THE ENVIRONMENTAL PROTECTION (DUMPING OF WASTES AND OTHER MATTER) BILL 2018: AN ACT INCORPORATING THE 1996 PROTOCOL TO CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTER INTO THE LAW OF TRINIDAD AND TOBAGO

A Legislation Drafting Project submitted in partial fulfillment of the requirements for the award of the Degree of Master of Laws (LL.M.) in International Maritime Law at the IMO International Maritime Law Institute

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### TABLE OF INTERNATIONAL CONVENTIONS

- International Convention for the Prevention of Pollution from Ships 1973
- The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972
- The International Convention on Civil Liability for Oil Pollution Damage
- The International Convention on Oil Pollution Preparedness, Response and Co-operation
- The International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969
# TABLE OF NATIONAL LEGISLATION

- The Environmental Management Act Chapter 35:05 of 2000
- The Oil Pollution of Territorial Waters Act 1951 Chapter 37:03
- The Shipping Act 1987

**National Drafted Legislation**

- The Shipping Marine Pollution Bill (Revised) 2014

**Declarations and Resolutions**

- Resolution LP 4(8) on the amendment to the London Protocol to Regulate the Placement of Matter for Ocean Fertilization and Other Marine Geoengineering Activities.
- Resolution on the Regulation of Ocean Fertilisation (2008) LC-LP.1 on Regulation of Ocean Fertilisation
- Stockholm Declaration

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- The National Environmental Policy of Trinidad and Tobago 2006
- The Water Pollution Rules 2001
- Water Pollution (Fees) (Amendment) Regulations, 2006.
1. Introduction

Historically, the sea has been unduly used as a cheap dumping site for wastes, chemicals, and other substances. The myth has always been that the ocean is “self-cleaning”; however, this sentiment could not be further from the truth. The reality is that marine pollution is a perilous threat to human life, marine resources, and of course, the life of sea-dwelling creatures, and most of the damage incurred is irreversible. The law surrounding marine pollution has been “action oriented” and “effects oriented.” That is to say that the legal regimes formulated to combat various threats only came about after environmental damage was caused by human action (and inaction). This is often referred to as the “titanic effect” following major incidents of pollution of the sea. The 1972 London Dumping Convention and its 1996 Protocol are prime examples of this effect.

Due to the incessant dumping of matter into the sea, the threat to the living resources is increasing rapidly. From a Caribbean perspective, this problem is particularly worrying because the livelihood of many of its residents is heavily dependent on the sea and its resources.

This problem has been evident for some time. For example, it has been said that:

the pollution problems of the Caribbean Sea may not have reached the magnitude of those in the Baltic and the Mediterranean...but the similarity of land-locked configuration of the Caribbean with the potential for the retention of pollutants from a developing region.

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3 Ibid.
warrants early preventative action. If the countries of the region are to benefit from the exploitation and sharing of the resources of the Caribbean Sea it becomes imperative that immediate action is taken to arrest the trend towards destruction of the marine life which is so essential to the maintenance of the marine ecological balance and the substance of our people. 

More than 30 years later this statement, unfortunately, still holds true. It is safe to say that the dumping of wastes in coastal waters has become a serious epidemic in all corners of the globe. The influence of politics, individual State interests and in some cases, a clear disregard for the environment, has made curing this disease more difficult in practice than one would expect.

Another worrying trend that evolved during the years, involved the use of special vessels used to incinerate land-based wastes at sea. Arguments in favour of this practice dictated that the incineration transformed harmful materials such as highly chlorinated liquid wastes into substances that were more environmentally friendly. The first documented incident of commercial incineration took place in 1969 by a German Vessel in the North Sea and other European States quickly followed suit, as did the United States in 1974.

Following a rise in environmental concerns, this practice ceased in the North Sea by the late 1980’s but that did not stop it from taking place in other parts of the world. It follows that when the wastes are incinerated, ash and other contaminants are created that obviously must be disposed of. This fact, along with the fear of harmful emissions being

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11 Ibid.
expelled into the air or the ocean (which is nearly impossible to clean up), is precisely what triggered concern to legislators for its prohibition which is witnessed in the 1996 Protocol, which this Bill seeks to give effect to.12

Before considering the provisions of the Protocol, it is important to place its purpose within the grand scheme of maritime law and the International Maritime Organisation (IMO), the aims of which are largely to ensure the safety of shipping and the prevention of marine pollution. Because of the international nature of shipping, there is a need for a structured and unification of the laws that are applied so as to achieve these overarching goals. Each Member State is expected to fulfill its role by not just the adoption of IMO conventions but also the effective implementation and enforcement of them.

As one of the leading countries in the region, economically and otherwise, Trinidad and Tobago is under a duty to set an example by ensuring that its international obligations are fulfilled. This Bill seeks to satisfy a portion of this responsibility by imploring local legislators to adopt this law that prevents ships registered in, or otherwise flying the flag of Trinidad and Tobago, from dumping, placement or incineration of matter at sea.

It can be said without a doubt, that Trinidad and Tobago has acknowledged the need for this law when it deposited its instrument of accession on 6th March 2000. However, it has unfortunately fallen short with regards to the national implementation. This Bill seeks to rectify this shortcoming.

By reason of the foregoing, the purpose of this drafting project is to effectively incorporate the 1996 Protocol to the London Dumping Convention into the domestic laws of Trinidad and Tobago. This explanatory note will lend insight into the current international regime along with the rationale behind the adoption of the Protocol. This discussion will shed light on the importance of the proposed Bill when juxtaposed against the current legal regime in Trinidad and Tobago and the threat posed to its sensitive environment. The reader will then be led to a brief explanation of the proposed Bill, its aims and how its implementation will benefit the Country.

2. The International Legal Regime

This section seeks to outline the international legal regime as it relates to the dumping of wastes and other matter. It will begin by highlighting the broad legal framework and proceed to show the journey to what the law reflects currently. This discourse will begin with an introduction to the “umbrella” convention which has paved the way for most of the current maritime conventions. Thereafter, the 1972 London Dumping Convention, its 1996 Protocol, and the most recent developments will be discussed.

2.1 UNCLOS

The International Convention on the Law of the Sea 1982 (UNCLOS)\(^\text{13}\) provides the general framework for the legal issues surrounding the law of the sea and has paved the way for the implementation of more detailed provisions relating to the specific areas of the law of the sea which include the prevention of pollution of the marine environment from dumping and the enforcement measures for same. Although the 1972 Convention was adopted and entered into force long before it, UNCLOS influenced the amendments made by the 1996 Protocol.\(^\text{14}\)

UNCLOS does not specifically prohibit the dumping of wastes. However, it lends a guidance to States for the management of such activities. Article 1 (5) (a) of UNCLOS defines dumping as “any deliberate disposal of waste or other matter from vessels aircraft or other man-made structures at sea.”\(^\text{15}\) This includes the disposal of vessels and related articles. States are under an obligation to protect and preserve the maritime environment.\(^\text{16}\) Article 210 of UNCLOS further stipulates that Coastal States are obliged to implement laws catering to the reduction, prevention, and overall control of the dumping of foreign

\(^{14}\) London Dumping Convention (N 4), the 1996 Protocol (N 5).
\(^{15}\) UNCLOS (n 13) Art 1 (5) (a).
\(^{16}\) UNCLOS (n 13) Art 192.
substances into the sea. Under this regime, much of the discretion is left to States to determine what substances may be exempted from this rule.

2.2 The London Dumping Convention

A large portion of the international law relating to the dumping of matter at sea is found in the London Dumping Convention. This Convention was introduced following a spike in awareness of the environmental effects of marine pollution. These issues were addressed in the United Nations Conference on the Human Environment which took place in Stockholm, Sweden between the 5th and 16th of June 1972. The Conference was in wide attendance by 113 States and was the forum whereby the Declaration on the Human Environment was adopted. The Adopting States vowed to take steps to curb and prevent pollution of the seas. These endeavours later led to the adoption of the London Dumping Convention that same year.

The Convention deals most commonly with the disposal at sea of wastes emanating from land but it also touched on issues like the incineration of wastes at sea. The main objective, as suggested by the title, is to reduce marine pollution by encouraging States to exercise adequate jurisdiction and control over its citizenry, along with the vessels registered under its flag.

The Convention incorporates a colour-coded system that categorises substances that were frequently disposed of at sea. The blacklisted substances are those that attract a strict prohibition such as crude oil, petroleum products, pesticides, mercury, and trace contaminants. The “grey list” permits the dumping of listed substances by those in possession of a permit from the designated local authorities prior to the expulsion into the ocean.

17 Also referred to as the Stockholm Declaration.
20 Ibid Art VI (I).
Since the 1972 Convention’s entry into force, it has undergone significant amendments relating to pertinent matters such as the incineration of wastes and other matter at sea,\textsuperscript{21} the procedure as it related to the issuance of permits,\textsuperscript{22} and the prohibition of the dumping of low-level radioactive wastes.\textsuperscript{23}

### 2.3 The 1996 London Protocol

The most significant amendment made to the Convention is undoubtedly the 1996 Protocol which, as mentioned above, embodies the overall theme of UNCLOS, in particular articles 1, 210, 216.\textsuperscript{24} The Protocol ultimately aims to replace the 1972 regime and will supersede the Convention in the Countries that have adopted them.\textsuperscript{25} Therefore, both instruments will remain simultaneously active until more States become parties to the Protocol which will result in the inevitable phasing out the 1972 Convention.

The 1996 Protocol reflects a more modern and comprehensive approach to protecting the marine environment from dumping activities than the original 1972 Convention and reflects the broader aims to protect the environment in general, emanating from Agenda 21, the global plan of action for sustainable development adopted by the 1992 United Nations Conference on Environment and Development (UNCED), in Rio de Janeiro, Brazil, also known as the 1992 Earth Summit.\textsuperscript{26}

According to the Preamble, the Protocol’s purpose includes “the protection and preservation of the marine environment from all sources of pollution” and it recognises the need for “conservation and the sustainable use of the oceans”. Contracting Parties are asked

\textsuperscript{22} Addressed in the 1989 amendments which entered into force on 19 May 1990.
\textsuperscript{23} Addressed in the 1993 amendments which entered into force on 20 February 1994.
\textsuperscript{24} UNCLOS (n 13).
\textsuperscript{25} 1996 Protocol (n 5) Art 23.
\textsuperscript{26} IMO News, Issue 1 2006
to individually and collectively protect and preserve the marine environment from all sources of pollution and take effective measures according to their scientific, technical and economic capabilities, to prevent, reduce and where practicable, eliminate pollution caused by dumping or incineration at sea of wastes and other matter.27 Such States are thus required to align their national laws and policies with these important aims. Furthermore, the Protocol leaves it to the States to stipulate what constitutes an offence with the accompanying sanctions.28

The Protocol entered into force on 24 March 2006, and its provisions impose far stricter rules for the prevention of dumping of wastes at sea than its 1972 predecessor. For example, it effectively reverses the burden of proof to the polluter by applying an absolute prohibition of dumping or incineration of wastes of any kind. Essentially, it widens the definition of what constitutes marine pollution by deeming all methods of dumping at sea as pollution unless the contrary can be proven.29 If it can be proved that the substance is harmless then the competent authority in the Member State has the discretion to issue a permit.30 Thus, the State is also tasked with designating the authority that will be responsible for screening applicants and issuing the said permits. The authority must also keep adequate records of these applications.31

As for the general structure of the Protocol, Annex 132 addresses wastes and other matter that may be considered for dumping; whereas Annex 233 pertains to the assessment of such wastes; and Annex 3 covers the arbitral proceedings.

Notably, Article 334 of the Protocol implores Contracting States to apply a “precautionary approach” when it comes to the issuance of permits. This dictates that

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28 Ibid Art 10(2).
30 The 1996 Protocol (n 5) Art 4.1.2.
31 Ibid Art 9.
34 The 1996 Protocol (n 5) Art 3.
where there is an absence of scientific data to the contrary, the burden of proof that the substance proposed to be dumped is not harmful is on those applying for the permit. Failure to discharge this burden results in the permission not being granted. States are also placed under an obligation to ensure that those authorised to dispose of the matter in the sea bear the cost of mending any damage caused.\textsuperscript{35} This “polluter pays principle” serves as an incentive to some States to proportionally distribute environmental costs between the respective government and those polluting the environment.

Another change comes with its application to the internal waters of a State. Although the internal waters are excluded from the general provisions, under article 7, States may also “opt in” by choosing to apply the prohibitions to internal waters.\textsuperscript{36} The 1972 regime did not provide for this “opting in” procedure. This procedure is linked to the precautionary principle as explained above.\textsuperscript{37}

The Protocol also advocates for the responsible disposal of wastes by addressing the common practice involving the transportation of wastes from one geographical location to another,\textsuperscript{38} usually to lesser developed countries. This often involves a vessel being contracted from one State to transport wastes to be disposed on the waters of a Non-Contracting States. The Protocol seeks to put an end to these unscrupulous practices which were not in the contemplation of the Drafters of the 1972 Convention.\textsuperscript{39}

Furthermore, the definition of dumping not only includes the dumping in the traditional sense but also extends to the deliberate disposal, toppling, and/or abandonment of vessels, aircraft, platforms or other manmade structures at sea but does not, however, extend to the dumping or storage of wastes emanating from these structures.\textsuperscript{40} It does not

\textsuperscript{35} Ibid Art 3.2.
\textsuperscript{36} Ibid Art 7.
\textsuperscript{37} The institutional incorporation of an ‘opting in’ clause responds to the adoption of a resolution by a consultative meeting of the parties on the application of the precautionary principle in 1991.
\textsuperscript{38} However, by amendment to article 6, adopted on 30 October 2009, it was agreed that the export of carbon dioxide streams for disposal in accordance with Annex 1 may occur, provided that an agreement or arrangement has been entered into by the countries concerned.
\textsuperscript{39} The 1996 Protocol (n 5) Art 6.
\textsuperscript{40} Ibid Art 1.4.1.
cover operational discharges from vessels or offshore facilities, pipeline discharges, wastes discharged into rivers that end up in the sea or the placement of matter into the sea for purposes other than disposal.

As mentioned above, a State must consider the composition of the substance and the potential effect it may have on the proposed dumping site. Therefore, it is important to train and equip personnel with the tools and knowledge necessary to identify the composition of a particular substance which can assist in ascertaining the possible impact on the marine environment.\footnote{Specific Guidelines for the Assessment of Dredged Material <http://sednet.org/download/SpecialSession1-Guidelines-Dredged-Material.pdf> last accessed 27 April 2017.} This necessity also extends to the adequacy of treatment facilities with which to conduct these tests.

Even in cases where a permit is issued and the substance poses a nominal threat to the environment, the Protocol still encourages the sourcing of alternative methods of waste disposal.\footnote{The 1996 Protocol (n 5) Art 4.1.1.} A waste management hierarchy is employed to assist Parties in assessing the environmental impact of the various types. These options include but are not limited to re-use, recycling, destruction of hazardous constituents and the treatment of said constituents.\footnote{Ibid Annex II.} The provisions are thus meant to be a deterrent for any type of dumping at sea.

The incineration of wastes at sea is prohibited in article 5. However, article 8 provides certain exceptions to this prohibition if it can be shown that the action was necessary to insure the safety of or avoid damage to human life, vessels, aircraft, platforms or other man-made structures at sea in cases of\textit{force majeure} caused by weather conditions or otherwise to minimise the likelihood of such damage.\footnote{Ibid Art 5.}

Much emphasis is placed on the compliance of State Parties in implementing and enforcing the vital provisions of the Protocol. Of course, it is true that such pertinent...
provisions are useless without the cooperation, implementation and enforcement by States who have expressed their consent to be bound by them.

Cooperation is expressly addressed in article 11, which stipulates that after two (2) years of the Convention coming into force, the Contracting States shall hold meetings to discuss the procedures and methods to promote adherence, which may be used to share information and assistance.⁴⁵ The Parties are also permitted three to five year transitional period which were introduced to allow new Parties adequate time to put the necessary measures in place to implement the provisions.

For this same reason, the Protocol is also vocal in its promotion of open communication among States.⁴⁶ It correctly recognises that a concerted effort is necessary to prevent further coastal deprivation. Thus, States are provided with support, advice and guidelines for implementation in pursuance of regional, technical, and scientific cooperation to combat these issues. This support system is also evidenced in Annex 2 to the Protocol. Article 13 deals with this subject, that is, cooperation and assistance. It requires Parties to promote bilateral and multilateral support for the prevention and reduction of marine pollution.⁴⁷ A scientific group is also employed to constantly review and recommend ways of assessing whether materials are suitable for dumping. Each Contracting State is tasked with compiling an “action list” categorising the type of substances and their toxicity levels.⁴⁸

In understanding that dredging is necessary for safe and efficient navigation, the Protocol provides both generic and specific guidelines for the responsible assessment and disposal of dredged material, all while simultaneously having regard for the specific marine areas whereto the substances will be discharged. Guidance for the development of action lists and action levels for dredged materials were published to assist the policy developers of contracting States in the assessment of materials proposed for dumping at sea. An action list is a mechanism employed for the screening of wastes and their constituents on the basis

⁴⁵ Ibid Art 11.
⁴⁶ Ibid Art 18.
⁴⁸ The 1996 Protocol, (n 5) Annex II.
of their potential effect on the environment. The action levels are used to identify the composition of dredged materials being considered for disposal. If the competent authority has decided that the substances are not suitable for ocean discharge, then an alternative method of disposal must be chosen. Conversely, in assessing whether a permit should be issued, the Authority must consider important factors such as the effect the substance will have on human health, tourism, fisheries, as well as any potential effect on navigation.49

Article 16 promotes the peaceful settlement of disputes through forms of Alternative Dispute Resolution. If these methods fail then, and only then, should the parties resort to the arbitral procedures set out in Annex 3, or the parties may choose to bring the dispute to the International Tribunal for the Law of the Sea (ITLOS), the International Court of Justice (ICJ) or other tribunal of their choosing.50

2.3.1 Amendments through Tacit Acceptance

Articles 21 and 22 provide information in relation to the procedures for amendments to the Protocol and its annexes respectively. The tacit acceptance procedure is employed as seen in article 22. It stipulates that the amendments to the annexes of the Protocol will be adopted in this manner, that is, shall enter into force "on the 60th day after two-thirds of Contracting Parties shall have deposited an instrument of acceptance of the amendment with the Organization.” Furthermore, amendments to the annexes enter into force no later than 100 days after being adopted and the amendments bind all Contracting Parties except those who have explicitly expressed their non-acceptance.51

49 Guidelines (n 41).
50 UNCLOS (n 13) Art 287.
2.3.2 Amendments to the Protocol

As mentioned above, the Protocol was drafted to battle the modern issues regarding the environment, climate change being one of the major concerns. The sea levels are continuously rising, the oceans are becoming acidified and there has been an increase in carbon dioxide (CO$_2$) levels in the atmosphere. In response to these concerns, the Protocol has been amended three times, the first in 2006, the second in 2009 and the third in 2013. Each of these amendments will be considered in turn.

The 2006 amendment, which came into force in February 2007, was introduced to allow the sequestration of carbon dioxide under the seabed to facilitate the mitigation of climate change. Annex I was amended to include carbon dioxide streams from carbon dioxide capture processes for sequestration on the “safe list” of waste that may be dumped at sea. Clause 4 was also added to Annex I providing that carbon dioxide streams may be considered for dumping if such disposal is into a sub-seabed geological formation and they consist “overwhelmingly of CO$_2$” and no other wastes or other matters are added for the purpose of disposing of those wastes or other matter.$^{52}$ Hence, the Protocol does not apply to sequestration projects that utilise land-based pipelines to deliver CO$_2$ to the offshore seabed.$^{53}$

In November 2007, a joint meeting of the Contracting Parties to the London Convention and London Protocol was held in London. The Parties highlighted the need for more conclusive scientific evidence relating to this practice before its continued use.

The second amendment to the Protocol was made in 2009 namely to Article 6 of the Protocol. This article, which initially prevented States from permitting the export of wastes or other matter to other countries for dumping or incineration at sea, was amended to allow such movement, if the export included the transboundary export of CO$_2$. Article 6 also provides for an exception for the export of these streams for disposal if the countries

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$^{53}$ Wendy B Jacobs, Carbon Capture and Sequestration, Global Climate Change and U.S Law (Second Ed, Chapter 17) 25.
involved have an agreement or arrangement that includes the confirmation and allocation of
permitting responsibilities between exporting and receiving countries that are consistent with the Protocol and other applicable international law. If the export is to a non-contracting State then the agreement should include provisions that are equivalent to those found in the Protocol, including those provisions relating to permits and should be in line with the requirement to preserve the environment.\textsuperscript{54}

In further response to these climate change concerns, amendments to the Protocol address the controversial practice of ocean fertilisation which is a form of geoengineering that is largely in the research phase of development. The experiment involves the introduction of micronutrients (such as iron) and macronutrients (like urea) into the sea to stimulate phytoplankton activity.\textsuperscript{55} This process is aimed at increasing photosynthesis with the hopes of the subsequent removal of CO\textsubscript{2} from the atmosphere. While in theory, this sounds like a promising way of reducing the harmful effects of rising sea levels and decreasing fish stock, there are concerns that this practice may be harmful to marine ecosystems.

In 2010, by Resolution LC-LP.2 the Parties adopted an Assessment Framework for Scientific Research Involving Ocean Fertilisation. However, the resolution was not legally binding.\textsuperscript{56}

These discussions quickly led to the thirtieth meeting of the Contracting Parties to the London Convention and the third meeting of the Contracting Parties to the London Protocol, where the parties agreed not to pursue these activities until such conclusive evidence became available.\textsuperscript{57}

\textsuperscript{54} Ibid.
\textsuperscript{55} Ocean Fertilisation: Implications for Marine Ecosystems \texttt{<http://www.whoi.edu/ocb-fert/page.do?pid=38315>last accessed 27 April 2017}.
In 2013, further amendments were made to the Protocol whereby Marine Geoengineering was defined\(^58\) and prohibited, and the Parties were vested with the power to grant a permit in cases where the activity could be classed as legitimate scientific research. Consequently, in addition to the prohibition of dumping of wastes and other matter in the sea, the Protocol now prohibits the placement of matter for marine geoengineering activities. The new Annex 5 provides guidance with regards to the types of Geoengineering activities and references to the Assessment Framework for Scientific Research Involving Ocean Fertilisation, which was adopted in 2010.\(^59\) These amendments will enter into force when two-thirds of the Contracting Parties to the Protocol have ratified them.\(^60\)

This Bill will include the suggested amendments to the Protocol, thereby expanding the scope of the classic prohibition, in that, it will extend to the placement of matter into the sea from vessels, aircraft, platforms or other manmade structures at sea for marine geoengineering activities unless one is in possession of a permit.

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58 Ibid Art 5.
60 As of 9 February 2016 no instruments of acceptance have been deposited.
3. The Trinidad and Tobago Perspective

3.1 Identifying the Problem: Dumping in Trinidad and Tobago

As it stands, Trinidad and Tobago is the largest exporter of ammonia and methanol in the world. Other exports include petroleum, food items, steel, and fertiliser to destinations such as the United States of America (USA), South America and the European Union. This means there is heavy and unregulated traffic coming in and going out of the two main cargo ports as well as the twelve (12) other international ports around the country. Unfortunately, there is nothing in place to ensure that these vessels are not adding to the pollution problem.

It is reiterated that marine dumping has, on many occasions, been acknowledged by the Trinidad and Tobago Government as an area of concern. The condition of the environment is inextricably linked to the condition of the economy which, if degraded, will ultimately lead to social instability. Coastal and marine resources were highlighted by the Institute of Marine Affairs as areas of priority and pollution were identified as the most substantial pressure on its sustainability.

Cruise ships and other pleasure crafts often frequent the ports of Trinidad and Tobago. With the lack of a legislative framework, there is a serious risk, especially with smaller vessels, that they dump waste material into the coastal waters without a fear of punishment. This is usually due to the lack of adequate waste management facilities on board.

The fishing industry in Trinidad and Tobago has suffered insurmountable losses due to noxious substances being found in the waters off the Southwestern point of Trinidad. A slew of dead fish was found washed up on the Gulf of Paria and as a result, fishermen have suffered millions of dollars in losses due to the sudden halt in sales. Another unfortunate

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61 Economywatch Content, ‘Trinidad and Tobago Trade, Exports and Imports’

62 IMA 14th Research Symposium, 17 September 2014, Lowlands Tobago.
incident occurred in March 2016, where hundreds of dead fish were found in the Tacarigua River in the East-west corridor of Trinidad and it is still unclear what caused this damage.

Again, on 11th August 2016, the Secretary of the Environmental Activist Group Fisherman and Friends of the Sea, Mr. Gary Aboud, issued a grave warning to citizens not to eat bottom dwelling fish such as catfish, herring, and molluscs. As a result, fishermen have completely have stopped going out to sea due to public fear that all fish was contaminated by substances in the water. The Environmental Management Authority investigated the situation and once again the evidence came up inconclusive.

Independent Total Petroleum Hydrocarbons (TPH) Testing conducted by the Caribbean Industrial Research Institute (CARIRI) on the fish, water, and sediment off the south-west peninsula of Trinidad showed that the fish were:

contaminated 170,000 to 1,400,000 times more than the European Union recommended benchmark for hydrocarbon testing, which is two micro grammes per kilogramme, which is two parts per billion. What we found are 334,990 micro grammes per kilogramme to 2,680,730 micro grammes per kilogramme

Unlike its sister isle Trinidad, the sustainability of Tobago and its citizenry is almost completely dependent on tourism. It is, therefore devastating that many of the cherished tourist attractions such as the coral reefs have perished due to sources of pollution running from land off into the sea causing irreversible damage.


On 5 August 2005, a report prepared by the Ministry of Trade and Industry in Trinidad and Tobago and Economic Commission for Latin America and the Caribbean highlighted a few of the main issues concerning the marine environment in Tobago.65

The study revealed the two worrying issues; the first being the anchoring of pleasure yachts in fragile areas such as reefs and secondly, faecal discharge inshore areas that are commonly used for bathing. Furthermore, the coral reefs, mangroves, and seagrass areas, which are the homes and the source of sustenance of many species of fish, crustaceans, and reptiles are threatened because of the properties of the sewage and other pollutants that are expelled into the ocean.

3.2 The Current Legal Framework Relating to Dumping in Trinidad and Tobago

The current legal framework in Trinidad and Tobago is insufficient to combat the issues outline above. The only remotely relevant laws are found within the Water Pollution Rules of 2001, the Environmental Management Act66 and the outdated Oil Pollution in Territorial Waters Act of 1951.67 The latter is an old piece of legislation aimed at controlling the levels of oily discharges let out by vessels in the territorial waters of Trinidad and Tobago. The Environmental Management Act prohibits the release of any water pollutant into the environment.68 However, a shortcoming is that it only applies to the internal and territorial waters of the country and does not extend to the Exclusive Economic Zone (EEZ). Furthermore, it is primarily aimed at prohibiting the contamination of Trinidad and Tobago’s water supply as opposed to the prevention of dumping of wastes at sea.

67 The Oil Pollution of Territorial Waters Act 1951 Chapter 37:03.
68 Environmental Management Act (n 66) Section 54.
The Water Pollution Rules 2001⁶⁹ is a piece of subsidiary legislation formed under the Environmental Management Act and is designed to regulate the pollution of the inland, nearshore, and offshore waters. However, an examination of its provisions shows its inefficiencies. Firstly, its provisions are limited, in that they only apply to persons with a permit⁷⁰ who are intending to release water pollutants from “registrable facilities,” which include industrial, commercial, agricultural, institutions, and sewerage facilities.⁷¹ The polluter may apply for a permit and pay a fee of Ten Thousand Trinidad and Tobago Dollars ($10,000.00) which is a fixed fee that applies across the board to all applicants. Arguably, this egalitarian approach⁷² which embraces a “fair burden sharing’ attitude runs counter to the ‘polluter pays principle’ as endorsed by the Protocol.

3.2.1 National Environmental Policy (NEP)

As mentioned above, Trinidad and Tobago has acknowledged the importance of environmental protection, the sentiments of which echo throughout the National Environmental Policy as proffered by the Environmental Management Authority (EMA).⁷³ The Policy takes into account the relationship between environmental sustainability and human health and has identified the need to ‘reduce pollution to the marine environment from “ship based or fixed platform sources”’ and to impose a ban on the ‘import and export of wastes in the absence of bilateral or multilateral agreements.’

The Policy was heavily influenced by certain specific guiding principles that are in line with the spirit of the Protocol and the general aims of the IMO. The first important theme is that the coastal and marine environment is a natural asset where the public’s

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⁷⁰ Environmental Management Act (n 66) Section 26.
⁷¹ Ibid Rule 4 (1).
⁷² Water Pollution (Fees) (Amendment) Regulations, 2006.
interest is firmly rooted and as such its protection is vital to preserve these interests. To realise these goals the Bill places the responsibility not only on the shoulders of public bodies but also on the general public to report incidents of dumping as provided for in Part IV.

The second is the “polluter pays” principle which is a strategic method of risk aversion and dictates that those who pollute the environment are under a duty to rectify any damage. This is implemented through an initial fee that must be paid to receive a permit. It also follows that those who contravene the provisions are also obligated to rectify any damage caused to the environment through the financial penalties and in some cases may be subject to imprisonment for a term of no more than 10 years depending on the severity of the offence.
4. The Solution: The Environmental Protection (Dumping of Wastes and Other Matter) Bill 2018

As established in the above discussion, it is incumbent upon Trinidad and Tobago to adopt a more proactive approach for the protection of the marine spaces, for the present generation and for those to come. The IMO has done its part by working tirelessly to adopt mutually beneficial international rules and regulations to achieve safer shipping and cleaner seas but these goals will never be met without the cooperation of States. It is on this basis that the initiative has been taken to draft a Bill incorporating the provisions of the Protocol, along with Regulations pertaining to the administrative aspects. If passed, this Bill will serve as a valuable contribution by Trinidad and Tobago in the fight against dumping and incineration of wastes at sea. The following paragraphs concisely identify the salient features of the Bill in anticipation of its implementation in the future. Firstly, the decision to draft a standalone Bill will be defended, followed by a brief explanation of the legislative process it will have to undergo should it be passed. Thereafter, the reader will be introduced to provisions of the Bill, including details of its scope of application, facilitation and enforcement.

4.1 The Decision to Draft an Independent Bill

The decision was taken to draft a standalone Act of Parliament rather than draft Regulations or amendments to the existing Shipping Act\(^\text{74}\) for a number of reasons. The first, and most noteworthy, comes as a result of the unsuccessful Shipping (Marine Pollution) Bill.\(^\text{75}\) It was drafted and presented to the Senate on 18 January 2000, where it was then forwarded to a Special Select Committee of the Senate for revision. On 9 October 2000, the Bill was scheduled to be taken to the next sitting of the Senate. The Bill was then reintroduced at the end of 2002 and was passed. Unfortunately, it lapsed before a second debate could take place in the House of Representatives. The Bill was then reintroduced

\(^\text{74}\) Shipping Act 1987 (Cap. 50:10).

\(^\text{75}\) The Shipping Marine Pollution Bill, Senate, (6th Session of the 5th Parliament), Volume 22.
on June 23, 2004, and again on 11 March 2005. However, it suffered the same fate after again going to a Special Select Committee of the Senate.

A review of the Hansard records for the June 2004 and March 2005 debates identifies a number of concerns which were ultimately responsible for the Bill’s failure.\textsuperscript{76} A major concern was the lack of administrative infrastructure. It is one thing to have detailed laws on a topic but, effort is useless without methods of implementation and not having the requisite manpower to facilitate enforcement of the laws. There were also doubts as to the language used, which mirrored those of the 1972 Convention. Concerns were launched concerning the drafting style, which did not reflect the style drafters use locally. It follows that most Conventions are drafted in a style common to Civil Law countries whereas the style used in Trinidad and Tobago, being a common law country, is different than that of its civil law counterparts. It requires the adaptation of the provisions of international instruments to suit the constituent drafting style. Common law jurisdictions tend to prefer more detailed provisions in an effort to assist judges in their functions of interpreting the law.

The biggest issue for the Senate was the voluminous nature of the Bill, comprising 228 clauses and 17 schedules. It attempted to incorporate six of the leading IMO Conventions, namely:

(1) The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1987 \textsuperscript{77}

(2) The Convention for the Prevention of Marine Pollution by Dumping of Waste and Other Matters 1972 \textsuperscript{78}

(3) The International Convention relating to the Intervention on the High Seas in cases of Oil Pollution Casualties 1969 and the Protocol of 1973 \textsuperscript{79}

\textsuperscript{77} International Convention for the Prevention of Pollution from Ships (adopted November 2 1973, entered into force on 2 October 1983) 12 ILM 1319 (1973); TIAS No. 10,561; 34 UST 3407; 1340 UNTS 184.
\textsuperscript{78} The London Dumping Convention (n 4).
(4) The International Convention on Oil Pollution Preparedness Response and Cooperation 80

(5) The International Convention on Civil Liability on Oil Pollution Damage of 199281

(6) International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 199282

Unless strategically drafted, lengthy pieces of legislation carry with them the risk of intimidating the reader, and while it is true that laws are drafted by legal minds, it must be reiterated that the majority of those to whom the laws apply do not hail from a legal background. It is therefore stressed that laws should be drafted with the reader in mind.

After more than 15 years, it is clear that a different approach needs to be employed. Therefore, it is in the interests of the readers that a standalone Act is proposed. This is suggested instead of the other option which would involve the amendment of the existing Shipping Act, which is already itself quite voluminous.

Additionally, an Act that is user-friendly stands a better chance of being passed in Parliament making the goal of implementation and enforcement easier to attain. In light of this significant lapse of time since the initial Bill was drafted, this Bill is also necessary to reflect the updated provisions found in the 1996 Protocol.

The importance of the subject matter also warrants a standalone piece of legislation. It also has the potential to lead the way for the implementation of other laws, such those relating to the ballast water management, oil pollution and anti-fouling methods.


4.2 The Legislative Process of Implementation

Being a dualist nation, international laws must be actively incorporated into national legislation in order to be binding and enforceable in Trinidad and Tobago Courts. Accordingly, being a party to the Protocol is ineffective without its provisions undergoing the local legislative process which will be briefly outlined below.

In order to be passed, this draft must pass through both the House of Representatives and the Senate before it is presented to the President for assent. Within each house, the Bill must pass through various stages. That is the first reading, second reading, committee of the whole, report from the committee of the whole and finally, the third reading. As this Bill will be introduced in the Senate, it will proceed through the various stages in the Senate before being read for the first time in the House of Representatives. If this Bill successfully passes these stages then it will be presented to the President for the Presidential assent. Once signed by the Honourable President the Bill will obtain the status of law. Thereafter, it will be up to the Clerk of the House to have the Act printed and published in the Trinidad and Tobago Gazette.83

4.3 Scope of Application of the Bill

The provisions of this Bill shall apply to vessels and aircraft registered in Trinidad and Tobago or otherwise flying the Trinidad and Tobago flag. It shall also apply to vessels and aircraft loading in its territory the wastes or other matter which are to be dumped or incinerated at sea and vessels, aircraft and platforms or other manmade structures believed to be engaged in dumping or incineration at sea in areas within which Trinidad and Tobago is entitled to exercise jurisdiction.

All forms of dumping are prohibited except those stipulated in an approved list, which may be expelled into the sea by those who possess a permit provided by the personnel attached to the EMA, with the approval from the Maritime Services Division of

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the Ministry of Transport. The materials in this approved list will include organic matter, fish materials and certain dredged materials. The primary pollutants in Trinidad and Tobago are identified as sewage, nutrients, heavy metals, hydrocarbons, persistent organic pollutants, and sediments,84 which are certainly not ignored by this Bill. The incineration of wastes at sea is prohibited in Part II.

The Bill embraces the notion of cooperative governance. The EMA is mandated to keep in constant communication with the Maritime Services Division “MSD” 85 which in turn, is under a duty to communicate with the IMO in relation to developments in the area. These include but are not limited to the number of permits issued and the conditions attached to them, data collected in relation to the substances being dumped and also the quantities and locations where they are being dumped. This duty to communicate also extends to neighbouring Countries and other signatories to the Convention. Success in this regard can only be achieved with a concerted effort on all sides.

It is understood that the full implementation of these provisions will take time. Therefore the date of commencement is toward the end of 2018, which will leave time for its contents to be debated in Parliament, as well as allow time for the infrastructure to be put in place.

Of course, the execution of this Bill will require additional funds to facilitate its proper management and enforcement. The EMA, in coordination with the MSD, is entrusted with the power to prescribe further regulations and delegate functions to officials who will be in charge of inspections of vessels, investigations and reports, testing of substances being considered for dumping, incineration, or placement onto the seabed.

Moreover, there is no better time than the present for the proposal of this important Bill. The Government has recently established a Standing Committee to see to the

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84 14th Research Symposium (n 64).
85 The Maritime Services Division of the Ministry of Works and Transport was established by section 403 of the Shipping Act 1987 to establish and administer a legal framework to further develop and update the Maritime Law regime. Two of the key aspects of the Division’s portfolio are identified as the promotion of safety at sea and the protection of the marine environment from ship pollution.
development of the maritime sector with a view of boosting the economy which has been adversely affected by the decline of the oil industry. The Committee is mandated to report to the Cabinet every three (3) months with updates as to its progression.\footnote{Senator Paula Gopee-Scoon, The Report of Trinidad and Tobago, 5 September 2016 < http://tradeind.gov.tt/wp-content/uploads/2016/09/9-5-16-The-Report-of-TT.pdf> last accessed 27 April 2017.} As of 5 September 2016, the Committee met twice and has identified areas that can be utilised to increase revenue.\footnote{These include yachting, bunkering, transshipment, marina development and cold stacking.}

The ideal scenario will involve the development and growth of the legal regime alongside the stimulation of the economy through the promotion of maritime activities. It is stressed that these developments should not be introduced without first ensuring that the marine environment is adequately shielded from the inevitable effects of these anticipated changes.

This Bill prescribes two different categories of Offences which are distinguished by the severity of the breach each of which attracting a different penalty. The offences in section 14 are the most severe and include the following activities:

1. Dumping and/or incineration of wastes or the placement of matter in the sea without a Permit;
2. Loading, importing, exporting of wastes to be dumped or incinerated; and
3. Alteration of any authorisation or permit or being in possession of any false document.

The above activities may attract a fine up to Five Million Trinidad and Tobago Dollars and up to two (2) years imprisonment. Whereas, the offences found in section 15 are less severe but still attract steep penalties. These offences include:

1. Failure to comply with a condition of a permit; and
2. Allowing a person to commit an offence under section 14.

The above offences attract (for a first time offender) financial penalties up to One Million Trinidad and Tobago Dollars as well as a up to 5 years community service related to environmental rehabilitation.
Regulations addressing administrative matters are also attached to this Bill. The decision was taken to draft regulations to provide a flexible document whereby changes may be implemented without having to undergo the usual formalities required to amend an Act. This decision was also taken to avoid overburdening the Bill with administrative matters.

The Regulations cover a plethora of issues including the procedures regarding the provision, assignment, renewal, and revocation of permits and the fees attached to same. The Schedules to the Regulations also touch on issues such as the resolution of disputes as provided for under the Protocol.

A draft of the proposed Bill and accompanying Regulations are hereto attached for the consideration of all.
The Environmental Protection (Dumping of Wastes and Other Matter) Bill 2018

Arrangement of Sections

Part I

Preliminary

Section
1. Short Title
2. Commencement
3. Interpretation
4. Administration
5. Scope of Application
6. Duties of the Authority

Part II
7. Prohibition of the Dumping of Wastes and Other Matter
8. Prohibition on the Incineration of Wastes and Other matter
9. Prohibition on the Transport of Wastes
10. Exceptions

Part III
11. Permits
12. Enforcement Measures
13. Penalties
14. Jurisdiction of the Courts
15. Offences of Bodies Corporate
16. Defences

Schedules
The Environmental Protection (Dumping of Wastes and Other Matter) Bill 2018

An Act To Protect Trinidad And Tobago’s Marine Environment And Human Health From Marine Pollution Caused By The Dumping Of Wastes And Other Matter At Sea.

PART I

Preliminary

1. This Act may be cited as the Dumping of Wastes and other Matter Act

2. 31 December 2018

3. In this Act -

“Act” means the Environmental Protection (Dumping of Wastes and Other Matter) Act 2018;

“alternative methods of disposal” means methods which are less harmful to the environment and do not involve disposing of waste material into the sea;

“Authority” means the Environmental Management Authority;

“Community” means neighbouring Countries whose coasts may or may not share an ocean, including members of the Caribbean Community (CARICOM);
“Contracting State” means a State who has signed, ratified or acceded to the 1996 Protocol (as amended) to the International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972;

“Director” means the Director of the Maritime Services Division of Ministry of Transport;

"dumping" means:

(1) any deliberate disposal into the sea of wastes or other matter from land, vessels, aircraft, platforms or other manmade structures at sea;

(2) any deliberate disposal into the sea of vessels, aircraft, platforms or other manmade structures at sea;

(3) any storage of wastes or other matter in the seabed and the subsoil thereof from vessels, aircraft, platforms or other man-made structures at sea; and

(4) any abandonment or toppling at site of platforms or other man-made structures at sea, for the sole purpose of disposal;

(5) the disposal or storage of wastes or other matter directly arising from, or related to the exploration, exploitation and associated offshore processing of seabed mineral
resources.

"dumping" does not include:

(1) the disposal into the sea of wastes or other matter incidental to, or derived from the normal operations of vessels, aircraft, platforms or other manmade structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or other manmade structures;

(2) placement of matter for a purpose other than the mere disposal thereof, provided that such placement is not contrary to the aims of this Act;

(3) abandonment in the sea of matter (e.g., cables, pipelines and marine research devices) placed for a purpose other than the mere disposal thereof.

“environment” shall include the coastal environment;

“foreign vessel” means a vessel which is not a Trinidad and Tobago ship;
"incineration at sea" means the combustion on board a vessel, platform or other manmade structure at sea of wastes or other matter for the purpose of their deliberate disposal by thermal destruction;

"incineration at sea" does not include the incineration of wastes or other matter on board a vessel, platform, or other man-made structure at sea if such wastes or other matter were generated during the normal operation of that vessel, platform or other man-made structure at sea;

“Organisation” means the International Maritime Organisation;

“managing owner”, in relation to a ship, includes any person not being an agent in whom an owner of such ship has vested authority to manage and operate the ship;

“Maritime Division” means the Maritime Services Division of the Ministry of Works and Transport;

“master” includes every person having command or charge of any ship, other than a pilot;

“Minister” means the Minister to whom the responsibility for shipping is assigned;

“wastes or other matter” means any tangible material or substance of any kind, form or description;
“owner”, in relation to a ship, includes a demise or bareboat charterer and a managing owner;

“permit” means express, written authorisation provided by the Environmental Management Authority in accordance with the measures adopted pursuant to part III of this Act;

“pilot” in relation to any ship, means any person not belonging to the ship who has the conduct thereof;

"pollution" means the introduction, directly or indirectly, by human activity, of wastes or other matter into the sea which results or is likely to result in such deleterious effects as harm to living resources and marine ecosystems, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities;

“regional States” means States in the Caribbean and in South America;

“regulations” mean the Environmental Protection (Dumping of Wastes and other Matter) regulations;

“seafarer” includes every person employed or engaged in any capacity on board any ship, other than a master or a pilot or a person temporarily employed on the ship while in port, and apprentices;

“structure” means a structure that is made by a person;
“Trinidad and Tobago vessel” means a vessel which is—

(a) registered or licensed in Trinidad and Tobago;

“vessel and aircraft” means waterborne or airborne craft of any type whatsoever. This expression includes air-cushioned craft and floating craft, whether self-propelled or not;

“the sea” means all marine waters other than the internal waters, as well as the seabed and subsoil thereof; it does not include sub-seabed repositories accessed only from land;

“waste assessment guidelines” means the guidelines set out in Schedule II;

“water pollution rules” mean the Water Pollution Rules, 2001, (as amended) generated under the provisions of the Environmental Management Act Chapter 35:05;
Section 4

Administration and

Implementation

4. (1) The Authority shall--

(a) be responsible for the administration of the provisions of this Act;
(b) shall cooperate with Contracting States and Regional States in the development of procedures for the reporting of vessels and aircraft that are observed dumping, incinerating at sea or placing of wastes or other matter in contravention of the Act.

(2) The Authority may--

(a) delegate any of the functions stipulated in this Act to the Director or to any other competent body;

(b) prescribe regulations for the administration of this Act, for the enforcement of the provisions therein or any functions incidental to the administration of this Act;

(c) conduct enquires or investigations in relation to any part of this Act;

(d) board, inspect, survey, any vessel, platform or aircraft to which this Act applies;
(e) demand the production of any documents or records;

(f) collect statements from any person on board a vessel, platform or aircraft as prescribed in this Act including the Master, Pilot, Passengers, Managing Owner, Shipowner or Seafarer;

(g) make the Protocol available to those members of the public, Seafarers or anyone who may wish to peruse same or make copies of same at their own expense;

Section 5

Scope of Application

5. (1) Unless otherwise stipulated, this Act applies to--

(a) vessels and aircraft which are registered under the Trinidad and Tobago flag or are otherwise entitled to fly the flag of Trinidad and Tobago;

(b) foreign vessels and aircraft loading in the territory of Trinidad and Tobago, wastes which are to be dumped or incinerated at sea; and

(c) vessels, aircraft and platforms or other manmade structures believed to be engaged in dumping or incineration at sea in
areas within which Trinidad and Tobago is entitled to exercise jurisdiction under international law;

(d) the internal waters of Trinidad and Tobago.

(2) This Act shall not apply to--

(a) the disposal or storage of wastes or other matter directly arising from, or related to the exploration, exploitation or off-shore processing of seabed mineral resources;

(b) vessels and / or aircraft that enjoy sovereign immunity in international law.

Section 6

Duties of the Authority

6. (1) The Authority shall--

(a) take all precautions to ensure that all forms of dumping into the sea are avoided as far as practicable even in circumstances where it appears that substance proposed to be dumped poses a minimal threat to the environment;

(b) designate dumping site in accordance to Schedule II of this Act;

(c) ensure that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environmental degradation;
(d) develop guidelines for the assessment of vessels and equipment used for dumping; and

(e) periodically conduct inspections of vessels and equipment of those who are authorised to dump or incinerate matter at sea in order to ensure compliance with the guidelines prepared under Subsection (1)(d);

(f) provide the Director with information in respect of the type and nature of the materials dumped in Trinidad and Tobago waters.

PART II

Section 7

Prohibition of the Dumping of Wastes and other Matter

7. (1) No person shall dump any waste or other material at sea from a vessel, aircraft or platform unless in possession of a permit as prescribed in Part III of this Act;

(2) No waste or other material may be dumped from a Trinidad and Tobago vessel, aircraft, platform or other man-made structure into the sea.
Section 8

Prohibition of the Incineration of Wastes and Other Matter

8. (1) No person shall incinerate wastes or other matter at sea unless in possession of a permit as prescribed under Part III of this Act.

Section 9

Prohibition of the Import or Export of Wastes

9. (1) No person shall load any waste or other material to be dumped or incinerated at sea onto any vessel, aircraft or other structure at sea unless expressly authorised by virtue of a permit as prescribed in Part III of this Act.

(2) No person shall transport or permit another person to transport any waste or other material for the purposes of disposal to any other jurisdiction.

(3) No person shall import into Trinidad and Tobago any substance for the purposes of disposal or incineration into any part of the sea.
Section

10

Exception

10. (1) The prohibitions in section 7(1) and 8 (1) shall not apply where dumping or incineration at sea appears to be the only way of securing the safety of human life, vessels, aircraft, platforms or other man-made structures at sea or averting an emergency occasioned by --

(a) adverse weather conditions; or

(b) a threat to a vessel, aircraft, platform or other man-made structure at sea.

(2) Subsection (1) only applies in those situations where the likely damage that would be caused by the threat is worse than the damage that would likely be caused by dumping or incineration as referred to in subsection (1).

(3) In the absence of a feasible alternative, the prohibition in section 7(1) shall not apply where there exists a serious threat or danger to human life, health or the environment.

(4) Any dumping or incineration at sea as referred to in subsection (1) shall be conducted in a manner that has due regard to the risk of damage to human or marine life.

(5) The Authority shall inform the Director of the details of dumping or incineration at sea carried out under this section and the Director shall, as soon as may be practicable, relay the information to the Organisation.
PART III

Section 11

Permits

11. (1) In the absence of any other feasible solution the Authority may--

(a) issue a permit authorising the substances found in schedule I to be dumped, placed or transported at sea upon receiving an application in a form prescribed by the Authority; and

(b) issue a permit as an exception to the provisions found in sections 9 and 10 in emergencies posing an unacceptable threat to human health, safety, or the marine environment.

Section 12

Enforcement Measures

12. (1) A person commits an offence under this Part if he:

(a) dumps any waste at sea without a valid permit contrary to section 7;

(b) incinerates any waste or material at sea
contrary to section 8;

(c) loads, imports or exports any waste or other material to be dumped or incinerated at sea contrary section 9;

(d) alters any permit;

(e) fabricates or forges any document for the purpose of passing it off as a permit;

(f) passes off, uses, alters or has in possession any altered or false document;

(g) fails to comply with a condition attached to a permit;

(h) allows another person to commit an offence under this Act.

(2) Any person who witnesses any of the activities prohibited shall report such occurrences to the Authority as soon as practicable;

(3) The Authority shall investigate and record any reports made under subsection (2).
Section 13

Penalties

13. (1) A person who is convicted of an offence under Part II may be sentenced to a fine of up to $5,000,000 (Five Million) Trinidad and Tobago Dollars or to imprisonment for a period of up to two (2) years or serve 5 years community service related to environmental rehabilitation.

(2) A person who is convicted of an offence under section 12 may be sentenced on a first conviction to a fine of up to $1,000,000 (One Million) Trinidad and Tobago Dollars or.

(3) A person who is convicted more than once of an offence under subsection (2) may be sentenced on a second or subsequent conviction for that offence as if he or she has committed an offence under section (1).

(4) If a person is found guilty of an offence in the High Court, the penalty limitations in Part IV do not apply and a higher penalty may be imposed.
Section 14

Jurisdiction of Courts

(1) The High Court of Justice and the Magistrates Court of Trinidad and Tobago have Jurisdiction over the offences found in this Act;

(2) Any offence in terms of this Act shall, for purposes in relation to the jurisdiction of a Court to try the offence, be deemed to have been committed within the area of jurisdiction of the Court in which the prosecution is instituted.

(4) A Court that sentences any person—

(a) to community service for an offence in terms of this Act, must impose a form of community service which benefits the coastal environment, unless the circumstances do not permit;

(b) for any offence in terms of this Act, may suspend, revoke or cancel any permit granted to the offender under this Act.

Section 15

Corporate Liability

(1) Any company or organisation found to be in contravention of sections 8, 9 or 10 of this Act shall be guilty of an offence and will be liable to prosecution.
(2) The Authority has the authority to prosecute any company or organisation who is found guilty of an offence as referred to in subsection (1) of this Part.

(3) The provisions of Parts IV and VIII of the Environmental Management Act shall apply with respect to such companies or organisations referred to in subsection (1) of this Part;

PART VI

Section 17

Defences

17(1) A person who partakes in any prohibited act will have a defence if it can be shown that--

(a) adverse weather conditions rendered the prohibited act a necessity in order to protect human life or that of the vessel, aircraft, platform or structure in question; or

(b) that there was a real threat to human life or to the vessel, aircraft, platform in question; and

(c) that there was no reasonable alternative to the prohibited act and that the likely damage arising from the prohibited act at sea were less than what would was likely to have
otherwise occurred; and

(d) the prohibited act was conducted in such a manner so as to minimise any actual or potential adverse effects and was promptly, reported to the Authority.
SCHEDULE I

WASTES OR OTHER MATTER THAT MAY BE CONSIDERED FOR DUMPING

1) The following wastes or other matter are those that may be considered for dumping being mindful of the Objectives and General Obligations of this Act:

   a) dredged material;
   
   b) sewage sludge;
   
   c) fish waste, or material resulting from industrial fish processing operations;
   
   d) vessels and platforms or other man-made structures at sea;
   
   e) inert, inorganic geological material;
   
   f) organic material of natural origin;
   
   g) bulky items primarily comprising iron, steel, concrete and similarly unharmful materials for which the concern is physical impact, and limited to those circumstances where such wastes are generated at locations, such as small islands with isolated communities, having no practicable access to disposal options other than dumping; and
   
   h) carbon dioxide streams from carbon dioxide
capture processes for sequestration.

2) The wastes or other matter listed in subsection (d) and (g) may be considered for dumping, provided that material capable of creating floating debris or otherwise contributing to pollution of the marine environment has been removed to the maximum extent and provided that the material dumped poses no serious obstacle to fishing or navigation.

3) Notwithstanding the above, materials listed above containing levels of radioactivity greater than de minimis (exempt) concentrations as defined by the IAEA and adopted shall not be considered eligible for dumping.

The Authority shall complete a scientific study relating to all radioactive wastes and other radioactive matter other than high level wastes or matter, taking into account such other factors as the Authority considers appropriate and shall review the prohibition on dumping of such substances.

4) Carbon dioxide streams referred to in subsection (h) may only be considered for dumping, if:

   a) disposal is into a sub-seabed geological formation; and

   b) they consist overwhelmingly of carbon dioxide. They may contain incidental associated substances derived from the source material and the capture and sequestration processes used;
c) no wastes or other matter are added for the purpose of disposing of those wastes or other matter
SCHEDULE II

GUIDELINES FOR THE ASSESSMENT OF WASTES OR OTHER MATERIAL THAT MAY BE CONSIDERED FOR DUMPING AT SEA (“the Waste Assessment Guidelines”)

GENERAL

1. Guidelines for the reduction of dumping at sea. The acceptance of dumping under certain circumstances does not prejudice the duties to reduce the dumping of wastes at sea.

Drafted in accordance with Annex I to the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters which Trinidad and Tobago became a party to on 6 March 2000.

WASTE PREVENTION AUDIT

2. The assessment of alternatives to dumping at sea should, include an evaluation of—

   (a) the types, amounts and relative hazard of wastes generated;

   (b) details of the production process and the sources of wastes within that process; and

   (c) the feasibility of the following waste reduction or prevention techniques:
(i) product reformulation;

(ii) clean production technologies;

(iii) process modification;

(iv) input substitution; and

(v) on-site, closed-loop recycling.

3. If the audit reveals opportunities for waste prevention at its source, any applicant for a permit shall, in coordination with the Environmental Authority, formulate and implement a strategic plan for waste prevention. This plan should incorporate specific targets and make provision for further audits to track progress.

4. For dredged material and sewage sludge, targeted waste management is necessary to identify and control the sources of contamination. This should be achieved through the introduction of waste prevention methods. These are best achieved through collaboration between the relevant local, provincial and national agencies involved with the control of point and non-point sources of pollution. Until these standards are met, the problems of contaminated dredged material may be addressed by employing disposal management methods at sea or on land.
CONSIDERATION OF WASTE MANAGEMENT OPTIONS

5. Applications to dump wastes or other material must show that the following alternatives for waste management were considered:

(a) re-use;

(b) off-site recycling;

(c) destruction of hazardous constituents;

(d) treatment to reduce or remove the hazardous constituents; and

(e) disposal on land, into air and in water.

6. The Authority may refuse a permit application if it can be proved that the one or all of the alternatives were not used. The practical availability of the alternatives listed in section 5 (a-d) should be considered in the light of a comparative risk assessment involving both dumping at sea and the alternatives.

CHEMICAL, PHYSICAL AND BIOLOGICAL PROPERTIES

7. The characterisation of the wastes and their properties including detailed descriptions of its constituents. If a waste is so poorly characterised that proper assessment
cannot be made of its potential impacts on human health and the environment, that waste shall not be dumped. Such assessments should consider the following--

(a) origin, total amount, form and average composition;

(b) properties: physical, chemical, biochemical and biological;

(c) toxicity;

(d) persistence: physical, chemical and biological; and

(e) accumulation and biotransformation in biological materials or sediments.

**ACTION LIST**

8. In selecting substances for consideration in the Action List the Authority shall give priority to toxic, persistent and bioaccumulative substances from anthropogenic sources (e.g., cadmium, mercury, organohalogens, petroleum hydrocarbons, and, whenever relevant, arsenic, lead, copper, zinc, beryllium, chromium, nickel and vanadium, organosilicon compounds, cyanides, fluorides and pesticides or their by-products other than organohalogens).

An Action List can also be used as a trigger mechanism for further waste prevention considerations.
9. The Action List must specify an upper level and may also specify a lower level. The upper level should be set so as to avoid acute or chronic effects on human health or on sensitive marine organisms representative of the marine ecosystem. Application of an Action List will result in three possible categories of waste:

(a) wastes which contain specified substances, or which cause biological responses, exceeding the relevant upper level shall not be dumped, unless made acceptable for dumping at sea through the use of management techniques or processes;

(b) wastes which contain specified substances, or which cause biological responses, below the relevant lower levels should be considered to be of little environmental concern in relation to dumping at sea; and

(c) wastes which contain specified substances, or which cause biological responses, below the upper level but above the lower level require more detailed assessment before their suitability for dumping at sea can be determined.

DUMP•SITE SELECTION

10. The Authority will require at least the following information before deciding whether or not to approve a site for dumping at sea:
(a) the physical, chemical and biological characteristics of the water column and the seabed;

(b) the location of amenities, values and other uses of the sea in the area under consideration;

(c) the assessment of the constituent fluxes associated with dumping at sea in relation to existing fluxes of substances in the marine environment;

(d) the economic and operational feasibility; and

(e) any relevant coastal management objectives.

ASSESSMENT OF POTENTIAL EFFECTS

11. Assessment of potential effects should lead to a concise statement of the expected consequences of the sea or land disposal options, i.e., the “Impact Hypothesis”. It provides a basis for deciding whether to approve or reject the proposed disposal option and for defining environmental monitoring requirements.

12. The assessment should include information on waste characteristics, conditions at the proposed dump site(s), proposed disposal techniques, likely effects on the
environment, human health, living resources, amenities and other legitimate uses of the sea. The assessment should also define the nature, temporal and spatial scales and duration of expected impacts based on reasonably conservative assumptions.

13. An analysis of each disposal option must be considered in the light of a comparative assessment of the following concerns: human health risks, environmental costs, hazards, (including accidents), economics and exclusion of future uses. If this assessment reveals that adequate information is not available to determine the likely effects of the proposed disposal option then this option may not be considered further. In addition, if the interpretation of the comparative assessment shows the dumping at sea option to be less preferable, a permit for dumping will not be given.

14. Each assessment must conclude with a statement supporting a decision to issue or refuse a permit for dumping at sea.

MONITORING

15. Monitoring is used to verify that permit conditions are met—compliance monitoring—and that the assumptions made during the permit review and site selection process were correct and sufficient to protect the environment and human health—field monitoring. It is essential that such monitoring programmes have clearly defined objectives.
PERMIT AND PERMIT CONDITIONS

16. A decision to issue a permit will only be made if all impact evaluations are completed and the monitoring requirements are determined. The conditions of the permit must ensure, as far as practicable, that adverse effects are minimised and the benefits maximised. A dumping permit issued must contain data and information specifying—

(a) the types and sources of materials to bedumped;

(b) the location of the dumpsite(s);

(c) the method of dumping at sea; and

(d) monitoring and reporting requirements.

17. The Authority will review permits for dumping at sea at regular intervals, taking into account the results of monitoring and the objectives of monitoring programmes. Review of monitoring results will indicate whether field programmes need to be continued, revised or terminated and will contribute to informed decisions regarding the continuance, modification or revocation of permits. This provides an important feedback mechanism for the protection of human health and the marine environment.
Environmental Protection (Dumping of Wastes and Other Matter) Regulations
Arrangement of Regulations

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**References**
1. These Regulations may be cited as the Environmental Protection (Dumping of Wastes and Other Matter) Regulations.

2. (1) In these Regulations--

“Act” means the Environmental Protection (Dumping of Wastes and Other Matter) Act 2018;


(2) The same definitions contained in the Act shall apply to the Regulations herein.

3. (1) The Authority is responsible for the administration of these Regulations

4. (1) The Authority has the power to issue permits in respect of the wastes listed in Schedule I of the Act that are intended for dumping into the sea provided that the wastes are:

   a) loaded in the territory of Trinidad and Tobago; and

   b) loaded onto a vessel or aircraft registered in Trinidad and Tobago or flying the Trinidad and Tobago flag when the loading occurs in the territory of a State not a Party to the Protocol.
(2) The Authority may not issue a permit if—

(a) there is a more environmentally safe alternative method of disposal available in line with the waste assessment guidelines stipulated Schedule II of the Act;

(b) the waste or other material proposed for dumping contains—

(i) levels of radioactivity greater than those to be determined by the Authority;

Or

(ii) material which is capable of creating floating debris or otherwise contributing to the pollution of the marine environment and which could be removed from the material proposed for dumping;

(c) the dumping the waste or other material in question—

(i) is likely to cause irreversible or longlasting adverse effects that cannot satisfactorily be mitigated;

(ii) would cause a serious obstacle to fishing or navigation;

(iii) would be contrary to the obligations of Trinidad and Tobago under International Law;

(iv) would be contrary to the interests of regional States or members of the Community.

4. (3) In issuing permits, the Authority may consider any additional criteria and has the power to impose such requirements as it may see fit.
(4) Should the Authority take the decision to issue a permit, the Director shall be informed of its decision.

(5) Upon receiving such notice the Director shall inform the Organisation of the decision to issue the said permit.

5. (1) The Authority before granting any permit must take into account—

(a) the interests of the community;

(b) the socioeconomic impact if the disposal—

(i) is authorised;

(ii) is not authorised;

(c) the likely impact of the proposed disposal on the coastal environment, including, the cumulative effect of its impact together with those of existing point and nonpoint discharges;

(d) the Waste Assessment Guidelines set out in Schedule II of the Act;

(e) the likely environmental impact of the proposed activity;

(f) national legislation dealing with waste;

(g) transboundary impacts and international obligations and standards;

(h) Trinidad and Tobago’s obligations under international law;

(i) any other factors that may be prescribed.

6. (1) The Authority may --

(a) upon communication with the Director and other Countries likely to be affected, exempt a person from Sections 7 and 8
of the Act in cases of emergency;

(b) permit the activities stipulated in sections 7 and 8 of the Act if it is satisfied that such activity is incidental to the operation of the vessel.

7. (1) The Authority shall require an application for a permit to be made in the form to be stipulated by the Authority.

(2) Any application shall be accompanied by a fee to be calculated after considering the following:

a) the amounts of wastes intended to be discharged;

b) its properties and the effect on the environment proposed to be dumped;

c) the frequency in which the substance is to be dumped.

8. (1) The Authority may—

(a) alter the application forms required depending on the type of application being sought; or

(b) provide for varied fees depending on the content of the application sought.

(2) The content of the application referred to in Regulation 7 (1) shall include the --

(a) type of material the applicant intends to dispose of; and

(b) intended site of disposal, having regard to the impact the substance will have on the surrounding environment.
9.(1) The Authority shall stipulate the following in each permit:

(a) the substances authorised to be dumped;

(b) the quantity, conditions and concentrations the permit holder may dump;

(c) if sampling is to take place, the exact location where it will occur;

(d) requirements for reporting.

(e) additional conditions that the Authority may see fit.

10. (1) The Authority may require an applicant to—

(a) supply additional information;

(b) produce samples of the substance he/she intends to dispose of;

and;

(c) cooperate in further investigations and tests as the Authority deems necessary.

(2) If the Authority requires any investigations or tests as referred to in Sub-Regulation (1) (c), it may require the applicant to pay a fee towards the reasonable cost of obtaining them.

(3) The Authority shall inform the Applicant in writing of the conditions attached to a permit.

(4) If an applicant fails to comply with the conditions stipulated under this Part, the Authority is entitled to—

(a) refuse to proceed with the application; or

(b) refuse to proceed with the application until the said conditions are fulfilled.
11. (1) The Authority shall monitor any activities permitted under the Act to ensure compliance with the conditions in Regulation 9 and;

(2) confirm that the performance of the activity is consistent with the particulars provided any application for a permit.

12. (1) A person who is issued a permit shall--

(a) have due regard to the environment in which he/she intends to dispose of the permitted substances;
(b) take into account any alternative methods of disposal that will be less harmful to the environment; and
(c) avoid endangering the safety of persons or animals with the disposal of such materials.

13. (1) No permit is transferable to any person without the consent of the Authority.

(2) The Authority may, on the application of a person holding the permit, transfer a permit to another person.

(3) The Authority shall not approve an application under Sub-Regulation (2) unless the application is in respect of the specific substance(s) to which the permit applies.

(4) An application for a transfer shall be in triplicate in accordance with the form as determined by the Authority, and shall be submitted to the Authority together a prescribed fee to be determined by the Authority.

(5) An application for a transfer shall contain—

(a) the name and address of the person the permit is to be transferred to; and

(b) the signatures of the person the permit is to be transferred

Transfer of Permit
to and that of the applicant.

(6) An application for a transfer shall be accompanied by the permit which is to be transferred.

(7) Where the proposed transferee is a company, an application for a transfer shall be accompanied by a certified copy of the certificate of incorporation under Section 12 of the Companies Act.

(8) Where the Authority approves an application under Sub-Regulation (2), the Authority shall—

(a) endorse the transfer on the permit;

(b) substitute the name of the applicant on the permit for that of the transferee; and

(c) endorse the date on which the application was approved.

14. (1) Where a permit holder desires to continue to release a pollutant beyond the expiration of a permit, the permit holder shall submit an application for the renewal of a permit to the Authority, in accordance with the form as determined by the Authority, together with a fee to be determined by the Authority;

(2) An application for a new permit shall be made at least thirty (30) working days before the expiration of the permit.

(3) Where, after the expiration of a permit, a permit holder has submitted an application for the new permit in accordance with Sub-Regulation (1) and (2), the expired permit shall continue in force until the effective date of the renewed permit.
15. The Authority may revoke a permit if it appears that—

(a) the continued dumping of the pollutant authorised by the permit is likely to cause serious pollution of the environment or serious harm to human health which cannot be avoided by varying the conditions of the permit;

(b) the registered person or permittee has made a misrepresentation or wilful omission in obtaining the permit or in any report submitted to the Authority;

(c) the permit holder has violated any fundamental condition of the permit;

16.(1) Where the Authority refuses to issue a permit it shall --

(a) provide the applicant with written reasons for its refusal;

(b) give the applicant a reasonable opportunity to make submissions in relation to the revocation, suspension, variation or rejection; and

(d) take into consideration any submissions made by the applicant within five (5) working days of the provision of reasons.

17. (1) If the Authority considers that the applicant has omitted to provide any of the information required under Regulation 10(1)(a), the Authority shall notify the applicant in writing of the omission within ten (10) working days of receipt of the application and shall request the information to be provided within a time stipulated by the Authority.

(2) Following a written application in the prescribed form, the
Authority may allow for an extension of the time for a duration to be determined by the Authority.

(3) The Authority may refuse to grant a permit or issue a permit if the applicant does not supply the requisite information as requested under Sub-Regulation 1 within the time limit specified by the Authority.

18. (1) The Authority shall be responsible to---

(a) keep records of the nature and properties of all wastes or other matter for which dumping permits have been issued and, where practicable, the quantities dumped, and the location, and method of dumping;

(b) establish and maintain a Register detailing permits which have been refused, varied, transferred, renewed, suspended or revoked;

(c) collaborate and communicate with other Contracting States to the Convention and the International Maritime Organisation relating to the release of pollutants in the of the sea;

(d) communicate all the information referred to in Sub-Regulation (1)(a), (b) and (c), to the Director and, the Director shall report to the Organisation the said information;

(e) keep record of the enforcement measures as referred to in Part III of the Act, the effectiveness of such measures and any disputes arising therefrom;

(f) certify that the equipment to be used is satisfactory for the activity proposed.
19. Unless previously revoked, varied or suspended by the Authority, a permit shall be effective until a fixed date specified in the permit, which shall not be more than five (5) years from the date on which the permit was granted.