Liboironc., *et al.* 'Why we need an international agreement on marine plastic pollution' (19 September 2017) 114(38) *Proc Natl Acad Sci U S A* 9994-9997.
[70] National Waste Management Strategy *Department of Environment, Forestry and Fisheries* (2020) ('2020 NWMS') available at https://faolex.fao.org/docs/pdf/saf198615.pdf (accessed on 07 March 2024).
[71] Ibid at 11.

South Africa's poor waste management practices that see waste being dealt with mostly in landfills, causes plastic waste to inevitably become pollution, with 70 to 80 per cent of this mismanaged plastic waste being transported by rivers to the ocean.[72] Ninety per cent of marine pollution is plastic,[73] and consequently, the ocean acts as a plastic sink rather than a 'carbon sink'.[74] This impedes the oceans' ability to absorb carbon and produce oxygen, thus causing a lack of 'equilibrium' in our climate and directly [contributes] to climate change.[75]

2.6 ECOLOGICAL DEPLETION

The Earth has always had the ability to 'self-regulate'[76] and regenerate. However, human activity has impacted the Earth's ability to renew itself at a pace fast enough to keep up with the needs of humans.[77] In 20024, for example, the world reached 'overshoot day'[78] on 1 August 2024,[79] which was a day earlier than the previous year, and thus extended their 'debt' to nature.[80] As a result, humans are surviving '... on natural resources borrowed from future generations'[81] with the continued effect of drowning the planet in waste.[82]

[72] Y Du (fn 55 above at 976).
[73] ND King (fn 7 above at 617).
[74] The ocean, much like trees, are the 'lungs of the planet' for the fact that it digests nearly 25 per cent of anthropogenic carbon dioxide in the atmosphere that was produced from human activity. Acting as a carbon sink, the ocean is able to balance the negative impacts of the anthropogenic activities (such as burning fossil fuels to produce plastic) by producing oxygen and regulating our climate to ensure an equilibrium on earth; J.D Müller., N Gruber., B Carter., R Feely., M Ishii., N Lange., et al. 'Decadal trends in the oceanic storage of anthropogenic carbon from 1994 to 2014' 4 *AGU Advances* (2023) 1-28 at 1 available at https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2023AV000875 (accessed on 13 October 2023).
[75] J.D Müller (fn 74 above); White Paper (fn 8 above at 14).
[76] White paper (fn 8 above at 14).
[77] Ibid.
[78] Earth Overshoot Day is the date in a particular year when human demand for ecological resources exceeds what the Earth can regenerate in that year. This causes a deficit of ecological resources; K Engel 'Humanity now lives on natural resources borrowed from the future' (2 August 2023) *Daily Maverick* available at https://www.dailymaverick.co.za/article/2023-08-02-humanity-now-lives-on-natural-resources-borrowed-from-the-future/ (accessed on 09 October 2023).
[79] Anon 'Earth Overshoot Day 2024: What Is It and Why Is It Important?' (1 August 2024) *Earth.org* available at https://earth.org/what-is-earth-overshoot-day/ (accessed on 25 January 2025).
[80] Anon 'Humans have used up the planet's natural resources for the year. Here's what Earth Overshoot Day means' (2 August 2023) *CBS News* available at https://www.cbsnews.com/miami/news/humans-have-used-up-the-planets-natural-resources-for-the-year-heres-what-earth-overshoot-day-means/ (accessed on 09 October 2023).
[81] K Engel (fn 78 above).
[82] Anon 'Humans have used up the planet's natural resources for the year...' (fn 80 above).

The relationship between natural resources and waste generation stems from the fact that the production of a product relies on the resources provided to us by the environment.[83] An important consequence of this relationship is that not only is waste generated at each stage of production, but also, once a product has been consumed, further waste is produced, often in the form of pollution.[84] The materials sourced for production are used at an unsustainable rate, meaning that the waste turnover is far greater than the Earth's ability to replenish its natural resources.[85]

Plastic is produced from fossil fuels,[86] a natural fuel made from decomposed plants and animals.[87] Since plastic is derived from the Earth's natural resources, it follows that it is also responsible for depleting the Earth's ecological resources. The ever-growing generation of plastic that becomes pollution[88] and plagues our oceans is both unsustainable and unsightly. Without proper regulations for plastic pollution, natural resources will continue to be used to create an insurmountable marine plastic problem.

2.7 CONCLUSION

This chapter provided a context to the main problem of this thesis, being plastic. The rate at which plastic pollutes our oceans, through both land-based and marine-based sources, is beyond comprehension. Through its toxicity of being comprised of fossil fuels, plastic pollution has a devastating effect on ecosystems, marine life and human health. Plastic not only utilises natural resources at a rate faster than they can be replenished, but it also produces a tsunami of waste that is not being managed correctly, which results in marine pollution. In marine environments, plastic impedes the ocean's ability to perform its core functions, such as the production of oxygen, which benefits all life on Earth. By South Africa having an extensive coastline, its contribution to marine plastic pollution on a global scale is significant due to poor

[83] Anon 'Natural-Resource Use And Environmental Impacts' *One Planet Network* (undated) available at https://www.oneplanetnetwork.org/SDG-12/natural-resource-use-environmental-impacts (accessed on 17 June 2024).
[84] Ibid.
[85] Ibid.
[86] K Brigham 'How the fossil fuel industry is pushing plastics on the world' (1 February 2023) *Consumer News and Business Channel* available at https://www.cnbc.com/2022/01/29/how-the-fossil-fuel-industry-is-pushing-plastics-on-the-world-.html (accessed on 09 October 2023).
[87] Anon 'Fossil fuels' (undated) *National Geographic* available at https://education.nationalgeographic.org/resource/fossil-fuels/ (accessed on 05 March 2024).
[88] Y Du (fn 55 above at 976).

waste management and low recycling rates. The next chapter will assess the constitutional and statutory measures that South Africa ascribes to in relation to marine plastic pollution in order to see how the law can prevent the ever-growing plasticene and promote a utopian 'symbiocene.'[89]

[89] 'Symbiocene' is a term used to describe the reintegration of human life into natural systems in order to promote harmony between the natural world and developing world; G Albrecht 'An Invitation to the Symbiocene' (undated) *Symbioscene* available at https://symbioscene.com/invitation-to-the-symbiocene/ (accessed on 07 March 2024).

CHAPTER THREE: CONSTITUTIONAL AND STATUTORY FRAMEWORK

3.1 INTRODUCTION

South Africa has a wide array of statutes pertaining to the environment, waste (pollution) and the ocean. The purpose of this chapter is to lay out the constitutional and statutory framework regulating waste and, in particular, plastic waste, focusing specifically on the ocean. This chapter is divided into four sections, namely the introduction, constitutional framework, statutory framework and conclusion. The statutory framework is divided into three subsections. The first focuses on the National Environmental Management Act ('NEMA'),[90] which is the overarching environmental statute. The second focuses on the National Environmental Management: Waste Act ('NEM: WA'),[91] which is a specific environmental management Act. The third focuses on the National Environmental Management: Integrated Coastal Management Act ('NEM: ICMA'),[92] the Marine Spatial Planning Act ('MSPA')[93] and the National Environmental Management: Oceans Bill ('NEMO'),[94] all of which may be described as coastal and ocean environmental statutes or potential statutes. Before turning to discuss the statutory framework, however, it will be helpful to first examine the constitutional framework governing the protection of the environment.

3.2 CONSTITUTIONAL FRAMEWORK

The South African Constitution[95] provides that none of the rights contained therein is superior to any others, but rather that they are all equally important.[96] Though not formally divided into categories by the Constitution itself, the rights enshrined in the Bill of Rights encompass 'first generation, second generation and third generation rights.'[97] First-generation rights refer to 'civil and political rights,' second-generation rights refer to 'social and economic rights,' and third-generation rights include 'environment[al]' rights.[98] These generations of rights are not

[90] National Environmental Management Act 107 of 1998.
[91] National Environmental Management: Waste Act 59 of 2008.
[92] National Environmental Management: Integrated Coastal Management Act 24 of 2008.
[93] Marine Spatial Planning Act 16 of 2018.
[94] South African Department of Environmental Affairs *White Paper: National Environmental Management of the Ocean* (2014).
[95] Constitution of the Republic of South Africa, 1996.
[96] P de Vos and W Freedman (eds) *South African Constitutional Law in Context* (2ed) (2021) at 401.
[97] Ibid.
[98] Ibid.

hierarchical in nature but rather 'interdependent' and 'interrelated,'[99] which is an important point to bear in mind throughout this dissertation, as so often it appears as if environmental rights are placed third, as its classification might suggest.

Environmental rights are guaranteed in section 24 of the Constitution,[100] which reads as follows:

> 'Everyone has the right:
> (a) to an environment that is not harmful to their health or well-being; and
> (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
> (i) prevent pollution and ecological degradation;
> (ii) promote conservation; and
> (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.'

These provisions deal with two aspects: first, the human right to the environment (section 24(a)) and, second, the actual 'rights of the environment itself not to be degraded' (section 24(b)). For the purposes of this dissertation, section 24(b) is particularly significant. This section places an obligation on the State, natural persons and juristic persons to take 'measures' to achieve the 'objectives' set out in paragraphs (i) to (iii).[101] These measures include 'legislative measures ... supported by appropriate, well-directed policies and programs implemented by the executive.'[102]

More specifically, section 24(b) requires the environment to be conserved not only for the present inhabitants but also for future generations to come.[103] This idea of conserving the environment for future generations is known as the principle of 'intergenerational equity'[104] and requires '...members of the present generation, [to] hold the Earth in trust for future

[99] P de Vos (fn 96 above at 401).
[100] M Kidd *Environmental Law* 2ed (2011) at 20.
[101] Ibid at 23-24.
[102] Ibid at 23; *Government of the Republic of South Africa and Others v Grootboom and Others* 2001 (1) SA 46 (CC) at para 42.
[103] M Kidd (fn 100 above at 24); See S 24(b) of the Constitution.
[104] *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs* 2004 (5) SA 124 (W) at 24.

generations.'[105] 'Intergenerational equity, as an element of sustainable development, requires the present generation to leave the environment in no worse a condition than they found it.'[106]

In the southern African context, the judicial recognition of the concept of intergenerational equity may be traced back to the 1971 judgment in *King v Dykes*[107] where, regarding the ownership of land, the Appellate Division of the High Court of Rhodesia stated that a person 'holds his land in trust for future generations.'[108] More recently, in *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province*[109] the Constitutional Court noted that it rests on the courts to ensure that the environment is '... protected for the benefit of the present and future generations.'[110]

In the same case, the Constitutional Court confirmed that '[t]he present generation holds the Earth in trust for the next generation' and that with '[t]his trusteeship position' comes an adjacent 'responsibility to look after the environment.'[111] Holding the planet in trust for the benefit of future generations does not only refer to future generations of our own species but also to future generations of all species of the greater, natural world.[112] Given that this duty to protect the Earth for the future exists, it is safe to say that present generations are guilty of dereliction of duty by virtue of the fact that ecological resources belonging to future generations have already been spent. [113]

Apart from the principle of intergenerational equity, section 24(b) of the Constitution also promotes the principle of 'sustainable development'.[114] Sustainable development is comprised of 'three interlinked pillars',[115] namely social, economic and environmental factors that, when

[105] EW Brown 'Our rights and obligations to future generations for the environment' (1990) 84 *AJIL* 198-207 at 199.
[106] D Tladi 'Intragenerational Equity: A New Name For International Environmental Justice' (2003) 9 *Fundamina: A Journal of Legal History* 197-204 at 198.
[107] *King v Dykes* 1971 (3) SA 540 (RA).
[108] *BP Southern Africa (Pty) Ltd* (fn 104 above at 24).
[109] *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2007 (6) SA 4 (CC).
[110] Ibid para 102.
[111] Ibid.
[112] EW Brown (fn 105 above at 199).
[113] K Engel (fn 78 above).
[114] M Kidd (fn 100 above at 25).
[115] R Krüger 'The Silent Right: Environmental Rights in the Constitutional Court of South Africa' (2019) 9 *Constitutional Court Review* 473-496 at 478.

integrated, have the effect of protecting the notion of intergenerational equity by ensuring that 'development serves present and future generations.'[116] Sustainable development has been interpreted by the courts to be understood as an ideal where '... environmental considerations will be balanced with socio-economic considerations... .'[117] 'The Constitution ... recognises the need for the protection of the environment while at the same time, it recognises the need for social and economic development.'[118] In *Fuel Retailers,*[119] the Constitutional Court emphasised that it is the judiciary's responsibility to give 'effect to the principle of sustainable development' in order to protect the environment,[120] for without the environment, 'no other rights in the Bill of Rights can be enjoyed.'[121] This interpretation has been echoed and 'endorsed' in at least two subsequent judgments, namely *MEC, Department of Agriculture, Conservation and Environment and Another v HTF Developers (Pty) Ltd*[122] and *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs.*[123] In the chapters to follow, we will come to see how international conventions, such as the 'International Plastic Treaty'[124] (which is still being developed) and the '2030 Agenda for Sustainable Development'[125], also promote this concept of sustainable development.

The fundamental essence of the environmental rights protected in section 24 of the Constitution, as expressed in *Director: Mineral Development, Gauteng Region and Another v Save the Vaal Environment and Others,*[126] is that '[o]ur Constitution, by including environmental rights as fundamental, justiciable human rights, by necessary implication requires that environmental considerations be accorded appropriate recognition and respect in the administrative processes in our country. Together with the change in the ideological climate must also come a change in our legal and administrative approach to environmental concerns.'[127]

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[116] S 1 of the NEMA.
[117] *Fuel Retailers (*fn 109 above; para 45).
[118] Ibid.
[119] Ibid.
[120] Ibid para 102.
[121] Ibid.
[122] *MEC, Department of Agriculture, Conservation and Environment and Another v HTF Developers (Pty) Ltd* (2008) 2 SA 319 (CC) at para 24; M Kidd (fn 100 above at 27-28).
[123] *BP Southern Africa (Pty) Ltd* (fn 104 above at 25).
[124] United Nations Environment Assembly *End plastic pollution* (fn 16 above at 1). Interchangeably referred to as 'the instrument.'
[125] Ibid; The 2030 Agenda for Sustainable Development is more commonly referred to as the Sustainable development Goals ('SDGs').
[126] *Director: Mineral Development, Gauteng Region and Another v Save the Vaal Environment and Others* [1999] 2 All SA 381 (A)
[127] Ibid at 15.

3.3 STATUTORY FRAMEWORK

The environmental rights in section 24 of the Constitution provide the basis of all environmental legislation in South Africa,[128] and the suite of environmental legislation that has since been enacted over the past 30 years gives effect to section 24.[129] For the purposes of this dissertation, the discussion of these various legislative measures is divided into three categories: First, the overarching legislation for the conservation of the environment,[130] namely, the NEMA. Second, the specific legislation dealing with pollution (waste), namely the NEM: WA; and, third, the specific legislation focusing on the ocean and the coast, namely the NEM: ICMA, the MSPA and the NEMO. Each category will be dealt with in turn.

3.4 NATIONAL FRAMEWORK LEGISLATION

3.4.1 Introduction

The NEMA was signed into law on 19 November 1998 and came into operation on 29 January 1999. According to its preamble, one of the primary goals of the NEMA is to give effect to the environmental rights in section 24 of the Constitution[131] by, *inter alia*, creating an overarching framework within which the various 'specific environmental management Act[s]'[132] ('SEMAs') such as the NEM: WA and the NEM: ICMA may function. One of the ways in which the Act seeks to achieve this goal is by providing a set of definitions[133] and environmental management principles[134] that are applicable to all of the SEMAs.

Aside from giving effect to section 24 of the Constitution, the preamble also sets out a variety of other goals, some of which are directly relevant to this study. For example, the preamble dictates that:

[128] M Kidd (fn 100 above at 26).
[129] ND King (fn 7 above at 127).
[130] Preamble to the NEMA.
[131] Preamble to the NEMA.
[132] S 1 of the NEMA.
[133] S 1 of the NEMA.
[134] S 2 of the NEMA.

> ‘the State must respect, protect, promote and fulfil the social, economic and environmental rights of everyone and strive to meet the basic needs of previously disadvantaged communities;’

The preamble also emphasises the importance of sustainable development and intergenerational equity by:

> ‘... requir[ing] the integration of social, economic and environmental factors in the planning, implementation and evaluation of decisions to ensure that development serves present and future generations;’.

The NEMA is divided into ten chapters. Out of these ten chapters, Chapter One and Chapter Seven are relevant for the purposes of this dissertation. Chapter One makes provision for the national environmental management principles, and Chapter Seven makes provisions for various compliance and enforcement mechanisms. The key provisions in Chapter One are sections 2(4)(a)(viii) and 2(4)(p), while the key provision in Chapter Seven is section 28. Prior to discussing these sections individually, however, it will be helpful to highlight some of the definitions set in section 1 of the NEMA that are relevant to this chapter.

3.4.2 Definitions

As mentioned above, the definitions contained in the NEMA often apply to the SEMAs as well. It is, therefore, sensible to set out the manner in which this framework legislation defines concepts such as the ‘environment’, ‘pollution’ and ‘sustainable development’, all of which are crucial to the topic at hand.

‘Environment’ is thus defined in section 1 of the NEMA as:

> ‘the surroundings within which humans exist and that are made up of:
> (i) the land, water and atmosphere of the earth;
> (ii) micro-organisms, plant and animal life;
> (iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and
> (iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being;’

This holistic definition of the environment includes water and, by logical extension, the ocean and the coast as well. When the term ‘environment’ is used throughout the SEMAs, therefore, the assumption is that it includes the ocean and the coast.

'Pollution' is defined in section 1 as:

> 'any change in the environment caused by:
> (i) substances;
> (ii) radioactive or other waves; or
> (iii) noise, odours, dust or heat,
> emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future.'

Unfortunately, this definition emphasises the adverse effects pollution has on human life rather than the adverse effects it has on the environment. Its focus is not on how the environment is impacted but rather on how the environment's ability to serve human life is impacted.

Apart from the NEMA, 'pollution' is also defined in the National Water Act[135] ('NWA') as:

> 'the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it:
> (a) less fit for any beneficial purpose which it may reasonably be expected to be used or;
> (b) harmful or potentially harmful:
> (aa) to the welfare, health or safety of human beings;
> (bb) to any aquatic or non-aquatic organisms;
> (cc) to any resource quality; or
> (dd) to property.'

This definition expands our understanding of pollution to include the alteration of a water resource's properties in a way that makes it harmful, not only to human beings, but also to its ecosystem. 'Pollution' is closely related to, but not synonymous with, 'waste'[136] and will be discussed in more detail in the next section.

'Sustainable development' is defined in section 1 as:

> 'the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations.'

[135] National Water Act 36 of 1998.
[136] M Kidd (fn 100 above at 142).

This definition aligns with section 24(b)(iii) of the Constitution and confirms that there must be a balance between social, economic and environmental factors to achieve sustainable development that will serve present and future generations.

3.4.3 Relevant provisions

(i) Introduction

As stated above, for the purposes of this dissertation, the key provisions of the NEMA are section 2(4)(a)(viii) and 2(4)(p), both of which may be found in Chapter One, and section 28, which may be found in Chapter Seven.

Chapter One is entitled 'National Environmental Management Principles' and consists of only one section, namely section 2. As the Supreme Court of Appeal held in *MEC for Agriculture, Conservation, Environment and Land, Gauteng Province v Sasol Oil and Another,*[137] these principles apply to the '... interpretation of any law concerned with the protection and management of the environment …'.

At the heart of these principles is the principle of 'sustainable development', which requires organs of state to evaluate the 'social, economic and environmental impacts of activities.'[138] It is not surprising, therefore, that section 2(3) specifically requires '[d]evelopment [to] be socially, environmentally and economically sustainable.'

Of somewhat similar importance is the 'precautionary principle' and 'polluter pays principle'. These principles are 'factors to be taken into account when considering what constitutes sustainable development.'[139] The precautionary principle and polluter pays principle are referred to in section 2(4) of NEMA.

(ii) Section 2(4)(a)(vii) - The precautionary principle

[137] *MEC for Agriculture, Conservation, Environment and Land Affairs, Gauteng v Sasol Oil and Another* 2006 (5) SA 483 (SCA) para 15; M Kidd (fn 100 above at 39).
[138] Ibid.
[139] *South African Human Rights Commission v Msunduzi Local Municipality and Others* 2021 (6) SA 500 (KZP) para 79; *Minister of Water Affairs and another v Really Useful Investments 219 (Pty) Ltd and* another 2017 (1) SA 505 (SCA).

Section 2(4)(a)(vii) provides in this respect that:

> 'Sustainable development requires the consideration of all relevant factors including … that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions.'[140]

(iii) Section 2(4)(p) - The polluter pays principle

And section 2(4)(p) provides that:

> 'Sustainable development requires the consideration of all relevant factors including … the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.'[141]

(iv) Section 28 - The duty of care

Apart from the provisions discussed above, another important provision for the purposes of this dissertation section 28, which imposes a duty of care on '[e]very person who causes, has caused or may cause significant pollution or degradation of the environment'. This section may be found in Chapter Seven of the NEMA. It is entitled 'Compliance and Enforcement' and consists of 35 sections, of which section 28 is the very first.

This section requires a 'person who causes, has caused or may cause significant pollution or degradation of the environment [to] take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, ... [where it cannot be] avoided or stopped, to minimise and rectify such pollution or degradation of the environment.'[142] It reads as follows:

> 'Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.'[143]

[140] S 2(4)(a)(vii) of the NEMA.
[141] S 2(4)(p) of the NEMA.
[142] S 28(1) of the NEMA.
[143] S 28(1) of the NEMA.

This is known as the waste hierarchy.[144] This duty is not only limited to the person causing the pollution but also to 'the owner, person in control of or person with rights to land' upon which the activity that was detrimental to the environment took place.[145]

3.4.4 Conclusion

This chapter laid out two crucial principles, namely, the precautionary and polluter pays principles. Both of the aforementioned principles '… must be observed as they are of considerable importance to the protection and management of the environment,'[146] and may have to ability to support South Africa in adopting and implementing the provisions of the International Plastic Treaty. The precautionary principle will become particularly important in making decisions around marine plastic pollution, even when the risks are not fully known, for the fact that plastic 'significantly affects'[147] the environment, which would invoke section 2 of the NEMA. 'Precautionary measures' will therefore have to be taken to 'safeguard' the ocean from plastic pollution.[148]

3.5 WASTE LEGISLATION

3.5.1 Introduction

The NEM: WA was signed into law on 6 March 2009 and came into operation on 1 July 2009. According to its long title, the goals of the NEM: WA are to promote sustainable development, prevent pollution and effectively regulate waste management.[149] These goals are set out in more detail in the objects clause, which reads as follows:

'(a) to protect health, well-being and the environment by providing reasonable measures for—
  (i) minimising the consumption of natural resources;
  (ii) avoiding and minimising the generation of waste;
  (iii) reducing, re-using, recycling and recovering waste;
  (iv) treating and safely disposing of waste as a last resort;

[144] LH Frost *Is the regulation of single-use plastic in South Africa a waste of time?* (unpublished LLM thesis, University of Kwazulu-Natal, 2019) at 19.
[145] S 28(2) of NEMA; M Kidd (fn 100 above at 152).
[146] *Fuel Retailers* (fn 109 above; para 67).
[147] S 2(1) of the NEMA.
[148] *Fuel Retailers* (fn 109 above; para 98).
[149] The long title of the NEM: WA.

(v) preventing pollution and ecological degradation;
(vi) securing ecologically sustainable development while promoting justifiable economic and social development;
(vii) promoting and ensuring the effective delivery of waste services;
(viii) remediating land where contamination presents, or may present, a significant risk of harm to health or the environment; and
(ix) achieving integrated waste management reporting and planning;

(b) to ensure that people are aware of the impact of waste on their health, well-being and the environment;
(c) to provide for compliance with the measures set out in paragraph (a); and
(d) generally, to give effect to section 24 of the Constitution in order to secure an environment that is not harmful to health and well-being.'

Among the most significant objects for the purposes of this dissertation are section 2(a)(v), which refers to the prevention of pollution and ecological degradation and section 2(a)(vi), which refers to sustainable development. Like the long title, section 2(d) also refers to section 24 of the Constitution and thus confirms the relationship between the NEM: WA, on the one hand, and the Constitution and the NEMA, on the other hand. The relationship between these three statutes is also reflected in the NEM: WA's long title, which refers to the 'duty of care' In section 28 of the NEMA and which promotes the waste hierarchy.

In *Minister of Environmental Affairs and another v ArcelorMittal South Africa Limited,*[150] the Supreme Court of Appeal highlighted that much like the NEMA, the NEM: WA is also a 'legislative measure[] contemplated in s 24 of the Constitution'[151] whose long title highlights its 'overarching purpose as being to reform the law regulating waste management...in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development.'[152]

The NEM: WA is divided into nine chapters. Out of these nine chapters, Chapter Two and Chapter Four are relevant to this dissertation. Chapter Two makes provision for a national waste management strategy as well as national waste management norms and standards, and Chapter Four makes provision for national waste management measures. The key provision in Chapter Two is section 6, while the key provision in Chapter Four is section 18. Prior to

[150] *Minister of Environmental Affairs and another v ArcelorMittal South Africa Limited* [2020] ZASCA 40 at para 4-5.
[151] Ibid para 4.
[152] Ibid para 6.

discussing these sections individually, it will be helpful to highlight some of the definitions set out in section 1 of the NEM: WA.

3.5.2 Definitions

Given that the terms 'environment,' 'pollution' and 'sustainable development' are defined in the NEMA, it is not surprising that they are not defined in the NEM: WA. Instead, the Act simply refers the reader to the definitions set out in the NEMA. Two significant terms that are not defined in the NEMA but rather in the NEM: WA are 'waste' and 'extended producer responsibility' ('EPR').

Waste is defined in section 1 of the NEM: WA as:

'any substance, whether or not that substance can be reduced, re-used, recycled and recovered:
- (a) that is surplus, unwanted, rejected, discarded, abandoned or disposed of;
- (b) which the generator has no further use of for the purposes of production;
- (c) that must be treated or disposed of; or
- (d) that is identified as a waste by the Minister by notice in the Gazette, and includes waste generated by the mining, medical or other sector, but:
  - (i) a by-product is not considered waste; and
  - (ii) any portion of waste, once re-used, recycled and recovered, ceases to be waste;'

As previously mentioned, 'pollution' and 'waste' are synonymous[153] with one another but are not one and the same. Common to both is the use of the vague descriptor 'substance,' which may or may not include plastic. According to its definition, waste is simply something that a person does not want,[154] but which ceases to be 'waste' if it is a by-product or if it has been re-used and recycled. However, as the popular phrase goes, 'one man's trash is another man's treasure,'[155] and, consequently, the definition of waste depends heavily on the subjective intention of the person in question. The problem with 'waste', or at least one of the problems, is that it has the potential to become pollution if it is not managed correctly.[156] For example, plastic waste can be recycled and reused, but through mismanagement, it causes pollution, especially in our oceans.

[153] M Kidd (fn 100 above at 142).
[154] Ibid.
[155] JF Campbell *Popular Tales of the West Highlands: Orally Collected* I (1860) at iii.
[156] ND King (fn 7 above at 1056).

The definition of 'waste' set out above was amended by the National Environmental Management Laws Amendment Act ('NEMLAA') in 2022.[157] The amended definition differs from the original definition in several important respects. One of these differences is that the definition of 'waste' has been widened to encompass, not only 'substances', but also 'any material or object'.[158] The inclusion of the word 'any' in the phrase 'any material or object' suggests that the definition of 'waste' now includes plastic pollution. Apart from widening the definition of waste, another important difference is that the amended definition no longer excludes unwanted substances and by-products from the concept of waste. Instead, it provides that a 'substance, material or object' ceases to be waste only once 're-used, recycled or recovered or traded in by the holder of that waste.'[159] The amended definition also provides that substances that are unwanted are not automatically classified as waste if they can be repurposed. This change is particularly welcome given the large amounts of waste that is generated every year and the low rate of recycling in South Africa.[160]

Unfortunately, the amended definition was declared unconstitutional and invalid by the Constitutional Court in *South African Iron and Steel Institute and Others v Speaker of the National Assembly and Others.*[161] The Constitutional Court based its decision on the grounds

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[157] National Environmental Management Laws Amendment Act 2 of 2022; 'waste' according to NEMLAA means:
'(a) any substance, material or object—
(i) that the generator of that substance, material or object has no further use for within its own processes, whether or not it has any commercial value for the generator, but which can be re-used, recycled, recovered or traded in by any person; or
(ii) that is rejected, abandoned, discarded or disposed of, either temporary or permanently, or is intended to be discarded or disposed of by the generator of that substance, material or object, regardless of whether or not that substance, material or object has any commercial value for the generator or can be re-used, recycled, recovered or traded in by any person; or
(b) any other substance, material or object that may be defined as a waste by the Minister by notice in the Gazette; but any waste or portion of waste, referred to in paragraphs (a) and (b), ceases to be a waste—
(aa) once it is re-used, recycled or recovered or traded in by the holder of that waste or portion of waste in accordance with a condition stipulated in a valid waste management licence, where applicable, or in accordance with an applicable norm or standard made in terms of this Act; or
(bb) where the Minister has, in the prescribed manner, excluded the holder of any waste stream or a portion of a waste stream from the definition of waste, enabling the holder thereof to trade in the excluded waste stream or portion of the excluded waste stream, provided that the holder has satisfied the requirements of proving the environmentally safe use of the waste stream or portion of waste stream by it or any other person and committed to provide the Minister with annual reports of the use thereof;'
[158] S 61(k)(a) of the NEMLAA.
[159] S 61(k)(b)(aa) of the NEMLAA.
[160] Anon 'Stats SA' (5 September 2018) *Department: statistics South Africa* available at https://www.statssa.gov.za/?p=11527 (accessed on 19 February 2024).
[161] *South African Iron and Steel Institute and Others v Speaker of the National Assembly and Others* 2023 (10) BCLR 1232 (CC).

that Parliament had failed to facilitate public participation in the legislative process as required in terms of section 59(1)(a) and section 72(1)(a) of the Constitution.[162]

Apart from the NEM: WA, the NWA also defines 'waste' in relation to water and stipulates that it:

> 'includes any solid material or material that is suspended, dissolved or transported in water (including sediment) and which is spilled or deposited on land or into a water resource in such volume, composition or manner as to cause, or to be reasonably likely to cause, the water resource to be polluted.'

This definition is relatively simple and provides that waste is any material, in any form, that has been spilled or deposited on land or water and has caused, or is reasonably likely to cause, that water to become polluted. This definition also aligns with the previous statements that waste has the potential to become pollution,[163] and in this instance, waste spilled into water is considered to be pollution.

Apart from 'waste', the other term that is not defined in the NEMA but is defined in the NEM: WA is 'extended producer responsibility measures' ('EPRs'), which are defined as:

'measures that extend a person's financial or physical responsibility for a product to the post-consumer stage of the product, and includes:

(a) waste minimisation programmes;
(b) financial arrangements for any fund that has been established to promote the reduction, re-use, recycling and recovery of waste;
(c) awareness programmes to inform the public of the impacts of waste emanating from the product on health and the environment; and
(d) any other measures to reduce the potential impact of the product on health and the environment;'

After a product has been consumed, this provision holds producers financially responsible for how the product is managed in order to minimise waste, which could potentially cause pollution. This provision allows the Minister to identify categories of products to which an EPR scheme applies, as well as the measures to be taken in respect of the identified products.[164]

[162] *South African Iron and Steel Institute and Others v Speaker of the National Assembly and Others* 2023 (10) BCLR 1232 (CC) para 50.
[163] ND King (fn 7 above at 1056).
[164] S 18(1)(a) & (b) of the NEM: WA.

3.5.3 Relevant provisions

(i) Introduction

As stated above, for the purposes of this dissertation, the key provisions of the NEM: WA are section 6, which may be found in Chapter Two and section 18, which may be found in Chapter Four.

(ii) Section 6 – National Waste Management Strategy

Chapter Two is entitled 'National Waste Management Strategy, Norms and Standards' and consists of only four sections, the first of which is section 6. This section begins by imposing an obligation on the Minister to prepare a National Waste Management Strategy ('NWMS')[165] and sets out a relatively long list of matters that the Minister must include in the NWMS.[166]

These matters include objectives, plans, guidelines, systems and procedures relating to the 'protection of the environment' and the 're-use, recycling [and] recovery of waste.'[167] In addition, they also include 'mechanisms, systems and procedures' to give effect to South Africa's 'international agreements.'[168]

Insofar as South Africa's 'international agreements' are concerned, the 2020 NWMS specifically requires South Africa to collaborate with international role players to address two pertinent issues, the first being the reduction in volumes of plastic generated, which will reduce the amount of plastic that seeps into the environment, and the second being the issue of legacy plastics.[169] These two issues also feature in the 'International Plastic Treaty.'

The 2020 NWMS prioritises 'waste prevention' in the waste management hierarchy and recommends promoting 'cleaner production' such as, *inter alia*, using sustainable materials and paying attention to the 'design & packaging of products' in order to achieve this.[170] These

[165] S 6(1) of the NEM: WA.
[166] S 6(1)(a)-(f) of the NEM: WA.
[167] S 6(1)(a) of the NEM: WA.
[168] S 6(1)(b) of the NEM: WA.
[169] 2020 NWMS (fn 70 above at 11).
[170] Ibid at 13.

aspects of the 2020 NWMS show South Africa's eagerness to address plastic throughout its lifecycle and not simply at its end of life. Additionally, the 2020 NWMS speaks to initiatives to ensure its effectiveness, such as supporting EPR schemes and the polluter pays principles, as well as recommending incentives to model behaviour as outlines in the 2020 NWMS.[171]

(iii) Section 18 – EPR Schemes

Chapter Four is entitled 'Waste Management Measures'. It is divided into nine parts and consists of 29 sections, one of which is section 18, which makes provision for EPR Schemes. It reads as follows:

'(1) The Minister after consultation with the Minister of Trade and Industry may, in order to give effect to the objects of this Act, by notice in the Gazette:
  (a) identify a product or class of products in respect of which extended producer responsibility applies;
  (b) specify the extended producer responsibility measures that must be taken in respect of that product or class of products; and
  (c) identify the person or category of persons who must implement the extended producer responsibilities measures contemplated in paragraph (b).

(2) The Minister may in a notice under subsection (1) specify:
  (a) the requirements in respect of the implementation and operation of an extended producer responsibility programme, including the requirements for the reduction, re-use, recycling, recovery, treatment and disposal of waste;
  (b) the financial arrangements of a waste minimisation programme, with the concurrence of the Minister of Finance;
  (c) the institutional arrangements for the administration of a waste minimisation programme;
  (d) the percentage of products that must be recovered under a waste minimisation programme;
  (e) the labelling requirements in respect of waste;
  (f) that the producer of a product or class of products identified in that notice must carry out a life cycle assessment in relation to the product, in such manner or in accordance with such standards or procedures as may be prescribed; and
  (g) the requirements that must be complied with in respect of the design, composition or production of a product or packaging, including a requirement that:
    (i) clean production measures be implemented;
    (ii) the composition, volume or weight of packaging be restricted; and
    (iii) packaging be designed so that it can be reduced, re-used, recycled or recovered.

(3) Before publishing a notice under subsection (1) or any amendment to the notice, the Minister must:
  (a) consult affected producers;
  (b) follow a consultative process in accordance with sections 72 and 73, unless the notice is amended in a non-substantive manner;
  (c) take into account the Republic's obligations in terms of any applicable international agreements; and

[171] 2020 NWMS (fn 70 above at 15-16).

(d) consider relevant scientific information.'

These extensive provisions identify products that will be subject to EPR Schemes, the persons responsible for the implementation of EPR Schemes, and the measures that need to be taken to implement EPR Schemes. These provisions also promote waste minimisation through the 'reduction, re-use, recycling, recovery, treatment and disposal of waste.'[172] They also call for cleaner production of those products that are subject to EPR Schemes[173] and requires South Africa to comply with its international obligations in this respect.[174]

3.5.4 Conclusion

Although 'pollution' and 'waste' go hand in hand, it is important to note that simply because something is waste does not automatically mean that it causes pollution.[175] 'Waste ... has the potential to cause pollution ... depending on the characteristic of the substance ... and the circumstances under which humans or ecosystems or environments are exposed to these substances when the waste is accommodated in the environment.'[176] When waste is managed correctly, pollution can be prevented.[177] However, when we think about plastic waste, we often think about pollution due to poor waste management globally.[178] While the amended definition for 'waste' in the NEMLAA remains invalid and unconstitutional until such time that proper public consultation processes take place, the NWA does clarify that, in relation to water, waste is something that causes the water to become polluted.[179] For the purposes of this dissertation, waste and pollution will be used interchangeably due to the fact that plastic waste frequently becomes plastic pollution that is plaguing our oceans.

Since the terms 'pollution' and 'waste' are used interchangeably, the provisions of the NEM: WA become relevant. In understanding how South Africa will attempt to implement the International Plastic Treaty to tackle marine plastic pollution, the 2020 NWMS could provide some support since it is legally binding,[180] enforced by section 6(4) of the NEM: WA, and is

[172] S 18(2)(a) of the NEM: WA.
[173] S 18(2)(g) of the NEM: WA.
[174] S 18(3)(c) of the NEM: WA.
[175] ND King (fn 7 above at 1056).
[176] Ibid.
[177] M Kidd (fn 100 above at 143).
[178] Anon 'Our planet is choking on plastic' (fn 44 above).
[179] S 1 of the NWA under the definition for 'waste'.
[180] S 6(3)(a) of the NEM: WA.

required to create mechanisms to implement international agreements such as the Treaty.[181] Promoting cleaner production and EPR Schemes are among such mechanisms provided by the 2020 NWMS to implement international obligations, which further aligns with section 18 of the NEM: WA. EPR Schemes are heavily relied on by the new Treaty, therefore, this provision will be under the spotlight. Despite the NEM: WA only addressing waste (pollution) at the end of its life cycle rather than throughout the entire plastic process, section 18 does focus some attention on the entire lifecycle by requiring sustainable design and production.[182]

3.6 COASTAL AND OCEAN LEGISLATION

3.6.1 Introduction

Unfortunately, South Africa does not have specific legislation dealing with the ocean or, more pertinently,[183] with marine plastic pollution. However, South Africa does have two sector-based Acts that relate to the ocean.[184] The two Acts are the National Environmental Management: Integrated Coastal Management Act ('NEM: ICMA') and the Marine Spatial Planning Act ('MSPA'). Apart from these two Acts, the Green[185] and White Papers[186] on the *National Environmental Management of the Ocean* recommended that a National Environmental Management: Oceans Act ('NEMO') should also be adopted. Instead of acting on this recommendation, however, the MSPA was passed instead. The NEM: ICMA, the MSPA and the White Paper will be discussed in turn hereunder.

3.6.2 NEM: ICMA

(i) Introduction

The NEM: ICMA was signed into law on 9 February 2009 and came into operation on 1 December 2009. According to its long title, the goals of the NEM: ICMA are to conserve South

[181] S 6(1)(b) of the NEM: WA.
[182] S 18(2)(g) of the NEM: WA.
[183] ND King (fn 7above at 632).
[184] White paper (fn 8 above at 19).
[185] South African Department of Environmental Affairs *Green Paper: National Environmental Management Of The Ocean for general comment* (2012).
[186] White paper (fn 8 above).

Africa's coastal environment and promote sustainable development.[187] These goals are set out in more detail in the objects clause, which reads as follows:

'(a) to determine the coastal zone of the Republic;
(b) to provide, within the framework of the National Environmental Management Act, for the co-ordinated and integrated management of the coastal zone by all spheres of government in accordance with the principles of co-operative governance;
(c) to preserve, protect, extend and enhance the status of coastal public property as being held in trust by the State on behalf of all South Africans, including future generations;
(d) to secure equitable access to the opportunities and benefits of coastal public properly; and
(dA) to provide for the establishment, use and management of the coastal protection zone; and
(e) to give effect to the Republic's obligations in terms of international law regarding coastal management and the marine environment.'

Among the most significant objects for the purposes of this dissertation is section 2(c), which requires the State to hold the coastal environment in trust on behalf of all citizens to conserve the environment for future generations and thus promote the principle of intergenerational equity. Another significant object is section 2(e), which gives rise to South Africa's international obligations in relation to the marine environment. Furthermore, in its preamble, the theme of sustainable development continues to be a priority by requiring development in the coastal zone to be 'socially and economically justifiable and ecologically sustainable.'[188] This Act aims to, *inter alia*, 'control pollution in the coastal zone [as well as other] adverse effects on the coastal environment.'[189]

The NEM: ICMA is divided into twelve chapters. Out of these twelve chapters, Chapter Seven is relevant to this dissertation. Chapter Seven deals with the protection of coastal resources. The key provision in Chapter Seven is section 58. Prior to discussing these sections individually, it will be helpful to highlight some of the definitions set out in section 1 of the NEM: ICMA.

(ii) Definitions

When reference is made to the 'coastal environment,' according to s1 of the NEM: ICMA it 'means the environment within the coastal zone.' The 'coastal zone' is described as:

[187] Long title of the NEM: ICMA.
[188] Long title of the NEM: ICMA.
[189] Long title of the NEM: ICMA.

> 'the area comprising coastal public property, the coastal protection zone, coastal access land and coastal protected areas, the seashore, coastal waters and the exclusive economic zone and includes any aspect of the environment on, in, under and above such area.'[190]

'Coastal public property', according to section 7 of the Act, includes:

(a) coastal waters; [and]

(b) land submerged by coastal waters ... .

This essentially comprises 'the area where the ocean meets the land and thus lies at the heart of the coastal zone.'[191] South Africa's coastal public property extends from the 'seashore' or high-water mark on the landward side of the coastal zone to the outer limits of the exclusive economic zone ('EEZ') on the seaward side.[192] The EEZ itself extends '200 nautical miles from the baseline[193] into the ocean, which is essentially the low-water mark.[194] In other words, the NEM: ICMA encompasses a large part of the ocean.

(iii) Relevant provisions

(a) Introduction

As stated above, for the purposes of this dissertation, the key provision of the NEM: ICMA is section 58, which may be found in Chapter Seven. Prior to discussing this section, section 2(c), which was identified as one of the relevant objectives, will be expanded on.

(b) Section 2(c) – Public Trust

Section 2(c) of the NEM: ICMA provides that the State holds coastal public property ('CPP') in trust for present and future generations, with a duty of protection and conservation towards the marine environment. Sections 11 and 12, entitled 'Ownership of coastal public property' and 'State public trustee of coastal public property', respectively, give effect to section 2(c). Section 11(1) essentially confirms that while the State holds the CPP in trust, it does so on behalf of the citizens of South Africa. Additionally, section 11(2) prohibits the CPP from being

[190] S 1 of the NEM: ICMA.
[191] ND King (fn 7 above at 684).
[192] Section 7(h)(ii) of the NEM: ICMA; ND King (fn 7 above at 684).
[193] Article 57 of the 1982 United Nations Convention on the Law of the Sea ('UNCLOS').
[194] ND King (fn 7 above at 653).

sold or privately owned. In carrying out its duty as trustee, the State must ensure that the CPP is 'protected [and] conserved' in a manner that aligns with the citizens' interests.[195] The State must also 'take whatever reasonable legislative and other measures it considers necessary to conserve and protect coastal public property for the benefit of present and future generations.'[196] Thus, the State, through the NEM: ICMA, has a duty to protect the marine environment by ensuring sustainable development and intergenerational equity.

(c) Section 58 – Duty of Care

Section 58 of the NEM: ICMA gives effect to 'duty of care' in the coastal sphere by stating that the provisions of NEMA relating to the 'duty of care'[197] includes the coastal environment.[198] Additionally, section 19 of the NWA also provides for this duty of care in relation to water resources specifically. Section 19, which falls under Part Four of Chapter 3 in the NWA, deals with the prevention of pollution, particularly as it relates to 'pollution of a water resource [that] occurs or might occur as a result of activities on land.'[199] Much like the duty of care in the NEMA, measures must be taken to 'prevent the pollution or to remedy its effects, and to recover all reasonable costs from the persons responsible for the pollution.'[200]

Chapter 8 of the NEM: ICMA, entitled 'Marine and coastal pollution control,' largely focuses on the 'discharge of effluent into coastal waters'[201] and the '[p]rohibition of incineration or dumping at sea'[202] both of which are forms of point-source pollution. Reference to marine plastic pollution from non-point sources in this chapter is non-existent. Marine plastic pollution from non-point sources could perhaps fall generally under section 58 of Chapter 7 of the Act entitled the 'protection of the coastal environment'[203] which is the equivalent of 'duty of care'[204] provision in terms of s28 of the NEMA, as discussed above.

(iv) Conclusion

[195] S 12(a) of the NEM: ICMA.
[196] S 12(b) of the NEM: ICMA.
[197] M Kidd (fn 100 above at 152).
[198] S 58 of the NEM: ICMA.
[199] Chapter 3, part 4 of the NWA.
[200] Chapter 3, part 4 of the NWA.
[201] S 69 of the NEM: ICMA.
[202] S 70 of the NEM: ICMA.
[203] Chapter 7 of the NEM: ICMA.
[204] M Kidd (fn 100 above at 152).

Since this dissertation focuses on plastic pollution in South Africa's marine environment, the NEM: ICMA does come under the spotlight due to the fact that it is aimed at protecting the coastal zone and the CPP in order to promote sustainable development. The NEM: ICMA emphasises that the State is the guardian of South Africa's coastal environment; therefore, in executing its duty to 'preserve [and] protect...',[205] the measures taken to implement the International Plastic Treaty to safeguard South Africa's coastal zone will speak directly to whether the State is performing its functions. What is glaringly evident is that although the NEM: ICMA contains an entire chapter dealing with pollution, its focus is on the control of effluent as pollution rather than plastic. The NWA, on the other hand, dedicates a section to the prevention of pollution, which could incorporate plastic pollution as it focuses on pollution of a water resource derived from land-based activities, which is where a large portion of plastic pollution emanates from.[206]

3.6.3 The Marine Spatial Planning Act

(i) Introduction

The MSPA was signed into law on 6 May 2018 and came into operation on 1 April 2021. According to its long title, the goals of the Act are to provide for 'the development of marine spatial plans' and governance in South Africa's coastal environment.[207] In addition, it also seeks to 'give effect to South Africa's international obligations in South African waters.'[208] These goals are set out in more detail in the objects clause, which reads as follows:

> '(a) develop and implement a shared marine spatial planning system to manage a changing environment that can be accessed by all sectors and users of the ocean;
> (b) promote sustainable economic opportunities which contribute to the development of the South African ocean economy through coordinated and integrated planning;
> (c) conserve the ocean for present and future generations;
> (d) facilitate responsible use of the ocean;'

[205] S 2(c) of the NEM: ICMA.
[206] PG Ryan 'The transport and fate of marine plastics in South Africa and adjacent oceans' (2020) 116(5/6) *South African Journal of Science* 34-42 at 35.
[207] Long title of the MSPA.
[208] S 2(f) of the MSPA.

Among the most significant of these objects for the purposes of this dissertation are section 2(b), which refers to the principle of sustainable development, and section 2(c), which refers to the principle of intergenerational equity. The MSPA is divided into fifteen sections. The key provision is section 5, which deals with the principles and criteria for marine planning.

(ii) Relevant provisions

As stated above, for the purposes of this dissertation, the key provision of the MSPA is section 5. This section provides that South Africa's ocean resources must be sustainably used to enhance and maximise the ocean's economic potential through thorough consultation processes, reliance on scientific research and indigenous knowledge, as well as decision-making that is not detrimental to the social, economic and environmental spheres of South Africa.[209] Section 5 also specifically requires that in promoting the 'ocean economy' through an 'ecosystem approach,' an overall 'precautionary approach' should be utilised in order to ensure sustainable development.[210] Most importantly, section 5(1)(d) promotes '... an ecosystem and earth system approach to ocean management which focuses on maintaining ecosystem structure and functioning within a marine area.'

(iii) Conclusion

The MSPA focuses primarily on the development and use of the ocean rather than on pollution. However, one of the objects of the Act is to conserve the ocean, which includes protecting the ocean from pollution and especially marine plastic pollution. The MSPA is the only piece of legislation in South Africa that specifically prioritises the earth agenda by promoting 'an ecosystem and earth system approach'[211] as opposed to the sector-based blueprint. South Africa's approach to ocean governance is sector-based, focusing on 'economic mandates'[212] instead of following a more 'holistic' or eco-centric approach with 'conservation and protection' at its core.[213]

[209] S 5 of the MSPA; N Rivers *et al.* 'Integrating Indigenous and Local Knowledge in Marine Spatial Planning' (April 2023) *JSTOR* 1-13 at 2.
[210] S 5 of the MSPA.
[211] S 5(1)(d) of the MSPA.
[212] White paper (fn 8 above at 16).
[213] Ibid.

Although it does not focus on plastic pollution, the obligation imposed by section 24 of the Constitution to conserve and protect the environment, including the marine environment, to ensure sustainable development and to preserve the planet for future generations is mirrored in the MSPA. The provisions of the MSPA could thus be extended to include plastic pollution due to its precautionary and eco-centric approach. It does, however, omit to mention the applicability of the waste hierarchy and polluter pays principles and fails to place a burden on the State to protect the oceans like the NEMO had promoted.

3.6.4 National Environmental Management: Oceans Bill

(i) Introduction

A Green Paper[214] followed by a White Paper on the *National Environmental Management of the Ocean*,[215] recommended the adoption of legislation integrating various aspects of the ocean, including ocean management, through the utilisation of mandates, principles, objectives and decision-making focusing on sustainability.[216] In light of this recommendation, it was assumed that the next step in the process would be the drafting and eventual adoption of a National Environmental Management: Oceans Bill ('NEMO')[217] drawing from the NEMA and international law.[218] However, at the time of writing, no legislation has yet been enacted. Instead, the Department of Environmental Affairs decided to prioritise the Marine Spatial Planning Bill instead of the NEMO Bill.[219]

(ii) Relevant provisions

(a) Introduction

The White Paper recognised that the sectoral approach to environmental protection, especially in the coastal zone, has not yielded the best results and that 'coordinated sectoral management' was needed.[220] The White Paper identified 'six ocean governance objectives', all of which

[214] Green paper (fn 185 above).
[215] White paper (fn 8 above).
[216] J Glazewski 'Ocean governance: A first step' (2013) 109(3/4) *South African Journal of Science* 1-2 at 1.
[217] ND King (fn 7 above at 632); J Glazewski 'Ocean governance: A first step' (fn 216 above at 1).
[218] White paper (fn 8 above at 18).
[219] ND King (fn 7 above at 631).
[220] White paper (fn 8 above at 6).

speak to promoting sustainable development and a deeper understanding of the ocean through data collection, research and knowledge sharing in order to conserve ocean ecosystems and biodiversity.[221] The approach to ocean governance proposed that the NEMO should take a 'precautionary approach to sustainable use and conservation'. In addition, it also highlighted the waste hierarchy as an important principle, stating the need for 'the prevention, avoidance and mitigation of pollution and adherence to the polluter pays principle.'[222] Most importantly, the approach suggested for the NEMO was one that promoted '...an ecosystem and earth system approach to ocean management.'[223] The White Paper, thereafter, identified four interrelated strategic themes that would ultimately lead to the goal of 'coordinated sectoral management.'[224] These themes were as follows:

(b) Theme 1: Ocean environmental information

The White Paper noted that reporting requirements as required by the NEMA to provide consolidated reports on 'ocean sector information' are lacking. This theme aimed to enhance the standard of reporting whilst promoting 'research, monitoring and conservation of ocean ecosystems, whilst supporting sustainable development opportunities.'[225]

(c) Theme 2: Ocean environmental knowledge

The lack of knowledge surrounding the ocean hinders the government's ability to make informed decisions that promote sustainable development.[226] This lack of knowledge is to the detriment of both development and conservation.[227] This theme aimed to close the knowledge gap through understanding important factors surrounding the ocean, such as ecosystems, anthropocentric impacts, pollution, and economic benefits.[228]

(d) Theme 3: Ocean environmental management

[221] White paper (fn 8 above at 6 & 18).
[222] Ibid at 18.
[223] Ibid.
[224] Ibid at 7.
[225] Ibid at 19-20.
[226] Ibid at 21.
[227] Ibid.
[228] Ibid.

The information and knowledge produced in the preceding themes, which will bring ocean challenges to the fore, must be managed correctly by the relevant organs of state.[229] This theme proposed rapid responses to ecosystem and earth system threats such as extreme weather changes and climate change.[230] 'Better trend and scenario planning services and reports will be provided to aid climate change mitigation and adaptation decision making by role-players. This will inform national planning on how ocean ecosystem services will vary or change in the short, medium and long term at local, national, regional and global scales.'[231] It is unfortunate that a suggestion of this calibre that specifically supports the precautionary principle enshrined in the NEMA was not taken forward when the NEMO was abandoned and the MSPA taken forward. This ability to pre-empt the effects of climate change to then manage South Africa's response to the issue could be adapted to pre-empt the effects of plastic pollution on the ocean environment and amend plans and strategies to address the issue without haste. This will allow for the '...efficient deployment of resources to mitigate the impact of pollution... .'[232] This theme additionally required conservation and biodiversity management.[233]

(e) Theme 4: Ocean environmental integrity

Maintaining the oceans' integrity not only contributes to the global management of a healthy ocean but ensures an ocean for present and future generations, as required by the environmental right contained in the Constitution.[234] This theme recognises that '[t]he State is the custodian of this large ocean space on behalf of the people of South Africa'[235] which affirms section 2(c) of the NEM: ICMA. It aimed to promote strategic collaboration domestically and internationally in order to promote and 'advance sustainable ecosystem-based management' of the ocean[236] and urged a move from a 'sectoral to an ecosystem-based' approach.[237]

(iii) Conclusion

[229] White paper (fn 8 above at 22).
[230] Ibid at 23.
[231] Ibid.
[232] Ibid.
[233] Ibid at 23-24.
[234] Ibid at 25.
[235] Ibid.
[236] Ibid.
[237] Ibid.

The NEMO, in the writer's opinion, is the closest link to the International Plastic Treaty for the fact that it holds an eco-centric approach central to its purpose. Its focus is not only on requiring development to be sustainable but also on identifying information and management gaps in order to conserve ecosystems and biodiversity. Its approach is risk-averse, much like the precautionary principle contained in section 2 of the NEMA. It also aligns with section 24 of the Constitution through by promoting sustainable development and ensuring a healthy ocean for present and future generations. It further emphasises the importance of the waste hierarchy and the polluter pays principle as a mechanism to conserve the ocean. The White Paper placed a burden on the State to act in the best interests of the ocean, aligning with the NEM: ICMA, but this did not translate to the MSPA. The MSPA, although also promoting the earth agenda, focuses on what can be gained from the ocean through development rather than creating a legislative base for the conservation and protection of the ocean, especially as it pertains to marine plastic pollution. This dissertation will consider whether the NEMO needs to be reconsidered as a tool to implement the Treaty, whether the MSPA can be amended to include the vital themes that were omitted from the White Paper or whether an entirely new Act should be enacted.

3.7 CONCLUSION

South Africa has an array of sector-specific statutes that refer to ocean governance in a limited and isolated manner. The Constitution lays the foundation for the right to the environment with concepts such as sustainable development and intergenerational equity forming a common thread throughout the siloed provisions from the national framework (the NEMA) through the waste legislation (the NEM: WA) and finally the coastal and ocean legislation (the NEM: ICMA, the MSPA and the NEMO). This chapter focused on legislation specific to the topic at hand and further identified provisions that are relevant for the discussion that will ensue in subsequent chapters. The provisions have also shown their duty to give rise to and align South Africa with its international obligations. Whether these fragmented provisions will be useful in protecting the ocean from plastic pollution and promoting its health, by applying the International Plastic Treaty to domestic law, will be analysed and evaluated in Chapter 5. Before engaging in such an analysis, however, it is necessary to set out and discuss the provisions of the Treaty.

CHAPTER FOUR: INTERNATIONAL PLASTIC TREATY

4.1 INTRODUCTION

The constitutional and statutory framework regulating waste and, in particular, plastic waste that affects the ocean, was set out and discussed in the previous chapter. The purpose of this chapter is to look beyond South Africa's domestic legal system and to set out and discuss the international legal framework governing plastic waste and, in particular, plastic waste that affects the ocean. The focus will fall mainly on the International Plastic Treaty that is currently being negotiated by those states that are members of the United Nations Environment Programme (UNEP).[238] The chapter is divided into four sections. Apart from the introduction and the conclusion, the other two sections deal with UNEP's Resolution 5/14 and the Revised Zero Draft. Each will be discussed in turn.

4.2 RESOLUTION 5/14

4.2.1 Introduction

As the World Wildlife Fund has noted, it is difficult, if not impossible, for individual countries to effectively and speedily address the problem of plastic pollution, no matter how committed they are to doing so.[239] This is because plastic pollution is a global problem that can be solved only at a global level. It is not surprising, therefore, that the ever-increasing number of regulations adopted by individual countries to combat plastic pollution have been accompanied by an ever-increasing amount of plastic pollution.[240]

In response to this failure, the UN Environmental Assembly, on 22 March 2022, adopted Resolution 5/14,[241] in terms of which the member states agreed to develop a legally binding global instrument to end plastic pollution.[242] Entitled *End plastic pollution: towards an*

[238] United Nations Environment Assembly *End plastic pollution* (fn 16 above at 1). Also referred to as resolution 5/14.
[239] World Wildlife Fund for Nature *Towards a treaty to end plastic pollution* (3 November 2022) at 5, available at https://wwfint.awsassets.panda.org/downloads/towards_a_treaty_to_end_plastic_pollution___final_report.pdf (accessed on 07 September 2023).
[240] Ibid.
[241] United Nations Environment Assembly *End plastic pollution* (fn 16 above at 1).
[242] Also referred to as the UNEA-5; World Wide Fund For Nature *WWF commends UN Environment Assembly's watershed decision to start negotiations for a global plastics treaty* (2 March 2022), available at

international legally binding instrument (the 'instrument'),[243] Resolution 5/14 is aimed at eradicating the threat of plastic pollution at all stages of its life,[244] with added emphasis on marine plastic pollution.[245]

4.2.2 The recital

In its recital, Resolution 5/14 begins by noting, first and foremost, that the high and ever-increasing levels of plastic pollution are a serious 'transboundary'[246] environmental concern that negatively impacts the three pillars of sustainable development at a global level.[247] In addition, it also notes with concern 'the specific impact of plastic pollution on the marine environment',[248] and that a full life-cycle approach must be adopted towards plastic pollution.[249]

As a part of its recital, Resolution 5/14 also affirms the principles of the Rio Declaration on Environment and Development adopted at the UN Conference on Environment and Development in 1992 and the 2030 Agenda for Sustainable Development adopted by the General Assembly in 2015,[250] which includes as one of its goals the protection of the natural world by 'promoting the sustainability of natural resources,'[251] reducing pollution and addressing climate change.[252]

4.2.3 The Intergovernmental Negotiating Committee

https://wwf.panda.org/wwf_news/?5215966/WWF-commends-UN-Environment-Assemblys-watershed-decision-to-start-negotiations-for-a-global-plastics-treaty (accessed on 9 August 2023).
[243] Interchangeably referred to as the 'Plastic Treaty.'
[244] Anon 'Historic day in the campaign to beat plastic pollution: Nations commit to develop a legally binding agreement' (2 March 2022) *United Nations Environment Program* available at https://www.unep.org/news-and-stories/press-release/historic-day-campaign-beat-plastic-pollution-nations-commit-develop (accessed on 29 April 2023).
[245] World Wildlife Fund for Nature *Quick guide to INC-2: Towards An Effective Treaty To End Plastic Pollution* (undated) available at https://wwfint.awsassets.panda.org/downloads/quick_guide_to_inc_2.pdf (accessed on 9 August 2023).
[246] United Nations Environment Assembly *End plastic pollution* (fn 16 above at 1).
[247] Ibid.
[248] World Wildlife Fund for Nature *Quick guide to INC-2* (fn 245 above).
[249] United Nations Environment Assembly *End plastic pollution* (fn 16 above at 1).
[250] Ibid.
[251] United Nations General Assembly *Transforming our world: the 2030 Agenda for Sustainable Development* UN Resolution 70/1 (21 October 2015) at 2.
[252] Ibid at 23.

Following its recital, Resolution 5/14 goes on to request the Executive Director of UNEP to convene an Intergovernmental Negotiating Committee ('INC') to develop an international legally binding instrument on plastic pollution, including in the marine environment, by 2024.[253] In addition, it also states that this legally binding instrument must include both binding and voluntary approaches and adopt a comprehensive approach that includes the full life cycle of plastic.[254] The INC must also consider, *inter alia*, the valuable contributions of science, traditional and indigenous knowledge, as well as the need for international collaboration, capacity building and financial assistance.[255]

The INC has met on four occasions. The first session took place in Uruguay from 28 November to 2 December 2022,[256] the second took place in France from 29 May to 2 June 2023,[257] the third meeting took place in Kenya from 13 to 19 November 2023,[258] and the fourth in Canada from 23 to 29 April 2024.[259] A fifth session is scheduled to take place in South Korea from 25 November to 1 December 2024.[260] The International Plastic Treaty is expected to be finalised at this fifth session.[261]

At the first INC session ('INC-1'), over 150 States, including South Africa, supported the establishment of the International Plastic Treaty by emphasising the need for mandatory measures, as opposed to voluntary ones, in order to address the 'triple planetary crisis of biodiversity loss, climate change and pollution'[262] caused by plastic pollution.[263] INC-1 briefly touched on 'options for potential elements'[264] to be contained in the Treaty and highlighted 'core obligations'[265] and implementation[266] among the most important features of the anticipated instrument.

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[253] United Nations Environment Assembly *End plastic pollution* (fn 16 above; para 3 at 1).
[254] Ibid at 1.
[255] Ibid.
[256] United Nations *UNEP/PP/INC.1/14* (fn 18 above; para 24 and 28 at 3-4).
[257] United Nations 'Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its second session' (7 July 2023) *UNEP/PP/INC.2/5* para 3 at 1.
[258] United Nations *UNEP/PP/INC.4/3* (fn 22 above).
[259] United Nations 'Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its fourth session' (6 May 2024) *UNEP/PP/INC.4/5* at 1.
[260] Ibid para 7 at 2.
[261] Ibid.
[262] United Nations *UNEP/PP/INC.1/14* (fn 18 above; Annex II part I para 4 at 12).
[263] Ibid.
[264] Ibid Annex II part III at 13.
[265] Ibid Annex II part III para 10-12 at 13.
[266] Ibid Annex II part III para 13-17 at 13.

Following INC-1, a Potential Options Document[267] ('POD') was prepared for the INC-2 session to facilitate negotiations. 'Two contact groups'[268] were formed during the meeting to refine the POD on mutually agreeable elements.[269] These negotiations contributed to the adoption of a first draft of the Treaty, which is also known as the 'Zero Draft'.[270]

At the INC-3 session, the text of the Zero Draft – which is a combination of all previous negotiations and especially those of the contact groups at INC-2 – was reviewed, discussed and refined.[271] Following these negotiations, a revised draft ('Revised Zero Draft') was formulated,[272] which formed the basis of the negotiations at the fourth INC session ('INC-4').

At the INC-4 session, two contact groups were once again established to go through the Revised Zero Draft with a fine-tooth comb.[273] In addition, the session called for the establishment of a 'legal drafting group,'[274] to ensure that the various drafts make legal sense without changing the actual elements.[275] The legal drafting group was expected to begin its work at the fifth INC session.[276]

The Revised Zero Draft[277] remains the latest version of the text at the time of writing, with a 'Streamlined Draft Text'[278] to be compiled for discussion at the INC-5 session.[279] At the time

[267] United Nations 'Potential options for elements towards an international legally binding instrument, based on a comprehensive approach that addresses the full life cycle of plastics as called for by United Nations Environment Assembly resolution 5/14' (13 April 2023) *UNEP/PP/INC.2/4*
[268] United Nations *UNEP/PP/INC.2/5* (fn 257 above para 89 at 14).
[269] Ibid.
[270] World Wildlife Fund for Nature *UN Plastic Pollution Treaty 'one step closer' to being realised, as negotiators in Paris agree to start developing a draft treaty with global rules to curb plastic pollution* (2 June 2023) available at https://wwf.panda.org/wwf_news/press_releases/?8901966/UN-Plastic-Pollution-Treaty-one-step-closer-to-being-realised-as-negotiators-in-Paris-agree-to-start-developing-a-draft-treaty-with-global-rules-to-curb-plastic-pollution (accessed on 29 August 2023).
[271] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 1).
[272] Anon 'Third session of negotiations on an international plastics treaty advance in Nairobi' (19 November 2023) *United Nations Environment Programme* available at https://www.unep.org/news-and-stories/press-release/third-session-negotiations-international-plastics-treaty-advance (accessed on 09 January 2024).
[273] United Nations *UNEP/PP/INC.4/5* (fn 259 above para 7 at 2).
[274] Ibid para 93 at 17.
[275] Ibid para 93(a) at 17.
[276] Ibid para 33 at 6.
[277] United Nations *UNEP/PP/INC.4/3* (fn 22 above).
[278] Anon 'Outcomes of the Fourth Negotiating Session on a Global Agreement to End Plastic Pollution' (2 May 2024) *US Department of State* available at https://www.state.gov/outcomes-of-the-fourth-negotiating-session-on-a-global-agreement-to-end-plastic-pollution/ (accessed on 17 October 2024).
[279] Ibid.

of writing, this 'Streamlined Draft Text'[280] had not yet been published but will be developed from the comments, proposals and tracked changes (the 'tracking comments') made at the INC-4 session. For the purposes of the discussion set out below, the tracking comments will be referred to as the 'streamlined comments.'

4.3 THE REVISED ZERO DRAFT TEXT

4.3.1 Introduction

The Revised Zero Draft is divided into six parts. Part One deals with the objective, preamble, definitions, principles and scope.[281] Part Two deals with the actual substance and elements of the International Plastic Treaty.[282] Parts Three and Four deal with implementation,[283] while Parts Five and Six focus on the governing bodies of the Treaty and the annexures, respectively.[284] Parts One and Two of the Revised Zero Draft, as well as additional remarks from the 'streamlined comments', will be discussed hereunder.

4.3.2 Part I: Preamble, Objectives, Definitions and Scope

(a) Preamble

The preamble of the Revised Zero Draft draws heavily on Resolution 5/14 and reiterates that plastic pollution is a 'transboundary' issue that causes large-scale damage to the environment and diminishes sustainable development.[285] At INC-4, some of the delegates proposed that the preamble of the 'Streamlined Draft Text[286] should include a fixed date by which plastic pollution must end, namely 2040.'[287] However, these delegates agreed to suspend their proposal until the 'substantial elements' of the Treaty were finalised.[288]

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[280] Anon 'Outcomes of the Fourth Negotiating Session...' (fn 278 above).
[281] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 3).
[282] United Nations 'Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment' (04 September 2023) *UNEP/PP/INC.3/4* at 3.
[283] Ibid at 3-4.
[284] Ibid at 4.
[285] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 5).
[286] Anon 'Outcomes of the Fourth Negotiating Session...' (fn 278 above).
[287] United Nations 'European Union and its Member States – Submission Preamble' (25 April 2024) *UNEP* available at https://www.unep.org/inc-plastic-pollution/session-4/documents/in-session#TextualSubmissionsGroupStates (accessed on 18 October 2024).
[288] United Nations *UNEP/PP/INC.4/5* (fn 259 above para 63 at 12).

(b) Objectives

The Revised Zero Draft contains two options for possible objectives, both of which speak to protecting human health and the environment, including the marine environment, from plastic pollution[289] and '[achieving] sustainable development.'[290] The second of the two options is the more controversial. This is because it also includes a time-bound target by which to end plastic pollution, namely 2040.[291] Although a 'time-bound target'[292] does have the advantage of placing pressure on State Parties for swift action; many delegates argued that this could result in the instrument being interpreted as having an expiry date.[293] The difficulty with an expiry date is that if plastic pollution is not, in fact, ended by 2040, the problem will outlive the potential solution.[294]

(c) Definitions

Like the objectives, the Revised Zero Draft contains two options for definitions. The first option provides that there should be no standalone set of definitions. The second option is simply a placeholder for the terms to be defined and contains no substantive content.[295]

(d) Principles

Again, the Revised Zero Draft contains two options for possible principles. The first option is simply a placeholder and contains no substantive content. The second option contains a long list of well-established environmental management principles, such as 'common but differentiated responsibilities', 'the polluter pays principle', and 'the precautionary principle'.[296]

(d) Scope

[289] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 6).
[290] Ibid.
[291] Ibid.
[292] United Nations *UNEP/PP/INC.2/5* (fn 257 above Annex I at 16).
[293] Ibid.
[294] Ibid.
[295] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 7).
[296] Ibid.

The scope of the Revised Zero Draft is extremely broad.[297] This is because it includes seventeen options.[298] The first option provides that there should be no standalone provision dealing with the scope of the instrument. The remaining sixteen options are those proposed at the INC-3 session.[299]

Several of these options provide that the scope should include provisions that promote sustainability,[300] protect the marine environment, biodiversity and ecosystems from plastic pollution[301] from 'cradle to cradle,'[302] and that this 'cradle to cradle'[303] strategy should be addressed through a hierarchical approach.[304]

Other options suggested that the instrument should not be limited to a 'time-bound target' in order to ensure its 'longevity',[305] that the instrument should address 'leakages... from anthropogenic activities,'[306] 'legacy plastic pollution'[307] as well as 'maritime sources of pollution' such as fishing gear, to ensure a holistic approach to all sources of plastic pollution.[308]

Apart from the sixteen options proposed at the INC-3 session, the Revised Zero Draft also provides that the scope should be 'attainable, effective and realistic' according to the varying capabilities of countries.[309]

4.3.3 Part II: Core Obligations, Control Measures and Voluntary Approaches[310]

[297] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 8).
[298] Ibid.
[299] Ibid.
[300] Ibid at 9.
[301] Ibid at 8-10
[302] Ibid at 11; Here, 'cradle to cradle' means the full life-cycle of plastic from production to waste.
[303] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 11).
[304] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 8). The hierarchy approach includes dealing with plastic throughout its many phases and various forms through 'avoidance, reduction, reuse, recycling, and elimination'.
[305] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 8).
[306] Ibid at 10.
[307] Ibid at 10; 'Legacy plastics' refer to plastic pollution already present in the environment that cannot be reused or recycled.
[308] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 10).
[309] United Nations *UNEP/PP/INC.4/5* (fn 259 above para 48 at 10).
[310] United Nations 'Potential elements, based on provisions in paragraphs 3 and 4 of United Nations Environment Assembly resolution 5/14, including key concepts, procedures and mechanisms of legally binding multilateral agreements that may be relevant to furthering implementation and compliance under the future international legally binding instrument on plastic pollution, including in the marine environment' (13 April 2023) *UNEP/PP/INC.2/4* at 4.

(a) Introduction

The task of creating a global treaty to combat and ultimately eliminate plastic pollution is a daunting and monumental task.[311] One of the most effective ways in which this task may be accomplished is by separating each phase of the plastic lifecycle into categories along with their associated risks.[312] This helps to prioritise the categories that need to be actioned first, which in turn helps to identify the principal plastic 'pollution drivers' and provide the correct measures for combating these drivers.[313] To be effective, the control measures must be unique to each plastic category and the adjacent implementation needs of that category.[314]

The Revised Zero Draft contains thirteen possible elements stemming from the core obligations discussed at the INC-2 session.[315] Each element addresses a fundamental aspect of plastic pollution holistically by considering the production, consumption and disposal phases of plastics as well as the effects of plastic pollution, recycling and circularity.[316] The substantive elements of the Revised Zero Draft, as well as the 'streamlined comments' from the INC-4 session, are discussed below. However, it is important to note, that the State Parties had not come to a final agreement on these elements at the end of the INC-4 session.[317]

(b) Element one: Primary plastic polymers[318]

This element focuses on plastic from an early point in its lifecycle and seeks to 'prevent and mitigate'[319] the harmful effects that primary plastic polymers have on the environment.[320] In

[311] World Wildlife Fund for Nature *INC-2: Time To Get Specific* (May 2023) at 2 available at https://wwfint.awsassets.panda.org/downloads/wwf_technical_paper___inc2___time_to_be_specific.pdf (accessed on 03 September 2023).
[312] Ibid.
[313] Ibid.
[314] Ibid at 3.
[315] United Nations *UNEP/PP/INC.2/5* (fn 257 above).
[316] United Nations 'Potential elements, based on provisions in paragraphs 3 and 4 of United Nations Environment Assembly resolution 5/14' (fn 310 above para 10-21 at 5-12); United Nations *UNEP/PP/INC.4/3* (fn 22 above).
[317] World Wildlife Fund for Nature *INC-2: Time To Get Specific* (fn 311 above at 1).
[318] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 12).
[319] United Nations 'European Union and its Member States – text proposal on Primary plastic polymers' (29 April 2024) *UNEP* at 1 available at https://www.unep.org/inc-plastic-pollution/session-4/documents/in-session#TextualSubmissionsGroupStates (accessed on 22 October 2024).
[320] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 12); see also United Nations 'European Union and its Member States – text proposal on Primary plastic polymers' (fn 319 above).

order to 'reduce the demand for … primary plastic polymers'[321] and, therefore, its production, this element proposes taking measures such as setting global or national targets,[322] and imposing 'regulatory requirements for … producers.'[323] This element further aims to promote the clean production of plastics and suggests a greater reliance on 'secondary plastics.'[324]

(c) Element two: Chemicals and polymers of concern[325]

This element focuses on so-called chemicals and polymers of concern and proposes that they should be 'eliminated' by a date yet to be decided. It also suggests that the sale of plastic products that contain these chemicals should be prohibited[326] where they may have detrimental effects on 'human health or the environment' throughout the plastic lifecycle.[327]

When it comes to identifying those chemicals and polymers that are of concern and which will be prohibited, both the production of plastic and the management of waste plastic will be taken into consideration.[328] This element shows a clear intention to tackle plastic pollution throughout its lifecycle by taking into account, not just the manufactured product at the end of its life, but also its molecular makeup.

(d) Element three: Problematic and avoidable plastic products[329]

This element focuses on two categories of plastic products: first, problematic and avoidable plastic products, including short-lived and single-use plastic products;[330] and, second, intentionally added microplastics.[331] Each will be discussed in turn.

[321] United Nations 'European Union and its Member States – text proposal on Primary plastic polymers' (fn 319 above).
[322] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 12).
[323] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 13); see also United Nations 'European Union and its Member States – text proposal on Primary plastic polymers' (fn 319 above).
[324] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 12).
[325] Ibid at 13.
[326] Ibid.
[327] Ibid.
[328] Ibid at 13-15.
[329] Ibid at 16.
[330] Ibid.
[331] Ibid at 17.

(i) Problematic and avoidable plastic products, including short-lived and single-use plastic products

This element focuses on problematic and avoidable plastics and proposes that the 'production, sale, distribution, import and export'[332] of this category of plastics should be disallowed, reduced and phased out.[333]

The reduction and phasing out of short-lived and single-use plastics was a much-discussed issue at the INC-4 session.[334] This is because of the negative impact these types of plastics have on the environment through littering and the amount of time they take to decompose.[335]

A draft list of the criteria to be applied was proposed by some of the delegates at the INC-4 session. These criteria were based on the 'likelihood of the product causing harm to the environment [and] biodiversity,'[336] especially as it relates to 'ingestion' and 'entanglement.'[337]

(ii) Intentionally added microplastics

This element focuses on 'intentionally added microplastics'. Microplastics are among the most problematic categories of plastics as they affect the ocean's ability to absorb carbon dioxide from the environment.[338] Research relating to microplastics is also lacking and requires more attention to understand its impacts on marine environments.[339] The streamlined comments

[332] United Nations *UNEP/PP/INC.3/4* (fn 282 above at 16); see also United Nations 'European Union and its Member States – proposal on problematic and avoidable plastic products' (29 April 2024) *UNEP* at 4 available at https://www.unep.org/inc-plastic-pollution/session-4/documents/in-session#TextualSubmissionsGroupStates (accessed on 24 October 2024).
[333] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 16-17).
[334] United Nations 'Conference room paper on an initial list of problematic and avoidable plastic products considered for elimination submitted by: Georgia, Peru, Rwanda, Switzerland and Thailand' (24 April 2024) *UNEP* at 9 available at https://www.unep.org/inc-plastic-pollution/session-4/documents/in-session#TextualSubmissionsGroupStates (accessed on 26 October 2024).
[335] Ibid at 9.
[336] United Nations 'Proposal by the United Kingdom and Thailand, on problematic and avoidable plastic products' (23 April 2024) *UNEP* at 6 available at https://www.unep.org/inc-plastic-pollution/session-4/documents/in-session#TextualSubmissionsGroupStates (accessed on 26 October 2024).
[337] Ibid.
[338] World Wildlife Fund for Nature *towards a treaty to end plastic pollution* (fn 239 above at 16).
[339] S Singh et al 'Microplastic pollution in the water column and benthic sediment of the San Pedro Bay, California, USA' (2025) 269 *Environmental Research* 1-14 at 1.

emphasised that microplastics are persistent '...especially [in] terrestrial and freshwater environments'[340] affecting the food chain '...in freshwater and marine ecosystems.'[341]

It is not surprising, therefore, that this element proposes that intentionally added microplastics should be prohibited at all stages of the plastic life-cycle.[342]

(e) Element four: Exemptions available upon request[343]

The element focuses on exemptions to the manufacture, use and sale of 'problematic and avoidable plastic products, including short-lived and single-use plastic products and intentionally added microplastics.'[344] It proposes that while exemptions may be granted after the International Plastic Treaty comes into effect, these exemptions must expire on a specific date, following which that plastic product, polymer or chemical may no longer be manufactured, used or sold unless an extension to the exemption period is granted.[345] The streamlined comments propose that such an exemption may not be applied for where such 'plastic products, chemicals and polymers are harmful to the... environment.'[346]

(f) Element five: Product design, composition and performance[347]

This element is divided into four sub-categories:

(i) 'Product design and performance';[348]

(ii) 'Reduce, reuse, refill and repair of plastics and plastic products';[349]

(iii) 'Use of recycled plastic contents';[350] and

(iv) 'Plastics and plastic products'.[351]

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[340] United Nations 'Conference room paper...' (fn 334 above at 8).
[341] Ibid at 9.
[342] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 17).
[343] Ibid at 18.
[344] Ibid.
[345] Ibid.
[346] United Nations 'Submission by Samoa, on behalf of the small island developing states at the Fourth Session of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment' (26 April 2024) *UNEP* at 1 available at https://www.unep.org/inc-plastic-pollution/session-4/documents/in-session#TextualSubmissionsGroupStates (accessed on 28 October 2024).
[347] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 19).
[348] Ibid.
[349] Ibid at 21.
[350] Ibid at 22.
[351] Ibid at 23.

(i) Product design and performance

This element focuses on the design and performance of plastic products and proposes that it must adhere to 'minimum design and performance criteria'[352] that meet uniform international standards to create durable products that can be reused and recycled; that limits the need for products to be produced from primary plastic polymers, thus ensuring a 'circular economy'; and that ensures 'environmentally sound and safe' waste management.[353]

(ii) Reduce, reuse, refill and repair of plastics and plastic products

This element focuses on reducing, reusing, refilling and repairing plastic products and proposes that 'minimum... targets'[354] should be set for the 'distribution, sale, and consumption,'[355] of plastic products, and that these minimum targets should be achieved by a date to be decided.[356] The streamlined comments suggest incentivising 'reuse systems,'[357] including the 'return,' 'refill,' and 'repair' of plastics.[358]

(iii) Use of recycled plastic contents

This element focuses on the use of recycled plastic and proposes that a 'minimum percentage' of recycled plastic should be included in plastic products within a country's market.[359] This will promote recycling and will limit the reliance on primary plastic polymers, which leak into the environment and find their way to the ocean.[360]

(iv) Alternative plastics and plastic products

[352] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 20).
[353] Ibid at 19-21.
[354] Ibid at 21.
[355] Ibid.
[356] Ibid at 21-22.
[357] United Nations 'European Union and its Member States – Text proposal on Product design and performance' (29 April 2024) *UNEP* at 2 available at https://www.unep.org/inc-plastic-pollution/session-4/documents/in-session#TextualSubmissionsGroupStates (accessed on 28 October 2024).
[358] Ibid.
[359] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 23).
[360] Ibid.

This element focuses on alternative plastics and plastic products and proposes that the use of such alternatives should be promoted. Although a list of alternatives has not been included in the Revised Zero Draft, it does state that any substitutes should be 'safe, environmentally sound and sustainable, taking into account their potential for environmental, economic, social and human health impacts, including food security.'[361] In addition, it also states that any substitutes should promote sustainable development, and the process of developing these alternatives should not be rushed in order to ensure that they themselves are not harmful.[362] Alternatives could include 'bio-based, biodegradable and compostable plastics.'[363] However, the development of these alternatives must adhere to the 'waste hierarchy.'[364]

(g) Element six: Non-plastic substitutes[365]

This element focuses on non-plastic substitutes and, much like element five above, it proposes that the development and use of 'non-plastic substitutes' should be carried out in a 'safe, environmentally sound and sustainable ...'[366] manner whilst considering 'environmental, economic, social and human health impacts.'[367] It also suggests that non-plastic substitutes should be incentivised and that the 'waste hierarchy' must be adhered to.[368]

(h) Element seven: Extended producer responsibility[369]

This element focuses on extended producer responsibility and proposes that producers and importers across the globe should be held accountable for plastic throughout its life cycle by creating an incentive to recycle products and thus improving global recycling rates.[370] Mandatory EPR schemes, the Revised Zero Draft states, will be used as a tool to 'minimize [the] plastic pollution footprint'[371] of producers.

[361] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 23).
[362] United Nations *UNEP/PP/INC.2/5* (fn 257 above Annex I at 19).
[363] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 24).
[364] Ibid at 24-25.
[365] Ibid at 24.
[366] Ibid at 24-26.
[367] Ibid.
[368] Ibid at 25.
[369] Ibid at 26.
[370] Ibid at 26-27.
[371] Ibid.

(i) Element eight: Emissions and releases of plastic throughout its life cycle[372]

This element focuses on the emission and release of plastic throughout its life cycle. It proposes that plastic, in all its forms and at all stages of its lifecycle, should not be emitted or released into the environment, including soil and water,[373] and that this goal must be achieved by using the 'best available techniques and best environmental practices.'[374] Apart from preventing the emission and release of plastic, this element also proposes that plastic pollution, including microplastics, should be captured and removed from 'freshwater bodies, the marine environment and ecosystems.'[375]

(j) Element nine: Waste management[376]

This element is divided into (i) plastic waste management;[377] and (ii) fishing gear.[378]

(i) Plastic waste management

This element focuses on the management of plastic waste. It proposes that plastic waste should be managed in a 'safe and environmentally sound manner...' whilst upholding the 'waste hierarchy.'[379] The 'minimum requirements' and 'targets' to be met in terms of waste management will be included in an annexure to the International Plastic Treaty.[380] In addition, this element also proposes that the release of harmful substances from plastic waste should be prohibited and that the State Parties to the Treaty must prevent, *inter alia*, 'ocean dumping.'[381]

(ii) Fishing gear

[372] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 27).
[373] Ibid at 28.
[374] Ibid.
[375] United Nations *UNEP/PP/INC.3/4* (fn 282 above at 14).
[376] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 30).
[377] Ibid.
[378] Ibid at 32.
[379] Ibid at 30-32.
[380] United Nations *UNEP/PP/INC.3/4* (fn 282 above at 15).
[381] United Nations *UNEP/PP/INC.3/4* (fn 282 above at 15); United Nations *UNEP/PP/INC.4/3* (fn 22 above at 33).

This element focuses on the management of fishing gear. Fishing gear is a type of 'ocean-based plastic pollution',[382] and is one of the major contributors to marine plastic pollution.[383] Fishing gear poses a significant threat to 'marine habitats'[384] because it continues to perform its main function of capturing and killing marine life long after it has fulfilled its purpose.[385] Since it has high leakage rates and its effects are among the most harmful, the instrument should make this a priority.[386]

This element proposes that fishing gear waste should be managed by 'marking, tracing and reporting …' of fishing gear in an attempt to 'prevent, reduce and eliminate, abandoned, lost or otherwise discarded fishing gear.'[387] The streamlined comments have suggested incentivising 'ecologically sensitive retrieval of reported lost gear'[388] in an attempt to 'minimize further harm to marine ecosystems.'[389]

(k) Element ten: Trade in listed chemicals, polymers and products, and in plastic waste[390]

This element focuses on the trade in chemicals, polymers, plastic products and plastic waste. it is divided into (i) trade in listed chemicals, polymers and plastic products;[391] and (ii) the transboundary movement of plastic waste.[392]

(i) Trade in listed chemicals, polymers and products

This element focuses on the trade of listed chemicals, polymers and plastic products containing any such chemicals or polymers. It proposes that the export of these chemicals, polymers and products should be prohibited unless an exemption or permit to trade has been granted in terms

[382] Anon 'Marine plastic pollution' (November 2021) *The International Union for Conservation of Nature* available at https://www.iucn.org/resources/issues-brief/marine-plastic-pollution#:~:text=Plastic%20pollution%20is%20a%20widespread,and%20contributes%20to%20climate%20change. (accessed on 27 August 2023).
[383] Ibid.
[384] World Wildlife Fund for Nature *towards a treaty to end plastic pollution* (fn 239 above at 15).
[385] Ibid.
[386] Ibid.
[387] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 32-33).
[388] United Nations 'Submission by Samoa...' (fn 346 above at 1).
[389] Ibid at 1-2.
[390] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 34).
[391] Ibid.
[392] Ibid at 35.

of the International Plastic Treaty.[393] The Revised Zero Draft proposes strict reporting requirements that note the compositions of the products to ensure transparency, protection of the environment and protection of human health.[394]

(ii) Transboundary movement of plastic waste

This element focuses on the transboundary movement of plastic waste. It proposes that the movement of plastic waste between countries should be prohibited and should only be authorised for 'the purpose of its safe and environmentally sound management... .'[395] Plastic waste will need to be marked and labelled for monitoring purposes.[396]

(l) Element eleven: Existing plastic pollution, including in the marine environment[397]

The element focuses on legacy waste,[398] which is waste that has already accumulated in the environment. Given that 75 per cent of plastic ever produced has accumulated in the environment as waste,[399] this is a particularly pressing concern.[400] This element proposes that areas that have high concentrations of existing plastic pollution,[401] especially in freshwater and marine environments ('hotspots'),[402] should be identified and criteria established to address these hotspots.[403]

(m) Element twelve: Just transition[404]

[393] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 35).
[394] Ibid at 36.
[395] Ibid at 35-36.
[396] Ibid at 36.
[397] Ibid.
[398] United Nations 'Potential elements, based on provisions in paragraphs 3 and 4 of United Nations Environment Assembly resolution 5/14...' (fn 310 above para 19(a)(ii) at 11).
[399] World Wildlife Fund for Nature *Towards A Treaty To End Plastic Pollution: Global Rules To Solve A Global Problem* (3 November 2022) available at https://wwfint.awsassets.panda.org/downloads/towards_a_treaty_to_end_plastic_pollution___final_report.pdf (accessed 09 August 2023).
[400] United Nations 'Potential elements, based on provisions in paragraphs 3 and 4 of United Nations Environment Assembly resolution 5/14...' (fn 310 above para 19(a) at 11).
[401] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 36).
[402] Ibid.
[403] Ibid.
[404] Ibid at 37.

This element focuses on a just transition. It states that the International Plastic Treaty should be fair and equitable by promoting skills development and education, enhancing working conditions in the plastic sphere, especially as it relates to informal waste pickers and creating opportunities to earn an income from the plastic chain to improve communities' lives.[405] Marginalised groups such as women, children and the youth are also prioritised hereunder.[406]

(n) Element thirteen: Transparency, tracking, monitoring and labelling[407]

This final element focuses on transparency, tracking, monitoring and labelling. It provides that the producers of chemicals, polymers and plastic products must report on the 'composition' of plastic products in order to, first, ensure the 'traceability' of a product (which will be useful in holding producers accountable when implementing an EPR scheme) and, second, to assist in the 'safe and environmentally sound use, recycling and disposal of plastics and plastic products.'[408]

Lastly, Part II of the Revised Zero Draft makes some 'overarching' points akin to common themes that run throughout the instrument.[409] It is noted that through 'national policies', society will be responsible for '[promoting] plastic circularity and [preventing] the leakage of plastics into the environment'[410] by taking into account the entire lifecycle of plastic.[411] It is also emphasised that 'mandatory and voluntary measures' in the International Plastic Treaty will be given life through national policies,[412] thus, comparisons between the Treaty and South African law and policies would need to be drawn to establish what mechanisms already exist and what additions need to be made. While the Revised Zero Draft also provided provisions in Parts Three and Four relating to the implementation of the Treaty,[413] this dissertation is concerned with how the substantive provisions discussed above can be domesticated into South Africa's current national legislation.

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[405] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 37-39).
[406] Ibid at 38-39.
[407] Ibid at 39.
[408] United Nations *UNEP/PP/INC.3/4* (fn 282 above at 19-20); United Nations *UNEP/PP/INC.4/3* (fn 22 above at 39-40).
[409] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 40).
[410] Ibid.
[411] Ibid.
[412] Ibid.
[413] United Nations *UNEP/PP/INC.3/4* (fn 282 above at 3-4);

4.4 CONCLUSION

As the discussion set out above shows, the Revised Zero Draft seeks, first, to ban, phase out or reduce plastics throughout their lifecycle;[414] second, as a step-down, to promote the 'non-toxic circularity'[415] or recycling of plastics that do not fall within the first category;[416] and, third, as a further step-down, to promote effective waste management.[417] It is vital that these 'control measures'[418] are thoughtfully prepared for each concerning category of plastic in order to ensure their effectiveness.[419]

This hierarchical system of reducing, circulating and managing plastics (also called 'levers') must work in conjunction with one another to reach the goal of addressing plastic pollution throughout its various life stages.[420] These levers can address the various parts of the 'plastic value-chain'[421] with bans (lever one) being the most favourable approach to end plastic pollution because ultimately, 'a plastic not produced, is a plastic not polluting.'[422] Bans are instantaneous and create no other option but to produce alternatives as opposed to having a 'time-bound' target, which is more of a slow burn.[423] If the action to address the marine plastic crisis is not immediate, then the slow burn will quite literally accelerate our already burning planet.[424]

Lever two in this hierarchy, which addresses circularity and recycling, will ensure that plastics that were not banned in lever one, as well as single-use plastics with zero recycling potential, are eliminated. Lever two will require product design criteria to comply with standards that will allow for a plastic product's repeated use and recyclability.[425] The last rung in this hierarchy, lever three, deals with waste management in relation to 'exception plastics,'[426] which

[414] World Wildlife Fund for Nature *INC-2: Time To Get Specific* (fn 311 above at 3).
[415] Ibid.
[416] Ibid.
[417] Ibid.
[418] World Wildlife Fund for Nature *towards a treaty to end plastic pollution* (fn 239 above at 18).
[419] Ibid.
[420] Ibid at 18-19.
[421] Ibid at 19.
[422] Ibid.
[423] Ibid.
[424] Jordan Salama 'Earth Is on Fire' (1 January 2021) *Scientific American* available at https://www.scientificamerican.com/article/earth-is-on-fire/ (accessed on 08 September 2023).
[425] World Wildlife Fund for Nature *towards a treaty to end plastic pollution* (fn 239 above at 19).
[426] Ibid.

are those plastics that are essential to produce, such as medical supplies.[427] Effective waste management will improve plastic leakage; however, it should only be used when absolutely necessary on account of its high costs.[428]

This dissertation will now turn to assess South Africa's current legislation and policies in relation to the Revised Zero Draft to decipher the common elements and shortcomings in order to domesticate the International Plastic Treaty into national legislation.

[427] World Wildlife Fund for Nature *towards a treaty to end plastic pollution* (fn 239 above at 19).
[428] Ibid.

CHAPTER FIVE: ANALYSIS AND CONCLUSION

5.1 INTRODUCTION

Key aspects of the International Plastic Treaty were set out and discussed in the previous chapter. As this discussion revealed, the Treaty has adopted a hierarchical approach towards plastic pollution. In terms of this hierarchical approach, plastic pollution should ideally be eliminated. Where this is not possible, plastic pollution should be recycled or re-used, and if that is not possible, plastic pollution should be disposed of appropriately. To achieve this standard, the Treaty has focused on the production, consumption and disposal of plastic as a mechanism to address the full lifecycle of plastic in order to end plastic pollution.

While the International Plastic Treaty encompasses a wide range of elements, these elements can be sorted into three core obligations, namely: the production, consumption and disposal of plastic. The Treaty, therefore, has set a standard against which the statutory framework discussed in Chapter Two of this dissertation may be tested. The purpose of this chapter is to test the three core obligations of the Treaty against that statutory framework to determine whether it adequately addresses each obligation. In light of this evaluation, the chapter will investigate the most appropriate and effective way of domesticating the Treaty into South African law on the assumption that it will ultimately be signed and ratified by South Africa.

This chapter will begin by looking at how a treaty becomes law in South Africa and then test each of the three core obligations of the International Plastic Treaty against the statutory framework discussed in Chapter Two of this dissertation. Following this assessment, this chapter will determine whether the existing statutory framework can accommodate the Treaty or whether an entirely new piece of legislation will need to be passed, along with suggestions on the best course of action to take. Last, this chapter will provide the concluding remarks to answer the questions raised at the beginning of this dissertation.

5.2 APPLICATION OF INTERNATIONAL LAW IN SOUTH AFRICA

Due to South Africa being a sovereign state,[429] international law does not dictate how it accedes to and applies a treaty. Instead, section 231 of the Constitution[430] deals with the 'domestic requirements'[431] for South Africa to be bound by treaties. Broadly speaking, international law (and, in particular, the International Plastic Treaty) can be applied in South Africa in two ways. The first is directly by domesticating the Treaty as provided for in section 231(4) of the Constitution.[432] The second is indirectly by considering international law when interpreting South African law as provided for in section 39(1)(b)[433] and section 233[434] of the Constitution.[435] Since the Treaty has not yet been finalised, it is difficult to predict exactly what South Africa's approach will be to the application of the Treaty at a domestic level. For the purpose of this dissertation, however, it is assumed that the Treaty will be applied directly by domesticating it into national legislation.

Domestication refers to the incorporation of the provisions of a treaty into South African legislation.[436] As previously mentioned, section 231(4) of the Constitution makes provision for this by stating that '[a]ny international agreement becomes law in the Republic when it is enacted into law by national legislation; but a self-executing provision of an agreement that has been approved by Parliament is law in the Republic unless it is inconsistent with the Constitution or an Act of Parliament.' While section 231(4) has an exception to an international agreement becoming law through the enactment of national legislation, namely 'self-executing provisions,' the Constitutional Court has clarified that 'international treaty law only becomes law in the Republic once enacted into domestic legislation.'[437] Moving forward on the assumption that the International Plastic Treaty will be domesticated through the enactment of legislation, this chapter will test the statutory framework discussed in Chapter Two of this

[429] J Dugard *Dugard's International Law: A South African Perspective* 5ed (2018) at 610.
[430] Constitution of the Republic of South Africa, 1996.
[431] A Coutsoudis 'Making Sense of the South African Courts Evolving Approach to the Application of Unincorporated Treaties' (2023) 13 *Constitutional Court Review* 415–469 at 420.
[432] Ibid.
[433] S 39(1) states that 'When interpreting the Bill of Rights, a court, tribunal or forum—
(a) must promote the values that underlie an open and democratic society based on human dignity, equality and freedom;
(b) must consider international law; and
(c) may consider foreign law.'
[434] S 233 states that 'When interpreting any legislation, every court must prefer any reasonable interpretation of the legislation that is consistent with international law over any alternative interpretation that is inconsistent with international law.'
[435] Coutsoudis (fn 431 above at 421).
[436] Ibid at 420.
[437] *National Commissioner of the South African Police Service v Southern African Human Rights Litigation Centre & Another* 2015 (1) SA 315 (CC) at para 24.

dissertation against the fundamental aspects and standards set by the Treaty. This will allow an assessment of South Africa's statutory framework to determine if it is equipped to incorporate the provisions of the Treaty by amending existing legislation or whether an entirely new piece of legislation needs to be enacted.

5.3 THE INTERNATIONAL PLASTIC TREATY V THE SOUTH AFRICAN STATUTORY FRAMEWORK

5.3.1. Introduction

As we have already seen, the International Plastic Treaty aims to 'end plastic pollution across the full life cycle of all plastics.'[438] Although the Revised Zero Draft of the Treaty contains a wide range of elements, it is submitted that these elements can be reduced to regulating the production, consumption and disposal phases of plastic as a means to end plastic pollution. In this section, the South African statutory framework discussed in Chapter Two of this dissertation will be tested against the standards set in each of the Treaty's three categories.

5.3.2. Production of plastic

In order to effectively combat the plastic pollution crisis, it is generally accepted that plastic pollution should be tackled at its source.[439] Given this general agreement, it is not surprising that the International Plastic Treaty has placed significant focus on the production of plastic.[440] To regulate production, the Treaty has proposed that a number of elements should be included in the final draft. Among these are the following:

- requiring 'minimum design and performance criteria'[441] to ensure that plastics do not contain chemicals and polymers, amongst other things, that are harmful to the environment during production, consumption or disposal;
- setting national targets to reduce the production of harmful plastics;[442]

[438] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 8).
[439] Ibid at 9.
[440] Ibid.
[441] Ibid at 20.
[442] Ibid at 12.

- 'improv[ing] the composition of plastics and plastic products'[443] to ensure that plastics are produced in a manner that has a higher chance of being reused and recycled after consumption, is less harmful to the environment upon becoming waste[444] and eliminates the dependency on primary plastics for production;[445]
- regulating the production of problematic plastics such as 'short-lived and single-use plastic products;'[446]
- requiring a 'minimum percentage' of recycled plastic to be included in plastic products within a country's market;[447] and
- producing alternatives to plastic.[448]

Unlike the International Plastic Treaty, the South African statutory framework focuses only on reusing and recycling[449] rather than tackling the plastic crisis at its source.[450] Or, to put it another way, the South African statutory framework has focused on the 'symptoms rather than the causes of plastic waste.'[451]

Although the statutory framework focuses only on the reusing and recycling rather than the production of plastic, it is interesting to note that the 2020 NWMS, which is a legislative measure utilised to meet the objectives of the NEM: WA,[452] adopts a broader approach and speaks to reducing the amount of plastic generated as a 'waste prevention intervention.'[453] This shifts South Africa's focus from end-of-life only to a more holistic understanding of what the root cause of plastic pollution actually is.[454]

In order to control and effectively manage pollution, the 2020 NWMS has identified that a cleaner production strategy to prevent pollution, as required by the waste hierarchy detailed in

[443] United Nations *UNEP/PP/INC.4/3* (fn 22 above at21).
[444] Ibid at 19.
[445] Ibid at 19-21.
[446] Ibid at 16.
[447] Ibid at 23.
[448] Ibid at 21-22.
[449] S 16 of Act 59 of 2008; Anon 'The legal, policy and institutional frameworks governing marine plastics in South Africa' (fn 17 above at 2).
[450] F Alpizar (fn 26 above at 28).
[451] M.L Van Rensburg (fn 4 above at 2).
[452] S 6(1) of the NEW: WA.
[453] 2020 NWMS (fn 70 above at 13).
[454] Ibid.

section 28 of the NEMA, is necessary.[455] This shows South Africa's intention to address the full lifecycle of plastic by noting the importance of regulating production processes.

Despite the broader approach adopted in the 2020 NWMS, it is abundantly clear that the South African statutory framework is not well-positioned to incorporate those provisions of the International Plastic Treaty that relate to the production of plastic. In these circumstances, an amendment to existing legislation would be illogical due to the large, detailed pieces of information regarding regulating production that are completely missing in South African legislation, but which are being considered in the Treaty.

5.3.3. Consumption of plastic

The manner in which plastic is consumed is a result of how it is produced. The consumer is at the producer's mercy in the sense that the type of plastic produced is out of their control, and if plastic is primarily produced over sustainable alternatives, then the consumer is not really given a choice. However, the consumer is then in control of disposing of plastic waste in an environmentally sound manner.[456] Again, the International Plastic Treaty aims to eliminate the practice of plastic becoming waste and promotes the reuse and recyclability of plastic through production.[457] For this reason, the Treaty does not contain as many elements relating to the consumption of plastic as it does relating to the production and disposal of plastic.

To this end, the International Plastic Treaty provides for the regulation and reduction 'of problematic and avoidable plastic products, including short-lived and single-use plastic products,'[458] by prohibiting the 'sale, distribution, import and export'[459] of these plastic products. Additionally, the Treaty, in regulating consumption, aims to 'reduce the use of plastics across the value chain'[460] through the use of environmentally friendly alternatives.[461] Focusing on how plastic is consumed is another important rung in meeting the objective of the Treaty to end plastic pollution,[462] however, much like the production of plastic above, the South African

[455] 2020 NWMS (fn 70 above at 13).
[456] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 20).
[457] Ibid at 19-21.
[458] Ibid at 16.
[459] Ibid.
[460] Ibid at 20.
[461] Ibid.
[462] Ibid at 6.

statutory framework has no provisions in place to regulate the consumption of plastic within its borders.

The regulation that comes the closest to managing consumption in South Africa relates to the partial ban on plastic bags stemming from section 24(d) of the Environmental Conservation Act[463] as part of the EPR program.[464] Unfortunately, South Africans have become accustomed to paying for the single-use products and still rely heavily on plastic products.[465] This regulation alone is simply not enough to cater to the elements of the International Plastic Treaty to regulate the consumption of plastic.

Given that a vital aspect of the International Plastic Treaty is missing from the environmental management suite of Acts, it would also not make sense to amend existing legislation to give effect to the Treaty as this would require extensive changes. Additionally, since there is presently no framework for regulating the consumption of plastic, amending current legislation would raise the question as to which of the suite of environmental management Acts would one begin to amend in order to accommodate the Treaty.

5.3.4. Disposal of plastic

The third core aspect of the International Plastic Treaty is the disposal or the end-of-life of a particular plastic product.[466] When the Treaty speaks to the disposal of plastic waste or plastic pollution, it does not only refer to plastic waste and pollution at its end of life but also to the waste and pollution generated throughout its entire lifecycle, including waste and pollution from the production and consumption of plastic.[467] The Treaty addresses the waste and pollution generated by plastic from various angles, including:

- employing 'waste management'[468] practices such as recycling and EPR schemes that utilise 'marking, tracing and tracking' in order to 'prevent, reduce and eliminate' plastic waste and pollution;[469]

[463] Environment Conservation Act 73 of 1989 ('ECA'). The ECA has since been repealed and replaced by the NEMA.
[464] LH Frost (fn 144 above at 22).
[465] Ibid at 5.
[466] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 6).
[467] Ibid at 27.
[468] Ibid at 30.
[469] Ibid.

- highlighting the need for waste to be managed through the utilisation of the waste hierarchy;[470]
- regulating 'emissions and releases of plastic throughout its life cycle;'[471] and
- addressing 'existing plastic pollution, including in the marine environment.'[472]

Unlike the other two core aspects of the Treaty, this core aspect is addressed by South Africa's suite of environmental management Acts. As we have already seen, the NEMA contains a set of environmental management principles, the most relevant of which, in this context, is the polluter pays principle.[473] This principle is given detailed effect in the NEM: WA and NEM: ICMA.

The NEM: WA addresses the disposal of plastic waste or plastic pollution through its focus on waste management, the waste hierarchy and EPR schemes.[474] Chapter Three explained that the 2020 NWMS is a legislative measure utilised to reach the objectives set out in the NEM: WA.[475] Aside from regulating 'product design, raw material selection, [and the] manufacture, use and end of life,' of products,[476] the 2020 NWMS also makes room for EPR schemes.[477]

EPR schemes are a measure contemplated by the 2020 NWMS to implement 'effective waste management policies ...'[478] that are in line with the waste hierarchy to help achieve the objectives of the NEM: WA.[479] EPR schemes are contained in section 18 of the NEM: WA and element nine of the Revised Zero Draft of the International Plastic Treaty.[480] EPR schemes and the polluter pays principle go hand in hand as both are punitive measures that hold polluters accountable to remedy the pollution that they have caused.

Section 18(2) of the NEM: WA provides guidance for products subjected to EPR, by requiring minimum percentages of waste to be salvaged for reuse and recycling,[481] specifying labelling

[470] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 30).
[471] Ibid at 27.
[472] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 36).
[473] S 2(4)(p) of the NEMA.
[474] S 18 of the NEM: WA; see also the preamble to the NEM: WA.
[475] 2020 NWMS (fn 70 above at 8).
[476] Ibid at 13-14.
[477] Ibid at 13.
[478] Ibid.
[479] Ibid.
[480] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 27).
[481] S 18(2)(d) of the NEM: WA.

requirements,[482] as well as stipulating requirements for product design and composition.[483] This is reflected under elements five[484] and thirteen[485] of the Revised Zero Draft of the International Plastic Treaty. While section 18 of the NEM: WA shows great promise in aligning with the Treaty's provisions, its greatest shortcoming is that the guidance provided in relation to product design, recycling and labelling only extends to categories of waste identified by the Minister and not to all plastic waste.[486]

Additionally, despite its focus on waste management, the flawed definition of 'waste' in the NEM: WA may cause interpretation issues relating to plastic waste, if the NEM: WA is amended to include the elements of the International Plastic Treaty.

The NEM: ICMA sets out, *inter alia*, to 'control pollution in the coastal zone [as well as other] adverse effects on the coastal environment.'[487] While this is one of its aims, its provisions lack grit to this end. South Africa's provisions relating to marine pollution fall short of regulating plastic especially in the form of pollution as the NEM: ICMA only makes reference to the 'discharge of effluent into coastal waters.'[488] Pollution addressed in this piece of legislation deals only with point sources of pollution despite the fact that marine plastic pollution emanates from both point and non-point sources.[489] The NEM: ICMA is meant to protect the coastal environment[490] but does not completely address plastic pollution, save for a vague attempt to cover multiple aspects of ocean protection under the duty of care in section 58 of the Act. This clearly highlights South Africa's failure to adequately address pressing issues that threaten the ocean and as a result, the NEM: ICMA lacks the integrity to be the vehicle through which the specific and holistic provisions of the International Plastic Treaty are domesticated into national legislation.

While the provisions above show South Africa's intent to manage waste and pollution, the International Plastic Treaty is concerned with more than just plastic waste. The NEM: WA

[482] S 18(2)(e) of the NEM: WA.
[483] S 18(2)(g) of the NEM: WA.
[484] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 19).
[485] Ibid at 39.
[486] S 18(1)(a) of the NEM: WA.
[487] Long title of the NEM: ICMA.
[488] S 69 of the NEM: ICMA.
[489] ND King (fn 7 above at 615).
[490] Preamble to the NEM: ICMA.

focuses on the end of life of plastic through reuse and recycling[491] rather than the approach of the Treaty that deals with plastic throughout its lifecycle.[492] Underpinning both the NEM: WA and the Treaty is the 'waste hierarchy.'[493] Unfortunately, South Africa applies this hierarchy only in relation to the waste at a products end of life,[494] whereas the Treaty applies it in relation to plastic waste at all stages of the plastic lifecycle from production to disposal.[495] Furthermore, the provisions in the NEM: ICMA relating to plastic pollution are underwhelming despite it being the primary legislation to protect South Africa's oceans. These Acts, while showing promise, would require significant and wide-ranging amendments as more information is omitted than included. In enacting a new piece of legislation, these initial efforts by South Africa will not go unnoticed and will play a huge role in informing new legislation instead of returning to the drawing board to reinvent the wheel.

5.3.5. Domesticating the International Plastic Treaty

South African law is anthropocentric in nature by the fact that economic and social considerations take preference as they have a greater benefit to humans than an environmental consideration,[496] or so the misinformed understanding goes. The very definition of 'environment' in the NEMA emphasises this point through its explanation of how the environment is 'made of' elements such as land, water, micro-organisms, plants and animals but which humans 'exist in ... .'[497] It is apparent that while everything else on Earth is one with the environment and contributes to its makeup, the definition indicates that the environment revolves around humans to serve our existence. We see the concept of sustainable development run like an aorta throughout the suite of environmental management Acts, but with the definition of the 'environment' alluding to the preservation of human life over the environment, it is easy to see why social and economic concerns take preference over the environment.

[491] S 16 of Act 59 of 2008; Anon 'The legal, policy and institutional frameworks governing marine plastics in South Africa' (fn 17 above at 3).
[492] F Alpizar (fn 26 above).
[493] Preamble of the NEM: WA; United Nations *UNEP/PP/INC.4/3* (fn 22 above).
[494] Preamble of the NEM: WA.
[495] United Nations *UNEP/PP/INC.4/3* (fn 22 above).
[496] S 2(2) of the NEMA specifically supports this by stating that '(2) Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.'
[497] S 1 of the NEMA.

As previously highlighted in Chapter Three, the definition of 'pollution' in the NEMA,[498] which is vital to integrating the International Plastic Treaty into South African law, places emphasis on the adverse effects on human life rather than on how pollution adversely affects the environment.[499] Its focus in relation to the environment is not how it is impacted but rather how pollution affects its ability to serve human life. This highlights that even though the NEMA is a legislative measure contemplated by section 24 of the Constitution,[500] '... that promotes sustainable development'[501] (much like the Treaty)[502] and should be a measure relied on to domesticate the Treaty, the NEMA and the Treaty are fundamentally different in the sense that the former seeks to preserve human life, whilst the latter seeks to preserve the natural world.[503] Perhaps the White Paper[504] from which the NEMO and the MSPA both find their roots, was truly on to something by turning the blueprint on its head and recognising the need for '... an ecosystem and earth system approach to ocean management.'[505]

This intention did materialise in section 5(1)(d) of the MSPA and through this earth system approach, both the NEMO and the MSPA, unlike the NEM: ICMA, recognise that nothing can gained from the ocean if it is not sufficiently protected. This is the first provision in South African legislation to recognise that environmental management requires a unique eco-centric approach and not an anthropocentric one.[506] This idea of an 'earth system approach'[507] is echoed in the International Plastic Treaty as a result of the fact that it promotes the SDGs, which are aimed at protecting the natural world.[508] It is important for this 'eco-centric approach' to be recognised as a necessary measure that deviates from the existing 'sector-based approach'', which places more emphasis on economic and social concerns than environmental concerns.[509]

[498] S 1 of the NEMA.
[499] Ibid.
[500] ArcelorMittal (fn 150 above; para 4).
[501] Preamble to the NEMA.
[502] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 6).
[503] Ibid.
[504] White paper (fn 8 above).
[505] Ibid at 18.
[506] Ibid at 25.
[507] Ibid at 18.
[508] United Nations 'The Sustainable Development Goals Report' (2021) available at https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf (accessed on 15 August 2023) 19-22.
[509] White paper (fn 8 above at 25).

Given that this concept of placing the environment at the helm is not echoed throughout South Africa's suite of environmental management Acts, it is suggested that amending existing legislation to domesticate the International Plastic Treaty would not allow for the Earth to take centre stage and as such, an entirely new piece of legislation with this key objective should be enacted. The proposal would be to have this new Act form part of the suite of environmental management Acts and accordingly named the National Environmental Management: Plastic Pollution Act (the 'NEM: PPA').

From the discussion above, it can be seen that the three core elements of the International Plastic Treaty, namely, the production, consumption and disposal of plastic, would not be adequately covered by the existing environmental management framework. While the NEMA hosts an array of general environmental principles, such as sustainable development, the precautionary principle, and the polluter pays principle, the Treaty is far more detailed and in-depth than its basic principles. For this reason, it is crucial for South Africa to rely on the NEMA to inform the domestication of the Treaty. South Africa can, in turn, rely on the Treaty to identify its gaps and make right the shortcomings that ultimately affect the environment.

To further illustrate the need for the NEM: PPA, as opposed to amending existing legislation, it will be helpful to consider one of the goals identified by the International Plastic Treaty, namely, to recover costs from polluters,[510] which is a fundamental principle in the NEMA. South African legislation, particularly the duty of care contemplated in section 28 and the polluter pays principle contemplated in section 2(4)(p) of the NEMA, both provide for measures that align with the Treaty in this respect. The former speaks to recovering costs to remediate pollution,[511] whereas the latter provides that the cost to remedy pollution and environmental degradation 'must be paid for by those responsible for harming the environment.'[512]

Section 28 of the NEMA creates an understanding of who is responsible for this remedy by providing that '[e]very person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or

[510] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 26).
[511] S 28 of the NEMA.
[512] S 2(4)(p) of the NEMA.

degradation from occurring, continuing or recurring... .'[513] Since the wording makes reference to 'every person,' it follows that 'the category of persons on whom liability [is bestowed upon] is non-exhaustive.'[514] The difficulty with holding 'every person' responsible for actions that pollute the ocean is the fact that once plastic has made its way to the ocean, it becomes increasingly difficult to know who exactly should be held accountable.

The International Plastic Treaty aims to resolve this conundrum by requiring plastic products to be marked and tagged in order to track down the offender and hold them liable.[515] Despite South African legislation also providing for labelling requirements,[516] its greatest shortcoming is that this requirement only extends to categories of waste identified by the Minister and not to all plastic waste.[517] On the bright side, however, is the fact that these general environmental principles are already found in South African law and, therefore, are well-placed to inform the development of the NEM: PPA through the existing, but scattered, statutory framework.

Likewise, the NEM: WA, with the 2020 NWMS as its crutch, has the bone structure to inform the development of a new Act that not only focuses on a plastic product's end-of-life but also on its full lifecycle. The NEM: WA would have to undergo major revisions to incorporate provisions relating to all phases of the plastic lifecycle, and since the NEM: WA was enacted to specifically address waste,[518] it would be difficult to try to reconstruct this Act to domesticate the International Plastic Treaty. In addition, while the NEM: WA does cater to the disposal element of the Treaty, many of its provisions lack the depth required to address the plastic crisis. Instead of trying to bridge the gap by amending the NEM: WA, it would be more sensible for the NEM: PPA to be developed in order to ensure that the Treaty is domesticated in a manner that achieves the goal of ending plastic pollution. [519]

The NEM: PPA will provide lawmakers with the opportunity to revise the flawed definition of 'waste' that is presently contained in the NEM: WA to specifically include plastic. As a result of this suggestion, 'pollution' in the NEMA would also need to be revised to specifically

[513] S 2(1) of the NEMA.
[514] O Nabileyo 'The polluter pays principle and environmental liability in South Africa' (unpublished LLM thesis, North-West University, 2009) at 14.
[515] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 35).
[516] S 18(2)(e) of the NEM: WA.
[517] S 18(1)(a) of the NEM: WA.
[518] The long title of the NEM: WA.
[519] United Nations *UNEP/PP/INC.4/3* (fn 22 above at 6).

include plastic pollution as well. South Africa's statutory framework presently does not directly address plastic pollution and broadly relies on section 28 of the NEMA to prevent plastic pollution that stems from all stages of the plastic lifecycle. However, the NEM: PPA will allow for a direct approach to deal with plastic pollution.

Another one of South Africa's current statutes that would also not be an appropriate vessel to domesticate the International Plastic Treaty is the NEM: ICMA, due to its failure to address all threats to the ocean in order to protect the coastal environment. The NEM: ICMA promotes sustainable development to maximise the ocean's economic potential. Its provisions focus more on what the ocean can provide for the people rather than on the conservation and protection of the ocean.[520] Perhaps there is a blind spot in our law that fails to see that no social and economic benefits can be derived from the ocean if there is no healthy ocean at all. It is foreseeable that the provisions of the Treaty will poke holes in the NEM: ICMA, pointing out South Africa's ocean governance shortcomings, but will also provide an opportunity for South Africa to rectify its omissions and include provisions in the NEM: PPA that adequately protect the ocean.

South Africa's statutory framework shows just how fragmented its provisions are in dealing with plastic pollution; however, in developing the NEM: PPA, it will be important to revisit the NEMO for direction. The NEMO highlighted the need for 'coordinated sectoral management'[521] because it recognised that the siloed, sectoral-based approaches are inefficient.[522] Unfortunately, this was not carried over to the MSPA. There is a need for 'coordinated sectoral management'[523] as a means to ensure effective collaboration across sectors so that, ultimately, the ocean can successfully be conserved. However, the MSPA makes no mention of this, save for references to 'co-ordinated and integrated planning'[524] and 'the promotion of collaboration and responsible use of the ocean through consultation and cooperation.'[525] These provisions in the MSPA do not speak to collaboration across sectors, which we have come to see, as they deal with ocean concerns in various ways. The need for a coordinated and cooperative approach forms the basis of the International Plastic Treaty,[526] unlike South Africa's existing legislation, which is scattered and fragmented.

[520] Preamble to the NEM: ICMA.
[521] White paper (fn 8 above at 6).
[522] S 5(1)(g) of the MSPA.
[523] White paper (fn 8 above at 6).
[524] S 2(b) of the MSPA.
[525] S 5(1)(c) of the MSPA.
[526] Preamble to the Revised Zero Draft; United Nations *UNEP/PP/INC.4/3* (fn 22 above at 5).

While the purpose of the MSPA aligns with the environmental right enshrined in section 24 of the Constitution, its provisions focus primarily on planning and development and lack veracity when dealing with pollution. This is concerning, given that it is one of the latest environmental statutes to be enacted and thus clearly shows South Africa's lack of growth in protecting the environment. This is a prime example of how the NEM: PPA will not only have the power to domesticate the International Plastic Treaty, but will also allow South African legislation to correct poor decisions made in relation to the environment in the past. It will allow South Africa to ensure symmetry with the Treaty and also assess its current statutory framework, which does not promote an earth systems agenda. The NEMOs' risk-averse, holistic approach to ocean governance, which not only focuses on development but also on the actual conservation of the ocean, is a missing link in South Africa's legislation and will thus play a significant role in informing the development of the NEM: PPA.

It has become increasingly evident that an integrated, eco-centric, 'ecosystem-based'[527] approach is needed when it comes to domesticating the International Plastic Treaty, as South Africa's environmental statutory framework remains disjointed. Not only is an 'ecosystem-based'[528] approach vital, but the fragmented statutory framework relating to marine governance in South Africa needs to be consolidated to adequately address marine plastic pollution.[529] Each environmental management Act deals with ocean and plastic pollution in different ways, none of which are equipped to give effect to the elements of the Treaty on their own. The provisions relating to marine plastic pollution, much like the plastic in the ocean, are strewn across South Africa's legislation. Forcing the elements of the Treaty into any one of South Africa's current statutes would perform a disservice since the underlying objective to promote this earth agenda is currently missing. South Africa will have to work towards consolidating the splintered provisions by enacting the NEM: PPA that will bring cohesion, consistency and collaboration.

The environment has not had its day in the sun despite being a fundamental rung in the quest for achieving sustainable development. The NEM: PPA will have the ability to shine a light on the environment because not only will it draw fundamental definitions, concepts and principles from existing South African law, but it will also be steered in the right direction by the

[527] White paper (fn 8 above at 9).
[528] Ibid.
[529] Ibid at 8.

International Plastic Treaty where South African law falls short. By enacting the NEM: PPA, every aspect that relates to plastic pollution throughout its life cycle that exists in South Africa's statutory framework should be excluded from their current Acts and included in the NEM: PPA. This will create an overarching legislative framework ensuring that all elements from the Treaty, to protect the oceans from plastic pollution, can be found in one place.

5.4 CONCLUSION

Out of 192 coastal countries, South Africa ranks eleventh in terms of its contribution to marine plastic pollution.[530] Given this concerning ranking, South Africa will be required to make significant adjustments to reduce its contributions to marine plastic pollution globally. The International Plastic Treaty will be the first international convention with an overarching approach to plastic pollution that South Africa, as a potential signatory, will have to give effect to. Even though South African legislation pertaining to marine plastic pollution is fragmented, there is enough substance to at least begin the integration of the Treaty into South African law by enacting the NEM: PPA.

'South Africa ... has taken an anthropocentric approach to environmental rights – the environment is protected through its connection to humans'[531] meaning that the environment is at the mercy of humans both in its destruction and its conservation. It is thus vital that South Africa, in being presented an opportunity by the International Plastic Treaty, must make sound decisions in relation to the full lifecycle of plastic that do not weigh socio-economic considerations above those of the environment. For far too long, socio-economic considerations relating to development have progressed while environmental factors have fallen by the wayside.[532] The ideal scenario would see each pillar of sustainable development no more equal than the other, carefully integrated and balanced.[533]

[530] W.H.L Stafford, V Russo, S.H.H Oelofse, L Godfrey, and A Pretorius 'Reducing plastic pollution: a comprehensive, evidence-based strategy for South Africa' (November 2022) *CSIR* at 1 available at https://wasteroadmap.co.za/wp-content/uploads/2022/11/046-CSIR-Final_Report-Reducing-Plastics-Pollution-Pathways.pdf (accessed on 31 October 2023).
[531] R Krüger (fn 115 above at 487).
[532] Loretta Feris 'sustainable development in practice: Fuel Retailers Association of Southern Africa v Director-General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province' (2008) 1 *Constitutional Court Review* 235-253 at 249.
[533] Ibid at 241.

However, the reality is that in applying the principle of sustainable development in South Africa, a tethered approach is applied whereby a specific pillar is prioritised based on the agenda it seeks to fulfil and on the needs that most need to be met.[534] Emphasis is placed on 'economic mandates'[535] rather than 'conservation and protection',[536] and marine issues are dealt with through a sectoral approach.[537] Due to this, marine issues are strewn across a multitude of statutes, causing a lack of coherence in their implementation, which results in further ocean ecosystem degradation. Via the enactment of a new NEM:PPA, and especially the enactment of a new NEM: PAA that promotes an 'earth system approach,'[538] perhaps the three aspects of sustainable development will achieve equilibrium. This trend that has benefitted socio-economic development can then also benefit the environment when it comes to domesticating the International Plastic Treaty, in that serious consideration must be given to the threats to the environment if we continue to pollute the seas and do not tackle plastic pollution at the source.

A glaringly obvious issue with existing South African law is the clear omission of provisions dealing with marine plastic pollution, whether it be in the form of definitions or overarching principles. As we have come to see, South Africa has an array of specific environmental management Acts that refer to ocean governance in a limited and isolated manner. These fragmented provisions lack cohesion and do not communicate with each other in a way that promotes the earth agenda. Instead, it holds the economy and social development at the fore.[539] In wanting to develop the ocean space, a degree of consideration must be given to how pollution will affect South Africa's ability to develop the oceans within its jurisdiction. It seems as if consideration for the ocean is only an action on paper and not an action in real life. It is placed in legislation to check a box, but does little to actually produce positive results. Even if development is South Africa's primary agenda, for the sake of allowing its ability to develop, it cannot do so with waters plagued by plastic.

[534] L Feris (fn 532 above at 250).
[535] White paper (fn 8 above at 8).
[536] Ibid.
[537] Ibid.
[538] White paper (fn 8 above at 18).
[539] Ibid at 9.

As the timeless 'prophecy of the Cree Indians' [540] goes, 'only when the last tree has been cut down, the last fish has been caught, and the last river has been poisoned, will we realize we cannot eat money'. Environmental factors urgently need to be brought to the fore through an 'ecosystems-based approach'[541] to help us value the pricelessness of the environment, and as a result, act to protect and conserve it. The Earth is drowning in a tsunami of plastic, and due to the oceans' interconnected nature, a harmonised approach would more successfully achieve the desired goal[542] of saving the planet from this wave of plastic pollution.

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[540] Janet Townsend 'The Last Tree' (9 August 1995) *The New York Times* available at https://www.nytimes.com/1995/08/17/opinion/l-the-last-tree-420195.html (accessed on 06 February 2025).
[541] White paper (fn 8 above at 9).
[542] World Wildlife Fund for Nature *towards a treaty to end plastic pollution* (fn 239 above at 11).

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United Nations 'Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its first session' (28 November – 2 December 2022) *UNEP/PP/INC.1/14.*

United Nations 'Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its second session' (6 July 2023) *UNEP/PP/INC.2/5.*

United Nations 'Revised draft text of the international legally binding instrument on plastic pollution, including in the marine environment' (28 December 2023) *UNEP/PP/INC.4/3.*

United Nations 'Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment' (04 September 2023) *UNEP/PP/INC.3/4.*

United Nations Environment Assembly *End plastic pollution: towards an international legally binding instrument* UN resolution 5/14 UNEP (2 March 2022).

United Nations General Assembly *Transforming our world: the 2030 Agenda for Sustainable Development* UN Resolution 70/1 (21 October 2015)

6.7 THESIS AND DISSERTATIONS

Frost LH *Is the regulation of single-use plastic in South Africa a waste of time?* (unpublished LLM thesis, University of KwaZulu-Natal, 2019);

Nabileyo O 'the polluter pays principle and environmental liability in South Africa' (unpublished LLM thesis, North-West University, 2009)

ETHICAL CLEARANCE

HSSREC applicationThe tsunami of plastic: The adequacy of South African law to address the marine plastic crisis with the intervention of the international plastic treaty., (Singh, Thashmira (213547018)

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Title: The tsunami of plastic: The adequacy of South African law to address the marine plastic crisis with the intervention of the international plastic treaty.

Principal Investigator:

Singh, Thashmira (213547018) - School Of Law (Active)

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