

**LEGAL ANALYSIS OF THE APPLICATION OF THE BASEL
CONVENTION TO HAZARDOUS WASTES AND OTHER
WASTES GENERATED ON BOARD SHIPS**

(30 April 2012)

The present legal analysis of the application of the provisions of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal to hazardous wastes and other wastes generated on board ships was prepared by the Secretariat of the Basel Convention following a request from the tenth meeting of the Conference of the Parties to the Basel Convention contained in paragraph 5 of decision BC-10/16 . The present legal analysis is a revised version of a legal analysis prepared by the Secretariat for the consideration of COP-10, based on a request from the seventh session of the Open-ended Working Group. As requested by COP-10, the present legal analysis takes into account comments from Parties and others.

TABLE OF CONTENTS

Introduction	p.3
I. Overview of the application of the Basel Convention to hazardous and other wastes generated on board ships	p. 6
II. Relationship between the Basel Convention and an international instrument governing the discharge of wastes derived from the normal operation of a ship	p. 8
III. Interpretation of ‘Wastes which derive from the normal operations of a ship, the discharge of which is covered by another international instrument ...’	p. 10
IV. The application of the Basel Convention to hazardous and other wastes generated on board ships	p. 18
(a) The obligation to minimize the generation of hazardous wastes and other wastes	p. 19
(b) The obligation to manage wastes in an environmentally sound manner	p. 20
(c) The control of transboundary movements of hazardous wastes and other wastes generated on board ships	p. 24
Conclusions	p. 28

Introduction

1. The need for legal clarity with regards to the application of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (hereinafter “Basel Convention”) to hazardous wastes and other wastes generated on board ships was prompted by the August 2006 *Probo Koala* incident. This matter was especially discussed by States in the context of two international fora: the bodies of the Basel Convention and the International Maritime Organization’s (hereinafter “IMO”) Marine Environment Protection Committee (hereinafter “MEPC”). Issues of relevance to this matter have also been considered in the IMO Maritime Safety Committee (hereinafter “MSC”).

2. Following the *Probo Koala* incident, Côte d’Ivoire sent a request for technical assistance to the Secretariat of the Basel Convention. The mission mandated by the Secretariat in response to this request established that “based on available information, the *Probo Koala* wastes exhibit the hazard characteristics of the Basel Convention”¹. The dumping in Côte d’Ivoire of wastes generated on board the *Probo Koala* ship was the subject of thorough consideration during the eighth meeting of the Conference of the Parties of the Basel Convention (hereinafter “COP”), in 2006. During that meeting, noting that the *Probo Koala* vessel had entered the port of Amsterdam during its journey, the Netherlands stressed the importance of ruling out any future ambiguity on the applicability of international instruments. The Netherlands also highlighted concern about future waste streams, which might end up in the marine environment if processing at sea became a normal practice². Most Parties stressed the need to identify loopholes and grey areas in the Basel Convention and other international and national legal instruments related to waste and shipping, which might be exploited by unscrupulous business operators.

¹ UNEP/CHW/OEWG/6/2, annex, paragraph 3, c).

² UNEP/CHW.8/16, p. 8, paragraph 38.

3. In light of the aforementioned incident and the issues it raised concerning the applicable legal framework, COP-8 adopted decision VIII/9 on Cooperation between the Basel Convention and the International Maritime Organization. By virtue of this decision, the Conference of the Parties requested Parties and the Secretariat of the IMO to provide information and views on:

- the respective competencies of the Basel Convention and the International Convention for the Prevention of Pollution from Ships (1973), as modified by the Protocol of 1978 and the Protocol of 1997 (MARPOL)³ in respect to hazardous wastes and other wastes;
- any gaps between those instruments
- any option for addressing those gaps.

Norway, Colombia and the Secretariat of the IMO provided their views as a result⁴.

4. The invitation contained in decision VIII/9 was reiterated in decision IX/12 adopted by the ninth meeting of the Conference of the Parties and again in decision VII/13 adopted by the seventh session of the Open ending working Group (hereinafter “OEWG”), which invited the IMO to provide further comments, views or information on the elements contained in decision VIII/9. In response, the Secretariat of the IMO sent a letter dated 5 July 2010 to the Secretariat of the Basel Convention in which it explained that the requirements of MARPOL for Parties to provide adequate reception facilities for oily residues did not extend to the environmentally sound management of the landed wastes/residues. As a consequence, the Secretariat of the IMO expressed the view that advice and guidance from the Parties to the Basel Convention on the environmentally sound management of waste oil residues of ships would be a welcome development⁵. In its decision VII/13, the OEWG also requested the Secretariat to prepare a legal analysis of the

³*United Nations Treaty Series*, Vol. 1340, pp. 61 et seq. and 184 et seq. MARPOL entered into force on 2 October 1983. It replaced the 1954 Convention for the Prevention of Pollution of the Sea by Oil.

⁴See these views at: <http://www.basel.int/Implementation/LegalMatters/Ships/tabid/2405/Default.aspx>

⁵IMO, T5/1.01, p. 2.

application of the Basel Convention to hazardous and other wastes generated on board ships.

5. In line with decision OEWG VII/13, the Secretariat of the Basel Convention prepared an initial legal analysis, which was published on the website of the Basel Convention on 4 April 2011⁶. Argentina, the European Union and its member States, Guatemala, Mexico, Qatar, and Trinidad and Tobago submitted comments on this initial legal analysis⁷. The Secretariat prepared a revised legal analysis dated 7 October 2011 which was submitted to COP-10⁸. Following consideration of this matter, COP-10 adopted decision BC-10/16 on Cooperation between the Basel Convention and the International Maritime Organization that requested that a revised version of the legal analysis be prepared by the Secretariat, taking into account comments received by Parties and others. This revised legal analysis is to be considered during the eighth session of the OEWG.

6. The present analysis is the “revised legal analysis” requested by COP-10. In line with decision BC-10/16, it takes into account the comments from Parties and others received by the Secretariat by 15 March 2012 on the analysis dated 7 October 2011, specifically comments from Canada, the European Union and its member States, and Norway⁹. Some of these comments also refer to the initial legal analysis dated 4 April 2011. It is worth noting that the Secretariat of the Basel Convention, as it did during the elaboration of the initial and revised legal analyses, consulted the Secretariat of the IMO in the preparation of the present legal analysis. The Secretariat of the IMO provided comments on the technical aspects of this analysis but noted that its comments do not extend to the possible endorsement of the conclusions contained in this document.

⁶UNEP/CHW.10/INF/16, annex II

⁷UNEP/CHW.10/INF/17.

⁸UNEP/CHW.10/INF/16, annex I

⁹ These comments are available at: <http://archive.basel.int/legalmatters/coop-IMO/cop10-comments/index.html>

I. Overview of the application of the Basel Convention to hazardous and other wastes generated on board ships

7. The Basel Convention applies a life cycle approach to the management of hazardous wastes and other wastes, from their generation to their disposal. According to the definition provided for by the Convention, “wastes” are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law (Article 2). Article 1 on the scope of the Basel Convention provides:

1. The following wastes that are subject to transboundary movement shall be “hazardous wastes” for the purposes of this Convention:

(a) Wastes that belong to any category contained in Annex I, unless they do not possess any of the characteristics contained in Annex III; and

(b) Wastes that are not covered under paragraph (a) but are defined as, or are considered to be, hazardous wastes by the domestic legislation of the Party of export, import or transit.

2. Wastes that belong to any category contained in Annex II that are subject to transboundary movement shall be “other wastes” for the purposes of this Convention.

Annex I of the Convention is further elaborated in Annexes VIII and IX of the Convention.

8. It is thus primarily the **nature** of the wastes involved - not the process by which they are generated or who generates them - that defines the scope of the Basel Convention. As this paper will show, other important elements associated with the **spatial sphere** in which such wastes are generated, managed or moved also affect the scope of application of the Basel Convention.

9. The Party or Parties concerned, in undertaking their obligations concerning such wastes, should be determined to achieve the objective of the Basel Convention as set in its Preamble: to protect, by strict control, human health and the environment

from the adverse effects which may result from the generation and management of hazardous wastes and other wastes. The Basel Convention provides for three tracks to achieve this objective. The first track relates to the generation of hazardous and other wastes and requires that Parties reduce such generation to a minimum. The second track relates to the management of hazardous and other wastes and requires that such wastes be the subject of environmentally sound management (hereinafter “ESM”). The ESM requirement applies to the collection, transport and disposal of relevant wastes. The third track applies to transboundary movements (hereinafter “TBM”) of hazardous and other wastes. It is also worth emphasizing that the ESM provisions of the Convention apply regardless as to whether a TBM occurred.

10. The Convention excludes from its scope “wastes which derive from the normal operation of a ship, the discharge of which is covered by another international instrument”, as set out in paragraph 4 of Article 1. The Basel Convention is not the only treaty excluding such wastes: the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972) and its 1996 Protocol (hereinafter “LC/LP”) have a similar exclusion, which is considered to refer to MARPOL¹⁰.

11. The Basel Convention neither defines the term “wastes which derive from the normal operation of a ship” nor explicitly identifies “another international instrument” that covers the discharge of such wastes. In order to clarify the scope of the application of the Basel Convention to hazardous wastes and other wastes generated on board ships, it seems necessary as a first step to identify the other “international instrument” to which Article 1 paragraph 4 of the Convention refers.

¹⁰ As advised by the Secretariat of the IMO, a joint MEPC – LC/LP Group is looking at aspects related to the garbage of garbage /MARPOL Annex V) and in particular issues related to the management of spoilt cargoes. Several years ago this group developed guidance for mariners and will revise this guidance by January 2013. To date, the group has never ventured into the issue of “normal operations” on board ships.

II. Relationship between the Basel Convention and an international instrument governing the discharge of wastes derived from the normal operation of a ship

12. The United Nations Convention on the Law of the Sea (UNCLOS) provides a general legal framework to govern matters of the law of the sea, including the protection of the marine environment, and its provisions governing the protection of the marine environment from pollution from ships call for a competent international organization or general diplomatic conference to set the applicable international standards and rules. In this context, the IMO and the international instruments developed under its auspices are of direct relevance to setting such international standards and rules on the prevention of pollution from ships for the protection of the environment.

13. Among the IMO international instruments, MARPOL¹¹ appears to be the most relevant international instrument governing the discharge of wastes which derive from the operation of ships. MARPOL applies, in accordance with paragraph 1 of its Article 3, to ships entitled to fly the flag of a Party to MARPOL and to ships not entitled to fly the flag of a Party but which operate under the authority of a Party. Pursuant to paragraph 1 of Article 1, the Parties to MARPOL undertake to give effect to the provisions of the Convention and its annexes in order to prevent the pollution of the marine environment by the discharge of harmful substances or effluents containing such substances in contravention of the Convention.

14. MARPOL aims at preventing pollution of the marine environment by discharges into the sea of harmful substances, or effluents containing such substances from ships, whether from operational or accidental causes. MARPOL addresses pollution from ships in six annexes that foresee: oil (Annex I), noxious liquid substances (Annex II), harmful substances carried in packages (Annex III), sewage (Annex IV), garbage (Annex V), and air pollution (Annex VI)¹². MARPOL also

¹¹*United Nations Treaty Series*, Vol. 1340, pp. 61 et seq. and 184 et seq. MARPOL entered into force on 2 October 1983. It replaced the 1954 Convention for the Prevention of Pollution of the Sea by Oil.

¹² Annex I of MARPOL entered into force on 2 October 1983, Annex II did so on 6 April 1987, Annex III on 1 July 1992, Annex IV on 27 September 2003, Annex V on 29 December 1988, and Annex VI on 19 May

contains requirements in relation to port reception facilities which must be “adequate” to meet the needs of the ships using them¹³. “Guidelines for ensuring the adequacy of port reception facilities” intended, inter alia, to “encourage States to develop environmentally appropriate methods of disposing of ships’ wastes ashore”, elaborate on the location and capacity requirements for the reception facilities¹⁴.

15. The management of hazardous wastes generated on board ships needs to be internationally regulated since they may pose severe danger to human health and the environment. In this regard, it is important to clarify the application of the Basel Convention and of MARPOL to hazardous wastes and other wastes generated on board ships. Providing clarity was certainly the intention of those who drafted and agreed to Article 1 paragraph 4 of the Basel Convention. By introducing this provision, negotiators made use of Article 30 of the Vienna Convention on the Law of Treaties (hereinafter “Vienna Convention”) that foresees the application of successive treaties relating to the same subject matter and defers to the will of Parties as expressed in the treaty through the adoption of a “conflict clause”. Such a clause, as embedded in Article 1 paragraph 4 of the Basel Convention, usually helps to determine the scope of apparently or possibly colliding treaties. Nevertheless, conflict clauses do not always succeed in clearly distinguishing the respective scope of application of these agreements. The terms in which those treaties are couched may be ambiguous and they may not be able to cover all the possible situations that could or will arise. In such cases, it becomes necessary to apply the general rules on treaty interpretation as contained in Articles 31 and 32 of the Vienna Convention. Hence, consideration of the general rules on treaty interpretation to Article 1, paragraph 4 of the Basel Convention will help provide some legal clarity to the application of the Basel Convention or/and another legal instrument, in this case MARPOL, to hazardous and other wastes generated on board ships.

2005. Whilst every State Party to MARPOL must accept Annexes I and II, consent to the rest of them is voluntary.

¹³ See for example regulation 38 of Annex I and regulation 18 of Annex II of MARPOL

¹⁴ Resolution MEPC.83(44) of 13 March 2000

16. In order to properly interpret Article 1, paragraph 4 of the Basel Convention, it is necessary to take into consideration all of its terms. This norm states that “[w]astes which derive from the normal operations of a ship, the discharge of which is covered by another international instrument, are excluded from the scope of this Convention”. The analysis of this norm will be broken into two segments. First, the meaning of “wastes which derive from the normal operations of a ship the discharge of which is covered by another international instrument” will be analysed in section III. Second, this analysis will assess in section IV how far the obligations of the Basel Convention pertaining to the minimizations of the generation of hazardous and other wastes, those pertaining to ESM and those pertaining to TBM apply to wastes generated on board ships.

III. Interpretation of ‘Wastes which derive from the normal operations of a ship, the discharge of which is covered by another international instrument ...’

17. Articles 31 and 32 of the Vienna Convention contain the international general norms on treaty interpretation¹⁵. When interpreting a particular legal norm, the interpreter seeks to determine its meaning and scope¹⁶. The International Court of Justice has stressed in its advisory opinion on the *Competence of the General Assembly on the Admission of a State to the United Nations* that there is no sense in interpreting a clear text¹⁷. The fact that the Parties to the Basel Convention have adopted several decisions seeking Parties’ views on the respective scope of the Basel Convention and MARPOL as well as decisions requesting the Secretariat to elaborate a legal analysis of the application of the Basel Convention to hazardous and other

¹⁵ Cf. *Territorial Dispute* (Lybian Arab Jamahiriya v. Chad), judgment of 3 February 1994, ICJ Reports 1994, p. 6, at p. 21 para. 41; *Oil Platforms* (Islamic Republic of Iran v. United States of America), preliminary objection, judgment of 12 December 1996, ICJ Reports 1996, p. 803, at p. 812, para. 23 and *Kasikili/Sedudu Island* (Botswana v. Namibia), judgment of 13 December 1999, ICJ Reports 1999, p. 1045, at p. 1059, para. 18.

¹⁶ Cf. *Request for Interpretation of the Judgment of November 20th 1950, in the Asylum Case* (Colombia v. Peru), judgment of 27 November 1950, ICJ Reports 1950, p. 395, at p. 402.

¹⁷The Court declared: “If the relevant words in their natural and ordinary meaning make sense in their context, that is an end of the matter”. *Competence of the General Assembly on the Admission of a State to the United Nations*, advisory opinion of 3 March 1950, ICJ Reports 1950, p. 4, at p. 8. See also *Fisheries Jurisdiction case*, (Spain v. Canada) jurisdiction of the Court, judgment of 4 December 1998, ICJ Reports 1998, p. 432, at p. 464, para. 76.

wastes generated on board ships is clear evidence that Article 1 paragraph 4 is not “a clear text”. Thus, it becomes necessary to establish more accurately the meaning and scope of this legal norm¹⁸.

18. In accordance with Article 31 of the Vienna Convention, a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the **terms** of the treaty in their **context** and in the light of its **object and purpose**. The context for the purpose of the interpretation of a treaty shall comprise, in addition to its text, its preamble and annexes: (a) any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty; (b) any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty. There shall also be taken into account, together with the context: (a) any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions; (b) any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation; (c) any relevant rules of international law applicable in the relations between the parties. Finally, a special meaning shall be given to a term if it is established that the parties so intended. Article 32 authorizes the recourse to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of Article 31, or to determine the meaning when the interpretation according to Article 31: (a) leaves the meaning ambiguous or obscure; or (b) leads to a result which is manifestly absurd or unreasonable.

19. The first part of Article 1 paragraph 4 of the Basel Convention needs to be interpreted as a whole in order to fully understand its meaning and scope. It refers to wastes which derive from the normal operations of a ship the discharge of which is covered by another international instrument.

¹⁸ Cf. SADAT-AKHAVI, Seyed Ali, *Methods of Resolving Conflicts Between Treaties*, Leiden, Martinus Nijhoff, 2003, p. 25.

20. An interpretation of Article 1, paragraph 4 cannot contradict the language of the treaty as a whole. The *travaux préparatoires* of Article 31 of the Vienna Convention support this interpretation. In its draft Articles on the law of treaties, the International Law Commission recalls the *dictum* of the Permanent Court of International Justice in the advisory opinion of the *Competence of the ILO to Regulate Agricultural Labour*¹⁹. The Court stressed that,

“In considering the question before the Court upon the language of the Treaty, it is obvious that the **Treaty must be read as a whole**, and that **its meaning is not to be determined merely upon particular phrases which, if detached from the context, may be interpreted in more than one sense**”²⁰.

21. The context of a conventional legal norm comprises both the preamble and annexes of the treaty under analysis. The preamble provides the object and purpose in the light of which Article 1, paragraph 4 should be understood. The Parties to the Convention are “determined to protect, by strict control, human health and the environment against the adverse effects which may result from the generation and management of hazardous wastes and other wastes”. In addition, they are “convinced also that the transboundary movement of hazardous wastes and other wastes should be permitted only when the transport and ultimate disposal of such wastes is environmentally sound”. Their goal is to reduce the generation and transboundary movements of hazardous wastes to a minimum and to ensure that hazardous wastes are treated and disposed of as close as possible to their source of generation²¹.

22. In defining the wastes covered by the Convention it is important to recall that it is primarily the **nature** of the wastes involved - not the process by which they are generated or who generates them - that is the basis define the scope of the Basel

¹⁹*Yearbook of the International Law Commission*, Vol. II, 1966, p. 121.

²⁰*Competence of the ILO to Regulate Agricultural Labour*, advisory opinion of 12 August 1922, PCIJ, Series B, Nos. 2 and 3, p. 23.

²¹ Cf. RUMMEL-BULSKA, Iwona, “The Basel Convention and the UN Convention on the Law of the Sea”, in: RINGBOM, Henrik, *Competing Norms in the Law of Marine Environmental Protection*, London, Kluwer Law International, 1997, p. 84.

Convention. Taking into consideration the process by which wastes are generated would seem to be at odds with the approach of the Basel Convention which has a primary objective to prevent the negative impact or “adverse effects” of such wastes on human health and the environment. Hence, there is apparently no justification under the Basel legal regime to treat differently the wastes stemming from “normal” or “abnormal” operations, whether on board or off board ships. In light of the object and purpose of the Basel Convention, the origin of the waste in question would not be relevant as long as its discharge is covered by MARPOL. Such an understanding is also supported by the fact that MARPOL appears to follow the same approach as that of the Basel Convention: it is the listing in the Annexes that determines whether a specific substance is covered by MARPOL, not the process through which such substances are generated, unless, obviously that process is not permissible.

23. In as much as the use of the terms “normal operations” cannot be interpreted in isolation of the rest of the first part of the Article, of the context of the Convention and without taking into account its object and purpose, it would appear that a helpful approach to the use of the word “normal operations” in Article 1 paragraph 4 could be that this word was intended to serve as a marker to identify, without specifically mentioning it, MARPOL, as opposed to the LC/LP²². In light of all the above, and by virtue of the application of Article 31 of the Vienna Convention, the first part of Article 1 paragraph 4 of the Basel Convention should be taken to mean “MARPOL wastes”.

24. Whilst the only “authentic” interpretation of a treaty is said to be that provided by the Parties to the agreement in question²³, resort to subsequent agreements and subsequent practices in interpreting a treaty is based on the understanding that a treaty is by nature evolving and that current Parties should have

²² Article III of the LC/LP specifies that “dumping” does not include “the disposal at sea of wastes or other matter incidental to, or derived from the normal operations of vessels ...”

²³ Applying the Latin adagio *eius est interpretari cuius est condere*, the Permanent Court of International Justice declared in its advisory opinion on the *Jaworzina case*: “it is an established principle that the right of giving an authoritative interpretation of a legal rule belongs solely to the person or body who has power to modify or suppress it”. *Question of Jaworzina (Polish-Czechoslovak Frontier)*, advisory opinion of 6 December 1923, PCIJ, Series B, No. 8, p. 6, at p. 37.

a say in what it means to them. The International Court of Justice has so confirmed in its judgment on the *Costa Rica v. Nicaragua* case²⁴. For this reason, in accordance with Article 31, there shall also be taken into account any subsequent agreement and subsequent practice in the application of the Basel Convention that establishes the agreement of parties regarding its interpretation²⁵. Subsequent agreements between Parties (whether the Protocol on Liability and Compensation or COP decisions) do not shed light of Parties' understanding of Article 1 paragraph 4. Moreover, few conclusions can be drawn from Parties' subsequent practice as to the meaning of Article 1, paragraph 4.

25. Article 32 of the Vienna Convention authorizes the recourse to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of Article 31. The text of Article 1, paragraph 4 was drafted by a representative of the IMO Secretariat and submitted at a late stage of the negotiations of the Basel Convention²⁶. It follows the same approach as paragraph 3 of the same article that excludes radioactive waste from the scope of the Basel Convention. There is no indication in the available travaux préparatoires as to the rationale for the choice - at the time - of the terminology "normal operations". There is no indication, for instance, that negotiators intended to make a distinction as to the processes by which the wastes were generated on board ships or that they intended to make a distinction, under the MARPOL regime, of wastes generated in a "normal" or "abnormal" way, a distinction that actually does not exist under MARPOL. One can actually question whether, at the time, industrial processes did take place on board ships and resulted in the generation of wastes. One can also question why it was proposed that such wastes should be treated differently under the Basel Convention,

²⁴ *Dispute over Navigational and Related Rights (Costa Rica v. Nicaragua)*, judgment of 13 July 2009, p. 1, at p.29, para.63-64.

²⁵ Caflisch defines practice as "le comportement des acteurs de la scène internationale sur les plans interne (législation, actes administratifs) ou externe (pratique diplomatique), de même que la *jurisprudence nationale et internationale*". CAFLISCH, Lucius, "La pratique dans le raisonnement du juge international", Société française pour le droit international, *La pratique et le droit international*, Colloque de Genève, Paris, Pedone, 2004, p. 126.

²⁶ UNEP/IG.80/4, p. 10, paragraph 15.

depending on whether they were generated as a result of “normal” or “abnormal” operations. As a consequence, the use of the terminology “normal operations” was perhaps at the time left very wide on purpose as it is too difficult to map all kind of operations that may exist – at present or in the future – on board ships. Most probably the terminology used was thus with reference to Article III.1b of the LC/LP, which contains a similar exclusion provision. Whereas a specific reference to MARPOL was not included in Article 1, paragraph 4 of the Basel Convention, resorting to the term “normal” was a way to clarify that it is the wastes falling within the scope of MARPOL that were targeted by the exclusion provision²⁷.

26. Hence, by virtue of the application of Articles 31 and 32 of the Vienna Convention, this legal analysis suggests that ‘Wastes which derive from the normal operations of a ship, the discharge of which is covered by another international instrument ...’ means wastes falling within the scope of MARPOL. This conclusion, however, may not be seen as offering all the legal clarity that may be needed by the Parties to the Basel Convention to implement this treaty and it can be argued that the boundaries between the “normal operation of ships” and the other activities or operations of ships may require further clarification. In this regard, it may be worth recalling work undertaken in the framework of the IMO that is of relevance to the issue under consideration.

27. During the 56th session of the MEPC, in July 2007, the Netherlands expressed concern about the lack of information and regulation on industrial production processes on board ships whilst at sea²⁸. This country expressed uncertainty with regard to the practice of making alterations to oil cargo through ‘industrial processing’ or on-board chemical processes. The issue was again discussed at the 59th session of the MEPC, held on 13-17 July 2009. The MEPC

²⁷ This Article states: “For the purposes of this Convention, b. "Dumping" does not include: (i) the disposal at sea of wastes or other matter incidental to, or derived from the normal operations of vessels, aircraft, platforms or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or structures” (emphasis added). This convention entered into force on 30 August 1975. *United Nations Treaty Series*, Vol. 1046, p. 140.

²⁸ IMO, MEPC 56/22/2, of 13 April 2007.

recalled the Netherlands' request for information to submit details of any relevant industrial production processes on board ships. It acknowledged that no feedback had been given to that date²⁹. However MEPC 59 and the Maritime Safety Committee (MSC) 86 agreed that blending on board during a sea voyage should be prohibited. MEPC 59 and MSC 86 thus instructed the Bulk Liquids and Gases (BLG) Sub-Committee to develop mandatory regulation, and, as an interim measure, issued MSC-MEPC.2/Circ.8 – Prohibition of blending MARPOL cargoes on board during the sea voyage. Subsequently, MSC 89 approved in May 2011 draft amendments to International Convention for the Safety of Life at Sea (SOLAS)³⁰, adding a new regulation VI/5.2 on the “Prohibition of the blending of bulk liquids cargoes during the sea voyage”³¹. The approved amendments have been circulated to Contracted Governments in accordance with the amendments' procedure of SOLAS, with a view to adoption at the 90th session of the Maritime Safety Committee, to be held from 11th to 20th May 2012.

28. In addition to the issue of blending, the MSC also considered a submission by the Netherlands contained in document MSC 89/11/1, proposing that an additional regulation be added to specifically prohibit any production processes on board ships. Production processes refer to any deliberate chemical process whereby a chemical reaction between the ship's cargoes, or cargo and any other substance, results in a cargo with a new product designation. The MSC noted the general support for the proposal by the Netherlands, and decided to refer the above document to the sixteenth session of the Sub-Committee on Bulk Liquids & Gases (BLG 16) for further consideration, and to advise the 90th session of the Maritime Safety Committee in May 2012 accordingly.

²⁹ IMO, MEPC 59/24, p. 110, paragraph 23.4

³⁰ *United Nations Treaty Series*, Vol. 1184, p. 277 *et seq.* SOLAS Convention entered into force on 25 May 1980.

³¹ This new regulation states that: “ The physical blending of bulk liquid cargoes during a sea voyage is prohibited. Physical blending refers to the process whereby the ship's cargo pumps and pipelines are used to internally circulate two or more different cargoes with the intent to achieve a cargo with a new product designation. This prohibition does not preclude the master from undertaking cargo transfers for the safety of the ship or protection of the marine environment.” Also, “the prohibition does not apply to the blending of products for use in the search and exploitation of sea-bed mineral resources on board ships used to facilitate such operations.”

29. BLG 16, which was held from 30th January to 3rd February 2012, concurred with the view that an additional regulation should be introduced to address production processes on board ships, in relation to the amendments approved for SOLAS chapter VI regarding the prohibition of the blending of bulk liquids cargoes during the sea voyage. The Sub-Committee endorsed proposed draft text for consideration by MSC 90 (noting a need for additional information to be supplied to MSC 90 regarding the activity of ships engaged in oil-related activities with respect to any possible exemptions).

30. BLG 16 invited the Maritime Safety Committee at its 90th session to consider the proposed draft amendment for SOLAS regulation VI/5.3, which prohibits any production process on board a ship during the sea voyage, together with the above-mentioned draft SOLAS regulation VI/5.2 approved at MSC 89 for adoption at MSC 90, possibly with a view to adoption of both draft regulations as a single package. Thereinafter, according to the tacit procedure, the amendments will be deemed to have been accepted about one year from the date they were circulated. . If adopted at MSC 90, the amendments will then enter into force six months after the date on which they are deemed to have been accepted. In this case this could be the 1st December 2013, or possibly the 1st of January 2014.

31. Given the work undertaken in the framework of the IMO, it has been suggested that to the extent that there are gaps in the international regulation of wastes generated on board ships, this issue may be better addressed under the MARPOL Convention because of its central role in regulating ships. It has for instance been proposed to establish a joint working group of the Basel Convention and the MEPC of the IMO to discuss: how industrial processes on ships generating wastes are currently regulated; whether these industrial processes are infrequent or commonplace; and how to determine whether waste from a ship's operations are normal or abnormal. In the event Parties to the Basel Convention intend to make a distinction between the "normal" and "abnormal" operations by which MARPOL wastes are generated and to clarify the scope of "normal operations", it is worth recalling that issues of industrial processes are considered within the IMO as a safety

issue and as such, they are discussed by the IMO's MSC within the framework of the SOLAS - a convention whose scope does not extend to the "discharge" of wastes - and not within the context of MARPOL. Obviously, the work of the IMO MSC is not irrelevant to the Basel Convention in that the regulation of activities on board ships may serve the purpose of minimizing the generation of hazardous wastes, in particular if the amendment currently under discussion to prohibit industrial processes from taking place at sea is adopted. However, whereas MARPOL regulates "discharges", as expressly specified in Article 1 paragraph 4 of the Basel Convention, SOLAS does not. It is not, therefore, a treaty directly falling under the scope of Article 1 paragraph 4.

IV. The application of the Basel Convention to hazardous and other wastes generated on board ships

32. The present legal analysis is expected to bring legal clarity on the application of the Basel Convention to hazardous and other wastes generated on board ships. Clarification of which wastes "derive from the normal operations of a ship, the discharge of which is covered by another international instrument" is one important element of the analysis, and it must be associated with an analysis of whether and how far the provisions of the Basel Convention apply to wastes generated on board ships, whether or not they fall under the scope of the Article 1 paragraph 4 exclusion clause.

33. The generation of wastes on board ships is, by its very nature, an ongoing activity: it takes place in areas within and outside the national jurisdiction of states. The generation of such wastes can also be, by its very nature, a transboundary process. Moreover, once generated, the wastes on board ships move across borders and within and outside areas under national jurisdiction. For this reason, MARPOL does not make a distinction as to where, geographically and legally, the waste is generated. Equally logical is the lack of regulation within MARPOL of the movements of such wastes generated on board ships. MARPOL's basic principle is that materials (including wastes) that cannot be discharged into the sea in accordance

with relevant requirements must be delivered to port reception facilities, and port states must provide adequate port reception facilities to receive MARPOL wastes. The Basel Convention, on the other hand, through its provisions on the control of TBM of hazardous and other wastes, approaches such wastes as cargo.

34. The following paragraphs discuss the application of the Basel Convention obligations pertaining to the generation, the ESM and the control of TBM of hazardous and other wastes generated on board ships.

(a) The obligation to minimize the generation of hazardous wastes and other wastes

35. Paragraph 2 of Article 4 of the Basel Convention prescribes that “[e]ach Party shall take the appropriate measures to: (a) [e]nsure that the generation of hazardous wastes and other wastes **within it** is reduced to a minimum, taking into account social, technological and economic aspects. Are wastes generated on board ships excluded from this obligation? One part of the answer lies in the above interpretation of “wastes generated on board ships that derive from the normal operation of a ship the discharge of which is covered by another international instrument are excluded from the scope of this Convention”. If the wastes generated on board the ships fall within the scope of the Article 1 paragraph 4 exclusion clause, it appears that the Basel Convention minimization requirement would not apply to them.

36. What about wastes generated on board ships that do not fall within the scope of the Article 1 paragraph 4 exclusion clause? A preliminary conclusion would be that Parties have the obligation to minimize the generation of such wastes. However paragraph 2 (a) of Article 4 refers to wastes generated “within it”, meaning within the Party. What are the implications, if any, for a Party to the Basel Convention that is also a flag State under UNCLOS? And can “within it” be interpreted as including “within a ship” that is located in a marine area under the national jurisdiction of a State? With regards to the first question, it could be argued that in as far as some activities likely to produce hazardous wastes and other wastes take place at sea, certain notions of the UNCLOS such as that of the flag State could be applicable in

the framework of the Basel Convention. Nevertheless, the Basel Convention does not foresee this possibility, neither does it refer to UNCLOS. With regards to the second question, it should be noted that paragraph 2 (a) of Article 4 does not use the terminology “area under national jurisdiction” as defined in paragraph 9 of Article 2. The use of the terminology “within an area under the national jurisdiction of the Party” rather than “within it” would have meant that the obligation to minimize the generation of waste would have applied to any land, marine area or airspace area within which a State exercises administrative and regulatory responsibility in accordance with international law, therefore also to ships located within territorial waters that generate wastes other than those falling within the scope of the exclusion clause of paragraph 4 of Article 1. The use of “within it” rather than “within an area under national jurisdiction” was, unless there is evidence to the contrary, made in purpose. As a result, equating both terminologies would seem too broad an interpretation of the terms “within it”. Rather, “within it” would appear to actually be a reference to the territory of that State, and a ship at sea, yet located within territorial waters, would not fall within that spatial sphere.

37. As a consequence, the Basel Convention requirement of minimization of wastes would not apply to hazardous and other wastes which derive from the normal operations of a ship, the discharge of which is covered by another international instrument. In addition, it can be argued that such wastes, even if not falling within the scope of this exclusion clause, are not covered by Article 4 paragraph 2 (a) of the Basel Convention because of the use of the terminology “within it” in Article 4 paragraph 2 (a).

(b) The obligation to manage wastes in an environmentally sound manner

38. Under the Basel Convention, Parties have the duty to take all appropriate measures to ensure the environmentally sound management of hazardous wastes³². The notion of ‘environmentally sound management’ is defined in paragraph 8, Article 2 of the Convention. ESM entails:

³² Article 4.2, b), c), e), f), g) and h) of the Basel Convention.

“taking all practicable steps to ensure that hazardous waste or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes”.

39. The Basel Convention thus defines the notion of environmentally sound management in rather general terms³³, which call for further clarification when applied in practice. Since the Convention does not prescribe a specific standard, each Party must rely on its own understanding of what is environmentally sound³⁴. However, tools for achieving environmentally sound management have been further developed by Parties through Technical Guidelines adopted by the Conference of the Parties. These guidelines assist Parties in the implementation of the Convention providing them with guidance with regard to operations involving the management of diverse types of hazardous waste.

40. The Guidance Document on the Preparation of Technical Guidelines for the Environmentally Sound Management of Wastes Subject to the Basel Convention presents some principles that merit consideration in assisting State Parties in developing their waste and hazardous waste strategies. They are: the source reduction principle, the integrated life-cycle principle, the precautionary principle, the integrated pollution control principle, the standardization principle, the self-sufficiency principle, the proximity principle, the least transboundary movement principle, the polluter pays principle, the principle of sovereignty and the principle of public participation³⁵.

41. MARPOL defines the term “discharge” of harmful substances or effluents containing such substances in its Article 2, paragraph 3, a) and b) as “any release howsoever caused from a ship and includes any escape, disposal, spilling, leaking,

³³ ABRAMS, David, “Regulating the International Hazardous Waste Trade: A Proposed Global Solution”, in: *Columbia Journal of Transnational Law*, Vol. 28, 1990, p. 828.

³⁴ GROSZ, Mirina & PORTAS, Pierre, “Environmentally Sound Management: Towards a Coherent Framework Bridging the Basel, the Rotterdam and the Stockholm Conventions”, in: *EcoLomic Policy and Law, Journal of Trade and Environment Studies*, Vol. 5/6, Special Edition 2008-2010, p. 48.

³⁵ See paragraph 10 of the Guidance Document, available at: <http://www.basel.int/Portals/4/Basel%20Convention/docs/meetings/sbc/workdoc/framework.doc>.

pumping, emitting or emptying”³⁶. MARPOL does not contain a mandatory requirement to discharge ships’-generated wastes or specify when or where this discharge shall be done. In addition, while all of MARPOL annexes contain provisions for the environmentally sound management of wastes generated on board ships only whilst at sea, MARPOL does not require the environmentally sound management of waste that is offloaded. Neither do its specific obligations concerning reception facilities, as contained in regulation 38 of Annex I foresee the environmentally sound management requirement of such wastes. The “Guidelines for ensuring the adequacy of port reception facilities” to which regulation 38 makes reference state that “the facilities provided by the port must allow for the ultimate disposal of ships’ wastes to take place in an environmentally appropriate way” (paragraph 3.3., 2). However, these guidelines do not contain specific provisions on the environmentally sound management of such wastes ashore³⁷.

42. The application of the Basel Convention ESM requirement to wastes generated on board ships needs to be assessed in two respects: the existence of an ESM requirement on board the ship, and the existence of an ESM requirement once the waste is unloaded from the ship. In both instances, the exclusion clause of Article 1 paragraph 4 of the Basel Convention needs to be born in mind.

43. Are wastes generated on board ships that are still on the ship excluded from the overall ESM requirements of the Basel Convention? For wastes falling within the scope of the Article 1 paragraph 4 exclusion clause, the Basel Convention ESM requirement would not apply. As far as hazardous and other wastes not covered by the exclusion clause are concerned, Article 4, paragraph 2 (c) of the Basel Convention prescribes that each Party shall take the appropriate measures to “ensure that persons involved in the management of hazardous wastes or other wastes within it take such steps as are necessary to prevent pollution due to

³⁶ It does not include: (i) dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, done at London on 13 November 1972; or (ii) release of harmful substances directly arising from the exploration, exploitation and associated off-shore processing of sea-bed mineral resources; or (iii) release of harmful substances for purposes of legitimate scientific research into pollution abatement or control.

³⁷ See IMO, MEPC.83/44 of 13 March 2000.

hazardous wastes and other wastes arising from such management and, if such pollution occurs, to minimize the consequences thereof for human health and the environment”. As in our previous reasoning with regard to Article 4, paragraph 2 (a), the terms “within it” is understood as meaning “within the territory” of a Party. As a consequence, the Basel Convention ESM requirement would not apply on board ships.

44. Does the ESM requirement apply to ships-generated wastes once offloaded from a ship? It must be noted that the requirement for Parties to undertake ESM of hazardous and other wastes exists independently of any TBM taking place. If a TBM does take place, the ESM requirement presumably applies as soon as the wastes are within the jurisdiction of the State Party to the Basel Convention, unless otherwise provided by the Convention. Given the context of the Basel Convention as well as its object and purpose, it is also safe to conclude that in the case of MARPOL wastes, “excluded from the scope of this Convention” cannot be interpreted as meaning that the Basel Convention ESM requirement does not apply to such MARPOL unloaded wastes.

45. In conclusion, once ships’-generated wastes are unloaded from a ship, and provided they are “hazardous” or “other” wastes, the requirement that they be managed in an environmentally sound manner in accordance with the provisions of the Basel Convention is fully applicable. As a consequence, in the event a State is Party to both MARPOL and the Basel Convention and the wastes are hazardous wastes or other wastes, one may argue that the port reception facility should comply with the ESM requirement associated with being an “adequate disposal facility” under Article 4 paragraph 2 (b) if that facility disposes of the wastes. In the event the port reception facility is not a disposal facility in the sense of the Basel Convention, Parties should ensure that wastes received by the port facility are then transported to an “adequate disposal facility” as defined by the Basel Convention.

46. In this respect, it would be helpful to assess the type of information notified under MARPOL through the advance waste notification (IMO MEPC.1/Circ.644) of

the nature of the wastes a ship intends to deliver to port reception facilities in order to have a better idea of the nature of the MARPOL wastes offloaded from a ship. In addition, in order to properly articulate the application of both Conventions, the Conference of the Parties could assess how far the current technical guidelines on environmentally sound management cover MARPOL wastes.

(c) The control of transboundary movements of hazardous wastes and other wastes generated on board ships

47. As noted in the introduction of this work, the control of the transboundary movement of hazardous wastes and other wastes is the third track by which the Parties to the Basel Convention achieve its objective of protecting human health and the environment from the adverse effects which may result from the generation and management of hazardous wastes³⁸.

48. For the purposes of the Convention, “[t]ransboundary movement” means “any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State or to or through an area not under the national jurisdiction of any State, provided at least two States are involved in the movement”³⁹. The Basel Convention applies to those cases where the following three conditions are fulfilled:

- a) the movement is **from** an area under the national jurisdiction of a State, and
- b) the movement is **to** or **through** an area under the national jurisdiction of another State or **to** or **through** an area not under the national jurisdiction of another State, and
- c) at least **two States** are involved in the movement.

³⁸ Cf. also Article 4, paragraph 2, (d)

³⁹ Article 2, paragraph 3 of the Basel Convention.

49. Under paragraph 9 of that Article, “[a]rea under the national jurisdiction of a State” means any land, marine area or airspace within which a State exercises administrative and regulatory responsibility in accordance with international law in regard to the protection of human health or the environment. Consequently, the norms of the Basel Convention are applicable to any movement of hazardous wastes and other wastes generated on the land, national airspace, territorial sea, exclusive economic zone and continental shelf of one State. For these norms to be applicable, this movement must also take place to or through these same areas of another State or to or through the high seas, the international seabed or the outer space, as long as a minimum of two States are involved in such activity. A movement of hazardous wastes from the high seas or other areas outside the national jurisdiction of a State does not fall within the scope of the notion of transboundary movement of hazardous waste as defined by the Basel Convention.

50. Transboundary movements of hazardous wastes that fall within the scope of the Basel Convention must take place in accordance with the general requirements of the Convention contained in its Article 4 and also in line with the Convention’s provisions on the control procedure of TBM. Article 6 is the main provision of the Basel Convention governing this procedure – also known as the Prior Informed Consent (PIC) procedure. In a nutshell, the following actions apply. Each Party appoints a competent authority responsible for administering this procedure at a national level. The State of export must notify in writing the States concerned about its intention to move hazardous wastes across their boundaries. This notification shall include detailed information on the nature and risks of the waste involved, the site of generation, the process by which it was generated, the method of disposal and the parties involved in the transboundary movement⁴⁰. The written consent of the State of import and/or transit as well as a contract between the exporter and the disposer specifying ESM of the wastes in question are required prior to any movement of hazardous waste. If only one of the States concerned consider the waste to be moved

⁴⁰ Article 6 and Annex V A of the Convention. Article 7 prescribes that the obligation to notify foreseen in Article 6.1 is also applicable to the transboundary movement of hazardous waste involving one or more States of transit which are not Parties to the Basel Convention.

as hazardous waste according to its national legislation, the duty to notify is still applicable⁴¹.

51. MARPOL does not provide for a PIC procedure in instances where there is a transboundary movement of wastes generated on board ships. Such a requirement is not in line with the object and purpose of MARPOL and the way this treaty addresses issues of marine pollution.

52. Does the Basel Convention PIC procedure apply to wastes generated on board ships? As far as wastes falling under the Article 1 paragraph 4 are concerned, the exclusion clause embedded in this provision means that the PIC procedure would not apply. For wastes not falling within the scope of the exclusion clause, several elements may be considered: first, whether a ship can be defined as “an area under national jurisdiction”; second, whether waste generated on board a ship that is physically located within “an area under national jurisdiction” may be considered as falling within the definition of a movement from an area under the national jurisdiction of a State; and third, whether a flag State that is a Party to the Basel Convention would be bound by its obligations with regard to the PIC procedure.

53. It does not appear that a ship is “an area under national jurisdiction” as defined in Article 2 paragraphs 3 and 9 of the Basel Convention. While a State has jurisdiction over the ships flying its flag, a ship is not an extension of the geography of the State whose flag it flies, and therefore it appears difficult to argue that the ship is “an area under national jurisdiction”. With regards to the second element mentioned here above, the application of the PIC procedure to wastes generated on board ships whilst physically located in “an area under national jurisdiction” seems to raise serious practical difficulties. Basically, if the waste was generated within the area under the national jurisdiction of a State (e.g. its territorial waters) and then moved with the ship to or through another area under the national jurisdiction of another State, then the PIC procedure would be applicable; notification and consent would be required. If the same type of waste was generated in international waters

⁴¹ Article 6, paragraph 5 of the Convention.

and then “moved” with the ship to territorial waters, then the Basel Convention PIC procedure would not apply. Such an interpretation, whereby the TBM control procedure applies to wastes generated on board ships, appears to lead to a result that seems unreasonable. Notwithstanding the practical difficulties of determining whether wastes are generated within or outside areas under the national jurisdiction of a State, there seems to be little justification in applying different legal regimes to such wastes depending on whether they are generated within or outside an area under national jurisdiction. Such an interpretation would actually be an incentive for ships to generate such wastes in the high seas if they do not want the Basel Convention to apply.

54. The third element relates to whether a flag State that is a Party to the Basel Convention would be bound by its obligations with regard to the PIC procedure. Under Article 94 of part VII of UNCLOS governing the duties of the flag States, every State must effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag (paragraph 1), and assume jurisdiction under its internal law over each ship flying its flag and its master, officers and crew in respect of administrative, technical and social matters concerning the ship (paragraph 2 (b)). In Article 217, the UNCLOS requires States to ensure compliance by vessels flying their flags or of their registration with applicable international, rules and standards, established through the competent international organization or general diplomatic conference, and with their laws and regulations adopted in accordance with the UNCLOS for the prevention, reduction and control of pollution of the marine environment from vessels and must accordingly adopt laws and regulations to take other measures necessary for their implementation. Flag States must provide for the effective enforcement of such rules, standards, laws and regulations, irrespective of where a violation occurs (paragraph 1).

55. There seem to be practical difficulties in arguing that the flag State that is a Party to the Basel Convention would be bound by its obligations with regard to the transboundary movement. Accepting such a view could bring about situations where the flag State that is party to the Basel Convention could be different from a State of

export exercising the national jurisdiction over an area (e.g. port, marine area) in which hazardous wastes and other wastes are generated on board a ship and from which transboundary movement of hazardous wastes or other wastes is planned to be initiated or is initiated. Moreover, it has been pointed out that if a ship had to request consent from the State of disposal and all the transit States, it could take at least several weeks, or even months, to receive the replies, and by then, the slop tanks, bilge tanks, sewage tanks and other receptacles could be overflowing. If the intended port of disposal or a transit State refused consent, there is a risk that the wastes would be discharged into the sea, which would be both illegal and environmentally unsound⁴².

56. If hazardous and other wastes generated on board ships have been offloaded from a ship and are subsequently the object of a TBM as defined by the Basel Convention, the control procedure of the Basel Convention applies to such TBM.

Conclusions

57. The application of the Basel Convention to hazardous wastes and other wastes generated on board ships needs to be agreed upon by the Parties to the Basel Convention. This analysis covers both wastes falling within the scope and outside the scope of the exclusion clause embedded in Article 1, paragraph 4 of the Basel Convention.

58. In order to solve the issues under analysis, it seems necessary to agree on the meaning and scope of Article 1, paragraph 4 of the Basel Convention. In accordance with Articles 31 and 32 of the Vienna Convention, this norm requires that the segment “wastes which derive from the normal operations of a ship, the discharge of which is not covered by another international instrument” be interpreted as a whole. Taking into account the terms of the treaty in their context and in the light of its object and purpose, this analysis concludes that “wastes which derive from the normal operations of a ship, the discharge of which is not covered by another

⁴² De La Fayette, L. A., “The Sound Management of Wastes Generated at Sea – MARPOL, not Basel”, in: *Environmental Policy and Law*, Vol. 39, 2009, p. 213.

international instrument” refers to those wastes whose discharge is covered by MARPOL.

59. With regards to the application of the Basel Convention obligations to hazardous and other wastes generated on board ships, this legal analysis suggests that, in line with the terminology “within it” used in Article 4 paragraph 2 (a), the minimization requirement of the Basel Convention does not appear to apply. With regards to the Basel Convention ESM requirement, this legal analysis also suggests that Article 4 paragraph 2 (b) and (c), in particular the use of the terms “within it” does not appear to apply to ships-generated wastes as long as the wastes are on board a ship. However, once the wastes are offloaded the ship, this analysis argues that the Basel Convention ESM requirement applies to hazardous and other wastes generated on board ships, whether such wastes fall within or outside of the Article 1 paragraph 4 exclusion clause. Indeed, whereas MARPOL contains provisions on environmentally sound management whilst at sea that are supportive of the objective and purpose of the Basel Convention, it does not have similar requirements for landed wastes. Hence, the Basel Convention requirements on environmentally sound management are applicable once the waste is offloaded, for instance to port reception facilities if these are intended to serve as “adequate disposal facilities”.

60. With regards to the Basel Convention provisions regulating TBM, this legal analysis suggests that they do not apply to wastes generated on board ships, whether such wastes fall within or outside of the Article 1 paragraph 4 exclusion clause. However, if hazardous and other wastes generated on board ships have been offloaded from a ship and are subsequently the object of a TBM as defined by the Basel Convention, the control procedure of the Basel Convention applies to such TBM.