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EXPLANATORY NOTE

INTRODUCTION

In July 2008, three environmental groups and six States of the United States of America[1] won a ruling in the Ninth Circuit of Appeals which prohibited oceangoing freighters from discharging Ballast Water into United States' waters without a permit from the United States' Environmental Protection Agency. In the ruling of the case, *Northwest Environmental Advocates; The Ocean Conservancy Inc. (and others) v. United States Environmental Protection Agency*,[2] the nature of Ballast Water as a good servant but a bad master was articulated as follows:

> Ballast water is water that is taken on by ships to compensate for changes in the ship's weight as cargo is loaded or unloaded, and as fuel and supplies are consumed. Ballast water may be used for a number of different purposes such as maintaining stability, maintaining proper propeller and bow emersion and to compensate for off-center weights. Thus ballast water is essential to the proper functioning of cargo ships, as well as to the safety of its crew.
>
> Because ballast water is primarily used to compensate for changes in cargo, it is generally taken in or pumped out at the ports along the ship's route. When a ship takes on ballast water, whether freshwater or saltwater, organisms found in that water are typically taken in as well. These organisms are carried in the ballast tanks of the ship until the ship arrives at its next port, where due to changes in the distribution of the ship's cargo, they may be released into the new ecosystem…If these foreign organisms manage to survive and reproduce in the new ecosystem, they can cause severe problems in the natural and human environment…With lack of natural predators, invasive species can multiply rapidly and quickly take over an ecosystem, threatening native species. Indeed, invasive species are a major or contributing cause of declines for almost half the endangered species in the United States. Once established, invasive species become almost impossible to remove, leading scientists, industry officials and land managers to recognize that invasive species are one of the most serious, yet least appreciated environmental threats of the 21st century.

The quotation tells it all. The danger posed to the marine environment and indeed the ecosystem by uncontrolled and unmanaged use of Ballast Water is profound. Transfer of species in Ballast Water started as early as shipping trade. The movement of some 3 to 12 billion tons of ballast in ships internationally each year has been responsible for settlement of about 100 million tons of

[1]The States of New York, Illinois, Michigan, Minnesota Wisconsin and Pennsylvania.

[2] United States Court Of Appeals, Ninth Circuit No 06-17188 DC No cv-03-05760-SI available at http://cdn.ca9.uscourts.gov/datastore/opinions/2008/07/23/0374795.pdf

sediment.[3] Indeed Ballast Water has been recognized as a major vector for the translocation of aquatic species across bio geographical boundaries. It is estimated that as many as 10,000 alien species of plant and animals are transported per day in ships around the world.[4]

The ruling in the case which was justifiably hailed by environmentalists does not reflect the menace in the United States alone but also the global trend of the negative impact Ballast Water could ultimately have on human life if urgent attention is not given to the subject.

It is not in any doubt that the use of ballast water has come to stay as an integral part of the shipping industry worldwide. The world itself today cannot do without shipping. Shipping has become a global economic engine. From refrigerated freights and container ships to car carriers and supertankers, the world shipping industry has played inevitably, a key role in transporting about 90 percent of the world's food and other commodities as well as energy[5] whilst helping to transform the global economy. As at 2009, cargo transported by liner shipping industry represented about two-thirds of the value of global trade equating each year to more than US$4 trillion worth of goods. Workers at ports worldwide loaded and unloaded cargo for more than 10,000 liner vessel-stops per week with the average ship making 2.1 port calls per week. In mid-2008, there were more than 17.8 million containers in the world fleet which cost the industry US$80.1 billion to purchase. The full annual economic impact of shipping was estimated at US$436.6 billion.[6]

Certainly, shipping will continue to impact on the world's economy. With increase in the emerging developing economies and the discoveries of oil and related natural resources, the need to address the evil side of Ballast Water is most critical now than ever before. The responsibility, whilst is at the doorstep of the industry's active players is that of humanity.

> Is there not the Earth itself, its forests and waters, above and below the surface? These are the inheritance of the human race…What rights, and under what conditions, a person shall be allowed to exercise over any portion of this common inheritance cannot be left undecided. No function of government is less optimal than the regulation of these things, or more completely involved in a civilized society.[7]

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[3]IMO Resolution A. 868 "Guidelines for the Control and Management of Ship's Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens".

[4] Cohen, N. A., "Ship's ballast water and the introduction of exotic organisms into the San Francisco Estuary-Current Status of the problem and options for management", California Urban Water Agencies, October 1998, p.4.

[5] IMO Technical Cooperation Brochure, available at http://www.imo.org/OurWork/TechnicalCooperation/Documents/Brochure/English.pdf

6 Report commissioned by The World Shipping Council, IHS Global Insight Report, 2009.

[7] Mills, J., S., *on Liberty* (1859), "Harvard Classics", Volume 25,1909, P.F. Collier&Son, London, p.212

1. THE INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS (The BWM Convention): ANTECEDENT AND OVERVIEW

1.1 THE ANTECEDENT

The subject of the control and management of Ballast Water as a distinct case seems relatively to be of recent origin at least on the annals of the International Maritime Organization (IMO). Internationally, it seems its consideration had apparently been subsumed under the more general subject of invasive alien species even though specifically, invasion through the use of Ballast Water and its devastating effect on the environment had been known for many decades. It is on record that in 1903, domestic regulation was passed to control Ballast Water exchange following a bloom of Odentella Sinensis Algae in the North Sea.[8]

The Law of the Sea Convention[9] made provision generally for the prohibition of introducing alien species into the marine environment.[10] Even though no specific mention was made of Ballast Water, the provision could be considered as the basic legislative framework setting the tone for the more specific thoughts about invasive alien species in broad terms and invasion through Ballast Water in particular.

Previously, the subject could have been considered under the broader anti-pollution rules applicable. Under customary law, a flag State could prescribe anti-pollution rules applicable to its vessels wherever in the world they might be. The MARPOL Convention[11] (Articles 3 and 4) obliges flag States to apply the Conventions pollution standards.[12]

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992 in its Agenda 21 called on the IMO and other international bodies to take action to address the issue of the negative effect of ships' Ballast Water.[13] The Convention on Biodiversity[14] which had three main objectives, namely, the conservation of biological diversity, sustainable use of its component, and fair and equitable sharing of benefits arising from genetic resources,[15] did

[8] Fonseca de Souza, Rolim, M. H., "International Law on Ballast Water: Preventing Biopollution, Martinus Nijhoff Publishers Leiden, The Netherlands, 2008 p.8.
[9] The United Nations Convention on the Law of the Sea adopted on 10 December 1982 at Montego Bay, entered into force on 16 November 1994,available at https://treaties.un.org/
[10] Article 196.
[11] The International Convention for the Prevention of Pollution from Ships, adopted on 2 November 1973 in London, did not enter into force until modified by the Protocol of 1978, the combined instrument entered into force on 2 October 1983, available at https://treaties.un.org/
[12] Churchill R.R. and Lowe A.V., "The Law of the Sea" 3rd edn, Juris Publishing, Manchester 1824, p. 344.
[13] See Lloyd's register on Understanding Ballast Water Management series (October 2012).
[14] The Convention on Biological Diversity, adopted on 5 June 1992 in Rio de Janeiro, entered into force on 29 December 1983, available at https://treaties.un.org/
[15] Article 5

not specifically focus on the pollution from Ballast Water even though the issue could be tackled under those broader objectives.

Prior to all that however, the IMO had been seeking a solution for over 10 years. In 1991, through its Marine Environment Protection Committee (MEPC), the IMO published Guidelines for Preventing the Introduction of Unwanted Organisms and Pathogens from Ships' Ballast Water and Sediment Discharges. These were updated in 1993. Then in 1997, the IMO published Guidelines for Control and Management of Ships' Ballast Water to minimize the Transfer of Harmful Aquatic Organisms and Pathogens.[16]

Doubtlessly, these documents are the foundation for today's International Convention for the Control and Management of Ships' Ballast Water and Sediments (The Ballast Water Management or BWM Convention) adopted in London on Friday 13 February 2004.

The Convention shall come into force 12 months after ratification by 30 states, representing 35percent of the world's merchant shipping tonnage. As of July 2013, 38 Contracting States representing 30.38 percent of the world's tonnage had ratified.[17]

1.2 THE OVERVIEW

The Convention has 22 Articles and an annex which forms an integral part of the Convention.[18] The annex contains the regulations which must be given effect to just as the Convention.

The preambular provision cites Article 196(1) of the Law of the Sea Convention, the 1992 Convention on Biological Diversity, the 1992 United Nations Convention on Environment and Development, the 2002 World Summit on Sustainable Development and the IMO General Assembly Resolutions A.774 (18), 1993 and A.868 (20), 1997 all of which reflect not only the legal and historical basis of the Convention but also amplify its universal orientation.[19]

The principal aim of the Convention is for all parties to "prevent, minimize and ultimately eliminate the transfer of harmful aquatic organisms and pathogens through the control and management of ships' Ballast Water and sediments."[20] In doing so, States are required to cooperate for the purpose of effective implementation, compliance and enforcement of the Convention.[21]

The definition provisions indicate the basis of the scope of application of the Convention. It envisages that apart from ships that run from port to port, other seaborne crafts and

[16] IMO Res. A.868 op.cit.
[17] www.imo.org/About/Conventions/Status of Conventions.
[18] Article 2 (2).
[19] The Preamble.
[20] Article 2 (1).
[21] Article 2(4).

installations could also be a source of Ballast Water pollution. Accordingly, "ship" is given a wide definition to include submersibles, floating craft, floating platforms, FSUs and FPSOs.[22]

Article 3 emphasizes the wide scope of application of the Convention by covering not only ships entitled to fly the flag of a State Party, but also ships operating under its authority. Even where exemption is granted as for instance in the case of warships, naval auxiliaries or other ships owned or operated by a State and used only on government non-commercial service, it is provided that such ships act in a manner consistent, so far as is reasonable and practicable, with the Convention.[23] Even more far-reaching is the application of the Convention to ships of States which are not parties to the Convention.[24]

Articles 4, 5, 6 7 and 9 deal with the specific obligations of State Parties. They are required to ensure compliance with requirements and standards, develop national strategies and policies for Ballast Water Management,[25] provide adequate reception facilities at ports and terminals,[26]promote and facilitate scientific and technical research on Ballast Water and monitor its effects in waters under their jurisdictions.[27] They are further required to conduct survey and certification of ships flying their flags or operating under their authority[28] and also subject such ships to inspection to ensure compliance with provisions of the Convention.[29]

Articles 8, 10 and 11 deal with issues of violations of the Convention and impose an obligation on State Parties to provide sanctions for violations in their laws wherever they occur.[30] In this regard, the Convention adopts both territorial and nationality approach to the exercise of jurisdiction. States can deal with violations by ships flying their flags (wherever the violation occurred) as well as violations in their own ports or offshore.[31] For the purpose of dealing with "extra territorial" violations, the State in whose jurisdiction the violation is suspected to have occurred may conduct an inspection on the ship and report, with evidence where appropriate, to the administration of the offending ship for the commencement of the necessary proceedings.[32] There are also provisions for the issuance of warning, detention and even exclusion and a corresponding provision for compensation for undue delay and detention.[33]

To sustain peaceful cooperation and inter-State good neighbourliness, there is a dispute settlement provision under Article 15 where State Parties can settle disputes concerning the

[22] Article 1 (12).
[23] Article 3(2) (e).
[24] Article 3(3).
[25] Article 4.
[26] Article 5.
[27] Article 6.
[28] Article 7.
[29] Article 9.
[30] Article 8.
[31] Article 10.
[32] Article 11.
[33] Article 12.

interpretation or application of the Convention by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement resort to regional agencies or arrangement by their own choice.

Article 16 reflects the principle of international law that the codification of a customary rule into treaty law does not extinguish the obligations of States under that custom.[34] It therefore enacts that, nothing in the Convention shall prejudice the rights and obligations of any state under customary law as reflected in the United Nations Convention on the Law of the Sea.

Articles 17 to 22 provide for such matters as the methods of consent to be bound by the Convention, its entry into force, processes of amendment and denunciation.

The annex to the Convention which forms an integral part thereof sets out the regulations for the control and management of Ballast Water and sediments.

The annex has 5 sections, A to E. Section A sets out the general provisions and covers regulations A1 to A5. Matters in the general provisions include Definitions, General Applicability, Exceptions, Exemptions and Equivalent Compliance. Thus, aside the practical definitions given to various expressions used in the Annex,[35] exceptions and exemptions are made to the general applicability of the provisions that the discharge of Ballast Water shall only be conducted through a Ballast Water Management Plan set forth in the Annex.[36] The exceptions include emergency and accident situations.[37] Additionally, States Parties are permitted to grant exemptions in the application of the Rules. This is however restricted by some IMO control provisions.[38] The Section also provides for States to make equivalent compliance for such special ships as pleasure crafts and those used primarily for search and rescue of a certain size and Ballast Water capacity.[39]

Section B regulates the management and control requirement for ships and covers such matters as Ballast Water Management Plan, Ballast Water Record Book, Ballast Water Management for Ships, Ballast Water Exchange and the Duties of Officers and Crew. The contents of a typical Ballast Water Management plan are set out. To ensure compliance, it is specified that the plan should be approved by the Coastal States' administration taking into account guidelines developed by the IMO.[40] The form of Ballast Water Record Book and the entries that must be made into it are also specified in Section B. There are obligations of providing signatures in the book and also making the book available for inspection upon request. Copies may also be made of the book for purposes of investigation and the master is obliged to sign such copies.[41] Also, for purposes of Ballast Water Management for ships, different standards are expected of ships

[34] Nicaragua v. United States, ICJ reports, 1984 p.392.
[35] Regulation A-1.
[36] Regulation A-2.
[37] Regulation A-3.
[38] Regulation A-4.
[39] Regulation A-5.
[40] Regulation B-1.
[41] Regulation B2.

constructed in certain years and of certain Ballast Water Capacity to meet those standards.[42] It is also indicated that, Ballast Water Exchange is also to meet the standard set forth in Regulation D with a distance criteria prescribed for the exchange.[43] Sediments are also to be disposed of at designated spaces[44] and it is further provided that Officers and Crew are to be familiar with their duties in the implementation of the Ballast Water Management of their ships.[45]

Section C deals with special requirement in certain areas which include the imposition of Additional Measures and Warnings concerning Ballast Water uptake in certain areas. Thus, where it is determined by a State Party that in addition to the measures contained in Section B there is the need for other measures, it can put in place those additional measures taking into account IMO guidelines and international law. There should however be consultations with adjacent and other States that may be affected by those measures.[46] Adequate warnings and notices are also required to be given in pursuing those measures.[47]

Section D regulates the standards for Ballast Water Management. The matters provided for include Ballast Water Exchange Standard, Ballast Water Performance Standard, Prototype Ballast Water Treatment Technologies and the Review of Standards by the IMO. It is provided that the administration of States Parties must approve Ballast Water systems used in compliance with the Convention. Such systems must also be safe in terms of the ship, its equipment and the crew.[48] Most importantly, Regulation D-5 provides for periodic review by the MEPC, of the various systems, standards, as well as any other aspect of Ballast Water Management in the Annex including guidelines developed by IMO and where necessary, amendments may be adopted in that respect.

Section E is on Survey and Certification Requirements for Ballast Water Management and matters covered are Surveys, Issuance or Endorsement of a Certificate by a State Party, Issuance or Endorsement of a Certificate by another Party, Form of Certificate and Duration and Validity of the Certificate. Various types of surveys; initial, renewal, intermediate, annual and additional are specified which could be conducted by officers of the administration or by such other surveyors or recognized organization that the administration may engage.[49] Certificates are issued upon successful conduct of the surveys and the form, duration and period of validity of the Certificates are also specified. Provisions are also made for the situations where the Certificates shall cease to be valid.[50]

[42] Regulation B-3.
[43] Regulation B-4.
[44] Regulation B-5.
[45] Regulation B-6.
[46] Regulation C-1
[47] Regulations C-2 and C-3.
[48] Regulation D-3.
[49] Regulation E-1.
[50] Regulations E-4 and E-5.

Finally, it is noteworthy that, whilst the Convention is yet to come into force, the IMO has adopted a Resolution[51] that adjusts the implementation schedule by which ships are required to discharge Ballast Water in compliance with the D-2 discharge standard. However, as the Convention cannot be amended before it enters into force, the Resolution only recommends that administrations apply these changes. Once the Convention enters into force the changes are expected to effect an amendment to the Convention.

[51] Resolution A.1088 (28), adopted on 4 December 2013, available at http://wwww.maritime-executive.com/pressrelease/Statutory-Alert-Adjustment-to-Ballast-Water-Management-Convention-Implementation-Schedule-2014-01-10/

2. BALLAST WATER MANAGEMENT IN GHANA

2. 1 GHANA'S GEOGRAPHICAL POSITION

Ghana is one of the five African countries along the Gulf of Guinea. It is bordered on the west by Cote d'Ivoire, on the north by Burkina Faso and on the east by Togo. The country consists mostly of low-lying savannah regions with a central belt of forest.[52] Apart from the Gulf of Guinea, the other distinguishing geographical feature of Ghana is the Volta River on which the Akosombo dam has been constructed. The damming of the river created the enormous Lake Volta, which occupies a sizeable portion of Ghana's south eastern territory. With a storage capacity of 124,000,000 acre- feet of water, Lake Volta is one of the biggest man-made lakes in the world. The lake is navigable and provides a cheap route linking Ghana's south eastern savannah with the coast. It is also a major fishing ground and provides irrigation for farmland in the dry Accra plains lying immediately below the dam site.[53]

By its strategic location, Ghana is endowed with immense terrestrial and aquatic biodiversity at the genetic species and the ecosystem levels. The terrestrial ecosystem of Ghana includes the forest, savannah woodland and coastal savannah scrubs. There exists an ecosystem type in the interface between the high forest and the savannah zone known as the transitional zone. This belt hosts a mixture of flora and fauna species associated with both the forest and the savannah zones. The aquatic ecosystem comprises the marine, fresh water and the interface between the two represented by the coastal wetlands.

Ghana has two major sea ports and two fishing ports. The Tema port which is the larger of the two sea ports is located 28km east of Accra at 5 degrees 38'N and 0 degrees 01'E. It handles 80 percent of the nation's import and exports. It has 12 commercial berths and two other berths, a dedicated oil berth and another operated solely by the Volta Aluminum Company (VALCO).[54] The port has a privately operated reception facility which receives waste from ships calling at the port. The Takoradi port is situated on the Gulf of Guinea (Atlantic Ocean) in southern Ghana and is the country's main export port with around 900 vessel calls per year, handling 65 percent of Ghana's export. The port also has a reception facility for the collection of waste from ships calling at the port.[55]

There is no doubt that the country's socio-economic activities are inextricably linked to the ecosystem. As any threat to the system is ultimately a threat to human survival, any measure to offer protection as the Convention seeks to do, ought to be embraced. The next heading points out the specific reasons why Ghana needs the BWM Convention in its legal system.

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[52] Available at http://www.geographia.com/Ghana.
[53] Available at http://www. Britanica.com/Eb checked/topic/632445/Lake Volta.
[54]Valco is the largest aluminum company located in Tema.
[55] National Ballast Water Rapid Status Assessment (Advanced draft) Ghana Maritime Authority.

2.2 MEMORANDUM EXPLAININING WHY GHANA MUST ACCEDE TO AND IMPLEMENT THE BWM CONVENTION

Compelling constitutional, environmental and socio economic reasons why Ghana must accede to and implement the BWM Convention, abound.

In the first place, even though the 1992 Constitution of the Republic does not specifically address the subject of biodiversity and for that matter invasive alien species (including those from ballast water), there are however provisions governing the environment which are material. Article 36 (9) imposes an obligation on the State to take appropriate measures needed to protect and safeguard the environment. The citizens of the land are similarly admonished to act at all times in an environmentally sustainable manner.[56] The State is further enjoined in its dealings with other States to promote respect for international law, treaty obligations and to adhere to the principles of the charters of the United Nations, the African Union, the Economic Community of West African States, the Commonwealth and any other international organization of which Ghana is a member.[57] With these provisions read together, the accession to and implementation of the BWM Convention would place the country in compliance with its own domestic constitutional law and its international obligations. As it stands now, a legitimate constitutional question stands unanswered.

Closely related to the above, it should be of critical concern that as the criminal laws of Ghana stand now, there seem to be no provisions to deal with offences related to the unlawful discharge or exchange of Ballast Water. An attempt to bring any wrongful conduct related to Ballast Water under any general provision of the country's criminal jurisprudence is likely to miscarry in the courts given the provision in Article 19 (12). In unequivocal terms, the provision states that "no person shall be convicted of a criminal offence unless the offence is defined and the penalty for it prescribed in a written law." There is therefore a lacuna in the law which the accession to and incorporation of the provisions of the Convention will fill. The Act to implement the Convention will create the relevant offences and penalties to fill the vacuum as the Convention itself prescribes.

Secondly, Ghana is now an emerging oil and gas economy. The oil and gas discovery and exploitation have occasioned a rapid increase in the country's vessel calls and general shipping activities. Port Master Plan figures from the Ghana Ports and Harbours Authority (GPHA)[58] show that in the Tema port, container traffic increased from 167 TEUs in the year 2000 to 393,000 TEUs in 2005. There was a further rise in 2009 to 525,000 and it is estimated that container traffic will reach 750,000 TUEs by 2015. The Ghana Manganese Company and the Ghana Bauxite Company, the two exporters of dry bulk (manganese and bauxite) from the Takoradi port are both

[56] Article 41 (k).
[57] Article 40.
[58] The statutory body in charge of running the country's two seaports.

expanding their production capacities to exceed 1 million tonnes a year. These expected increases in imports will lead to increased ship traffic calling in Ghana. Ships calls at Tema have increased from 1,172 in 2003 to 1,631 in 2009. For Takoradi, it rose from 494 in 2003 to 956 in 2009.[59] The frightening news is that whereas both Tema and Takoradi ports have port reception facilities, they handle only oil waste with no reception facilities for Ballast Water. The danger is therefore clearly discernible.

The accession to and implementation of the BWM Convention will thus mean that Ghana will undertake to ensure that the ports and terminals designated for cleaning and repair of ballast tanks have adequate facilities for the reception of Ballast Water and sediments in accordance with the guidelines of the IMO.[60]

Third, Ghana is a Party to the Convention on Biodiversity which came into force in 1993. It was the 12th State to ratify the Convention out of the 157 State Parties. Till today, and strange to relate, the country has not as yet domesticated the provisions. What the country can show for is the National Biodiversity Policy of 2002.[61] The strategy states that work on diversity of organisms in marine and aquatic systems has concentrated mainly on those exploited for food (principally, mammals, reptiles, fishes and large invertebrates). Limited studies have been carried out on organism's biology with little or no work done on micro-organisms that inhabit such ecosystems. It is also seen that aquatic plants have been better studied whilst the strategy does not make any specific reference to threats from ship operation in the form of Ballast Water or any similar item. Meanwhile reference is made to other pollutants notably industrial pollutants. It is safe to state that even if the Convention on Biodiversity is to be implemented, the policy guideline which will drive the implementation in its present form, does not envisage issues of Ballast Water.

If the Convention is acceded to and implemented, it shall be required of the country, with due regard to its particular conditions and capabilities, to develop strategies and policies specifically for Ballast Water management in attainment of the objectives of the Convention.[62]

In 2010, the GPHA commissioned a survey on the water quality and biological baseline of the port of Tema. The survey was conducted by the department of oceanography and fisheries of the University of Ghana.[63] The objectives of the survey were: to measure the water quality and physic-chemical parameters in the port; make an inventory of native, non-indigenous and cryptogenic plankton (phytoplankton and zooplankton), benthic organisms and fish species present in the Tema port; and provide information on the distribution and abundance of native, non-indigenous and cryptogenic species present within and around the port.[64] The report indicates that whilst most of the species of the benthic and fouling organisms, fish and plankton

[59] National ballast water rapid status assessment (Advanced Draft) Ghana Maritime Authority.
[60] BWM Convention, Article 5 (1).
[61] The Ministry of Environment and Science, the National Biodiversity Strategy for Ghana, 2002, Chapter 2.3.
[62] Article 5 (2).
[63] The Research team headed by Prof. Elvis Nyarko.
[64] Report on the water quality and baseline survey of the Tema port, 2011.

identified had been reported by earlier studies to be native of the Ghana's coastal waters, the source of the species categorized as being cryptogenic or species indeterminate was unknown. The report recommended a constant monitoring of those species. But most importantly, the report recommended *inter alia* that "GPHA should push for the enactment of the Ballast Water Management Act to help control and manage ships' Ballast Water and Sediments at the port." Clearly therefore, there is some scientific basis for the accession to and implementation of the Convention.

The Convention has elaborate provisions on research and monitoring.[65] The accession and implementation will place Ghana in a good stead to give due attention to the recommendation.

Besides the foregoing, Ghana has already been a victim of other alien invasive species. The menace of Water Hyacinth to water resources and fisheries has regrettably resulted in more than 100 percent reduction in the fish catch for the past few years leading to the abandonment of some entire fishing communities.[66] There is literature to the effect that Water Hyacinth threatens the Akosombo dam, the source of hydro-electric power serving Ghana and neighbouring West African countries.[67] There certainly must be some useful lessons to learn from this disastrous experience.

Finally, if the recent mysterious incidents at the coast of Ghana where 15 humpback whales were washed ashore dead is anything to go by,[68] then the country ought to sit up and address all issues of the environment with dispatch which of course should include acceding to and implementing the BWM Convention. Whilst there is yet, no investigation linking the marine disaster to any particular cause, the incidents raise a fundamental environmental issue for which nothing should be left to chance.

[65] Article 6.
[66] Ghana News Agency (GNA), General news report, Wednesday, Nov. 4 2009.
[67] Sarpong, G. A.; "The legal regime for the control of invasive alien species (IAS): Some lessons in the implementation of treaty norms" FAO legal papers online, Dec. 2004.
[68] The "Daily Guide" newspaper, edn. of 21st September 2013.

3. THE INCORPORATION OF THE BWM CONVENTION INTO GHANA LAW

3.1 THE PROCESS OF INCORPORATING A CONVENTION INTO THE DOMESTIC LAW OF GHANA

In explaining the process involved in incorporating a Convention into Ghana's domestic legal regime, it is pertinent to recognize that Ghana is yet to become a party to the BWM Convention. The process below shall therefore be set in motion after due accession has taken place.

Ghana follows the dualist tradition and therefore any convention to which it is a party must be incorporated into its domestic law to be enforceable internally. The process of incorporation may either be by an Act of Parliament or by a Resolution of Parliament.[69] The former is usually the case. In any case, there is a prior Cabinet approval. The process can therefore be considered under 2 stages; the Pre- Cabinet approval stage and the post- Cabinet approval stage.

In the pre-Cabinet approval stage, the relevant sponsoring ministry (in the case of the BWM Convention, the Ministry of Transport) seeks the advice of the Attorney General about the legal obligation of Ghana and whether the treaty is in conflict with a domestic legislation. After this, a cabinet memorandum for approval is forwarded by the ministry to Cabinet. The memorandum should state, *inter alia,* the background information of the treaty, the benefits to Ghana and the obligation of the Government. Copies of the treaty must accompany the memorandum.

In the post cabinet approval stage, which is after cabinet has approved the incorporation, the relevant ministry is notified by a letter, a copy of which is forwarded to the Attorney General for the purpose of issuing drafting instructions for the preparation of the bill. After the completion of the legislative drafting process, the bill and an explanatory memorandum go back to Cabinet for a final approval and thereafter laid before Parliament. Parliament passes the bill into an Act and after a presidential assent, it is gazetted to take effect.

If the incorporation is by a Parliamentary resolution, the process is almost the same, save that instead of voting on the bill, Parliament passes it by a resolution.[70]

Having expressed the process, it is expected that a bill containing the provisions of the BWM Convention shall be introduced and taken through the above process. Due to its extreme importance, the bill would be expected to receive parliamentary approval by a resolution to become the Ballast Water Control and Management Act.

[69] 1992 Constitution, Article 75 (2).
[70] Republic of Ghana, Treaty Manual, 2008, Attorney General's Department.

3.2 THE METHODOLOGY FOR THE IMPLEMENTATION OF THE BALLAST WATER MANAGEMENT ACT: THE PRESENT LEGAL AND INSTITUTIONAL FRAMEWORK AND A CASE FOR AN IMPLEMENTATION AGENCY.

3.2.1 THE FRAMEWORK

Relative to the prevention and control of marine pollution in general, two public institutions are mainly at play in Ghana. The Environmental Protection Agency (EPA) is the main national regulatory authority on the environment. Established by an Act of Parliament in 1994,[71] the mandate of the EPA includes the issuing of environmental permits, requesting environmental impact assessments for development progammes, providing information on the environment, and serving enforcement notices. In terms of issues of marine pollution and invasive alien species however, the EPA does not play a frontline enforcement role. It largely remains at the background and acts in advisory and facilitating capacity. Sometimes, the needed cooperation has been problematic. There is an instance where certain species of fish harmful to the environment have been introduced into the Ghanaian aquatic environment without the prior clearance with the EPA for the necessary impact assessments to be made prior to their introduction.[72] Apart from this, there seems to be too much on the plate of the EPA and challenged with inadequate staff and logistics, it is not considered prudent to add on a responsibility as critical as the management and control of ships Ballast Water. Above all, to assign the implementation of the BWM Convention to the EPA (barring its own lapses) is likely to lead to institutional and statutory conflict given the core mandate of the Ghana Maritime Authority (GMA) as set out below.

The GMA is the main statutory body charged with the responsibility of regulating all maritime activities in Ghana. By its enabling enactment,[73] the GMA is charged with, inter alia, the following functions:

1. The implementation of the provisions of the Ghana Shipping Act, 2003, Act 645;
2. Ensuring the safety of navigation;
3. Regulation of activities on shipping in the inland waterways including safety of navigation in inland waterways;
4. Fulfillment of flag State and port State responsibilities in an effective and efficient manner, having due regard to international maritime conventions, instruments and codes;
5. Assessment of manpower needs of the maritime sector for national planning purposes;
6. Liaison with government agencies and institutions that deal with maritime transport and related transport matters for the purpose of achieving harmony in the maritime industry;
7. Causing investigation into maritime casualties and taking the appropriate action; and

[71] The Environmental Protection Agency Act, 1994, Act 490.
[72] Sarpong G.A., op., cit.
[73] The Ghana Maritime Authority, 2003, Act 630 (as amended).

8. Pursue the ratification or accession and implementation of international maritime Conventions.

Clearly, within the present legal and institutional framework, the implementation of the Convention should be the function of the GMA. However, the GMA has been shown to have numerous challenges. In a recent study to assess the effectiveness of the GMA in managing the maritime industry in Ghana, it was revealed that there has not been an effective and efficient delivery on the mandate of the GMA. Some of the challenges discovered were lack of proper management style, strategies, systems and structures, inadequate competent technical/professional personnel, inadequate logistics, infrastructure and equipment, inadequate funds, lack of rules and regulations to implement the core functions and political interference.[74] Again, it appears that the discovery of oil in Ghana has increased the functional burden of the GMA thereby compounding the already existing challenges. In the memorandum submitted to the parliament of Ghana in support of a bill to amend the GMA Act in 2011, it was stated that : *Following the discovery of oil, The GMA was confronted with many new challenges in particular, developing the necessary policy, administrative, legislative and human capacity to support offshore oil and gas development.*

Until the above deficiencies are remedied, it appears the GMA in its current form is not well positioned to effectively and efficiently manage implement the law which comes with all its technical ramifications.

3.2.2 A CASE FOR A SEMI-AUTONOMOUS IMPLEMENTATION AGENCY

The subject of Ballast Water Control and Management is a technical one. The obligation on ships to deal with their Ballast Water by any of the approved methods must satisfy the scientific and technological guidelines set out in the Convention in order to meet the required standard. A special scientific and technological know-how is required to monitor compliance and expertise in this area of the subject is critical, if the true object of the Convention is to be achieved.

Again, the constant uptake, use and discharge of Ballast Water as an integral part of movement of ships call for constant inspection and monitoring. With the expected increase in the tonnage of Ghana, the task of effective inspection and monitoring will become even more enormous. It will require not only expertise but also a dedicated and a well-focused manpower to deliver on the vision of the Convention.

The obligation to develop national policies, strategies and programmes for Ballast Water Management in the country's ports and waters under Article 3(2) of the Convention requires a well-positioned institution. There will be the need for information gathering, development of data, cross border institutional collaboration, proper policy planning, monitoring and evaluation,

[74] Cobbah, S.;"Assessing the Effectiveness of the Ghana Maritime Authority in Managing the Maritime Industry in Ghana" (2012), http://dspace.knust.edu.gh:8080/xmlui/123456789/4934 (accessed on 16/01/14).

all of which can be better managed in a special agency than being added on to an already overburdened and not-so-competent institution.

Given the above observation, the most ideal approach towards a successful implementation of the Convention would be to set up a completely new independent and autonomous institution. However, that approach comes with its own repercussions. The cost involved in a establishing a completely new institution could be lumbering. Again, establishing a new institution by reason of the failings of existing ones is, from public administration point of view, less rational. There is also the risk of institutional conflicts especially so when the GMA is the statutory umbrella body.

The Act will therefore provide for the setting up of a semi-autonomous agency within the structure of the GMA as the implementation body. To be called the Ballast Water Control and Management Agency, it shall be headed by a Director appointed by the President on the recommendation of the GMA board in accordance with Article 195 of the Constitution[75] and pursuant to Section 12 of the GMA Act.

This body will be responsible, within the framework of the Convention, for the formulation of strategies and mechanisms to implement to the full, the regulations set out in the Act. It will also plan and develop a sustainable national policy on ballast water control and management, serve as a policy think tank on invasive marine species, and become the national focal point for international collaboration on Ballast Water in the country. The Director shall be supported by specially recruited experts in the operational practices of Ballast Water, a well trained staff and field officers to monitor compliance. Within the framework of the Convention including the Regulations, the Act will set out the various functions of the Agency which will lead to a successful implementation.

3. 3 SCHEME OF DRAFTING

In incorporating the Convention into the laws of Ghana, its scope and structure as a single legal document, in particular, the relationship between the Articles and the Annex ought to be well considered. Article 2 (2) states that the Annex forms an integral part of the Convention and unless expressly provided otherwise, a reference to the Convention constitutes at the same time a reference to the Annex. Aside this provision pointing out the close affinity between the Articles and the Annex, a critical reading of the provisions shows how both parts need to be considered inseparable, for purposes of incorporation and implementation. For instance, it will be seen that whereas there is a general provision under Article 8 (2) for States Parties to prohibit violations and create sanctions in their laws, Article 10 (2) prescribes certain sanctions, i.e. warning, detention and exclusion. Meanwhile, the obligations of ship and their officers who may suffer those sanctions are contained mainly in the Annex.

Given these features of the structure of the Convention, it is considered that, a better approach of drafting should result in the unification of both parts to ensure a comprehensive

[75] Constitution of the Republic of Ghana, 1992.

implementation. Accordingly, in this drafting, the Articles and the Annex have been put together in a mixed fashion not only to reflect the inseparability provision in Article 2(2), but also to bring out a single comprehensive document. This approach will ensure ease of reference and enhance the enforcement of the law.

In the light of the foregoing, the drafting proceeds as follows:

Part I incorporates Articles 1 and 3 as well as some of the definitions in Regulation A-1 of Section A of the Annex of the Convention. There are also additional definitions introduced to ensure a meaningful implementation of the Convention.

Part II incorporates the General obligations of the State as a Party to the Convention as contained in Article 2 as well as other obligations in Articles 4, 5 6 7 and 9. Section 7 (1) (a) of the Act creates a Schedule A which shall contain the provisions in Section C of the Annex to the Convention. These provisions which are on "Special Requirements in Certain Areas" have been put in a Schedule for two main reasons. Firstly, it is for the State to determine whether any additional measures are necessary and if so when to implement them. Secondly, the provisions seem to involve a technical approach to implementation which could be better dealt with in a Ministerial Regulation if it ever becomes necessary to implement them. The rest of the provisions in Part II relate to the institutional framework drafted to aid the implementation of the Convention.

PART III which is on the creation of implementation fund, did not incorporate any specific provision of the Convention. It is introduced to aid the efficient implementation of the Convention.

PART IV, in a mixed fashion, incorporates parts of the Articles, the Annex and the Appendix. Specifically, Article 7 of the Convention is incorporated in Sections 21 and 22 whilst Section 22 indirectly incorporates Section C of the Annex (as Schedule A). Articles 11 and 12 of the Convention are incorporated in Sections 27 and 28, whilst Section E of the Annex is incorporated in Sections 23 to 26. In a close relation, Appendix 1 (Ballast Water Management Certificate) is also incorporated in Schedule B.

PART V also in a mixed fashion incorporates mainly, various parts of the Annex and the Appendix. Section 30 incorporates section D of the Annex into a Schedule (as Schedule D) which shall regulate the standards of management and control obligations of ships. This is due to the extreme technical nature of section D of the Annex. Then Section 31 incorporates Regulations A-2 and B-1 of the Annex. Section 32 incorporates Regulation B-2 of the Annex. Section 33 incorporates Regulation B-3 of the Annex. Sections 34, 35 and 36 incorporate respectively, the Exceptions and Exemptions and the Equivalent compliance provisions contained in Regulation A-3, A-4 and A-5 of the Annex. Section 37 incorporates Regulation B-4 of the Annex. Under this part, due notice is taken of the recently passed IMO Resolution A. 1088(28) which mainly seeks to amend the timelines contained in Regulation B-3 relative to standards and which is recommended to be effected on the coming into force of the Convention. Given that the amendment is yet to take effect and the fact that the Resolution itself envisages a review of the

relevant paragraphs, a provision is made under Section 33(8) for the Minister to make a Regulation to reflect the changes that may prevail at the time this Act comes into force.

PART VI incorporates Regulation B-5 of the Annex.

PART VII incorporates Regulation B-6 and further establishes violations and sanctions in respect of the obligations contained in the Convention. Section 44 however incorporates Article 10 (2) of the Convention which relates to violations and sanctions.

Part VIII contains miscellaneous provisions and the Schedules of the Act. It provides for Regulations by the Minister, the provision for international co-operation, and an amendment to the GMA Act. The amendment has the effect of making the Director answerable to the Board instead of the Director General of the GMA. As noted above, Schedule A will contain the provisions of Section C; Schedules B and C will contain the Forms of the Ballast Water Certificate and record book respectively; and Schedule D will contain the provisions in Section D of the Annex.

CONCLUSION

The control and management of ships' Ballast Water is an international problem with international dimensions. The international maritime community has come a long way to address the menace through the Convention. Ghana cannot remain a player on the field of shipping and be indifferent to the rules of the game. Any reason for not acceding to and implementing the Convention flies in the face of the benefits. The consequence could be catastrophic and the time to act is now.

THE REPUBLIC OF GHANA

INSTRUMENT OF ACCESSION

BY GHANA,

WHEREAS the International Convention for the Control and Management of Ships' Ballast Water and Sediments (hereinafter referred to as 'the Convention'), was adopted by the International Maritime Organization on Friday, 13 February, 2004 in London;

AND WHEREAS Article 17 of the Convention specifies that any State may accede to it at any time;

NOW THEREFORE, Ghana, having considered the Convention, hereby ACCEDES to it, and undertakes faithfully to abide by all the provisions contained therein.

IN WITNESS THEREOF, I, JOHN DRAMANI MAHAMA, President of Ghana, have signed this Instrument of Accession and affixed hereunto, the Seal of Ghana.

DATE…..

SEAL….. SIGNED

(PRESIDENT OF THE GHANA)

THE BALLAST WATER CONTROL AND MANAGEMET ACT

ARRANGEMENT OF SECTIONS

THE……

ACT OF THE PARLIAMENT OF THE REPUBLIC OF GHANA

ENTITLED

THE BALAST WATER CONTROL AND MANAGEMENT ACT, 2014

AN ACT to give effect and force of law to the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, to make provision for the Control and Management of ships' Ballast Water in the waters of Ghana, establish the National Ballast Water Control and Management Agency and to provide for related matters.

PART I – PRELIMINARY MATTERS.

1. Short Title.

This Act shall be cited as the Ballast Water Control and Management Act.

2. Commencement.

This Act shall come into operation on the … of … 20…

3. Interpretation.

In this Act, unless the context otherwise requires,

"Agency" means the Ballast Water Control and Management Agency;

"Anniversary date" means the day and the month of each year corresponding to the date of expiry of the Certificate;

"Auditor General" includes any person appointed by the Auditor General to perform any audit function;

"Authority" means the Ghana Maritime Authority;

"Ballast Water" means water with its suspended matter taken on board a ship to control trim, list, draught, stability or stresses of the ship;

"Ballast Water Capacity" means the total volumetric capacity of any tanks, spaces or compartments on a ship used for carrying, loading or discharging Ballast Water, including any multi-use tank, space or compartment designed to allow carriage of Ballast Water;

"Ballast Water Management" means mechanical, physical, chemical, and biological processes, either singularly or in combination, to remove, render harmless, or avoid the uptake or discharge of Harmful Aquatic Organisms and Pathogens within Ballast Water and Sediments;

"Board" means the Ghana Maritime Authority Board established under Section 4 of the Ghana Maritime Authority act, 2002 (as amended);

"Certificate" means the International Ballast Water Management Certificate issued under this Act;

"Committee" means the Marine Environment Protection Committee of the International Maritime Organization;

"Company" means the owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the owner of the ship and who on assuming such responsibility has agreed to take over all the duties and responsibilities imposed by the International Safety Management Code.

"Constitution" means the 1992 Constitution of the Republic of Ghana;

"Constructed" in respect of a ship means a stage of construction where:

(1) the keel is laid; or

(2) construction identifiable with the specific ship begins; or

(3) assembly of the ship has commenced comprising at least 50 tonnes or 1 percent of the estimated mass of all structural material, whichever is less; or

(4) the ship undergoes a major conversion.

"Convention" means the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004;

"Court" means the Circuit Court or the High Court of Ghana;

"From the nearest land" means from the baseline from which the territorial sea of Ghana is established in accordance with international law;

"Functions" includes powers and duties;

"Fund" means the Ballast Water Control and Management Fund established under this Act;

"Gross tonnage" means the gross tonnage calculated in accordance with the tonnage measurement regulations in Annex I to the International Convention on Tonnage Measurement of Ships, 1969 or any successor Convention;

"Harmful Aquatic Organisms and Pathogens means aquatic organisms or pathogens which, if introduced into the sea, including estuaries, or into fresh water courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas;

"Inspection" means lawfully authorized checking of the compliance with the provisions of this Act;

"Minister" means the Minister responsible for Transport;

"Organization" means the International Maritime Organization.

"Secretary-General means the Secretary- General of the Organization;

"Sediments" means matter settled out of Ballast Water within a ship;

"Ship" means a vessel of any type whatsoever operating in the aquatic environment and includes submersibles, floating craft, floating platforms, FSUs and FPSOs.

4. Scope of application.

Except as expressly provided otherwise in this Act, this Act shall apply to:

(a) ships entitled to fly the flag of Ghana; and

(b) ships not entitled to fly the flag of Ghana but which operate under the authority of Ghana.

5. Exceptions.

1. This Act shall not apply to:

(a) ships not designed or constructed to carry Ballast Water;

(b) ships entitled to fly the flag of Ghana or operating under the authority of Ghana which only operate in waters under the jurisdiction of Ghana, unless the Agency determines that the discharge of Ballast Water from such ships would impair or damage the environment, human health, property or resources of Ghana, or those of adjacent or other States;

(c) ships entitled to fly the flag of Ghana or operating under the authority of Ghana which only operate in waters under the jurisdiction of another State which is a party to the Convention, subject to the authorization of that State for such exclusion;

(d) ships which only operate in waters under the jurisdiction of one State which is a Party to the Convention and on the high seas, except for ships not granted an authorization pursuant to Sub-section (c) of this Section, unless the Agency determines that the discharge of Ballast Water from such ships would impair or damage the environment, human health, property or resources of Ghana or those of adjacent or other States;

(e) any warship, naval auxiliary or other ship owned or operated by a State and used, for the time being, only on government non-commercial service, except that, a ship referred to in this sub-section shall so far as is reasonable and practicable, act in a manner consistent with this Act;

(f) permanent Ballast Water in sealed tanks on ships, that is not subject to discharge.

3. With respect to ships of States which are not Parties to the Convention, the Agency shall apply the requirements of this Act as may be necessary to ensure that no more favourable treatment is given to such ships.

PART II

ESTABLISHMENT OF THE NATIONAL BALLAST WATER CONTROL AND MANAGEMENT AGENCY

6. Establishment of the Agency

There is hereby established by this Act an Agency to be known as the National Ballast Water Control and Management Agency (in this Act referred to as "the Agency") within the authority, with the responsibility of implementing the provisions of the Convention contained in this Act and such other Regulations that shall be made pursuant to the provisions of this Act.

7. General Objectives of the Agency.

It shall be the general objectives of the Agency to:

(a) either individually, or jointly with other agencies either in or outside Ghana, take measures with respect to the prevention, reduction, or elimination of the transfer of Harmful Aquatic Organisms and Pathogens through the control and management of Ballast Water and Sediments, consistent with international law. Whenever it becomes necessary to implement additional measures pursuant to Section 22 of this Act, the Minister shall make Regulations in accordance with Schedule A to achieve this objective.

(b) endeavour to co-operate with other agencies of States which are Parties to the Convention for the purpose of effective implementation, compliance and enforcement of the provisions of the Convention;

(c) encourage the continued development of Ballast Water Management and standards to prevent, minimize and ultimately eliminate the transfer of Harmful Aquatic Organisms and Pathogens through the control and management of ships' Ballast Water and Sediments;

(d) endeavour, while taking action pursuant to the Convention and this Act, not to impair or damage the environment, human health, property or resources of Ghana and those of other States;

(e) ensure that Ballast Water Management practices used to comply with the Convention do not cause greater harm than they prevent to the environment, human health, property or resources of Ghana and those of other States;

(g) encourage ships to which this Act applies to avoid as far as practicable, the uptake of Ballast Water with potentially Harmful Aquatic Organisms and Pathogens including promoting the adequate implantation of recommendations developed by the Organization; and

(g) endeavour to co-operate under the auspices of the Organization to address threats and risks to sensitive, vulnerable or threatened marine ecosystems and biodiversity in areas beyond the limits of national jurisdiction in relation to Ballast Water.

8. Functions of the Agency.

Pursuant to the provisions in Sections 6 and 7 of this Act, the Agency shall perform the following functions:

(a) Plan, promote and implement all activities relating to the control and management of Ballast Water and Sediments;

(b) Co-ordinate the activities of ministries, departments and agencies relating to the control and management of Ballast Water;

(c) Liaise and co-operate with the ports and harbour authorities to take measures to prevent, reduce or eliminate Harmful Aquatic Organisms and Pathogens through Ballast Water and Sediments;

(d) Provide and ensure the provision of adequate reception and all other facilities in ports and terminals where cleaning or repair of Ballast Water occurs and ensure the safe disposal of such Sediments in order not to impair the environment, human health, property and resources of Ghana and those of other States;

(e) Take and promote such measures as to ensure that the facilities contained in the immediate preceding sub-section operate efficiently and without causing undue delay to ships;

(f) Monitor and ensure compliance of all requirements and standards contained in this Act for the purpose of control and management of Ballast Water and Sediments;

(g) Conduct and cause to be conducted, such surveys, certifications and inspections in accordance with the provisions of this Act;

(h) Promote and facilitate scientific and technical research on Ballast Water, monitor the effects of Ballast Water Management in waters in Ghana and the effectiveness or adverse impact of any technology or methodology.

(i) Promote the availability to agencies of other States, of relevant information on scientific and technology programmes and measures undertaken with respect to Ballast Water Management as well as the effectiveness of Ballast Water Management deduced from any monitoring and assessment programmes;

(j) Plan and conduct programmes to educate and sensitize stakeholders and operators on the need to control and manage Ballast Water and Sediments to prevent their harmful effects on the environment; and

(k) Perform such other functions as the Board may determine.

9. Governing body of the Agency.

(1) The governing body of the Agency shall be the Board which shall be responsible for deciding and issuing policy directives of the Agency.

(2) Unless otherwise provided in this Act, the Board shall not take part in the day-to-day activities of the Agency.

(3) In the discharge of the functions contained in Sub-section 1 of this Section, the Board may nominate such person or persons as it may deem necessary as co-opted members, provided that such person or persons shall possess specialized knowledge or skill in the control and management of Ballast Water and Sediments.

10. Administration of the Agency.

(1) The Agency shall be administered by a Director who shall be the Head and such technical and other staff as may be appointed in accordance with the provisions of this Act.

(2) Except as otherwise provided in this Act, the Agency shall be administered separately from other divisions of the Authority and shall, as far as practicable, operate from offices and duty posts established at ports, harbours and designated terminals where Reception and other facilities for the cleaning and exchange of Ballast Water are located.

11. The Director.

(1) The Director shall be appointed by the President in accordance with Article 195 of the Constitution.

(2) The Director shall be responsible for the day-to-day management of the Agency and shall be answerable to the Board.

(3) The terms and conditions of the office of Director shall be contained in the instrument of appointment.

12. Appointment of Staff.

(1) The Agency shall have such other officers and employees as may be necessary for the proper and effective discharge of its functions under this Act.

(2) In appointing such officers and employees, due recognition shall be given to the applicants' expertise and know-how in Ballast Water control and management or related fields.

(3)The appointment and employment of such officers and employees shall be made by the Public Services Commission, provided however that such appointments and employment shall be on the advice of the Board acting in consultation with the Director.

(4) The terms and conditions of such officers and employees shall be contained in their letters of appointment or employment.

13. Task Force.

(1) There shall be established in the Agency, a Task Force which shall be as far as practicable, posted at the ports, harbours and designated terminals where reception and other facilities for the cleaning and exchange of Ballast Water and Sediments are located.

(2) It shall be the duty of the Task Force to monitor the proper use of such facilities and monitor compliance with the standards provided in this Act.

(3) The personnel of the Task Force shall be full time employees of the Agency and shall possess reasonable expertise and Know-how in the control and management of Ballast Water and Sediments.

14. Engagement of Experts.

(1) The Agency shall have the power whenever the need arises, to engage the services of such Experts and Consultants as required for the proper and effective discharge of the functions contained in this Act.

(2) The terms and conditions of the engagement contained in the preceding Sub-section shall be determined by the Agency with the approval of the Board.

15. Finance.

(1) The sources of funds for the Agency shall include:

(a) Budgetary allocation from the Authority;

(b) Proceeds from the Ballast Water Control and Management Fund established under Part III of this Act;

(c) Grants and donations; and

(d) Such other sources as the Board may determine.

(2) The expenses of the Agency including salaries, allowances and administrative costs shall be paid out of the funds contained in the preceding Sub-section.

16. Accounts and Audit.

(1) The Agency shall keep proper books of account and proper records in relation to them in the form approved by the Auditor-General.

(2) The books and accounts of the Agency shall, within six months after the end of each financial year, be audited by the Auditor-General and a report issued and published.

17. Annual and other Reports.

(1) The Agency shall submit to the Board as soon as practicable, but no more than after the end of each financial year, a report dealing generally with the activities and operations of the Agency during the year to which the report relates.

(2) The Agency shall also submit such other report as the Board may request in writing.

PART III

NATIONAL BALLAST WATER MANAGEMENT FUND.

18. Establishment of the Fund.

(1) There is hereby established by this Act, a Fund to be known as the National Ballast Water Management Fund.

(2) The sources of money for the Fund shall be:

(a) Tolls for the use of reception and other facilities;

(b) Fees for the issuance, endorsement and renewal of certificates as provided in this Act;

(c) Fees from surveys and inspection;

(d) Contributions from the Ghana Ports and Harbours Authority; and

(e) Such other sources as the Board may determine.

19. Objective of the Fund.

The Fund shall aid the general implementation of the provisions of this Act and shall be applied in accordance with the provisions of Sections 15 (2) and 16 of this Act.

20. Management of the Fund.

The Fund shall be managed by the Agency in a proper and transparent manner in accordance with guidelines to be issued by the Board for that purpose.

PART IV

SURVEY, CERTIFICATION AND INSPECTION

21. Ships requiring Survey and Certification.

Ships to which the provisions of this Act apply and which are subject to Survey and Certification shall be so surveyed and certified in accordance with the provisions of this Act.

22. No requirement of Survey and Certification in case of Additional Measures.

Whenever pursuant to Section 7 subsection (1) (a) of this Act, the Agency is implementing additional measures in accordance with Regulations made under Schedule A of this Act, there shall be no additional requirement of survey and certification of a ship of another State which is a Party to the Convention. Verification of such additional measures shall be the responsibility of the Agency and shall not cause undue delay to the ship.

23. Surveys.

(1) Ships of 400 gross tonnage and above to which the provisions of this Act apply, excluding floating platforms, FSUs and FPSOs, shall be subject to surveys specified below:

(a) An initial survey before the ship is put in service or before the Certificate required under Section 25 of this Act is issued for the first time. This survey shall verify that the Ballast Water Management Plan required by Section 31 of this Act and any associated structure, equipment, systems, fitting, arrangements and material or processes comply fully with the requirements of this Act.

(b) A renewal survey at intervals specified by the Agency, but not exceeding five years, except where the renewal provisions stated in Section 26 (3) of this Act are applicable. The verification contained in the preceding subsection shall apply.

(c) An intermediate survey within three months before or after the second anniversary date or within three months before or after the third anniversary date of the Certificate, which shall take the place of one of the annual surveys specified in Subsection (d). Such intermediate surveys shall be endorsed on the Certificate issued under Section 25 of this Act.

(d) An annual survey within three months before or after each anniversary date, including a general inspection of the structure, any equipment, systems, fittings, arrangements and material or processes associated with the Ballast Water Management Plan required by Section 31 of this Act. Such annual surveys shall be endorsed on the Certificate issued under Section 25 of this Act.

(e) An additional survey, either general or partial, according to the circumstances, shall be made after a change, replacement, or significant repair of the structure, equipment, systems, fittings, arrangements and material necessary to achieve full compliance with this Act.

(2) The Agency shall establish appropriate measures for ships that are not subject to the provisions of Sub-Section 1 of this Section in order to ensure that the applicable provisions of this Act are complied with.

24. Delegation of authority to conduct surveys.

(1) Surveys of ships for the purpose of enforcement of the provisions of this Act shall be carried out by officers of the Agency. The Agency may, however, entrust the surveys either to surveyors nominated for the purpose or organizations recognized by it, in which case it shall notify the Organization of the specific responsibilities and conditions of the authority so delegated for circulation to States Parties for the information of their officers.

(2)Whenever an accident occurs to a ship or a defect is discovered which substantially affects the ability of the ship to conduct Ballast Water Management in accordance with the provisions of this Act, the owner, operator or other person in charge of the ship shall report at the earliest opportunity to the Agency, the recognized organization or the nominated surveyor responsible for issuing the relevant Certificate, who shall cause investigations to be initiated to determine whether a survey is required under Sub-section 1 of this Section is required. If the ship is in a port of another State Party, the owner, operator or other person in charge shall also report immediately to the appropriate authorities of that State and the nominated surveyor or recognized organization shall ascertain that such report has been made.

(3) In every case, the Agency shall fully guarantee the completeness and efficiency of the survey and shall undertake to ensure the necessary arrangements to satisfy this obligation.

(4) After any survey of the ship under Sub-section 1 of this Section has been completed, no change shall be made in the structure, any equipment, fittings, arrangements or material associated with the Ballast Water Management Plan required under Section 31 of this Act and covered by the survey without the express approval of the Agency, except the direct replacement of such equipment or fittings.

25. Certification.

(1) The Agency shall ensure that a ship, after successful completion of survey under this Act, is issued with a Certificate. Such Certificate shall be issued or endorsed either by the Agency or any person or organization duly authorized by it and the Agency shall assume full responsibility for the Certificate.

(2) The Agency shall accept a Certificate issued under the authority of another State Party and regard it for all purposes as having the same validity as a Certificate issued by it.

(3) The Agency may request the Administration of another State Party to cause a ship to be surveyed and issue or authorize the issuance of a Certificate to the ship. The Agency shall as soon as possible, request the transmission of a copy of the Certificate and survey report which shall have the same force and recognition as that issued by the Agency.

(4) At the request of the Administration of another State Party, the Agency may survey a ship and issue a Certificate on behalf of that Administration.

(5) No Certificate shall be issued to a ship entitled to fly the flag of a non- State Party.

26. Form, Duration and Validity of Certificate.

(1) The Certificate shall be drawn in the English language in the form contained in the Schedule B of this Act.

(2) The Agency shall specify the period of validity of the Certificate but shall not exceed five years.

(3) For renewal surveys, the following rules shall apply:

(a) When the renewal survey is completed within three months before the existing Certificate expires, the new Certificate shall be valid from the date of completion of the renewal survey for not more than five years from that expiry date.

(b) When the renewal survey is completed after the existing Certificate expires, the new Certificate shall be valid from the date of the completion of the renewal survey for not more than five years from that expiry date.

(c) When the renewal survey is completed more than three months before the existing Certificate expires, the new Certificate shall be valid from the date of the completion of the renewal survey for nor more than five years from the date of the renewal survey.

(4) If a Certificate is issued for less than five years, it may be extended for up to five years provided that the surveys stated in Section 23 (1) (c) applicable when a Certificate is issued for a period of five years are carried out as appropriate.

(5) If a renewal survey has been completed, but a new Certificate cannot be issued or placed on board the ship before the existing Certificate expires, the existing Certificate may be endorsed and accepted as valid for a further maximum period of five month from the expiry date.

(6) If at the time its Certificate expires, a ship is not at the port where it is to be surveyed, the Agency may, if it finds it proper and reasonable to do so, extend for a maximum of three months, the period of validity of the Certificate to enable the ship complete its voyage to the port of survey. The ship shall not upon arrival, leave the port by virtue of such extension without a new Certificate. The new Certificate, after the survey, shall be valid for not more than five years from the expiry date of the existing Certificate.

(7) A Certificate of a ship which goes on short voyages and which has not been extended already, may be extended for a grace period of one month after expiry. Upon renewal, the new Certificate shall be valid from the expiry date for not more than five years.

(8) In special circumstances, the Agency may fix the date of validity of a Certificate from the date of completion of the renewal survey.

(9) If an annual survey is completed before the period specified in Section 23, then:

(a) the anniversary date shown on the Certificate shall be amended by endorsement to a date which shall not be more than three months later than the date on which the survey was completed;

(b) the subsequent annual or intermediate survey required by Section 23 shall be completed at the intervals prescribed by that section using the new Anniversary date;

(c) the expiry date may remain unchanged provided one or more annual surveys, as appropriate, are carried out so that the maximum intervals between the surveys prescribed by Section 23 are not exceeded.

(9) A Certificate issued under Section 25 shall cease to be valid in any of the following cases:

(a) if the structure, equipment, systems, fittings, arrangements and material necessary to comply fully with the provisions of this Act are changed, replaced or significantly repaired and the Certificate is not endorsed in accordance with this Act;

(b) upon transfer of the ship to the flag of another State. In case of transfer to the flag of Ghana, the Agency shall issue a new Certificate only if fully satisfied that the ship is in compliance with the provisions of this Act;

(c) if the relevant surveys are not completed within the periods specified under Section 23 (1) of this Act; or

(d) if the Certificate is not endorsed in accordance with Section 23 (1) of this act.

27. Inspection of Ships.

(1) Any ship in any port or offshore terminal of Ghana shall be subject to inspection by the Task Force or any duly authorized officers of the Agency for the purpose of determining whether the ship is in compliance with the provisions of this Act. Except as provided in subsection 2 of this section, any such inspection is limited to:

(a) verifying that there is on board a valid Certificate, which, if valid, shall be accepted; and

(b) inspection of the Ballast Water Record Book, and/or

(c) a sampling of the ship's Ballast Water carried out in accordance with the guidelines to be developed by the Organization. However, the time required to analyze the samples shall not be used as a basis for unduly delaying the operation, movement or departure of the ship.

(2) Where a ship does not carry a valid Certificate or there are clear grounds for believing that:

(a) the condition of the ship or its equipment does not correspond substantially with the particulars of the Certificate; or

(b) the master or the crew are not familiar with essential shipboard procedures relating to Ballast Water Management, or have not implemented such procedures; a detailed inspection may be carried out.

(3) In the circumstances given in Sub-section 2 of this section, the Task Force or officer carrying out the inspection shall take such steps as will ensure that the ship shall not discharge Ballast Water until it can do so without presenting a threat of harm to the environment, human health, property or resources.

(4) If the sampling described in Sub-section (1) (c) above leads to a result, or supports information received from another port or offshore terminal, indicating that the ship poses a threat to the environment, human health and property or resources, the Agency shall prohibit such ship from discharging Ballast Water until the threat is removed.

(5) The Agency may also inspect a ship when it enters a port or offshore terminal of Ghana, if a request for an investigation is received from another State together with sufficient evidence that the ship is operating or has operated in violation of the Convention.

(6) If the inspection pursuant to Sub-section 5 of this Section indicates a violation of the Convention, the ship shall be notified and a report forwarded to the requesting State and/or its consul or diplomatic representative. The report shall include any evidence of the violation and the Agency shall also notify the next port of call of all relevant information about the violation if the ship has been allowed to proceed to the next port of call.

28. Undue delay to ships.

(1) All possible efforts shall be made to avoid a ship being unduly detained or delayed under the provisions in Sections 22, 27 and 45.

(2) The Agency shall compensate a ship unduly detained or delayed under Sections 22, 27 and 45. The Board shall issue guidelines for the payment of such compensations under this Act.

29. Fees.

(1) The Agency shall have the power to charge such fees and tolls as shall be reasonable and necessary for the duties to be conducted in this Part.

(2) The proceeds of the fees and tolls shall be paid into the Fund.

PART V

STANDARD, MANAGEMENT AND CONTROL OBLIGATIONS OF SHIPS

30. Standards for Ballast Water Management.

(1) Except where expressly provided otherwise, the discharge of Ballast Water shall only be conducted through Ballast Water Management in accordance with the provisions of this Part.

(2) Ballast Water Management, Performance and Exchange shall be in accordance with and regulated by the provisions of Schedule D of this Act.

31. Ballast Water Management Plan.

(1) Each ship to which this Act applies shall have on board and implement a Ballast Water Management Plan. Such a plan shall be approved by the Agency taking into account the guidelines developed by the Organization.

(2) The Ballast Water Management Plan of each ship shall:

(a) detail safety procedures for the ship and the crew associated with Ballast Water Management as required by this Act;

(b) provide a detailed description of the actions to be taken to implement the Ballast Water Management requirements and supplemental Ballast Water Management practices as set forth in this Act;

(c) detail the procedures for the disposal of Sediments:

(i) at sea; and

(ii) to shore;

(d) include the procedures for coordinating shipboard Ballast Water Management that involves discharge at sea with the Agency;

(e) designate the officer on board in charge of ensuring that the plan is properly implemented;

(f) contain the reporting requirements for ships provided for under this Act; and

(g) be written in the working language of the ship. If the language used is not English, a translation into English shall be included.

32. Ballast Water Record Book.

(1) Each ship shall have on board a Ballast Water Record Book that may be electronic record system, or that may be integrated into another record book or system and which shall at least contain the information specified in Schedule C of this Act.

(2) Ballast Water Record Book entries shall be maintained on board the ship for a maximum period of two years after the last entry has been made and thereafter in the Company's control for a maximum period of three years.

(3) In the event of the discharge of Ballast Water pursuant to Sections 33(6), 34 and 35, or in the event of other accidental or exceptional discharge of Ballast Water not otherwise exempted by this Act, an entry shall be made in the Ballast Water Record Book describing the circumstances of, and the reason for, the discharge.

(4) The Ballast Water Record Book shall be kept readily available for inspection at all times and, in the case of an unmanned ship under tow, may be kept on the towing ship.

(5) Each operation concerning Ballast Water shall be fully recorded without delay in the Ballast Water Record Book. Each entry shall be signed by the officer in charge of the operation concerned and each completed page shall be signed by the master.

(6) The entries in the Ballast Water Record Book shall be in the working language of the ship but shall contain a translation into the English language. In case of a dispute or discrepancy between the working language of the ship and the English language over an entry in the book, The English language shall prevail.

(7) The master or officer in charge of the Ballast Water Management Plan of a ship to which this Act applies shall, upon request of the task Force or any duly authorized officer of the Agency allow the inspection of the Ballast Water Record Book on board the ship while it is in a port or offshore terminal of Ghana and shall allow a copy to be made. The master shall certify the copy as the true copy which shall be admissible in any judicial proceeding as evidence of the facts contained in the entry.

(8) The inspection of a Ballast Water Record Book and the taking of a certified copy shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

33. Ballast Water Management for ships.

(1) A ship constructed before 2009:

(a) with a Ballast Water Capacity of between 1,500 and 5,000 cubic metres, inclusive, shall conduct Ballast Water Management that at least meets the standard described in regulation D-1 or

regulation D-2 of Schedule D of this Act until 2014, after which time it shall at least meet the standard described in regulation D-2 of the Schedule.

(b) with a Ballast Water Capacity of less than 1,500 or greater than 5,000 cubic metres shall conduct Ballast Water Management that at least meets the standard described in regulation D-1 or regulation D-2 of Schedule D of this Act until 2016, after which time it shall at least meet the standard described in regulation D-2 of the Schedule.

(2) A ship to which Sub-section 1 applies shall comply with that Sub-section not later than the first intermediate or renewal survey, whichever occurs first, after the anniversary date of delivery of the ship in the year of compliance with the standard applicable to that ship.

(3) A ship constructed in or after 2009 with a Ballast Water Capacity of 5,000 cubic metres or more shall conduct Ballast Water Management that at least meets the standard described in Regulation D-2 of Schedule D.

(4) A ship constructed in or after 2009, but before 2012, with a Ballast Water Capacity of 5,000 cubic metres or more shall conduct Ballast Water Management in accordance with Sub-section 1 (b) of this Section.

(5) A ship constructed in or after 2012 with a Ballast Water Capacity of 5,000 cubic metres or more shall conduct Ballast Water Management that at least meets the standard described in Regulation D-2 of Schedule D.

(6) The requirements of this section do not apply to ships that discharge Ballast Water to a reception facility designed taking into account the guidelines developed by the Organization for such facilities.

(7) Other methods of Ballast Water Management may also be accepted as alternatives as to the requirements described in Sub-sections 1 to 5, provided that such methods ensure at least the same level of protection to the environment, human health, property or resources, and are approved by the Committee.

(8) Upon the coming into force of this Act, the Minister shall make such Regulations necessary to reflect any amendment contained in any resolution of the Organization in respect of the timelines contained in this Section.

34. Non- applicability of Ballast Water Management.

(1) The provisions of Section 33 of this Act shall not apply to:

(a) uptake or discharge of Ballast Water and Sediments necessary for the purpose of ensuring the safety of a ship in emergency situations or saving life at sea; or

(b) the accidental discharge or ingress of Ballast Water and Sediments resulting from damage to a ship or its equipment:

(i) provided that all reasonable precautions have been taken before and after the occurrence of the damage or discovery of the damage or discharge for the purpose of preventing or minimizing the discharge; and

(ii) unless the owner, Company or officer in charge wilfully or recklessly caused the damage; or

(c) the uptake and discharge of Ballast Water and Sediments when being used for the purpose of avoiding or minimizing pollution incidents from the ship; or

(d) the uptake and subsequent discharge on the high seas of the same Ballast Water and Sediments; or

(e) the discharge of Ballast Water and Sediments from a ship at the same location where the whole of that Ballast Water and those Sediments originated and provided that no mixing with unmanaged Ballast Water and Sediments from other areas has occurred. If mixing has occurred, the Ballast Water taken from the other area is subject to Ballast Water Management in accordance with the provisions of this Act.

35. Exemptions from Ballast Water Management.

(1) In addition to any exemptions contained elsewhere in this Act, the Agency may, as far as the waters of Ghana are concerned, grant exemption from the application of the provisions in Section 33, provided they are:

(a) granted to a ship or ships on voyage or voyages between specified ports or locations; or to a ship which operates exclusively between specified ports or locations;

(b) effective for a period of no more than five years subject to intermediate review;

(c) granted to ships that do not mix Ballast Water or Sediments other than between the ports or locations specified in (1) (a); and

(d) granted based on the guidelines on risk assessment developed by the Organization.

(2) Exemption granted under this section shall not be effective until after communication to the Organization and circulation of relevant information to the State Parties.

(3) Any exemption granted under this section shall not impair or damage the environment, human health, property or resources of adjacent or other States. Any State that the Agency determines may be adversely affected shall be consulted with a view to resolving any identified concerns.

(4) Any exemption granted under this Section shall be recorded in the Ballast Water Record Book.

36. Equivalent compliance.

(1) The Agency shall, taking into account guidelines developed by the Organization, determine equivalent compliance for pleasure craft used solely for recreation or competition or craft used primarily for search and rescue, less than 50 metres in length overall, and with a maximum Ballast Water Capacity of 8 cubic metres.

37. Ballast Water exchange.

(1) A ship conducting Ballast Water exchange to meet the standard in Schedule D-1 shall:

(a) whenever possible, conduct such Ballast Water exchange at least 200 nautical miles from the nearest land and in water at least 200 metres in depth, taking into account the guidelines developed by the Organization;

(b) in cases where the ship is unable to conduct Ballast Water exchange in accordance with Sub-section (1) (a), such Ballast Water exchange shall be conducted taking into account the guidelines described in Sub-section (1) (a) and as far from the nearest land as possible, and in all cases at least 50 nautical miles from the nearest land and in water at least 200 metres in depth.

(2) A ship shall not be required to deviate from its intended voyage, or delay the voyage, in order to comply with any particular requirement of Sub-section 1 of this section.

(3) A ship conducting Ballast Water exchange shall not be required to comply with Section 1, if the master reasonably decides that such exchange would the safety or stability of the ship, its crew, or its passengers because of adverse weather, ship design stress, equipment failure, or any other extraordinary condition.

(4) When a ship is required to conduct Ballast Water exchange and does not do so in accordance with this section, the reasons shall be entered in the Ballast Water Record Book.

PART VI

SEDIMENT MANAGEMENT FOR SHIPS.

38. Obligation to remove and dispose of Sediments.

(1) All ships shall remove and dispose of Sediments from spaces designated to carry Ballast Water in accordance with the provisions of the ship's Ballast Water Management Plan.

(2) Ships described in section 33 (3) should, without compromising safety or operational efficiency, be designed and constructed with a view to minimize the uptake and undesirable entrapment of Sediments, facilitate removal of Sediments, and provide safe access to allow for Sediment removal and sampling taking into account guidelines developed by the Organization. Ships described in section 33 (1) should, to the extent practicable, comply with this provision.

PART VII

DUTIES OF OFFICERS AND CREW, VIOLATIONS AND PENALTIES

39. Obligation to be familiar with duties.

(1) Officers and crew shall be familiar with their duties in the implementation of Ballast Water Management particular to the ship on which they serve and shall, appropriate to their duties, be familiar with the ship's Ballast Water Management Plan.

40. Violations and penalties in respect Surveys Certification, Inspection etc.

(1) Whoever:

(a) operates or allows any person to operate a ship without having it surveyed;

(b) wilfully prevents, or does any act to obstruct the conduct of any survey under this Act;

(c) wilfully prevents or does any act to prevent any inspection under this Act;

(d) after any survey, makes or allows any person to make any change in any structure, equipment, fittings, arrangements or material associated with a ship's Ballast Water Management Plan; or

(e) operates or allows another person to operate a ship with an invalid Ballast Water Management Certificate,

commits an offence under this Act and is liable on summary conviction to pay a fine not exceeding the Cedi equivalent US$ 200,000, or to a term of imprisonment not exceeding 12 months or to both.

41. Violations and penalties in respect of Ballast Water Management Plan.

(1) Whoever:

(a) operates or allows another person to operate a ship without having on board an approved Ballast Water Management Plan;

(b) operates or allows another person to operate a ship without implementing an approved Ballast Water Management Plan; or

(c) discharges or allows another person to discharge Ballast Water other than through an approved Ballast Water Management Plan,

Commits an offence and is liable on summary conviction to pay a fine not exceeding the Cedi equivalent of US$ 200,000, or to a term of imprisonment not exceeding 12 months or to both.

42. Violations and penalties in respect of Ballast Water Record Book.

(1) Whoever operates or allows another person to operate a ship without having on board a Ballast Water Record Book commits an offence and is liable on summary conviction to pay a fine not exceeding the Cedi equivalent of US$ 200,000, or to a term of imprisonment not exceeding 12 months, or to both.

(2) Failure to:

(a) fully make an entry of each Ballast Water operation in the Record Book;

(b) sign the entry made into the Ballast Water Record Book;

(c) maintain the Ballast Water Record Book for the periods specified in this Act;

(d) upon request by a duly authorized officer of the Agency,

(i) allow the inspection of the Ballast Water Record Book;

(ii) allow a copy to be made of the Ballast Water Record Book;

(iii) certify a copy of made of the Ballast Water Record Book as a true copy,

Constitutes an offence under this Act and the master and/or the designated officer in charge of Ballast Water Management of the ship shall be liable on summary conviction to pay a fine not exceeding the Cedi equivalent of US$ 100,000. Or to a term of imprisonment not exceeding 6 months, or to both.

43. Violation and penalty for failure to pay fees and tolls.

(1) Whoever fails to pay any fee or toll charged by the Agency or its nominated surveyors or recognized organization for any duty performed under this Act, commits an offence and is liable on summary conviction to pay a sum of not lesser than the multiples of ten of the fees or tolls charged.

44. Additional sanctions.

(1) In addition to the penalties specified in this part, the offending ship may be liable to detention until the violation in question is remedied.

(2) Without prejudice to Sub-section (1) of this section, the Court, in all judicial proceedings held in the enforcement of any provision of this Act shall deal with the matter in a most expeditious manner and make such orders including provisional measures and prompt release of ships, minimize delay, while ensuring that the object of this Act is not compromised.

45. Detection of violation.

(1) If a ship is detected to have violated any provision of this Act, the Agency may, in addition to any sanctions specified in this part, take steps to warn, detain or exclude the ship. The Agency may however grant the ship permission to leave the port or offshore terminal for the purpose of discharging Ballast Water, or proceeding to the nearest appropriate repair yard or reception facility available, provided doing so does not present a threat of harm to the environment, human health, property and resources.

PART VIII

MISCELLANEOUS PROVISIONS

46. Regulations.

(1) In addition to the provisions contained in Sections 7 (1) (a), 22 (1), 33 (8) and Schedule A of this Act, the Minister may, by legislative instrument, make such other Regulations,

(a) necessary for the achievement of the standards of Ballast Water Management set forth in Schedule D of this Act and

(b) for generally giving effective and full implementation of the provisions of this Act.

47. International Co-operation.

(1) In accordance with the provisions of this Act and in line with the broad objectives of the Convention, the Agency shall play an active role in such sub-regional, regional and global co-operation initiatives towards the achievement of harmonized and enhanced procedures for the prevention, reduction and elimination of all threats to the environment through Ballast Water.

48. Amendment

(1) Section 10 (5) of the Ghana Maritime Authority Act, 2002 (Act 630, as amended) is hereby amended by the introduction of the phrase ; *with the exception of the Director in charge of the National Ballast Water Control and Management Agency,* in between the words; *shall* and *answer* in the second line of that Sub-section.

SCHEDULES

1. SCHEDULE A

SECTION C- SPECIAL REQUIREMENTS IN CERTAIN AREAS

Regulation C-1 Additional Measures

1 If a Party, individually or jointly with other Parties, determines that measures in addition to those in Section B are necessary to prevent, reduce, or eliminate the transfer of Harmful Aquatic

Organisms and Pathogens through ships' Ballast Water and Sediments, such Party or Parties may, consistent with international law, require ships to meet a specified standard or requirement.

2 Prior to establishing standards or requirements under paragraph 1, a Party or Parties should consult with adjacent or other States that may be affected by such standards or requirements.

3 A Party or Parties intending to introduce additional measures in accordance with paragraph 1 shall:

.1

take into account the Guidelines developed by the Organization.

.2

communicate their intention to establish additional measure(s) to the Organization at least 6 months, except in emergency or epidemic situations, prior to the projected date of implementation of the measure(s). Such communication shalpossible, benefits;

.3

a description of the additional measure(s); and

.4

any arrangements that may be provided to facilitate ships' compliance with the additional measure(s).

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. 3 to the extent required by customary international law as reflected in the United Nations Convention on the Law of the Sea, as appropriate, obtain the approval of the Organization.

4 A Party or Parties, in introducing such additional measures, shall endeavour to make available all appropriate services, which may include but are not limited to notification to mariners of areas, available and alternative routes or ports, as far as practicable, in order to ease the burden on the ship.

5 Any additional measures adopted by a Party or Parties shall not compromise the safety and security of the ship and in any circumstances not conflict with any other convention with which the ship must comply.

6 A Party or Parties introducing additional measures may waive these measures for a period of time or in specific circumstances as they deem fit.

Regulation C-2 Warnings Concerning Ballast Water Uptake in Certain Areas and Related Flag State Measures

1 A Party shall endeavour to notify mariners of areas under their jurisdiction where ships should not uptake Ballast Water due to known conditions. The Party shall include in such notices the precise coordinates of the area or areas, and, where possible, the location of any alternative area or areas for the uptake of Ballast Water. Warnings may be issued for areas:

.1 known to contain outbreaks, infestations, or populations of Harmful Aquatic Organisms and Pathogens (e.g., toxic algal blooms) which are likely to be of relevance to Ballast Water uptake or discharge;

.2 near sewage outfalls; or

.3 where tidal flushing is poor or times during which a tidal stream is known to be more turbid.

2 In addition to notifying mariners of areas in accordance with the provisions of paragraph 1, a Party shall notify the Organization and any potentially affected coastal States of any areas identified in paragraph 1 and the time period such warning is likely to be in effect. The notice to the Organization and any potentially affected coastal States shall include the precise coordinates of the area or areas, and, where possible, the location of any alternative area or areas for the uptake of Ballast Water. The notice shall include advice to ships needing to uptake Ballast Water in the area, describing arrangements made for alternative supplies. The Party shall also notify mariners, the Organization, and any potentially affected coastal States when a given warning is no longer applicable.

Regulation C-3 Communication of Information

The Organization shall make available, through any appropriate means, information communicated to it under regulations C-1 and C-2.

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SCHEDULE B

APPENDIX I

FORM OF INTERNATIONAL BALLAST WATER MANAGEMENT

CERTIFICATEINTERNATIONAL BALLAST WATER MANAGEMENT CERTIFICATE

Issued under the provisions of the International Convention for the Control and Management of Ships‘ Ballast Water and Sediments (hereinafter referred to as "the Convention") under the authority of the Government of

……
(full designation of the country)

by …… (full designation of the competent person or organization authorized under the provisions of the Convention)

Particulars of ship[1]

Name of ship .....

Distinctive number or letters ..... Port of registry ..... Gross Tonnage ..... IMO number[2] ..... Date of Construction …… Ballast Water Capacity (in cubic metres) .....

Details of Ballast Water Management Method(s) Used

Method of Ballast Water Management used ……...

Date installed (if applicable) .....

Name of manufacturer (if applicable) .....

1 Alternatively, the particulars of the ship may be placed horizontally in boxes.

2 IMO Ship Identification Number Scheme adopted by the Organization by resolution A.600(15).

The principal Ballast Water Management method(s) employed on this ship is/are: in accordance with

regulation D-1 in accordance with regulation D-2

(describe) ..... the

ship is subject to regulation D-4

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with regulation E-1 of the Annex to the Convention; and 2 That the survey shows that Ballast Water Management on the ship complies with the

Annex to the Convention.

This certificate is valid until …… subject to surveys in accordance with regulation E-1 of the Annex to the Convention. Completion date of the survey on which this certificate is based: dd/mm/yyyy Issued at

.....

(Place of issue of certificate)

.... (Date of issue)
Signature of authorized official issuing the certificate)

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEY(S)

THIS IS TO CERTIFY that a survey required by regulation E-1 of the Annex to the Convention the ship was found to comply with the relevant provisions of the Convention: Annual survey: Signed .....

(Signature of duly authorized official)

Place ..... Date.....…

(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate survey*: Signed .....

(Signature of duly authorized official)

Place ..... Date.....…

(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate survey*: Signed .....

(Signature of duly authorized official)

Place ..... Date.....…

(Seal or stamp of the authority, as appropriate)

Annual survey: Signed .....

(Signature of duly authorized official)

Place ..... Date.....…

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate.

ANNUAL/INTERMEDIATE SURVEY IN ACCORDANCE WITH REGULATION E-5.8.3

THIS IS TO CERTIFY that, at an annual/intermediate* survey in accordance with regulation E-5.8.3 of the Annex to the Convention, the ship was found to comply with the relevant provisions of the Convention:

Signed .....
(Signature of authorized official)

Place .....

Date.....…...

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALIDFOR LESS THAN 5 YEARS WHERE REGULATION E-5.3 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation E-5.3 of the Annex to the Convention, be accepted as valid until……

Signed .....
(Signature of authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND REGULATION E-5.4 APPLIES

The ship complies with the relevant provisions of the Convention and this Certificate shall, in accordance with regulation E-5.4 of the Annex to the Convention, be accepted as valid until ……

Signed .....
(Signature of authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE REGULATION E-5.5 OR E-5.6 APPLIES

This Certificate shall, in accordance with regulation E-5.5 or E-5.6* of the Annex to the Convention, be accepted as valid until ……..

Signed .....
(Signature of authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE REGULATION E-5.8 APPLIES

In accordance with regulation E-5.8 of the Annex to the Convention the new Anniversary date is …….

Signed .....
(Signature of authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

In accordance with regulation E-5.8 of the Annex to the Convention the new Anniversary date is …….

Signed .....
(Signature of duly authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate
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3. SCHEDULE C

(AAPPENDIX II FORM OF BALLAST WATER RECORD BOOKINTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS

Period From: ……. To: ……. Name of Ship …….. IMO number ……..…… Gross tonnage …… Flag …… Total Ballast Water capacity (in cubic metres) …… The ship is provided with a Ballast Water Management plan Diagram of ship indicating ballast tanks:

1 Introduction

In accordance with regulation B-2 of the Annex to the International Convention for the Control and Management of Ships' Ballast Water and Sediments, a record is to be kept of each Ballast Water operation. This includes discharges at sea and to reception facilities.

2 Ballast Water and Ballast Water Management

—Ballast Water“ means water with its suspended matter taken on board a ship to control trim, list, draught, stability, or stresses of a ship. Management of Ballast Water shall be in accordance with an approved Ballast Water Management plan and taking into account Guidelines[3] developed by the Organization.

3 Entries in the Ballast Water Record Book

Entries in the Ballast Water record book shall be made on each of the following occasions:

3.1 When Ballast Water is taken on board:

Refer to the Guidelines for the control and management of ships‘ ballast water to minimize the transfer of harmful aquatic organisms and pathogens adopted by the Organization by resolution A.868(20).

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.1 Date, time and location port or facility of uptake (port or lat/long), depth if outside port .2 Estimated volume of uptake in cubic metres .3 Signature of the officer in charge of the operation.

3.2 Whenever Ballast Water is circulated or treated for Ballast Water Management purposes:

.1 Date and time of operation .2 Estimated volume circulated or treated (in cubic metres) .3 Whether conducted in accordance with the Ballast Water Management plan .4 Signature of the officer in charge of the operation

3.3 When Ballast Water is discharged into the sea:

.1 Date, time and location port or facility of discharge (port or lat/long) .2 Estimated volume discharged in cubic metres plus remaining volume in cubic metres.3 Whether approved Ballast Water Management plan had been implemented prior to discharge .4 Signature of the officer in charge of the operation.

3.4 When Ballast Water is discharged to a reception facility:

.1 Date, time, and location of uptake .2 Date, time, and location of discharge .3 Port or facility .4 Estimated volume discharged or taken up, in cubic metres .5 Whether approved Ballast Water Management plan had been implemented prior to

discharge .6 Signature of officer in charge of the operation

3.5 Accidental or other exceptional uptake or discharges of Ballast Water:

.1 Date and time of occurrence .2 Port or position of the ship at time of occurrence

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.3 Estimated volume of Ballast Water discharged .4 Circumstances of uptake, discharge, escape or loss, the reason therefore and general remarks. .5 Whether approved Ballast Water Management plan had been implemented prior to discharge .6 Signature of officer in charge of the operation

3.6 Additional operational procedure and general remarks

4 Volume of Ballast Water

The volume of Ballast Water onboard should be estimated in cubic metres. The Ballast Water record book contains many references to estimated volume of Ballast Water. It is recognized that the accuracy of estimating volumes of ballast is left to interpretation.

RECORD OF BALLAST WATER OPERATIONS

SAMPLE BALLAST WATER RECORD BOOK PAGE Name of Ship: …… …… …… Distinctive number or letters …… ……. Date	Item (number)	Record of operations/signature of officers in charge

4. SCHEDULE D

SECTION D - STANDARDS FOR BALLAST WATER MANAGEMENT

Regulation D-1 Ballast Water Exchange Standard

1 Ships performing Ballast Water exchange in accordance with this regulation shall do so with an efficiency of at least 95 percent volumetric exchange of Ballast Water.

2 For ships exchanging Ballast Water by the pumping-through method, pumping through three times the volume of each Ballast Water tank shall be considered to meet the standard described in paragraph 1. Pumping through less than three times the volume may be accepted provided the ship can demonstrate that at least 95 percent volumetric exchange is met.

Regulation D-2 Ballast Water Performance Standard

1 Ships conducting Ballast Water Management in accordance with this regulation shall discharge less than 10 viable organisms per cubic metre greater than or equal to 50 micrometres in minimum dimension and less than 10 viable organisms per millilitre less than 50 micrometres in minimum dimension and greater than or equal to 10 micrometres in minimum dimension; and discharge of the indicator microbes shall not exceed the specified concentrations described in paragraph 2.

2 Indicator microbes, as a human health standard, shall include:

.1 Toxicogenic Vibrio cholerae (O1 and O139) with less than 1 colony forming unit (cfu) per 100 millilitres or less than 1 cfu per 1 gram (wet weight) zooplankton samples ;

.2 Escherichia coli less than 250 cfu per 100 millilitres;

.3 Intestinal Enterococci less than 100 cfu per 100 milliliters.

Regulation D-3 Approval requirements for Ballast Water Management systems

1 Except as specified in paragraph 2, Ballast Water Management systems used to comply with this Convention must be approved by the Administration taking into account Guidelines developed by the Organization.

2 Ballast Water Management systems which make use of Active Substances or preparations containing one or more Active Substances to comply with this Convention shall be approved by the Organization, based on a procedure developed by the Organization. This procedure shall describe the approval and withdrawal of approval of Active Substances and their proposed manner of application. At withdrawal of approval, the use of the relevant Active Substance or Substances shall be prohibited within 1 year after the date of such withdrawal.

3 Ballast Water Management systems used to comply with this Convention must be safe in terms of the ship, its equipment and the crew.

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Regulation D-4 Prototype Ballast Water Treatment Technologies

1 For any ship that, prior to the date that the standard in regulation D-2 would otherwise become effective for it, participates in a programme approved by the Administration to test and evaluate promising Ballast Water treatment technologies, the standard in regulation D-2

shall not apply to that ship until five years from the date on which the ship would otherwise be required to comply with such standard.

2 For any ship that, after the date on which the standard in regulation D-2 has become effective for it, participates in a programme approved by the Administration, taking into account Guidelines developed by the Organization, to test and evaluate promising Ballast Water technologies with the potential to result in treatment technologies achieving a standard higher than that in regulation D-2, the standard in regulation D-2 shall cease to apply to that ship for five years from the date of installation of such technology.

3 In establishing and carrying out any programme to test and evaluate promising Ballast Water technologies, Parties shall:

.1 take into account Guidelines developed by the Organization, and

.2 allow participation only by the minimum number of ships necessary to effectively test such technologies.

4 Throughout the test and evaluation period, the treatment system must be operated consistently and as designed.

Regulation D-5 Review of Standards by the Organization

1 At a meeting of the Committee held no later than three years before the earliest effective date of the standard set forth in regulation D-2, the Committee shall undertake a review which includes a determination of whether appropriate technologies are available to achieve the standard, an assessment of the criteria in paragraph 2, and an assessment of the socio-economic effect(s) specifically in relation to the developmental needs of developing countries, particularly small island developing States. The Committee shall also undertake periodic reviews, as appropriate, to examine the applicable requirements for ships described in regulation B-3.1 as well as any other aspect of Ballast Water Management addressed in this Annex, including any Guidelines developed by the Organization.

2 Such reviews of appropriate technologies shall also take into account:

.1 safety considerations relating to the ship and the crew;

.2 environmental acceptability, i.e., not causing more or greater environmental impacts than they solve;

.3 practicability, i.e., compatibility with ship design and operations;

.4 cost effectiveness, i.e., economics; and

.5 biological effectiveness in terms of removing, or otherwise rendering not viable, Harmful Aquatic Organisms and Pathogens in Ballast Water.

3 The Committee may form a group or groups to conduct the review(s) described in paragraph 1. The Committee shall determine the composition, terms of reference and specific issues to be addressed by any such group formed. Such groups may develop and recommend proposals for amendment of this Annex for consideration by the Parties. Only Parties may participate in the formulation of recommendations and amendment decisions taken by the Committee.

4 If, based on the reviews described in this regulation, the Parties decide to adopt amendments to this Annex, such amendments shall be adopted and enter into force in accordance with the procedures contained in Article 19 of this Convention.