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Re-Interpreting The Environmentally Sound Management Under Basel Convention
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Abstract

One of the fundamental principles of the Basel Convention is environmentally sound management (ESM), serving as a 'meta-rule', which establishes the context within which bargaining under the Basel Convention takes place to develop more specific norms, such as rules regarding Prior Informed Consent (PIC), partnerships or management and technical guidelines of specific waste streams, regarding the management and transboundary movement of hazardous wastes. Yet, Basel Convention defines the crucial notion of ESM only in general terms, and has been subject to widely different interpretations and extensively criticized. Employing a teleological approach that relies on the purpose of the Convention, this study argues that Basel Convention intended to establish a global convention with three principal aims: 1) minimization of hazardous wastes; 2) environmentally sound management of hazardous wastes; and 3) minimizing the transboundary movement of hazardous wastes. The central element of these aims was to limit such movements, as opposed to current practices of establishing ESM as the "least standard" for which transboundary movement of hazardous wastes would be allowed. Reinterpretation of ESM is also needed in light of the recent entry into force of the Ban Amendment in 2019, which introduced 'high risk' as an element of consideration when addressing transboundary movements from developed countries to developing countries, which entails the applicability of the precautionary principle in ESM interpretation.

Keywords: Basel Convention; Environmentally Sound Management; ESM; Hazardous Waste.

A. INTRODUCTION

Environmentally Sound Management (ESM) can be considered as the original and enduring foundational principle of Basel Convention on the Control of Transboundary Movement of Hazardous Waste and Their Disposal [hereinafter Basel Convention].² Its importance falls within what Bodansky argues as 'meta-rule', which establish the context within which bargaining under the Basel Convention takes place to develop more specific norms, such as rules regarding Prior Informed

Consent (PIC) mechanism, through which any transboundary movement of hazardous waste may only be allowed under the Convention, partnerships or management and technical guidelines of specific waste streams, regarding the management and transboundary movement of hazardous waste.³ Many of the convention's provisions place obligations to state parties to observe environmentally sound management principle within its regulatory regime. The ESM concept was initially

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2 "Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal," 22 Mar. 1989.

3 Daniel Bodansky, *The Art and Craft of International Environmental Law* (Cambridge: Harvard University Press, 2010) 203 elaborating the notion of meta-rule and how it facilitates broad standards into more specific norms/rules.

incorporated into the convention as a means to be the 'standard' not only to manage any generated hazardous wastes, but also to permit its transboundary movement under the convention, thus making any attempt to transfer without observing the principle *a priori* illegal.⁴

The Basel Convention defines 'environmentally sound management' through Article 2(8) as "taking all practicable steps to ensure that hazardous wastes 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". The term 'management' of 'environmentally sound management' is further defined under Basel Convention in Article 2(2) as "the collection, transport and disposal of hazardous wastes or other wastes, including after-care of disposal sites", which suggest that all practices, from the generation of a hazardous waste to recycling, recovery and final disposal and every process in between should observe the environmentally sound principle. Together with Article 2(8), both readings assume an integrated life-cycle approach of ESM under Basel Convention, which involves strong control in every step/process of hazardous waste

management, suggesting the pervasiveness of ESM principle.⁵ Yet, Basel Convention defines the crucial notion of ESM only in general terms, and has been subject to widely different interpretations and extensively criticized.⁶ Attempts on the interpretation or elaboration of the term 'environmentally sound management' has been made not only within the framework of Basel Convention's Conference Of Parties (COP) and its subsidiary working groups, but also by academia. Kummer suggested that the term 'ESM' can be achieved to a number of provisions offering "guidance for the management of hazardous wastes in accordance with the Convention's aims".⁷ Others suggested that the term depends on national interpretation based on its socio-economic situation,⁸ while another attempted to define the term within the context of recycling after examining the convention's documents and comparing it with United Nations Environment Program (UNEP) and other international treaties' documents.⁹ The Basel Convention regime, acknowledging that ESM is varyingly interpreted and implemented,¹⁰ also made attempts to further provide guidance by identifying principles closely linked to ESM, establishing framework and introducing specific technical guidelines and toolkits for

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- 4 Report of the Ad Hoc Working Group on the Work of the Third Session: Ad Hoc Working Group of Legal and Technical Experts with a Mandate to Prepare a Global Convention on the Control of Transboundary Movements of Hazardous Wastes (Geneva, November 16, 1988) 3, [hereinafter Third Session Report]. The report states that: 'The aim of the Convention was to establish control measures that would....make it very difficult to get approval of movement of hazardous wastes with the goal of reducing to a minimum their transboundary movement and of ensuring that such movement is only permitted when it is more environmentally sound to dispose of waste farther than close to where it is generated.'; Mostafa K. Tolba and Iwona Rummel-Bulska, *Global Environmental Diplomacy: Negotiating Environmental Agreements for the World, 1973-1992* (Cambridge: The MIT Press, 1998) 103-108; Harvey Alter, "Environmentally sound management of the recycling of hazardous wastes in the context of the Basel Convention" *Resources, Conservation and Recycling*. 29.1-2 (2000): 111-129.
- 5 Iwona Rummel-Bulska, "The Basel Convention and its implementation" in *Solid Waste: Assessment, Monitoring and Remediation*. Ed. Irena Twardowska et al., vols.

(Amsterdam: Elsevier B.V., 2004), 133-169.

- 6 Kummer, *supra* note 18, at 57; Alter, *supra* note 74, at 112; David J. Abrams, *Regulating the International Hazardous Waste Trade: A Proposed Global Solution Note*, 28 Colum. J. Transnat'l L. 801 (1990); Handl, *supra* note 26; Mark A. Montgomery, *Travelling Toxic Trash: An Analysis of the 1989 Basel Convention*, 14 Fletcher Forum of World Affairs 313 (1990).
- 7 Kummer, *International Management of Hazardous Wastes: The Basel Convention and Related Legal Rules* 57-58.
- 8 Shunichi Honda, "Environmentally Sound Management of E-Waste—Relationship between Environmentally Sound Management and Transboundary Movements" *Advanced Materials Research*. 878 (2014): 380-392.
- 9 Alter, "Environmentally sound management of the recycling of hazardous wastes in the context of the Basel Convention" 111-112.
- 10 from now on from now on from now on *Framework for the environmentally sound management of hazardous wastes and other wastes*, vols. (Geneva, June 4, 2013), [hereinafter ESM Framework].

its implementation.¹¹

Despite rigorous interests and attempts in elaborating the notion, the extensive discussion on the issue has yet to formally agree a binding, more specific elaboration on ESM. Subsequently, it leads to the interpretation practices of ESM especially in relation to 'practicable steps' to include detailed implementing measures throughout its discussions under the convention and resulted documents. Thus, it is important to examine and identify fundamental contents which can be derived from such processes and documents, not only to ascertain the scope of the principle but also to identify whether the long development raises new content of the principle.

Accordingly, this study aims to review the development of the notion of 'environmentally sound management' within Basel Convention and identify the core contents of ESM principle. By going through the chronological discussions on ESM during the preparatory works of Basel Convention, from UNEP's Montevideo Programme and Cairo Guidelines, Working Group Sessions, Conference of Plenipotentiaries, until the shift from normative development to practical development of ESM under Basel Convention, this study identifies documents having special legal value to assist in elaborating the contents of ESM principle, in parallel with taking guidance from related provisions on ESM under the convention. Contents of ESM principle would be subsequently identified and serve as the basis for this research in determining whether the convention has evolved.

B. DEVELOPMENT OF ESM AS A PRINCIPLE ON HAZARDOUS WASTE ISSUE

1. Early development of ESM on hazardous wastes Under UNEP

Between late 1970s to early 1980s, the issue of hazardous wastes management didn't receive wider attention until UNEP's Governing Council adopted Montevideo Programme for the Development and Periodic Review of Environmental Law [hereinafter Montevideo Programme] on its 10th Session, held from 20-31 May 1982. The programme recommended three major subject areas of environmental law for the development of guidelines or principles which could lead to international agreements within UNEP framework and to cooperate with other relevant international organizations, including transport, handling and disposal of toxic and dangerous wastes.. The objective of the inclusion of toxic and dangerous waste into one of major subject areas was "to prevent, reduce and control damage, and the risk thereof, from local and international transport as well as from handling and disposal of wastes that are toxic and dangerous to human health and to the environment." Montevideo Programme raised early concept of the management of toxic and dangerous wastes to includes risk of damage to both human health and the environment, outlining the stages of management to include handling, transport, and disposal, both local and international. It did not differentiate hazardous wastes as final wastes and destined for recycling, instead relying on national strategies and environmental

11 *Guidance Document on the Preparation of Technical Guidelines for the Environmentally Sound Management of Wastes Subject to the Basel Convention*, vols.,

December 4, 1992, [hereinafter Guidance Document]; *ESM Framework (UNEP/CHW.11/3/Add.1/Rev.1)*.

assessment mechanism to do so. The inclusion of risk of damage on this document perhaps also a reference to the precautionary principle which at the time was still an emerging principle on international environmental law.

Another important document was the Guidelines and Principles for the Environmentally Sound Management of Hazardous Wastes [hereinafter The Cairo Guidelines],¹² adopted by Governing Council of UNEP on its 14th meeting in July 1987 through Decision GC.14/30.¹³ The guidelines were prepared on the basis of common elements principles “derived from relevant existing bilateral, regional, and global agreements and national regulations.”¹⁴ It was intended to be non-binding, broad, general in terms and “do not claim to give specific guidance on the more technical aspects of dealing with hazardous wastes.” The guidelines define ‘management’ of hazardous waste as “the collection, transport (including transfrontier movements), storage (including storage at transfer stations), treatment and disposal of hazardous wastes”, adding ‘generation’ and ‘transit’ aspect to the ‘management’ which helped to elucidate the whole life-cycle of hazardous waste that should be addressed: generation, collection, transport, transit, treatment and disposal (including after care), a

more comprehensive approach of ‘management’ from UNEP GC.10/24.

While both documents were non-binding, this inclusion nonetheless affects how the term ‘management’ of toxic and dangerous was being interpreted at the time. The new interpretation by Cairo Guidelines allowed for a more comprehensive approach, extending the responsibility to the point of generation and arguably acknowledging that transit states (in case of transfrontier movement) do have rights regarding the issue. Another result emerged from the Cairo Guidelines was the introduction of source (point of generation) reduction principle of waste into international environmental law, often utilized in municipal waste management.¹⁵ By this point, ESM as a concept was evolving by adding new threshold in ESM practice to include those two concerns as a principle of integrated life-cycle of hazardous waste management.¹⁶ The document also confirmed a changing perspective towards wastes and hazardous wastes, from wastes as materials required to be disposed to be wastes as materials need to be regulated. The ‘control over disposal’ approach can be considered as further elaboration of the ‘cradle to grave’ approach of OECD Council’s Decision which recognized several principles pertinent to hazardous waste

12 *Cairo Guidelines and Principles for the Environmentally Sound Management of Hazardous Wastes*, vols., April 2, 1987 contained in Annex II to the document, UNEP/GC.14/17. [hereinafter Cairo Guidelines]. *Final report of the Working Group: Ad Hoc Working Group of Experts on the Environmentally Sound Management of Hazardous Wastes* (Cairo, December 10, 1985) 3.

13 *United Nations Environment Programme Report of the Governing Council on its fourteenth session* (Nairobi, July 10, 1987) 26, [UNEP GC-14 Report].

14 *Cairo Guidelines* (UNEP/GC.14/17) 3.

15 At the time, despite widely acknowledged that source reduction should take highest priority, there were some

oppositions to drastic measures and changes in favor of recycling and disposal economic value. See, e.g., Katy Wolf, “Source Reduction and the Waste Management Hierarchy” *JAPCA*. 38.5 (1988): 681–686.

16 The generally accepted hierarchy of integrated waste management is as follows: waste avoidance; reduction of quantities and toxicity at the source; recycling, resource recovery, and reuse; and environmentally sound disposal. See e.g., Jonathan Krueger, “What’s to Become of Trade in Hazardous Wastes? The Basel Convention One Decade Later” *Environment: Science and Policy for Sustainable Development*. 41.9 (1999): 10–21.

management, such as principle of proximity, sovereignty, duty to re-import, non-discrimination, and prior informed consent principle.¹⁷

The Cairo Guidelines proved to be an important legal document in interpreting the concept of 'environmentally sound management', since it contains and elaborates a number of important principles in regard to environmentally sound management of hazardous wastes, be it domestic or transboundary, by recommending specific measures to be taken by states within their jurisdiction. It incorporates the principle of waste minimization (paras. 2.a, 7.a) especially through low-waste technology and encouraging its development (paras. 4.b, 7.c), non-discriminatory control of hazardous waste (para. 3), international cooperation (para. 4) including transfer of technology (para. 5) for the 'achievement', 'improvement', and 'promotion' of ESM. The guidelines designated damage of hazardous wastes to human health and the environment as pollution,¹⁸ and also re-affirms existing customary international law rules on transboundary pollution in regard to waste management: they set out duty of prior notification (para.16) and consultation in good faith (para 17) to "States concerned", be it prospective transit states or import states, and equal access for nationals of a said state to relevant administrative and judicial proceedings in the state of origin (para. 18). Another provision in the

Guidelines requires that in the absence of bilateral, regional or multilateral arrangements, PIC should be observed and any transport without observance of this principle should be unlawful (para. 26), and in the event that a state concerned opposes such transport while the waste shipment has already left exporting state, the Guidelines introduces a duty to re-import those wastes to the exporting state and they should not object (paragraph 27). Specific measures to ensure environmentally sound management were introduced such as establishment of competent national authorities and focal point, provision on safety standards of hazardous wastes management, including transport document standardization. Basel Convention would borrow many of the principles and provisions set out in Cairo Guidelines, even some areas adopted in Basel Convention are *in toto* to the language of the Guidelines.¹⁹

2. Normative development on ESM under Basel Convention

Article 4(8) of the Basel Convention states that "Technical guidelines for the environmentally sound management of wastes subject to this Convention shall be decided by the Parties at their first meeting". This provision was reiterated in Resolution 8, also adopted during the Conference of Plenipotentiaries, which calls for the "establishment of a technical working group to elaborate technical guidelines for the environmentally sound

17 "Decision-Recommendation on Transfrontier Movements of Hazardous Wastes," 1 Feb. 1984 5–6, online, Internet, 22 Apr. 2021. , Available: <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0209>.

18 Kummer, *International Management of Hazardous Wastes: The Basel Convention and Related Legal Rules*

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19 Cyril Uchenna Gwam, "Travaux Préparatoires of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal" *Journal of Natural Resources & Environmental Law*. 18.1 (2003): 1–78.

management of wastes" to be controlled and regulated under Basel Convention. Accordingly, it mandates Executive Director of UNEP to establish a technical working group (TWG) to prepare draft technical guidelines for ESM of wastes, to be considered and adopted at COP-1.

A concurrent relevant initiative is the elaboration of 'International Strategy and Action Programme for the Environmentally Sound Management of Hazardous Wastes' which was developed under the request of UNCED Preparatory Committee in 1990,²⁰ leading to a meeting being convened under the auspice of UNEP Governing Council in 1991.²¹ The elaboration influenced the development of discussion of Agenda 21 Chapter 20 of Environmentally Sound Management of Hazardous Wastes, Including Prevention of Illegal International Traffic in Hazardous Wastes, and proposed of 'strategy elements' to be considered in implementing the environmentally sound management of hazardous waste.²² The strategy elements reaffirm the core principles of ESM in the Basel Convention, as stated in its objective: "Within the framework of integrated life-cycle management (*principle of integrated life-cycle management*), prevent to the extent possible and minimize the generation of hazardous wastes (*principle of waste minimization*), treat and dispose of the wastes in such a way that they do not cause harm to health and the environment

(*precautionary principle* and *integrated pollution control principle*), and eliminate or reduce transboundary movements of hazardous wastes (*proximity principle* and *the least transboundary movement principle*).

During the 1st session of TWG ESM, many delegates voiced their concerns on the interpretation of the term "environmentally sound management" of hazardous waste, which was a core concept in the convention but defined only in broad terms.²³ A call on how to progress towards a common interpretation and associated criteria was then raised, setting the trajectory of the development on defining ESM to also include a set of criteria to its interpretation, reflecting the concerns of Parties to the Conference. Such concerns were not shared by all; rather it was the majority of the parties, comprises of mostly developing countries. The TWG would subsequently developed several elements to be considered for the development of a code of practice or guidelines for the environmentally sound management of hazardous wastes: a) prevention and minimization of waste generation; b) identification and assessment of hazardous wastes, other wastes and non-hazardous wastes, c) reduction of transboundary movements of hazardous wastes, d) substantiation of reasons for export, e) various aspects of recycling, treatment and disposal facilities, f) examination of priority waste streams, g) financial

20 PrepCom Decision 1/22 (Section I, ¶ 3), 31 August 1990 (Official Records of the UN General Assembly, 45th Session, Supplement No. 46(N45/46), Annex I.

21 *Report of the Experts Meeting on an International Waste Management Strategy* (Geneva, December 9–11, 1991) 3.

22 Expert Strategy Meeting Report

(UNEP/CHW/WG.2/1/3). See also its Annex on Strategy Elements.

23 *Report of the Technical Working Group to prepare draft technical guidelines for the environmentally sound management of wastes subject to the Basel Convention on its 1st session* (Geneva, February 26–28, 1992) paras. 11–12.

aspects, and h) capacity/capabilities of competent authorities.²⁴ Some of these elements, again, affirmed core principles of Basel Convention while also set considerations associated with interpretation of ESM. The meeting also expressed opinion that Annex IV of Basel Convention contains disposal and recycling operations most commonly employed during that time and it “should not be interpreted as indicating a preferred or possibly accepted method of disposal”.

The 2nd session of TWG ESM saw the center of discussion on the development of a framework document and technical guidelines on several waste streams. The group recommended a structure of framework document detailing “those matters to be taken into consideration in reaching decisions in respect to requirements of the Basel Convention”,²⁵ implying that since one of the underlying requirements of Basel Convention is environmentally sound management, any discussion related to the issue should refer to the framework document’s principles and elements for consideration. The structure includes a section on a set of selected principles, listed on Annex C, including: 1) polluter-pays principle; 2) integrated life-cycle principle; 3) precautionary principle; 4) source reduction principle; 5) self-sufficiency principle; 6) proximity principle; 7) integrated pollution control principle; 8) least transboundary movement principle; 9) standardization principle; and 10)

State sovereignty principle while noting that application of these principles will vary from country to country in view of their social, political and economic structure.

The Interim Secretariat of Basel Convention included the technical guideline as agenda item 6(l) on COP-1, held in Piriapolis on 3-4 December 1992, listed as “Adoption of the technical guidelines for the environmentally sound management of wastes subject to the Convention (Article 4, paragraph 8) as doc. UNEP/CHW.1/20. The documents were later adopted through decision BC-1/19 as ‘provisional technical guidelines’ forming the basis for a formal document, subject to further consideration taking into account future relevant priorities and consideration on economic aspects of disposal and recovery operations as well as preventive measures.²⁶ In order to achieve this aim, the decision also contains operative paragraph 4 which extend the mandate of TWG ESM to review the revised provisional documents and to prepare technical guidelines for other operations and waste streams. Based on this mandate, TWG ESM revised the provisional framework document (UNEP/CHW.1/20) on its 4th session to be finalized, accommodating recommendations and comments made on and after COP-1 in each of the operative agenda items on technical guidelines, and proposed to be adopted by the COP-2.²⁷ The revised draft framework documents were later

24 Ibid., para. 22.

25 *Report of the Technical Working Group to prepare draft technical guidelines for the environmentally sound management of wastes subject to the Basel Convention on its 2nd session* (Geneva, May 25–27, 1992) 2.

26 *Report of the First Meeting of the Conference of the Parties to the Basel Convention on the Control of*

Transboundary Movement of Hazardous Wastes and Their Disposals (Piriapolis, December 3–4, 1992) 35.

27 The activities were described on new paragraph 2bis of the revised framework document. See *Report of the Technical Working Group to prepare draft technical guidelines for the environmentally sound management of wastes subject to the Basel Convention on its 4th*

discussed as agenda item 4(i) and confirmed for adoption by the COP-2 of Basel Convention, removing its provisional nature.²⁸

C. DOCUMENTS HAVING SPECIAL LEGAL VALUES IN ELABORATING ESM

1. Establishing special legal value of the documents

As previously explained, the generality of definition of ESM under Article 2(8), remains subject of wide interpretation,²⁹ without any established and generally accepted working interpretation of the term. Beside the provisions offering insights to interpretation efforts, the existence of the Guidance Document (UNEP/CHW.1/20/Rev.1) and ESM Framework (UNEP/CHW.11/3/Add.1/Rev.1) might provide normative criterion with which the language of the article may be interpreted, especially since it incorporates principles accepted (to varying degrees) in various multilateral environmental agreements (MEAs) and were purposed to “address the need for guidance in developing national or regional hazardous waste management strategies as well as in managing such wastes in an environmentally sound way”.³⁰ The Guidance Document indeed claims that the principles were not absolute and not to define “ESM”, yet it also argues that it contains

‘special legal value’ as guiding document since it was “not only developed by highly specialized experts from various countries represented at the TWG, but were also later adopted by the Conference of the Parties to the Basel Convention”.³¹

How particular is this ‘special legal value’ expressed in these documents? What was the intention of this legal technique? In order to examine what this term suggests, this study first examines what are the implication from its methods of adoption by COP consensus decision. Rule 40 paragraph (1) of the Rule of Procedure of the Meeting states that “the Parties shall make every effort to reach agreement on all matters of substance by consensus”.³² The use of mandatory term ‘shall’ indicate that by defaults, COPs have to operate on ‘all matters of substance’. Consequently, party members need to advocate and concert together, even compromise within this law-making process, which is political in nature. Another reading of the rule explicitly assumes that any decision adopted through consensus is *agreement*, which implies that parties’ consent is presumed³³ unless no agreement is reached and decision is “taken by a two-thirds majority vote of the Parties present

session, vols. (Geneva, June 2–4, 1993).

28 There is a naming discrepancy of the document. COP Decision BC-II/13 adopted it as ‘Framework Document on the Preparation of Technical Guidelines for the Environmentally Sound Management of Wastes Subject to the Basel Convention and the four Technical Guidelines’ often shortened as framework document (UNEP/CHW.1/20 and its revised version UNEP/CHW.1/20/Rev.1). Cf. *Report of the Second Meeting of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposals*, vols. (Geneva, March 21–25, 1994), [hereinafter COP-2 Report].

Guidance Document on ESM (UNEP/CHW.1/20/Rev.1).

29 Kummer, *International Management of Hazardous Wastes: The Basel Convention and Related Legal Rules* 2–3.

30 *Guidance Document on ESM (UNEP/CHW.1/20/Rev.1).*

31 *Ibid.*, pt. Introduction.

32 See Rule 40, *Rules of Procedure for the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, vols. (Pirapolis, December 5, 1992).

33 Jutta Brunnée, “COPing with Consent: Law-Making Under Multilateral Environmental Agreements” *Leiden Journal of International Law*. 15.1 (2002): 19.

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and voting, unless otherwise provided by the Convention”.

It is rarely opted by the COP, with example of such decision is the decision BC-III/1 or Basel Ban Amendment. The implication of such reading of the rule and examining the development of COPs which rarely opt for majority vote, is that the practice of decision-making by consensus as agreement is well established on its actual operational under Basel Convention treaty regime.³⁴ The decisions’ wording on BC-I/19 and BC-II/13 offers hints at the legal drafting technique employed by the MOP (rather than individual parties) in reaching an agreement regarding the Guidance Document.³⁵ The MOP employs verbs of “decides” in BC-I/19 and “confirms adoption” in BC-II/13, both of which are common verbs of decisions under COP to the Basel Convention to convey ‘agreement reached by plenary consensus’ in MOP, with one rather distinct technique employed was the use of verb “agree” in the adoption of a rather contentious decision on the interpretation of

Article 17(5).³⁶

The particularity of these documents as having ‘special legal value’ should also be examined within the meaning of subsequent agreements and/or practices of Article 31 para. 3(a) and 3(b) of Vienna Convention on the Law of Treaties.³⁷ Endeavors to determine whether adoption by consensus constitutes ‘agreement’ as intended by Article 31 para. 3(a) and 3(b) are extensive.³⁸ However, many conclude that the boundaries between both considerations are fluid, and in need to be examined carefully based on the actuality and consistency of practices within the treaty regime.³⁹ As previously argued, in the context of Guidance Document, the practice of adoption by consensus has a strong case as being an agreement of the parties. This argument also drew from ICJ Whaling Judgment, which in para. 46 states that “These recommendations, which take the form of resolutions, are not binding. However, when they are adopted by consensus or by a unanimous vote, they may be relevant for the

34 The issue of legal evaluation of consensus on an actual operational level in treaty regime was suggested on Prof. Shibata’s paper as potential broader implication of ICJ’s judgment on Whaling in the Antarctic. See Akiho Shibata, “ICRW as an Evolving Instrument: Potential Broader Implications of the Whaling Judgment” *Japanese Yearbook of International Law*. 58 (2015): 298.

35 Concerns regarding this distinction of ‘will of the organ’ and ‘will of the party members’ was also raised in the ‘Whaling in the Antarctic’ trials and subsequently its judgment, as observed in *ibid.*, 132–133.

36 Decision BC-10/3, annexed in *Report of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal on its Tenth Meeting*, vols. (Cartagena, November 1, 2011).

37 “Vienna Convention on the Law of Treaties,” 27 Jan. 1980, [hereinafter VCLT].

38 Cf. Brunnée, “COPing with Consent” 31; Shibata, “ICRW as an Evolving Instrument” 310; Robin R. Churchill and Geir Ulfstein, “Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law” *American*

Journal of International Law. 94.4 (2000): 623–659; Ellen Hey, “Sustainable development, normative development and the legitimacy of decision-making” *Netherlands Yearbook of International Law*. 34 (2003): 16; Annecoos Wiersema, “The New International Law-Makers—Conferences of the Parties to Multilateral Environmental Agreements” *Michigan Journal of International Law*. 31.1 (2009–2010): 247; Tom Delreux, “Multilateral Environmental Agreements: A Key Instrument of Global Environmental Governance” in *European Union External Environmental Policy: Rules, Regulation and Governance Beyond Borders*. Ed. Camilla Adelle, Katja Biedenkopf, and Diarmuid Torney, vols., The European Union in International Affairs (Cham: Springer International Publishing, 2018), 19–38, online, Internet, 24 Aug. 2020. , Available: https://doi.org/10.1007/978-3-319-60931-7_2.

39 See also Churchill and Ulfstein, “Autonomous Institutional Arrangements in Multilateral Environmental Agreements” 641; Shibata, “ICRW as an Evolving Instrument” 310; Brunnée, “COPing with Consent” 31–32.

interpretation of the Convention”, arguing in para. 83 that it can be “regarded as subsequent agreement to an interpretation (or) as subsequent practice establishing an agreement of the parties regarding the interpretation of the treaty within the meaning of subparagraphs (a) and (b), respectively, of paragraph (3) of Article 31 of the Vienna Convention on the Law of Treaties”. Due note, however, that the judgment requires such observation to first establish that the decision has the support of all states parties and such practices are consistently undertaken within such treaty regime, as is the case with the adoption of Guidance Document (and the interpretation of Article 17(5) under Basel Convention) and the weight of such adoption of decisions within its COPs. Thus, the Guidance Document indeed contains ‘special legal value’ in two manners: it was adopted by decision which constitute as *agreement* of the state parties, and that it is a relevant instrument containing normative criterion (in form of principles) in interpreting the term ESM.

2. The 1992 Guidance Document UNEP/CHW.1/20/Rev.1 is an important document in the normative development and interpretation of ‘environmentally sound management’ of hazardous wastes subject to Basel Convention, now titled “Guidance Document on the Preparation of Technical Guidelines for the Environmentally Sound Management of Wastes Subject to the Basel Convention”.

The adopted document explains the Convention’s approach in providing guidance and implementing the concept of environmentally sound management and intended to be used as a reference in developing strategies on national level, having “special legal value” expressed in the document since the documents were developed by TWG representing various state parties and adopted by COP.⁴⁰ Indeed, TWG ESM acknowledges the requirement of a ‘firm legal ground’ for state parties to refer to in regulating hazardous wastes arising within or imported into the country, which can be understood as implying the guidance document as one.⁴¹ The guidance document affirms the nature of Basel Convention as a regulatory framework, which basis its function as ‘control’ of transboundary hazardous wastes throughout their entire life-cycle. It set the criteria to assess ESM and acknowledging countries’ obligation to avoid or minimize waste generation and to ensure the availability of adequate facilities for their waste, so as to protect human health and the environment.⁴² The document contains concept of ‘clean production methods’ to observe the principle of waste minimization and integrated life-cycle,⁴³ and introduces the concept of ‘Duty of Care’, which requires ‘all parties in the waste management chain to have regard for the proper observance of good waste management practice throughout the chain’ to address the competence of persons involved in the waste management cycle.⁴⁴

40 The the See the opening paragraph of *Guidance Document on ESM (UNEP/CHW.1/20/Rev.1)*.

41 Ibid., para. 3.

42 Ibid., para. 9.

43 Ibid., paras. 5–6.

44 Ibid., para. 18.

Perhaps the most important section in interpretation process of ESM under Basel Convention is that the guidance document elaborates eleven principles to be considered in waste and hazardous waste management which were based on the TWG ESM 2nd session report.⁴⁵ It acknowledges that these principles are observed by 'many countries' to varying degrees, despite stating that it's not absolute and not meant to 'replace' the principles agreed to in the Basel Convention nor to define 'environmentally sound management' to avoid misinterpretation that it formally did define ESM. Despite the notions, the document implies that the inclusion of the principles was aimed to pool consensus on common interpretation of which merit countries' consideration in observing the principle of environmentally sound management, as previously called by many delegates during the 1st session of TWG ESM. This section mentions eleven principles to be considered: 1) the source reduction principle; 2) the integrated life-cycle principle; 3) the precautionary principle; 4) the integrated pollution control principle; 5) the standardization principle; 6) the self-sufficiency principle; 7) the proximity principle; 8) the least transboundary movement principle; 9) the polluter pays principle; 10) the principles of sovereignty; and 11) the principle of

public participation.

Despite no explicit decision that formally adopts any interpretation of ESM, 62 the development of discussions leading to and the adoption of the Guidance Document may provide a framework within which ESM can be interpreted. Referring to its initial intention, discussion on ESM within the working group progressed under the impression, among others, to achieve a common interpretation of the term. The principles suggested in the Guidance Document may act as the guiding principles, allowing for interpretation of ESM under such a framework, since it reiterates several principles which were widely accepted in international environmental law. The Guidance Document is also crucial in two aspects. *First*, it confirms the 'control over disposal' approach regarding hazardous wastes management elaborated in the Cairo Guideline, which promotes the observance of waste management hierarchy, including avoidance or minimization of waste generation,⁴⁶ and was also elaborated in Agenda 21 Chapter 20.1.⁴⁷ *Second*, the document also reiterates principles previously set in authoritative documents on environmentally sound management: The Cairo Guidelines and UNCED Agenda 21 Chapter 20.7(a), affirming that pertinent to ESM, these principles should not be separated. The guidance document

45 Ibid., para. 10.

46 Some experts are in view that this concept is interchangeable with the notion of "integrated life cycle of waste". See e.g., Iwona Rummel-Bulska, "The Basel Convention: A Global Approach for the Management of Hazardous Wastes" *Environmental Policy and Law*. 24.1 (1994): 13–18; Sands et al., *Principles of International Environmental Law* 610–613.

47 *Agenda 21: Programme of Action for Sustainable Development, Rio Declaration on Environment and Development, Statement of Forest Principles: the Final Text of Agreements Negotiated by Governments at the United Nations Conference on Environment and Development (UNCED)*, 3–14 June 1992, Rio de Janeiro, Brazil (Rio de Janeiro, August 12, 1992) 21.

was subsequently referred several times under the work of the Basel Convention, most notably during the drafting of Guidance elements for bilateral, multilateral or regional agreements, despite its development being concluded by a decision on COP-7.⁴⁸

3. The 2010 ESM Framework

During the COP-10, the parties adopted an omnibus decision BC-10/3 which aims to, among other things, promote entry into force of the Ban Amendment, promote environmentally sound management, and other elements.⁴⁹ The decision adopted a mandate closely related to the development of ESM in Part B paragraph 2 which mandates the completion of a framework for the environmentally sound management of hazardous wastes and other wastes [from now on ESM Framework],⁵⁰ with Technical Expert Group to develop a framework for the environmentally sound management of wastes [from now on TEG-ESM] established and convened three times before its recommendations were adopted by COP-11 through decision BC-11/1.⁵¹ The framework was built upon previous efforts and existing resources, including the 1994 Guidance Document, and contains 'guiding principles' and 'a common understanding' of what ESM encompasses.

It also reaffirms the interpretation and hierarchy of

waste management: waste prevention, minimization, reuse, recycling, recovery and final disposal. Despite its attitude to build on Guidance Document, the guiding principles mentioned in the ESM Framework did not mirror the eleven principles established in the Guidance Document,⁵² but only referred to six principles: 1) the polluter pays principle; 2) the precautionary principle; 3) the proximity principle; 4) the least transboundary movement principle; 5) The principle of responsibility for ESM of hazardous waste generated within a State cannot be transferred to another State, based on Article 4 para. 10; and 6) environmental justice principle. The addition of the environmental justice principle was a new development to the Basel Convention, perhaps as an attempt to incorporate the then-newly convened UN Convention on Sustainable Development (Rio+20) or a reference to the Ban Amendment discourse. Nevertheless, a broadening framework of ESM through its guiding principles seems to be an accommodation to the more practical approach towards ESM.

D. RE-INTERPRETING THE ESM PRINCIPLE: THE CORE CONTENTS

For this study, provisions related to the ESM principle can be categorized into 'waste management and 'regulatory system of transboundary movements' provisions, two important aspects of constructing the

48 The consensus to conclude deliberations on this document was agreed through Decision OEWG-II/3, annex to *Report of the Open-ended Working Group of the Basel Convention on the work of its second session*, vols. (Geneva, December 2003) The decision was later submitted for COP-7 and subsequently adopted through BC-VII/36.

49 COP-10 Report (UNEP/CHW.10/28) para. 54.

50 ESM Framework (UNEP/CHW.11/3/Add.1/Rev.1).

51 Decision BC-11/1, annexed to *Report of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal on its Eleventh Meeting*, vols. (Geneva, July 23, 2013).

52 See Annex I on *Guidance Document on ESM* (UNEP/CHW.1/20/Rev.1).

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principle of ESM under the Basel Convention. Any transboundary movement without observing the waste management provisions and related principles, set out in the Guidance Document, might still be considered as having the risk of not 'environmentally sound managed' thus can be argued to be in contravention with obligations to prevent transboundary movement of hazardous wastes, stemmed from 'reasons to believe' in preventing the movement under Article 4(2)(e) and (g). On the other hand, any transboundary movement without adhering to the strict regulatory system established under the convention is considered illegal traffic under Article 9 of the convention.

1. Waste management provisions

Waste management provisions found under Article 4(2)(a)-(d) set out the obligations of states regarding managing hazardous wastes as to be considered 'environmentally sound': First, observe the waste minimization principle, that is to "ensure that the generation of hazardous wastes and other wastes within it is reduced to a minimum" (Article 4(2)(a)), with clemency of "taking into account social, technological and economic aspects", broadening the scope of earlier obligation by applying the common but differentiated principle. This drafting technique was used to the first draft convention to recognize the limited capabilities of developing in coping with the hazardous waste management problem and was drawn from the Cairo Guidelines 2(a) and 7(a) and (b).⁵³ The waste minimization principle in Article 4(2)(a) was intended to establish a general principle under the convention that transboundary movement of hazardous wastes ought

to be minimized, re-affirmed and further elaborated by the Guidance Document to include self-sufficiency, proximity, and least transboundary movement as a set of principles to be observed as a whole. This was also established under Article 4(2)(d), "Ensure that the transboundary movement of hazardous wastes and other wastes is *reduced to the minimum* consistent with the environmentally sound and efficient management of such wastes". Thus, the obligation under Article 4(9) of "Parties *shall take the appropriate measures...*" is to observe the waste minimization and should take precedence over allowing any transboundary movements based on exceptions under the article, that is, if the state of export does not have the capacity to environmentally sound managed the waste, if required in the state of import as raw materials, or if by additional criteria decided later by the parties.

Second, based on the previous premise, the obligation of Article 4(2)(b) to ensure the availability of adequate disposal facilities shall be to the closest of state of generation and shall take precedence over the interpretation of "to the extent possible" to allow transboundary movement of hazardous waste which might be based on 'economic value'. It was initially intended to establish adequate facilities. Still, it raised comments and disagreements from developing countries representatives since it might burden developing countries without proper resources to implement the provision.⁵⁴ They also argued that the intended obligation

53 *First Draft Convention on the Control of Transboundary Movements of Hazardous Wastes* (Budapest, October 15, 1987) 8.

54 Cf. *Fourth Revised Draft Convention on the Control of the Transboundary Movement of Hazardous Wastes*, vols.

(Geneva, September 14, 1988), [hereinafter Fourth Revised Draft Convention]; *Draft Convention on the Control of Transboundary Hazardous Waste*, vols. (Geneva, March 11, 1989), [hereinafter Draft Convention]. See also the comments on each provision.

was also contravention of the differentiated principle mentioned above. The revised language of “ensure the availability” resulted from compromise. The development behind this article thus does not necessarily ‘promote’ the hazardous waste trade, but rather in consideration of the different realities faced by the developing states. It should not be interpreted as establishing the waste trade, since it does not conform to the underlying principle of ESM as initially intended. Thus, the term ‘efficient’ in ‘environmentally sound *and efficient*’ should not be interpreted as to justify export solely based on lower disposal cost despite observing minimum ESM standards as argued by one commentator,⁵⁵ but rather to read the term with the obligation to cooperate set out under Article 10(2)(c) and to achieve ‘environmentally sound and efficient’ management of hazardous waste through technology transfer and cleaner production. Indeed, the current practices as a result of such interpretation is to ‘environmentally sound’ regulate the hazardous waste trade, but with the entry into force of Ban Amendment (see Ch. 3) the initial aim as elaborated earlier might take precedence and strengthen the ESM principle under the Basel Convention.

Third, Article 4(2)(c) sets out the obligation regarding preventive and control measures to potential hazard of pollution during hazardous waste management. Contracting parties were obliged to ensure persons involved in managing dangerous waste commonly through establishing, if not already

established, domestic control and preventive regulations so that no pollution should come from management activities. The pollution concept becomes the reference since the potential adverse effect of hazardous wastes can be described through four elements of pollution: the source of pollution, the polluting agent, the medium, and the adverse impact.⁵⁶ The difference is that in transboundary pollution, the head of the pollution is traditionally presupposed to be located in one state, while transboundary movements involve what Kummer defined as ‘pollution source transfer’ that is a “deliberate transfer of the source of pollution to other country or the global commons.”⁵⁷ Subsequently, legal rules related to pollution control, such as observing the integrated pollution control as confirmed by the Guidance Document, should at least be taken into consideration in managing hazardous wastes and its transboundary movement, by the notion of “appropriate” under Article 4(4), and obligation to establish authorization system for persons handling the hazardous waste (Article 4(7)(a)).

2. Control system provisions

Regarding the ‘control system of transboundary movements’ provisions, the first thing to emerge is the right of states to prohibit the import of hazardous waste (Article 4(1)(a)) as a part of the sovereignty principle, confirmed by the Guidance Document on ESM, in line with national definition as provisioned under Article 1(1)(b)

55 Winfried Lang, Hanspeter Neuhold, and Karl Zemanek, *Environmental Protection and International Law* (London: Graham & Trotman, 1991) 153.

56 Kummer argued that transboundary hazardous waste was an aspect of transboundary pollution, an issue well established in international law before deliberations on hazardous waste. See Kummer, *International Management of Hazardous Wastes: The Basel*

Convention and Related Legal Rules 13–14; Cf. Allen L. Springer, *The International Law of Pollution: Protecting the Global Environment in a World of Sovereign States*, vols. (Westport: Quorum Books, 1983).

57 Kummer, *International Management of Hazardous Wastes: The Basel Convention and Related Legal Rules* 15.

and Article 3. This right to prohibit is an option that contracting parties may take, and under certain circumstances might not be exercised. The notion of 'option' is important; after the entry into force of the Ban Amendment, such 'option' might be interpreted to have changed into an obligation to refuse to ratify states (see Ch. 3).

The 'control system' provisions emphasized the state of export regarding obligations related to ESM, such as the obligation to prohibit the export of hazardous wastes if importing states have banned the import of such wastes under national definition (Article 4(1)(b)) or state of import does not submit written consent to such imports (Article 4(1)(c)), to prohibit "if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner" (Article 4(2)(e)), implicating that state of export must verify the proposed waste transfer. Nevertheless, since the verification mechanism is not established under the convention, 'reason to believe' shall be interpreted as the state of export's "conclusion based on relevant information received from the importing state."⁵⁸ State of export also must ensure the proposed wastes are managed in an environmentally sound manner whatever the place of disposal (Article 4(8)). By applying the principle of non-discrimination, the state of export shall, before verifying adequateness in the proposed form of import, require the waste in question to be domestically managed with the same rules and standards. These obligations exclusive to the state of export "may not under any circumstances be transferred to the States of import or transit" (Article 4(10)), implicating that the state of

export has central duty in establishing ESM of hazardous wastes.

Under the waste management provisions related to the ESM, Obligations established the principle of ESM as the 'defining' standards whether transboundary movements of hazardous wastes may or may not be permitted. The code is embedded in each aspect regulated under the Basel Convention, from waste management to its control system, to require the observance of environmentally sound standards, further elaborated by the Guidance document which provides normative criteria from which obligations related to ESM should be implemented. Ergo, ESM should not be interpreted as having laxity or a tendency to allow hazardous waste trade "as long as minimum standards are met", but to balance the obligations of the control system with waste minimization which were also confirmed by the Basel Declaration adopted by COP-5 of the Convention.

3. Introduction of the precautionary principle as an element of ESM

The entry into force of the Ban Amendment arguably has also evolved how ESM should be interpreted under the Basel Convention. The preambular text paragraph 7bis indeed confirms that the Ban Amendment was based on ESM consideration, again affirming that the ESM principle is the core principle of the Basel Convention, despite the various approaches of interpretation to ESM principle and provisions elaborating ESM. A rather peculiar expression in the preambular is the perception that developing countries do not have sufficient technical capabilities and infrastructure to manage hazardous waste environmentally, thus

58 See *ibid.*, 57, especially what is stressed on footnote 59.

constituting a “high risk” over any transboundary movement. With the introduction of the ‘high risk’ concept, the precautionary principle is now closely attached as an element to the interpretation of ESM. It entails an understanding that in the case of transboundary movement of hazardous waste to developing countries, the precautionary principle takes precedence over economic consideration in the face of a potentially high risk. The precautionary principle recognizes that delayed action until sufficient evidence of harm will typically result in more harmful consequences to society and the environment.⁵⁹ Consequently, any obligation relating to the transboundary movement of hazardous waste to developing countries is now considered to have high harm potential and should be prohibited. While the risk management approach does not necessarily oblige Parties to confirm the conditions in importing states thoroughly,⁶⁰ attaching precautionary principle would now impose a stricter interpretation of observing ESM regarding the transboundary movement of hazardous waste to developing countries.

This also applies to waste destined for recycling and recovery; despite exporting such waste to countries with adequate infrastructure might constitute environmentally sound management of hazardous wastes, such practices should not be considered ecologically sound now. The previous expression of “environmentally sound and efficient” under the Convention might not have a symmetrical reading again by attaching

the precautionary principle to the ESM principle. Even if a transboundary movement of hazardous waste from developed countries to developing countries is both efficient and environmentally sound, if the destination of such transfer is a developing country, such transfer should not be carried out, irrespective of whether it is more efficient or not. Now, suppose we are to read ESM interpretation having both waste minimization element through the normative documents and precautionary element through the introduction of the high-risk concept to transboundary movement from developed countries to developing countries. In that case, it can be argued that the ESM principle under the Basel Convention has indeed evolved to be interpreted as having stricter standards. While Ban Amendment only applies to parties who ratify it and consequently the applicability of this interpretation is currently limited, I nevertheless predict that it might become a norm under the Convention.

E. CONCLUSIONS

The environmentally sound management principle under the Basel Convention seems to have developed both its legal norms and implementation. The development of discussions on ESM for the last 30 years also seems to be included in every COP’s agenda, and a different approach towards this principle is also employed during said time. Despite the reluctance from the Parties to the Convention to establish the Guidance document as an ‘interpreting decision’, it nevertheless became an important legal instrument having normative criterion to interpret what constitutes ESM under Basel Convention. The reading of ESM with

59 Daniel Bodansky, “Law: Scientific Uncertainty and the Precautionary Principle” *Environment: Science and Policy for Sustainable Development*. 33.7 (1991): 4–44.

60 See William Schneider, “The Basel Convention Ban on

Hazardous Waste Exports: Paradigm of Efficacy or Exercise in Futility Notes” *Suffolk Transnational Law Review*. 20.1 (1996): 247–288.

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elaboration from the guidance document emphasizes the waste minimization obligation instead of the control of the transboundary movement of hazardous wastes, by the waste hierarchy principle. Drafting intention also shows that the obligations related to ESM promote that the transboundary movement should be kept to a minimum instead of establishing a 'regulated and controlled' hazardous waste trade. The recent development on the entry into force of the Ban Amendment also has implications on the interpretation of ESM, and perhaps, one of the most important. The introduction of high risk in its preambular paragraph 7bis has changed the reading of ESM since it entails a consideration of the precautionary principle. With the entry into force of the Ban Amendment, transboundary movement of hazardous waste from developed countries to developing countries is considered to have a high risk of being managed in an environmentally unsound manner. Thus, the precautionary principle is now an added element in interpreting the ESM principle under the Basel Convention, at least for transboundary movement from Annex VII countries to non-Annex VII countries.

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