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Exporting Waste: Regulations of the Export of Hazardous Wastes from the United States

Jeffrey M. Gaba

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EXPORTING WASTE: REGULATION OF THE EXPORT OF HAZARDOUS WASTES FROM THE UNITED STATES

JEFFREY M. GABA*

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The international trade in hazardous wastes has been a subject of controversy for decades. Notorious examples of hazardous wastes being improperly disposed of in Africa have created concern about the legitimacy of developed western countries "dumping" the hazardous byproducts of their industrial development on less-developed countries.¹ Alarms have

¹ In 2006, there was an international furor when the vessel *Probo Koala* unloaded toxic wastes in the port city of Abidjan, Ivory Coast. Seven people died as a result of improper disposal of the wastes, and the scandal led the president of the Ivory Coast to dismiss his cabinet. See Tanya Karina A. Lat, Note, *Testing the Limits of GATT Art. XX(b): Toxic Waste*

been sounded about the adverse impacts on human health and the environment from the practice of exporting electronic wastes for recycling.²

Most members of the international community, with the notable exception of the United States, have addressed these concerns through the Basel Convention on the Transboundary Movement of Hazardous Wastes.³ The Basel Convention establishes a “notice and consent” regime that allows the trade in hazardous waste, both for disposal and recycling, only if the government of the importing country has been given advanced notice of and consents to the shipment.⁴ This notice and consent regime attempts to address concerns about the human health and environmental risks of the trade in hazardous waste while at the same time both fostering the alleged economic efficiencies that result from free trade in hazardous wastes⁵

Trade, Japan's Economic Partnership Agreements, and the WTO, 21 GEO. INT'L ENVTL. L. REV. 367, 369 (2009); see generally Cyril Uchenna Gwam, *Adverse Effects of the Illicit Movement and Dumping of Hazardous, Toxic, and Dangerous Wastes and Products on the Enjoyment of Human Rights*, 14 FLA. J. INT'L L. 427 (2002); Jeffery D. Williams, *Trashing Developing Nations: The Global Hazardous Waste Trade*, 39 BUFF. L. REV. 275 (1991).

² See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-1166T, ELECTRONIC WASTE: HARMFUL U.S. EXPORTS FLOW VIRTUALLY UNRESTRICTED BECAUSE OF MINIMAL EPA ENFORCEMENT AND NARROW REGULATION (2008) [hereinafter SEPTEMBER 2008 GAO REPORT] (describing problems resulting from export of electronic waste to Asian countries including China and India); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-1044, ELECTRONIC WASTE: EPA NEEDS TO BETTER CONTROL HARMFUL U.S. EXPORTS THROUGH STRONGER ENFORCEMENT AND MORE COMPREHENSIVE REGULATION (2008) [hereinafter AUGUST 2008 GAO REPORT]; see also BASEL ACTION NETWORK & SILICON VALLEY TOXICS COAL., EXPORTING HARM: THE HIGH-TECH TRASHING OF ASIA (2002), available at <http://www.ban.org/E-waste/technotrashfinalcomp.pdf>.

³ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Mar. 22, 1989, 1673 U.N.T.S. 126, available at <http://www.basel.int/text/documents.html> [hereinafter Basel]. There are currently 176 parties to the Convention. See *Basel Convention's Ratifications*, BASEL CONVENTION, <http://www.basel.int/ratif/convention.htm> (last visited Nov. 8, 2011). The United States proudly stands with Haiti and Afghanistan as countries that have signed, but not ratified, Basel. *Id.*

⁴ See Basel, *supra* note 3, at arts. 6, 9.

⁵ See *Resource Conservation and Recovery Act Amendments of 1991: Hearings Before the Subcomm. on Env'tl. Prot. of the Comm. on Env't and Pub. Works*, 102d Cong. 639–40 (1991) (testimony of William K. Reilly, Administrator, U.S. Environmental Protection Agency and Richard J. Smith, Assistant Secretary of State for Environment) [hereinafter *Hearings on Env'tl. Prot.*, testimony of W. Reilly]. Another bedrock in the debate over the legitimacy of the international trade in hazardous waste is the argument that the trade promotes economic efficiency by allowing disposal or recycling at facilities that can manage the wastes more cheaply. The Preamble to the Revision of the 2001 Decision of the Organization for Economic Cooperation and Development (“OECD”), for example, recognizes that “the environmentally sound and economically efficient recovery of wastes may justify transboundary

and respecting the rights of states to establish their own environmental policy.⁶

Although an international scofflaw with respect to the Basel Convention, the United States does regulate the export of hazardous waste. The Environmental Protection Agency ("EPA") has issued a complex set of regulations that establish domestic "notice and consent" requirements on the export of hazardous wastes.⁷ These regulations implement section 3017 of the Resource Conservation and Recovery Act ("RCRA") which prohibits the export of hazardous waste unless the exporter complies with either a set of Congressionally defined "notice and consent" requirements or, if in existence, any international agreements between the United States and the receiving country.⁸ The United States is a party to three such international agreements: bilateral agreements with Canada and Mexico and a Decision of the Organization for Economic Cooperation and Development ("OECD") governing the transboundary movement of hazardous wastes.⁹

movements of wastes between member countries." ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, GUIDANCE MANUAL FOR THE CONTROL OF TRANSBOUNDARY MOVEMENTS OF RECOVERABLE WASTES 37 (2009), available at <http://www.oecd.org/dataoecd/57/1/42262259.pdf>. EPA has supported efforts to allow continued export of hazardous waste based on efficiencies associated with the trade. *Hearings on Env'tl. Prot.*, testimony of W. Reilly, at 638–39.

⁶ See Basel, *supra* note 3, at Preamble. The Preamble to the Basel Convention recognizes "the sovereign right [of States] to ban the entry or disposal of foreign hazardous wastes." *Id.* The tension in international agreements between establishing environmental standards and concerns, particularly among developing countries, about preserving state sovereignty to establish environmental policy is a staple of debate in international environmental law. See, e.g., A. Dan Tarlock, *Exclusive Sovereignty Versus Sustainable Development of a Shared Resource: The Dilemma of Latin American Rainforest Management*, 32 TEX. INT'L L.J. 37 (1997).

⁷ Hazardous and Solid Waste Amendments of 1984, Pub. L. No. 98-616, §§ 245(a), 3017, 98 Stat. 3221, 3262 (codified at 42 U.S.C. § 6938 (2006)).

⁸ *Id.*

⁹ See *infra* notes 46–231 and accompanying text for a discussion of these international agreements and implementing regulations. The United States has also entered limited treaties authorizing the importation of waste into the United States from other countries. These include treaties with Malaysia, Costa Rica, and the Philippines. See U.S. ENVTL. PROT. AGENCY, REGULATIONS GOVERNING HAZARDOUS WASTE GENERATORS III-49, available at <http://www.epa.gov/wastes/inforesources/pubs/orientat/rom33.pdf>. There was also apparently a "limited term, limited-purpose mercury import agreement with India." Robert Heiss, Director of Import/Export Program, U.S. Env'tl. Prot. Agency, Statement at the Joint U.S.-Canada Industry Workshop on the Transboundary Movement of Hazardous Waste and Border Security 16, (Mar. 5–6, 2003) (transcript available at <http://www.epa>

The purpose of this Article is to examine the legal bases for EPA's regulation of the export of hazardous waste and the manner in which EPA's regulations operate.¹⁰ The article contains a detailed examination of EPA's complex sets of export regulations and provides data on the actual scope of exports reported to EPA. It then examines a series of questions regarding EPA's authority to regulate the export of hazardous wastes: What domestic authority does EPA derive from the international agreements? What is the scope of EPA's authority to exclude hazardous wastes from export control? What authority does EPA have to ban the export of hazardous wastes to countries with which the United States does not have an international agreement and which may not manage the waste properly? This Article also examines the extent to which EPA regulations address the significant concerns associated with the largely unregulated export of electronic wastes.

This Article reaches a number of perhaps surprising conclusions. First, there are significant and unaddressed constitutional and statutory questions regarding EPA's authority to regulate the export of hazardous wastes under RCRA. Among other things, the Article evaluates the implications of the provisions of section 3017 that purport to give domestic legal effect to future international agreements. A particular problem arises with conferring domestic legal effect on the Decision of the OECD ("the OECD Decision"), and recent case law suggests that giving such domestic effect to the OECD Decision would be an unconstitutional delegation of legislative authority to an international body. If the OECD Decision does not have binding domestic effect, then EPA's regulations governing exports within the OECD for recycling may, among other things, have been promulgated in violation of the notice and comment requirements of the Administrative Procedure Act.

Second, although the United States has not ratified the Basel Convention, the Senate did consent to ratification in 1992 and the only step necessary to complete ratification may be submission of U.S.

[.gov/compliance/resources/briefings/monitoring/importexport/hazardtranscript.pdf](http://www.epa.gov/compliance/resources/briefings/monitoring/importexport/hazardtranscript.pdf) [hereinafter Statement of Robert Heiss, Joint U.S.-Canada Industry Workshop] (RCRA and Implementing Regulations; TSCA and Implementing Regulations).

¹⁰This Article does not address issues relating to the importation of hazardous waste into the United States. Although there are potential concerns regarding the import of wastes, in most cases those wastes, once they enter the United States, are subject to the same requirements applicable to domestic hazardous waste. See 40 C.F.R. § 262.60 (2010); see Statement of Robert Heiss, Joint U.S.-Canada Industry Workshop, *supra* note 9 (New Developments in Statutory and Regulatory Framework: U.S. Side).

documentation by the Executive.¹¹ The obstacle to ratification has been the widespread perception that statutory changes to RCRA would be necessary to implement Basel. This Article suggests that RCRA currently contains adequate authority to implement Basel and thus ratification could be immediately undertaken. The Article argues, however, that control of the international trade in U.S. hazardous waste may be better served by the United States *not* ratifying Basel.

Third, there may be a substantial misperception, fostered by EPA, about the regulation of electronic wastes under RCRA. EPA has suggested that only waste “cathode ray tubes” are a hazardous waste under RCRA, but EPA’s own data suggests that a substantial amount of other e-wastes should be classified as hazardous wastes and thus subject to export controls.¹² Perhaps the most significant step EPA could take to strengthen its existing export regulations would be to clarify the status of such e-wastes.

Fourth, EPA does have the authority under RCRA to impose export controls on hazardous wastes that it has excluded from domestic regulation. Thus, EPA could regulate the export of e-wastes while not imposing requirements on the domestic recycling of such wastes.

Finally, EPA’s management of the export of hazardous waste would be improved by providing more transparency through online posting of export data. Concerns about releasing confidential business information do not stand as a significant obstacle to providing this information.

I. REGULATION OF HAZARDOUS WASTES WITHIN THE UNITED STATES

Subtitle C of RCRA establishes the basic “cradle to grave” system that governs regulation of the domestic disposal, treatment, and storage of “hazardous waste.”¹³ Since it is difficult to evaluate EPA’s regulation of the export of hazardous waste without understanding the domestic requirements to which they would otherwise be subject, a brief excursus on RCRA (which RCRA mavens may ignore) is warranted.

RCRA does not regulate the broad mass of materials that might be considered hazardous wastes. Rather, Subtitle C of RCRA imposes

¹¹ See *International Waste Activities: Basel Convention*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/osw/hazard/international/basel.htm> (last visited Nov. 8, 2011).

¹² See *infra* notes 267–74 and accompanying text.

¹³ 42 U.S.C. §§ 6921–39 (2006).

regulatory requirements only on those materials that meet both EPA's regulatory definition of "solid waste" and "hazardous waste."¹⁴ EPA's regulatory definition of "solid waste" is notorious for its complexity.¹⁵ At its simplest, the definition of solid waste includes materials that are obviously discarded by being abandoned.¹⁶ Materials sent to a landfill for disposal would be considered solid wastes under RCRA. EPA, however, also defines some, but not all, materials that are recycled as solid wastes.¹⁷ Whether a recycled material is regulated as a solid waste depends both on the type of material and the manner by which it is recycled. "Spent materials," "byproducts," and some "commercial chemical products" that are sent to be recycled by "reclamation" or by being used as a "fuel" are also solid wastes.¹⁸ Under EPA's definition, spent lead-acid batteries or cathode ray tubes that are recycled by having their lead content recovered would be solid wastes.

Solid wastes must also be "hazardous" to be regulated under Subtitle C.¹⁹ A solid waste may be classified as hazardous in either of two ways. First, a solid waste may be a "listed" waste; any solid waste on specific hazard lists promulgated by EPA is classified as a hazardous waste.²⁰ Second, an unlisted waste can still be hazardous if it exhibits one of four hazard "characteristics."²¹ These characteristics include "ignitability" (capacity to catch fire), "reactivity" (capacity to explode), "corrosivity" (low and high pH materials), and "toxicity."²² The toxicity characteristic involves testing an extract of the material to see if it contains concentrations of forty specific chemicals above a regulatory threshold.²³ Thus, if an extract of a waste contained more than five milligrams per liter of lead it would exhibit the toxicity characteristic.²⁴ While EPA is responsible for

¹⁴ See 40 C.F.R. § 261.1(a)(1) (2010). There are broader statutory definitions of solid and hazardous wastes that apply for other purposes under RCRA. See generally Conn. Coastal Fishermen's Ass'n v. Remington Arms Co., 989 F.2d 1305 (2d Cir. 1993); see also JEFFREY M. GABA & DONALD W. STEVER, LAW OF SOLID WASTE, POLLUTION PREVENTION AND RECYCLING § 2:3 (Thompson Reuters 2010) (1992).

¹⁵ See 40 C.F.R. § 261.2. See generally Jeffrey M. Gaba, *Rethinking Recycling*, 38 ENVTL. L. 1053 (2008).

¹⁶ 40 C.F.R. § 261.2(b).

¹⁷ 40 C.F.R. § 261.2(a)(2)(i)(B).

¹⁸ 40 C.F.R. § 261.2(c) tbl.1.

¹⁹ 40 C.F.R. § 261.3.

²⁰ See 40 C.F.R. §§ 261.31–.33.

²¹ 40 C.F.R. §§ 261.20–.24.

²² *Id.*

²³ 40 C.F.R. § 261.24.

²⁴ 40 C.F.R. § 261.24 tbl.1.

making the determination to "list" a hazardous waste,²⁵ the determination of whether a solid waste exhibits a hazard characteristic must be made on a case-by-case basis by the generator.²⁶

The class of Subtitle C hazardous wastes is far from comprehensive; solid wastes may be hazardous, but if they are neither listed nor exhibit a hazard characteristic they are simply not RCRA hazardous wastes.²⁷ Additionally, EPA has promulgated a large number of exemptions and exclusions that exempt materials from being classified as either solid or hazardous wastes.²⁸ EPA has, for example, excluded "household hazardous waste" from classification as a Subtitle C waste and therefore most municipal solid waste is not regulated as hazardous waste.²⁹ EPA does, however, employ a device, known as a "conditional exclusion," through which it imposes regulatory requirements as a condition for excluding the material from being classified as a solid or hazardous waste.³⁰

The Subtitle C program imposes certain requirements on the management of hazardous wastes. These include 1) an obligation on generators to determine if their material is a regulated hazardous waste, 2) a requirement that a tracking document, known as a hazardous waste manifest, accompany the transportation of hazardous waste, 3) certain limited requirements on transporters of hazardous waste, and 4) a limitation, in most cases, on the disposal or treatment of hazardous wastes at facilities that have received a federal hazardous waste permit.³¹ EPA generally does not regulate the recycling process or products produced from the recycling

²⁵ 40 C.F.R. § 261.30.

²⁶ 40 C.F.R. § 262.11.

²⁷ For example, unlisted wastes that contain high concentrations of dioxin might not be classified as a hazardous waste since dioxin is not one of the chemicals tested under the "toxicity characteristic." See 40 C.F.R. § 261.24 tbl.1.

²⁸ These exemptions and exclusions litter various parts of EPA's RCRA regulations, but 40 C.F.R. § 261.4 (labeled Exclusions) contains the most specific list of exempt materials. 40 C.F.R. § 261.4(a) contains exclusions from classification as a "solid waste." *Id.* 40 C.F.R. § 261.4(b) contains exclusions from classification as a "hazardous waste." *Id.* The distinction is in most respects moot; either exclusion exempts the material from being classified as a Subtitle C hazardous waste.

²⁹ 40 C.F.R. § 261.4(b)(1). Ash from the incineration of municipal waste may, however, be classified as a hazardous waste. See generally *City of Chi. v. Env'tl. Def. Fund*, 511 U.S. 328 (1994).

³⁰ See Jeffrey M. Gaba, *Regulation by Bootstrap: Contingent Management of Hazardous Wastes Under the Resource Conservation and Recovery Act*, 18 YALE J. ON REG. 83, 102 & n.86 (2001).

³¹ See generally 40 C.F.R. pt. 263 (RCRA generator requirements).

of hazardous waste, and Subtitle C requirements largely stop at the point that a hazardous waste is inserted in the recycling process.³²

Generators that produce 100 kilograms per month or less of hazardous waste, known as “conditionally exempt small quantity generators” or “CESQGs,” are largely exempt from RCRA requirements.³³ Wastes produced by CESQGs are not subject to a manifest requirement and may be disposed of in municipal solid waste landfills.³⁴

II. RESTRICTIONS ON THE EXPORT OF HAZARDOUS WASTE FROM THE UNITED STATES UNDER STATUTE AND INTERNATIONAL AGREEMENT

EPA’s regulatory treatment of the export of hazardous waste is largely governed by the provisions of RCRA, but a series of international agreements governing the export of wastes also address the export of hazardous waste to Canada, Mexico, and other OECD countries.³⁵

A. *Statutory Requirements Under RCRA*

Section 3017 of RCRA, adopted as an amendment to RCRA in 1984, establishes the basic statutory requirements governing the export of hazardous waste.³⁶ Section 3017 provides several legal bases for the establishment and enforcement of export controls under RCRA. First, section 3017(a) directly imposes a prohibition on the export of a Subtitle C hazardous waste “unless” the exporter either 1) complies with congressionally

³² See 40 C.F.R. § 261.6(c)(1); Gaba, *supra* note 15, at 1074.

³³ 40 C.F.R. § 261.5.

³⁴ *Id.*

³⁵ In addition to the federal export requirements contained in RCRA and international agreements, the export of hazardous waste is also subject to state control. Texas, for example, has its own regulations governing the export of hazardous wastes. See, e.g., 30 TEX. ADMIN. CODE §§ 335.10–.13 (shipping, record-keeping and reporting requirements applicable to primary exporters of hazardous waste). RCRA generally allows states to adopt more stringent regulation of hazardous waste than that established by EPA; this article does not address issues that might arise from conflicts between state regulation and the requirements of an international agreement. Cf. *Nat’l Solid Wastes Mgmt. Ass’n v. Granholm*, 344 F. Supp. 2d 559 (E.D. Mich. 2004) (rejecting challenge to Michigan laws that limited the importation of solid waste from Canada based on claims that the laws violated the Dormant Commerce Clause and Foreign Affairs Power of the federal government).

³⁶ Resource Conservation and Recovery Act § 3017 (codified as amended at 42 U.S.C. § 6938 (2006)) [hereinafter RCRA].

defined “notice and consent” requirements or 2) the export “conforms” with any applicable international agreement governing the export of hazardous wastes.³⁷ Thus, section 3017(a) provides for two distinct sets of export requirements: a congressionally defined “base” program (applicable in the absence of any international agreement) and requirements established by any subsequent international agreement.³⁸ EPA is required to adopt regulations implementing the requirements of section 3017, including both the “base” program and any international agreements.³⁹ Exports in violation of these statutory prohibitions, as well as violation of EPA

³⁷ Section 3017(a) provides:

- Beginning twenty-four months after November 8, 1984, no person shall export any hazardous waste identified or listed under this subchapter unless
- (1)(A) such person has provided the notification required in subsection (c) of this section,
 - (B) the government of the receiving country has consented to accept such hazardous waste,
 - (C) a copy of the receiving country’s written consent is attached to the manifest accompanying each waste shipment, and
 - (D) the shipment conforms with the terms of the consent of the government of the receiving country required pursuant to subsection (e) of this section, or
- (2) the United States and the government of the receiving country have entered into an agreement as provided for in subsection (f) of this section and the shipment conforms with the terms of such agreement.

Id. § 3017(a). This subsection is curiously phrased to suggest that the “base” program or international agreements are alternative methods to satisfy the export prohibition. In other words, section 3017(a) reads as if exports are allowed if they satisfy either the requirements of the base program or any applicable international agreement. Section 3017(f), however, expressly provides that if an international agreement exists, then only the requirements of section 3017(a)(2) and certain reporting requirements apply. *Id.* § 3017(f). The legislative history of section 3017 clearly indicates that Congress intended that exporters must comply with any international agreement, rather than the base program, after such an agreement goes into effect. *See* H.R. REP. NO. 98-1133, at 46–47, 115 (1984) (Conf. Rep.) *reprinted in* 1984 U.S.C.C.A.N. 5649 (stating that under the provisions adopted by the conference committee, the requirements of the base program “do not apply if there exists an international agreement between the U.S. and the receiving country establishing hazardous waste export procedures.”).

³⁸ Sections 3017(c)–(f) contain additional details on the requirements for the “base” program. RCRA §§ 3017(c)–(f) (codified as amended at 42 U.S.C. §§ 6938(c)–(f) (2006)).

³⁹ Section 3017(b) requires EPA to adopt regulations “necessary to implement this section.” *Id.* at § 3017(b). Thus, on its face, section 3017(b) provides authority to implement the base program specified in section 3017(a)(1) and the requirement relating to international agreements in section 3017(a)(2). Additionally, section 2002(a)(1) grants the Administrator the authority to adopt “such regulations as are necessary to carry out his functions” under RCRA. *Id.* at 2002(a)(1) (codified as amended at 42 U.S.C. § 6912(a)(1) (2006)).

export regulations, would presumably be in violation of RCRA.⁴⁰ Indeed, RCRA makes it a criminal violation to knowingly export in a manner that is not “in conformance” with an international agreement.⁴¹ Thus, it appears that, under RCRA, a private party could be subject to civil and criminal liability for violation of an applicable international agreement.⁴²

Additionally, section 3017(h) expressly provides EPA with the authority to implement export regulations that are broader in scope than those required by the section 3017(a)(1) base program. Section 3017(h) provides:

(h) Other standards

Nothing in this section shall preclude the Administrator from establishing other standards for the export of hazardous wastes under section 6922 of this title or section 6923 of this title.⁴³

Thus, EPA is authorized under RCRA to establish more stringent regulation of hazardous waste exports if justified under the basic authority of Subtitle C applicable to regulation of generators and transporters.⁴⁴ This authority is, however, limited to imposing restrictions on exports to countries with which the United States does not have an applicable international agreement.⁴⁵

⁴⁰ Section 3008(g) provides for civil penalties for violation of “any requirement of this subchapter [i.e., Subpart C of RCRA].” RCRA § 3008(g) (codified as amended at 42 U.S.C. § 6928(g) (2006)). Section 7002(a)(1)(A) provides for citizen suits against persons who violate “requirement” or “prohibition” of RCRA generally. *Id.* at § 3008(g) (codified as amended at 42 U.S.C. § 6972(a)(1)(A) (2006)).

⁴¹ § 3008(d)(6)(B) provides criminal penalties for “any person who . . . knowingly exports a hazardous waste”:

where there exists an international agreement between the United States and the government of the receiving country establishing notice, export, and enforcement procedures for the transportation, treatment, storage, and disposal of hazardous wastes, in a manner which is not in conformance with such agreement.

Id. at § 3008(d)(6)(B) (codified as amended at 42 U.S.C. § 6928(d)(6)(B) (2006)).

⁴² The domestic legal status of international export agreements is discussed below. *See infra* notes 275–335 and accompanying text.

⁴³ RCRA § 3017(h) (codified as amended at 42 U.S.C. § 6938(h) (2006)).

⁴⁴ The significance of this authority is discussed below. *See infra* notes 370–75 and accompanying text.

⁴⁵ RCRA § 3017(f) (codified as amended at 42 U.S.C. § 6938(f) (2006)).

B. Bilateral Agreements with Canada and Mexico

In 1986, the United States entered into two bilateral agreements governing the import and export of hazardous wastes.⁴⁶ Not surprisingly these agreements are with our neighbors, Canada and Mexico, and, as discussed below, the vast bulk of reported exports of hazardous waste involved movements to these countries.⁴⁷ Neither the Canada nor the Mexico Agreement is a treaty ratified by the Senate; rather both have the status of international executive agreements.⁴⁸

The agreement between Canada and the United States addresses the import and export of hazardous waste and municipal solid waste between the countries.⁴⁹ The Canada/U.S. Agreement establishes a basic “notice and consent” system for transboundary shipments of “hazardous waste” for “treatment, storage or disposal.”⁵⁰ Indeed, the stated purpose of the agreement is to encourage transboundary shipments of hazardous waste to ensure economically efficient disposal.⁵¹ Notice must be provided by the designated authority of the exporting country to the designated authority of the importing country.⁵² The definition of hazardous wastes

⁴⁶ *International Waste Agreements*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/osw/hazard/international/agree.htm> (last visited Nov. 8, 2011); *see also* Statement of Robert Heiss, Joint U.S.-Canada Industry Workshop, *supra* note 9. The Canada and Mexico agreements address both the export and import of hazardous wastes. *See id.* The United States, however, has also entered into limited treaties authorizing the importation of waste from other countries. *See id.*

⁴⁷ *See infra* notes 238–48 and accompanying text.

⁴⁸ *See infra* notes 282–89 and accompanying text.

⁴⁹ Agreement Concerning the Transboundary Movement of Hazardous Waste, U.S.-Can., Oct. 28, 1986, T.I.A.S. No. 11,099, *available at* <http://www.epa.gov/epawaste/hazard/international/canada86.pdf> [hereinafter Canada/U.S. Agreement]. A word of caution, the version of the U.S./Canada Agreement published on the EPA website is missing a page. The Canada/U.S. Agreement was amended in 1992 to cover nonhazardous municipal solid waste. Amendments to Canada/U.S. Agreement, Nov. 4, 1992, *available at* <http://www.epa.gov/epawaste/hazard/international/canada86and92.pdf> [hereinafter Amendment to Canada/U.S. Bilateral Agreement]. This requirement has apparently not been implemented because of concerns that EPA does not have authority under section 3017 to implement export requirements on nonhazardous solid waste. *See* JAMES E. MCCARTHY, IMPORTS OF CANADIAN WASTE SUMMARY, CRS-2, CRS-7 (Mar. 16, 2007), *available at* <http://www.cnie.org/NLE/CRSreports/08Mar/RL33720.pdf>.

⁵⁰ *See* Canada/U.S. Agreement, *supra* note 49, arts. 2, 3(a).

⁵¹ *See* Canada/U.S. Agreement, *supra* note 49, Preamble.

⁵² Canada/U.S. Agreement, *supra* note 49, art. 3(a). For the United States, the designated authority is the EPA; for Canada, the designated authority is the Department of the Environment. *Id.* art. 1(a).

under United States law for purposes of the agreement includes “hazardous waste subject to a manifest requirement.”⁵³ Notification requires submission of a limited set of information, and if no objection or conditions are imposed within thirty days of receipt of notice, consent is presumed.⁵⁴

In 1986, the United States and Mexico also entered into an agreement governing the transboundary movement of hazardous waste.⁵⁵ This agreement, like the Canada/U.S. Agreement, is based on notice and consent requirements. Notification must be provided to the designated government authority at least forty-five days prior to shipment, and consent is not presumed from a failure to respond to the notice.⁵⁶ “Hazardous waste” is simply defined through reference to domestic regulation.⁵⁷ The Mexico/U.S. Agreement specifically defines the “activities” to which it applies, to include recycling, reuse, and “other utilization” in addition to disposal, treatment, and storage.⁵⁸ In addition to hazardous wastes, other portions of the Mexico/U.S. Agreement also address the transboundary movement of hazardous substances, including pesticides.⁵⁹

C. *The OECD Decision on the Export of Hazardous Waste for Recycling*

The OECD has issued a number of Directives relating to the movement of hazardous waste among member countries.⁶⁰ In 1992, the OECD

⁵³ *Id.* art. 1(b).

⁵⁴ *See id.* art. 3(d).

⁵⁵ Annex III to the Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area, Agreement of Cooperation Regarding the Transboundary Shipments of Hazardous Wastes and Hazardous Substances, Nov. 12, 1986, T.I.A.S. No. 11,269, available at <http://www.epa.gov/epawaste/hazard/international/mexico86.pdf> [hereinafter Mexico/U.S. Agreement]. The Mexico/U.S. Agreement was adopted as an Annex to the Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area. U.S.-Mex., Aug. 14, 1983, 35 U.S.T. 2916, available at <http://www.epa.gov/Border2012/docs/LaPazAgreement.pdf> [hereinafter La Paz Agreement]. The La Paz Agreement addressed a range of environmental issues between the United States and Mexico, and it specifically provided for the subsequent adoption of annexes. *Id.* art. 3.

⁵⁶ Mexico/U.S. Agreement, *supra* note 55, art. III.2.

⁵⁷ *Id.* art. I.2.

⁵⁸ *Id.* art. 1.4.

⁵⁹ *Id.* arts. V–VII.

⁶⁰ See Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236, 1238–39 (Jan. 8, 2010) for a discussion of the history of the OECD Decisions addressing the movement of hazardous

adopted a decision that first established a series of requirements on OECD members regarding the movement of hazardous waste among members for the purpose of recycling.⁶¹ In 2001, the OECD issued revisions to the 1992 Decision that were designed in part to “harmonize” OECD requirements with those of the Basel Convention.⁶² The OECD subsequently added an addendum and appendices and issued the revised document as “Decision of the Council Concerning the Control of Transboundary Movements of Wastes Destined for Recovery Operations.”⁶³ This 2001 OECD Decision, as amended, currently applies to the movement of hazardous wastes for recycling among OECD members.⁶⁴

The OECD Decision establishes a two-tier system for “green” and “amber” wastes.⁶⁵ For the hazardous “amber” wastes, it establishes a “notice and consent” regime that is similar, but more detailed, than that specified in the Mexico and Canada Agreements.⁶⁶ Among other things, the OECD Decision requires contracts between the exporter and the recycling facility and use of “movement documents” that accompany the wastes,⁶⁷ requires facilities recycling the waste to provide notice of receipt of the wastes and issue a “certificate of recovery” upon completion of the recycling,⁶⁸ provides for “tacit” consent when the importing country does not respond to a notice within thirty days,⁶⁹ provides for designation of “pre-consented” recycling facilities that have different notice and consent

wastes. The OECD was established in 1961 to improve economic cooperation among a group of developed nations and currently includes thirty-four countries. *History*, OECD, <http://www.OECD.org/history> (last visited Nov. 8, 2011). In addition to the United States, these include thirty-three other European, Latin American and Asian countries. *Members and Partners*, OECD, <http://www.oecd.org> (follow “About” hyperlink, then follow “Members and Partners” hyperlink) (last visited Nov. 8, 2011).

⁶¹ Organisation for Economic Co-operation and Development, *Decision of the Council Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations*, OECD Doc. C (92) 39/FINAL (Mar. 30, 1992), available at [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=C\(92\)39/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=C(92)39/FINAL&docLanguage=En).

⁶² OECD, *Decision of the Council Concerning the Control of Transboundary Movements of Wastes Destined for Recovery Operations*, OECD Doc. C(2001)107/FINAL (June 14, 2001) (amended 2002, 2004, 2005, 2008) <http://webnet.oecd.org/oecdacts/> (follow “by Title” hyperlink, then click on title of this decision) [hereinafter OECD Decision].

⁶³ *See id.*

⁶⁴ *See id.* at ch. II(A)(7)–(9).

⁶⁵ *Id.* at ch. II(B)(2).

⁶⁶ Compare OECD Decision, *supra* note 62, ch. II(D) with Mexico/U.S. Agreement, *supra* note 55, art. III and Canada/U.S. Agreement, *supra* note 49, art. 3–4.

⁶⁷ OECD Decision, *supra* note 62, ch. II(D)(2), at Case 1.

⁶⁸ *Id.*

⁶⁹ *Id.*

requirements,⁷⁰ and requires consent of any transit country as well as the importing country.⁷¹ The OECD Decision specifically requires the exporting country to readmit any amber wastes that cannot be recycled pursuant to the original consent or at an alternate approved recycling facility.⁷²

D. The Significance of the Basel Convention to U.S. Exports

The Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal is the primary multinational agreement that deals with the import and export of hazardous waste.⁷³ The Convention establishes a “notice and consent” regime that requires notification of and consent from the receiving and transit countries for trade in the disposal and recycling of hazardous wastes and municipal wastes.⁷⁴ Among other things, Basel requires that trade in hazardous

⁷⁰ *Id.* at Case 2.

⁷¹ *Id.* at Cases 1–2.

⁷² *Id.*

⁷³ Basel, *supra* note 3.

⁷⁴ Notification Concerning the Basel Convention’s Potential Implications for Hazardous Waste Exports and Imports, 57 Fed. Reg. 20,602, 20,603 (May 13, 1992). EPA issued a Federal Register notice shortly after the effective date of the Basel Convention in which it described the terms of the Convention as follows:

The Basel Convention’s main goal is to protect human health and the environment against the adverse effects that may result from mismanagement or careless international movements of hazardous and other wastes. The Convention seeks a reduction in waste generation, a reduction in transboundary waste movements consistent with environmentally sound and efficient waste management, and sets a standard of environmentally sound management for those waste movements that do occur. Wastes covered by the Convention include hazardous wastes, household wastes, and residues arising from the incineration of household wastes.

The Convention controls the transboundary movement of these wastes from one Party to another. Before a transboundary movement of hazardous or other wastes may occur, the exporting country must notify in writing the countries of import and transit and must obtain their consent. The shipment cannot proceed until the exporting country has received written consent from the importing country and any transit countries as well as confirmation of the existence of a waste management contract between the exporter and the importer. Both the exporting and importing countries are obligated to prohibit a transboundary movement if there is reason to believe that the waste will not be managed in an environmentally sound manner in the importing country.

Id. at 20,603.

wastes be allowed only if the waste will be managed in an “environmentally sound manner.”⁷⁵ Basel also prohibits the trade in waste between parties and nonparties.⁷⁶ Article 11, however, provides that trade between parties and nonparties is authorized if pursuant to a separate bilateral, multi-lateral, or regional agreement that is consistent with the aims and purposes of the Convention (for a pre-existing agreement) or that contains provisions that “do not derogate from the environmentally sound management” required by the Convention (for newly negotiated agreements).⁷⁷

The United States has signed, but not ratified, the Basel Convention,⁷⁸ and it remains among the very few countries that are not parties.⁷⁹ Thus, virtually every country on earth would be prohibited from consenting to a shipment of hazardous wastes from the United States unless pursuant to an international agreement that satisfies the requirements of Article 11 of Basel. EPA has taken the position that the OECD Decision and the Canada and Mexico Agreements satisfy these requirements.⁸⁰ EPA has specifically stated that the OECD Decision C(92)39 constitutes a “pre-existing” agreement, and adoption of the EPA regulations pursuant to the OECD Decision allows trade with OECD countries to continue in compliance with the Basel Convention.⁸¹

III. EPA'S REGULATORY REQUIREMENTS FOR THE EXPORT OF HAZARDOUS WASTE

In 1986, EPA promulgated a relatively simple, single set of “notice and consent” export requirements.⁸² At that time, the United States had not entered into the bilateral agreements with Mexico and Canada and the OECD had not issued a binding directive on the transboundary movement of wastes. Thus, these regulations were exclusively governed by EPA's

⁷⁵ Basel, *supra* note 3, art. 4.8.

⁷⁶ *Id.* art. 4.5.

⁷⁷ *Id.* art. 11.

⁷⁸ As discussed below, the Senate consented to ratification of the Basel Convention in 1992, and the United States has not “ratified” the Convention because it has not submitted documentation to the Basel Secretariat. *See infra* notes 338–40 and accompanying text.

⁷⁹ *See supra* note 3 and accompanying text.

⁸⁰ *See* Implementation of OECD Council Decision C(92)39, 61 Fed. Reg. 16,290, 16,291 (April 12, 1996).

⁸¹ *See id.*

⁸² Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. 28,664, 28,665 (Aug. 8, 1986) (codified at 40 C.F.R. pt. 262, subpt. E).

authority to establish a “base” program under section 3017(a)(1).⁸³ The original regulations have since morphed into a confusing array of differing regulatory programs that vary depending on the destination, the type of wastes, and their means of disposal or recycling. With apologies, the following section contains a detailed description of *eight* different sets of export regulations promulgated by EPA.

A. *General Requirements: Subpart E*

Part 262, Subpart E contains the regulations generally applicable to the export of hazardous wastes under RCRA.⁸⁴ Indeed, these general Subpart E regulations are the “default” export regulations and apply to all exports of hazardous waste unless other explicit export provisions apply.⁸⁵ The application of Subpart E to wastes exported to OECD countries is particularly complex (and confusing). Canada and Mexico, both OECD countries, are subject to the Subpart E regulations whether the export is for disposal or recycling. The export of hazardous waste for *disposal* to all other OECD countries is also subject to the Subpart E regulations. Exports of hazardous wastes for *recycling* to OECD countries (*other than Canada and Mexico*) are, however, subject to the Subpart H regulations discussed below in lieu of the Subpart E regulations.⁸⁶ EPA has described, but not explained, this distinction.⁸⁷

⁸³ RCRA § 3017(a) (codified as amended at 42 U.S.C. 6938(a) (2006)).

⁸⁴ 40 C.F.R. pt. 262, subpt. E (2010).

⁸⁵ 40 C.F.R. §§ 262.50–.52.

⁸⁶ 40 C.F.R. § 262.58(a).

⁸⁷ When EPA adopted the Subpart H regulations, EPA specifically excluded Canada and Mexico from their coverage. The preamble to the 1996 regulation states:

Although Canada is subject to the Decision, movements of waste between the U.S. and Canada that otherwise would be governed by the Decision will continue to be controlled by the U.S./Canada bilateral agreement.

Implementation of OECD Council Decision, 61 Fed. Reg. 16,290, 16,298 n.7 (Apr. 12, 1996).

The preamble also states:

Mexico joined the OECD in June 1994. Movements of waste between the U.S. and Mexico will continue to be controlled by the U.S./Mexico bilateral agreement and EPA’s current regulations, until such time as the U.S. and Mexico agree to switch to procedures under the OECD Decision.

Id. at 16,298 n.8. EPA’s decision to apply the bilateral agreements, rather than the OECD Decision, to exports to Canada and Mexico requires somewhat more justification. Presumably, EPA has concluded that the country specific bilateral agreements “trump” the OECD Decision, but it is not clear why. The OECD Decision was adopted after the

Covered Wastes. The Subpart E regulations explicitly apply only to the export of Subtitle C “hazardous waste.”⁸⁸ The regulations also implicitly apply only to hazardous wastes that are subject to the manifest requirement in Part 262, Subpart B. This limitation arises solely through the definition of “primary exporter” which includes “any person who is required to originate the manifest for a shipment of hazardous waste.”⁸⁹ Drafting notwithstanding, EPA has otherwise expressly stated that the Subpart E regulations only apply to Subtitle C hazardous wastes that are subject to a manifest requirement.⁹⁰

Persons Subject to Requirements. Most requirements under Subpart E apply to the “primary exporter” of hazardous waste; it is the “primary exporter” who is subject to the requirement to provide notice of intent to export, and who is subject to most record-keeping and reporting requirements.⁹¹ The “primary exporter” is defined as the person who is “required to originate the manifest for a shipment of hazardous waste in accordance with 40 C.F.R. part 262, subpart B.”⁹² Under the cited regulations, the person who is required to originate the manifest for a shipment

bilateral agreements, and although the OECD Decision is more detailed and, in some respects, more stringent than the bilateral agreements, it is not directly contradictory. In other words, an export could comply with both the requirements of the OECD Decision and the bilateral agreement. There is nothing in the OECD Decision that states that OECD members can comply with specific bilateral agreements in lieu of the Decision. Indeed, the 2001 OECD Decision notes that OECD members may be obligated to comply with other international agreements in addition to the OECD Decision, including the Basel Convention and regulations of the European Community governing both the disposal and recycling of wastes. OECD Decision, *supra* note 62, at “Instructions for Completing the Notification and Movement Documents: Introduction.” If, as EPA has stated, the OECD Decision is binding, it is worth some explanation as to why exports to Mexico and Canada for recycling should not meet the same Subpart H requirements that apply to exports to other OECD countries.

⁸⁸ 40 C.F.R. § 262.50. Although hazardous waste is not defined in the Subpart E regulations, EPA’s Subtitle C regulatory definitions of solid and hazardous waste would apply. *See id.* § 260.10.

⁸⁹ 40 C.F.R. § 262.51.

⁹⁰ *See* Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. 28,664, 28,670–72 (Aug. 8, 1986); U.S. ENVTL. PROT. AGENCY, RO 13719, MONTHLY HOTLINE REPORT: RCRA HOTLINE QUESTIONS AND ANSWERS (Dec. 1994), available at [http://yosemite.epa.gov/osw/rcra.nsf/ea6e50dc6214725285256bf00063269d/69375E8D66EC6CF78525670F006BCCDB/\\$file/13719.pdf](http://yosemite.epa.gov/osw/rcra.nsf/ea6e50dc6214725285256bf00063269d/69375E8D66EC6CF78525670F006BCCDB/$file/13719.pdf) (“Part 262, Subpart E applies only to wastes which are subject to Part 262, Subpart B manifest requirements.”).

⁹¹ 40 C.F.R. § 262.53(a) (“primary exporter” required to provide notice of intent to export); § 262.55 (“primary exporter” required to file exception report); § 262.56(a) (“primary exporter” required to file annual reports).

⁹² 40 C.F.R. § 262.51.

of hazardous waste is the “generator,”⁹³ and the generator is defined as the person whose action first creates the hazardous waste.⁹⁴ Thus, the original generator of the exported waste would appear to be the “primary exporter” subject to regulation under Subpart E.

Notice Requirement. The primary exporter of hazardous waste must provide notification of its intent to export at least sixty days prior to export.⁹⁵ The notification must be sent to EPA, and it must contain certain general information about the waste, its proposed means of disposal or recycling, the countries through which the waste will transit, and the country that will finally receive the waste.⁹⁶ The single notification may cover export activities for up to a year.⁹⁷ EPA, in conjunction with the State Department, is responsible for providing notification to the receiving country and any countries through which the waste will transit.⁹⁸

Consent Requirements. The waste may be exported only if the receiving country consents to the shipment.⁹⁹ Upon receipt of consent from the receiving country, the United States Embassy of that country will issue an “Acknowledgment of Consent.”¹⁰⁰ This document must accompany the shipment.¹⁰¹ If the receiving country objects to the shipment, EPA will notify the primary exporter. Transit countries, although notified, may not block the shipment of wastes under these provisions of RCRA; the regulations merely provide that EPA will inform the primary exporter of “any responses” by the transit countries.¹⁰²

Manifest Requirement. The exported wastes are subject to the basic RCRA manifest requirement, but some special requirements apply.¹⁰³ The RCRA manifest of wastes intended for export, for example, must include the “consignee” of the waste and the point of exit from the United States.¹⁰⁴

⁹³ 40 C.F.R. § 260.20.

⁹⁴ 40 C.F.R. § 262.10.

⁹⁵ 40 C.F.R. § 262.53(a).

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ 40 C.F.R. § 262.53(e).

⁹⁹ 40 C.F.R. § 262.52(b).

¹⁰⁰ 40 C.F.R. §§ 262.51, 262.52(c).

¹⁰¹ 40 C.F.R. § 262.52(c).

¹⁰² 40 C.F.R. § 262.53(f). Section 3017(a) does not address requirements for countries through which hazardous waste exports may transit. *See generally* RCRA § 3017 (codified as amended at 42 U.S.C. § 6938 (2006)). EPA exercised its authority under section 3017(h) to establish a requirement that transit countries receive notice. *See Hazardous Waste Management System; Exports of Hazardous Waste*, 51 Fed. Reg. 28,664, 28,665–67 (Aug. 8, 1986).

¹⁰³ 40 C.F.R. § 262.54.

¹⁰⁴ 40 C.F.R. § 262.54(a)–(c).

Exception Reporting. A primary exporter must file an “exception report” with EPA if the exporter has not received 1) a signed copy of the manifest from the transporter within forty-five days of the date the wastes were accepted for transport by the initial transporter, or 2) a written confirmation from the consignee that the wastes have been received within ninety days of the date the wastes were accepted for transport by the initial transporter, or if 3) the waste is returned to the United States.¹⁰⁵

Duty to Reimport. The regulations require that if a shipment cannot be delivered to the designated or alternate consignee, the primary exporter must notify the transporter to return the waste to the primary exporter.¹⁰⁶

Reporting and Record-keeping Requirements. The primary exporter is required to submit an “annual report” with EPA that summarizes “the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year.”¹⁰⁷ Exporters of greater than 1000 kilograms per year of hazardous waste must also, in even-numbered years, report on their efforts to reduce the quantity and toxicity of waste generated.¹⁰⁸ Primary exporters are also required to keep most documents, including their Notice of Intent and Acknowledgment of Consent, for at least three years.¹⁰⁹

Transporter Requirements. Subpart E contains no specific requirements applicable to the transporters of hazardous waste for export. Transporters are, however, subject to limited export requirements including a prohibition on accepting a hazardous waste for export that does not conform to an Acknowledgment of Consent that, in most cases, must be attached to the manifest.¹¹⁰ Transporters must also sign the manifest and give a copy to the customs agent at the point of departure from the United States.¹¹¹

¹⁰⁵ 40 C.F.R. § 262.55. In 2010, EPA amended this provision to require that exception reports be submitted to Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460. Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236, 1253 (Jan. 8, 2010).

¹⁰⁶ 40 C.F.R. § 262.54(g).

¹⁰⁷ 40 C.F.R. § 262.56(a).

¹⁰⁸ *Id.* Domestic generators of hazardous waste are required to submit biennial reports that describe their “waste minimization” efforts. *See id.* § 262.41. The export regulations apparently exclude small quantity exporters (100–1000 kilograms per month) of hazardous waste from this requirement. *Id.* § 262.56(a).

¹⁰⁹ 40 C.F.R. § 262.57(a).

¹¹⁰ 40 C.F.R. §§ 262.50, 263.20(a)(2). There are different requirements for use of manifests in shipments by rail or by water. *Id.* at § 263.20(e)–(f).

¹¹¹ 40 C.F.R. § 263.20(g).

B. *OECD Recycling: Subpart H*

In 1996, EPA adopted a new Subpart H to 40 C.F.R. Part 262 that governs the import and export of wastes for recycling to countries in the OECD other than Canada and Mexico.¹¹² The Subpart H regulations were amended in 2010 to implement the revised 2001 OECD Decision that now governs the transboundary movement of hazardous waste for recycling within the OECD.¹¹³ The Subpart H regulations are more detailed and extensive than the Subpart E regulations.

Covered Materials. Under the Subpart H regulations, covered materials include “wastes” that are both 1) defined as hazardous wastes under Subtitle C¹¹⁴ and 2) are either subject to the RCRA manifest requirement or to “universal waste” management standards.¹¹⁵

¹¹² 40 C.F.R. §§ 262.80–.89; Implementation of OECD Council Decision C(92)39, 61 Fed. Reg. 16,290 (Apr. 12, 1996). For purposes of Subpart H the OECD countries include: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. 40 C.F.R. §§ 262.58(a)(1), 262.80(a). Since the last revision to the Subpart H regulations in 2010, four countries, Chile, Estonia, Israel, and Slovenia, have joined the OECD. *See List of OECD Countries—Ratification of the Convention on the OECD*, OECD, <http://www.oecd.org/> (follow “List of OECD Countries” hyperlink at the bottom of the page, then follow “Dates of Accession” hyperlink under the heading “Useful Links”) (last visited Nov. 8, 2011). Apparently these countries have requested an extended period of time to comply with the OECD Decision, and when they have complied, trade in recyclable hazardous waste with other OECD countries will be authorized. Email from Eva Kreisler, U.S. Env’tl. Prot. Agency, Office of Int’l Enforcement Compliance Div., to Jeffrey M. Gaba, Professor of Law, Dedman Sch. of Law (Dec. 13, 2010) (on file with author). At that point, EPA will revise the list of applicable OECD countries to which Subpart H applies. *Id.* Canada and Mexico, although members of the OECD, are subject to these requirements only for wastes that transit their borders. 40 C.F.R. § 262.58(a)(2). The export and import of hazardous wastes for recycling from or to Mexico or Canada is governed by the general Subpart E regulations covering the import and export of hazardous wastes. *See supra* notes 86–87 and accompanying text.

¹¹³ OECD Decision, *supra* note 62, at ch.I.I.

¹¹⁴ 40 C.F.R. § 262.80(a). The OECD Decision allows a country to determine if a waste on the lists is hazardous based on “national procedures.” *See* OECD Decision, *supra* note 62, at II.B.4. Under the EPA implementing regulations, only wastes that qualify as RCRA hazardous wastes are classified as hazardous for purposes of the OECD Decisions. *See* Implementation of OECD Council Decision C(92)39, 61 Fed. Reg. 16,290, 16,294 (Apr. 12, 1996).

¹¹⁵ 40 C.F.R. § 262.80(a)(2). The Universal Waste rule, discussed below, establishes a separate program for management of certain batteries, pesticides, and mercury-containing equipment. *See infra* notes 152–64 and accompanying text.

Subpart H also only applies to the export of hazardous wastes that are destined for "recovery operations."¹¹⁶ These are defined as "activities leading to resource recovery, recycling, reclamation, direct re-use or alternative uses"¹¹⁷ as listed in the OECD Decision.¹¹⁸ The list of "recovery actions" in Subpart H is similar to the recycling activities covered in the EPA definition of solid waste,¹¹⁹ but materials being exported to engage in recovery actions that are not covered by the EPA regulatory definition would not be subject to Subpart H since they would not be a RCRA hazardous waste.

Amber and Green Waste Classification. Although the Subpart H regulations only apply to Subtitle C hazardous wastes, the regulations incorporate the OECD classification of "green" and "amber" wastes.¹²⁰ Under the Subpart H regulations, all materials classified as Subtitle C hazardous wastes are classified as "amber" wastes regardless of their classification in the OECD appendices.¹²¹ Subtitle C hazardous wastes that are not specified on the OECD lists are also classified as amber wastes.¹²² Thus, all Subtitle C hazardous wastes sent to the specified OECD countries for recycling are subject to Subpart H requirements applicable to amber wastes.¹²³

Somewhat confusingly, the Subpart H regulations also state that:

a waste is considered hazardous under U.S. national procedures, and hence subject to this subpart, if the waste:

- (1) Meets the Federal definition of hazardous waste in 40 CFR 261.3; and
- (2) Is subject to either the Federal RCRA manifesting requirements at 40 CFR part 262, subpart B, the universal waste management standards of 40 CFR part 273, State requirements analogous to 40 CFR part 273, the export requirements in the spent lead-acid battery management standards of 40 CFR part 266, subpart G, or State requirements analogous to the export requirements in 40 CFR part 266, subpart G.

40 C.F.R. § 262.89(a). This different phrasing picks up a cross-reference in the spent acid-lead batteries ("SLAB") regulations that apply to Subpart H regulations to the export of SLABs to the OECD for recycling.

¹¹⁶ 40 C.F.R. § 262.80(a).

¹¹⁷ 40 C.F.R. § 262.81.

¹¹⁸ OECD Decision, *supra* note 62, at app. 5B.

¹¹⁹ 40 C.F.R. § 261.2(c).

¹²⁰ 40 C.F.R. § 262.89(d).

¹²¹ 40 C.F.R. § 262.89(b).

¹²² 40 C.F.R. § 262.83(c).

¹²³ Wastes classified as nonhazardous "green" wastes under Subpart H may be classified as amber wastes by importing or transit countries; in that case, "[a]ll responsibilities of the U.S. importer/exporter shift to the importer/exporter of the OECD Member country that considers the waste hazardous unless the parties make other arrangements through contracts." 40 C.F.R. § 262.82(a)(2)(iii).

Mixtures of green wastes and amber wastes are subject to amber control only if the mixture would be hazardous under U.S. national procedures.¹²⁴ Thus, under EPA's mixture rule, mixtures of characteristic hazardous waste (classified as an "amber" waste) and nonhazardous (classified as a "green" waste) would not be subject to the Subpart H requirements if the mixture did not exhibit a hazardous characteristic.

Regulation of Green List Wastes. The Subpart H regulations purport to apply only to Subtitle C hazardous wastes. Nonetheless, EPA has included a provision in Subpart H that green list wastes are subject to "existing controls normally applied to commercial transactions."¹²⁵ This language, although consistent with the OECD Decision, simply cannot create any enforceable obligation under RCRA since both the applicability provisions of Subpart H and section 3017 are limited to regulation of Subtitle C hazardous wastes.

Persons Subject to Subpart H Requirements. Under Subpart H, the "exporter" of the hazardous wastes is required to submit the Notice of Intent and execute a contract with the receiving facility.¹²⁶ The "exporter" is defined as

[T]he person under the jurisdiction of the exporting country who has, or will have at the time the planned transfrontier movement commences, possession or other forms of legal

¹²⁴ 40 C.F.R. § 262.82(a)(3). EPA has stated:

EPA has revised the text in § 262.82(a) to clarify that only those wastes and waste mixtures considered hazardous under U.S. national regulations will be subject to the Amber control procedures within the United States. This is consistent with longstanding EPA policy, and should minimize confusion for the regulated community. For example, under the existing RCRA hazardous waste regulations, any mixture of an Amber waste that exhibits one or more of the hazardous characteristics of ignitability, corrosivity, reactivity, or toxicity under RCRA with a Green waste shall be considered an Amber waste if the mixture still exhibits one or more of the RCRA hazardous waste characteristics and, thus, be subject to the Amber control procedures. Conversely, if the resulting mixture no longer exhibits one or more of the RCRA hazardous characteristics, it will instead be considered a Green waste, and be subject to the Green control procedures.

Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236, 1243 (Jan. 8, 2010).

¹²⁵ 40 C.F.R. § 262.82(a)(1)(i).

¹²⁶ The exporter is the entity required to provide the Notice of Intent to export and to satisfy the reporting and record-keeping requirements. See 40 C.F.R. § 262.83(b).

control of the wastes and who proposes their transfrontier movement for the ultimate purpose of submitting them to recovery operations. When the United States (U.S.) is the exporting country, notifier is interpreted to mean a person domiciled in the U.S.¹²⁷

An exporter can be a "recognized trader" who has control over the waste.¹²⁸

This definition of "exporter" is clearly different from the one that applies to "primary exporters" under Subpart E. Under Subpart E, the hazardous waste generator is the primary exporter subject to the export requirements.¹²⁹ Under Subpart H, a different class of persons who have control over the waste and proposes to export of wastes is subject to the requirements applicable to "exporters."¹³⁰

The record-keeping and exception reporting requirements, in contrast, apply to the "primary exporter" as defined in the Subpart E regulations or the person who initiates the movement document.¹³¹

Notice Requirements. The exporter must provide written notification to EPA prior to undertaking the export of the hazardous waste.¹³² Notice requirements vary depending on whether or not the wastes are being sent to a "pre-approved" facility.¹³³ If wastes are being sent to a facility that has not been pre-approved, notice to EPA must be provided at least forty-five days prior to shipment.¹³⁴ If the wastes are being sent to a "pre-approved" facility, notification must be provided ten days before shipment.¹³⁵

Consent Requirements. Shipments may not occur without proper consent from the importing and transit countries.¹³⁶ Consent may be provided in writing, but the regulations also provide for "tacit consent."¹³⁷

¹²⁷ See 40 C.F.R. § 262.81(g).

¹²⁸ 40 C.F.R. § 262.86(b). A "recognized trader" is defined as "a person who, with appropriate authorization of concerned countries, acts in the role of principal to purchase and subsequently sell wastes; this person has legal control of such wastes from time of purchase to time of sale; such a person may act to arrange and facilitate transfrontier movements of wastes destined for recovery operations." *Id.* § 262.81(i).

¹²⁹ See 40 C.F.R. § 262.51.

¹³⁰ See 40 C.F.R. § 262.87.

¹³¹ *Id.*

¹³² 40 C.F.R. § 262.83.

¹³³ *Id.*

¹³⁴ 40 C.F.R. § 262.83(b)(1).

¹³⁵ 40 C.F.R. § 262.83(b)(2).

¹³⁶ 40 C.F.R. § 262.83.

¹³⁷ *Id.*

Tacit consent allows a waste shipment to proceed if no written objection is received within some set period of time after the importing country acknowledges receipt of a notice of intent to export.¹³⁸

Movement Document Requirements. All shipments of amber wastes must be accompanied by a “movement document” similar to a RCRA manifest.¹³⁹ For the portion of the shipment occurring within the United States, a RCRA manifest must also accompany the shipment.¹⁴⁰

Contract Requirements. All shipments are prohibited unless pursuant to a “valid written contract, chain of contracts or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity).”¹⁴¹ Among other things, the contract must specify which party will be responsible for alternate management of the waste if its disposition cannot be carried out as described in the notification.¹⁴²

Compliance with Other International Agreements. The Subpart H regulations purport to require compliance with other international agreements to which the shipment may be subject.¹⁴³ The regulations identify, as examples, a variety of international agreements relating to transit of goods.¹⁴⁴ It is unclear, and unlikely, that the regulations make violation of these other international agreements a violation of RCRA itself and therefore subject to RCRA penalties and citizen suits.

Duty to Reimport. The regulations also contain provisions requiring the return of wastes if the shipment is not completed.¹⁴⁵

Exception Reporting. Persons who are classified as “primary exporters” or who initiate the movement document are required to make an “exception” report to EPA if 1) they have not received a copy of the tracking document within forty-five days after it was accepted by the initial

¹³⁸ For wastes being sent to a facility that has not been pre-approved, the shipment may commence if the country has not provided a written objection or if the country has failed to respond within thirty days of issuance of an “Acknowledgement of Receipt” of a Notice of Intent by the country of import. 40 C.F.R. § 262.83(b)(1). If the shipment is to a pre-approved facility, the shipment may generally commence within seven days of issuance of an Acknowledgement of Receipt of a notice by the importing country. *See id.* § 262.83(b)(2).

¹³⁹ 40 C.F.R. § 262.84.

¹⁴⁰ *See* Implementation of OECD Council Decision C(92)39, 61 Fed. Reg. 16,290, 16,295 (Apr. 12, 1996).

¹⁴¹ 40 C.F.R. § 262.85(a).

¹⁴² 40 C.F.R. § 262.85(c).

¹⁴³ 40 C.F.R. § 262.82(b)(2). The issue of whether section 3017 gives domestic effect to international agreements is discussed below, *infra* notes 275–78 and accompanying text.

¹⁴⁴ 40 C.F.R. § 262.82(b)(2).

¹⁴⁵ 40 C.F.R. § 262.85(c)(2).

transporter, 2) they have not received written confirmation from the recovery facility that the waste was received within ninety days after it was accepted by the initial transporter, or 3) if “[t]he waste is returned to the United States.”¹⁴⁶

Reporting and Record-keeping Requirements. Primary exporters or persons who initiate the movement document must file an annual report with EPA that summarizes “the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year.”¹⁴⁷ These persons are also required to submit a biennial report on their efforts to reduce the quantity and toxicity of each hazardous waste exported “except for hazardous waste produced by exporters of greater than one hundred kilograms but less than 1000 kilograms per calendar month.”¹⁴⁸ The phrasing is odd since “exporters” may not “produce” waste. Primary exporters and persons who initiate the movement document are also required to keep most documents, including their Notice of Intent and Acknowledgement of Consent, for at least three years.¹⁴⁹

Transporter Requirements. Transporters “may not” accept waste subject to Subpart H unless it is accompanied by a “tracking document” that satisfies the “movement document” requirements.¹⁵⁰ Transporters are also required to properly sign the manifest and give a copy to the customs agent at point of export.¹⁵¹

C. *Universal Waste Rules: 40 C.F.R. Part 273*

In order to reduce the cost and complexity of the Subtitle C requirements, EPA, in 1995, promulgated a set of reduced requirements for a limited class of “universal wastes.”¹⁵² “Universal wastes” include certain batteries, pesticides, mercury-containing equipment, and most electric lamp bulbs.¹⁵³ These universal waste rules, contained in 40 C.F.R. Part 273,

¹⁴⁶ 40 C.F.R. § 262.87(b).

¹⁴⁷ 40 C.F.R. § 262.87(a).

¹⁴⁸ 40 C.F.R. § 262.87(a)(5).

¹⁴⁹ 40 C.F.R. § 262.87(c).

¹⁵⁰ 40 C.F.R. § 263.20(a)(2).

¹⁵¹ 40 C.F.R. § 263.20(g).

¹⁵² GABA & STEVER, *supra* note 14, at 9:28.

¹⁵³ 40 C.F.R. § 273.1. EPA has recognized that the class of universal wastes may be expanded in the future and established procedures and criteria for adding wastes. *Id.* §§ 273.80–.81. In general, a petitioner has the burden of demonstrating that a proposed

establish minimal requirements for persons who generate, store, and transport these wastes.¹⁵⁴ Universal wastes transported within the United States are not, for example, subject to a domestic manifest requirement.¹⁵⁵

The Part 273 rules also contain specific requirements relating to the export of universal wastes.¹⁵⁶ “Handlers” of universal wastes, including both persons who generate and those who store the wastes without disposing or recycling the wastes themselves, are subject to notice and consent requirements.¹⁵⁷ Universal waste handlers that export to OECD countries are required to comply with the Subpart H regulations.¹⁵⁸ Handlers that export to non-OECD countries are subject to a specified set of requirements that include many of the requirements of Subpart E that apply to primary exporters, including the requirement to 1) file an “intent to export” notice with EPA, 2) file an “annual report” of export activity, and 3) satisfy record-keeping requirements.¹⁵⁹ Additionally, universal waste handlers that export to non-OECD countries may only export in compliance with an

waste, among other things, is generated by a large number of generators, can be safely collected and transported with relatively low risk, if regulated as a universal waste will increase the likelihood that the waste will be recycled, if regulated will improve compliance with the Subtitle C hazardous waste program, and “[s]uch other factors as may be appropriate.” *Id.* § 273.81.

¹⁵⁴ See GABA & STEVER, *supra* note 14, at 9:28. See generally U.S. ENVTL. PROT. AGENCY, EPA530-K-05-019, RCRA TRAINING MODULE: INTRODUCTION TO UNIVERSAL WASTE (Sept. 2005), available at <http://www.epa.gov/osw/inforesources/pubs/training/uwast05.pdf> [hereinafter RCRA TRAINING MODULE]. Although, in part, intended to facilitate the recycling of universal wastes, the reduced requirements apply to the disposal as well as recycling of universal wastes. GABA & STEVER, *supra* note 14, at 9:28.

¹⁵⁵ See RCRA TRAINING MODULE, *supra* note 154. Since export regulations in most cases only apply to hazardous wastes that are subject to a manifest, the Subpart H regulations specifically state that they are applicable to hazardous wastes subject to a manifest or universal waste rules. 40 C.F.R. § 262.80(a).

¹⁵⁶ See 40 C.F.R. §§ 273.20, 273.40.

¹⁵⁷ The term “Universal Waste Handler” is defined at 40 C.F.R. § 273.9. EPA regulations distinguish between “large quantity” (those that accumulate 5000 kilograms of universal waste at any one time) and “small quantity” universal waste handlers, but the export requirements are the same for both. *Id.*

¹⁵⁸ 40 C.F.R. § 273.20 (export requirements for small quantity handlers); § 273.40 (export requirements for large quantity handlers). The universal waste regulations expressly apply the Subpart H regulations to all universal waste exports to the OECD countries listed at section 262.58(a)(1). *Id.* § 273.40. This includes the OECD countries other than Canada and Mexico. Unlike the basic scope of Subpart H, this provision appears to apply the universal waste rules to the export of universal wastes for disposal in OECD countries. *Id.* § 262.58.

¹⁵⁹ 40 C.F.R. §§ 273.20, 273.40. These include the requirements found at 40 C.F.R. §§ 262.53, 262.56(a)(1)–(4), 262.57.

Acknowledgment of Consent, and this acknowledgment must accompany the shipment.¹⁶⁰

“Transporter[s]” of universal waste that are being exported are subject to the requirements of Subpart H if the wastes are destined for an OECD country.¹⁶¹ If the shipment is destined for a non-OECD country, the regulations provide that the transporter may not accept a shipment that does not “conform” to the Acknowledgment of Consent and must “ensure” that a copy of the Acknowledgment of Consent accompanies the shipment and the shipment is delivered to the facility designated by the person initiating the shipment.¹⁶²

Finally, the universal waste rules explicitly do not apply to the export of household hazardous waste or to wastes generated by Conditionally Exempt Small Quantity Generators (“CESQGs”) unless persons “managing” universal wastes choose, “at their option,” to comply with the universal waste rules.¹⁶³ Household and CESQG universal wastes that are “commingled” with other universal wastes are, however, subject to the universal waste rules.¹⁶⁴

D. SLAB: 40 C.F.R. Part 266 Subpart G

Spent lead-acid batteries (“SLABs”) can be recycled by the reclamation of the lead content of the batteries.¹⁶⁵ When disposed or reclaimed, SLABs are classified as a RCRA hazardous waste since they can exhibit the characteristics of both toxicity and corrosivity.¹⁶⁶ Prior to 2010, reclaimed SLABs were exempt from manifest requirements and thus not subject to the Subpart E or Subpart H export provisions.¹⁶⁷ In 2010, however, EPA amended the regulations found at 40 C.F.R. Part 266, Subpart G to provide explicit notice and consent requirements for the export of SLABs.¹⁶⁸

¹⁶⁰ 40 C.F.R. §§ 273.20(b)–(c), 273.40(b)–(c).

¹⁶¹ 40 C.F.R. § 273.56.

¹⁶² *Id.*

¹⁶³ 40 C.F.R. § 273.8.

¹⁶⁴ *Id.*

¹⁶⁵ Revisions to: The Requirements for Transboundary Shipments of Wastes Between OECD Countries, 73 Fed. Reg. 58,388, 58,393–94 (proposed Oct. 6, 2008).

¹⁶⁶ *Id.* at 58,393.

¹⁶⁷ *Id.* at 58,391.

¹⁶⁸ *See generally* Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236 (Jan. 8, 2010).

These export requirements apply although EPA still does not require the use of a manifest for domestic transport of SLABs.¹⁶⁹

The new rules now impose specific notice and consent requirements for the export of SLABs. Exporters are given the option to comply with the Universal Waste Rules (and its associated export requirements) in lieu of the explicit Part 266 SLAB export requirements.¹⁷⁰ For those generators that do not elect to comply with the Universal Waste rules, the new rules do some odd parsing and cross-referencing similar to EPA's treatment of export requirements for universal wastes. For exporters of SLABs to OECD countries (other than Canada and Mexico), the rules simply require compliance with all of the Subpart H requirements.¹⁷¹ For exports to non-OECD countries (and Canada and Mexico), the SLAB rules cross-reference select portions of Subpart E: these include the Subpart E regulations governing submission of notice of intent to export, most but not all annual reporting requirements and record-keeping.¹⁷² Additionally, the SLAB rules themselves expressly prohibit export without an Acknowledgment of Consent and a requirement to provide the transporter with a copy of the Acknowledgment of Consent.¹⁷³

For non-OECD shipments, there is no requirement for a "movement document" or RCRA manifest to accompany the shipment.¹⁷⁴ Rather, generators must provide a copy of the Acknowledgment of Consent to the transporter.¹⁷⁵ Transporters are not allowed to accept a shipment that

¹⁶⁹ *See id.*

¹⁷⁰ 40 C.F.R. § 266.80(a).

¹⁷¹ 40 C.F.R. § 266.80(a)(6).

¹⁷² 40 C.F.R. § 266.80(a). The regulations cross-reference the requirements applicable to "primary exporters" in 40 C.F.R. §§ 262.53, 262.56(a)(1)–(4),(6),(b), 262.57. For reasons best known to EPA (since not explained in the preamble to the SLAB rules), EPA exempts exporters of SLABs to non-OECD countries from the Subpart E requirement that generators certify in the annual report that they have undertaken efforts to reduce the volume and toxicity of waste generated. *See id.*

¹⁷³ 40 C.F.R. §266.80.

¹⁷⁴ In a nicely circular argument, EPA states that shipments of SLABs: "do not have any shipment tracking documentation requirements or exception reporting requirements because they are exempt from the RCRA hazardous waste manifest requirements and are not required to comply with the movement document requirements in § 262.84." Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236, 1246 (Jan. 8, 2010). In other words, EPA explains that non-OECD shipments do not have shipment tracking requirements because EPA has exempted them from shipment tracking requirements.

¹⁷⁵ 40 C.F.R. § 266.80(a)(6).

does not “conform” to the Acknowledgment of Consent and must “ensure” that the Acknowledgment of Consent accompanies the shipment and that the shipment is delivered to facility designated in the Acknowledgment of Consent.¹⁷⁶

E. Cathode Ray Tubes: 40 C.F.R. 261.4(a)(22)

EPA’s most direct attempt to regulate the export of electronic waste is its 2006 regulation governing the disposal and recycling of cathode ray tubes (“CRTs”) and processed glass from CRTs.¹⁷⁷ CRTs include televisions and the older television tubelike computer monitors that are now being supplanted by flat panel liquid crystal displays.¹⁷⁸ EPA cites data that indicates that color CRTs are likely to exhibit the toxicity characteristic based on their lead content, and, thus, when CRTs become a solid waste they would likely be classified as a hazardous waste.¹⁷⁹ CRTs, however, have potential recyclable value because of the metal content, primarily lead, in the glass on the tube, and to avoid classification and regulation of CRTs as hazardous waste, EPA has established a general set of “conditional” exclusions for CRTs and specific set of requirements applicable to the export of CRTs for recycling.¹⁸⁰

A preliminary issue involves determining the point at which used CRTs become solid wastes. EPA’s position varies depending on whether the used CRTs are “intact” or “broken” and whether they are sent for “reuse” or “recycling.”¹⁸¹ In general, EPA claims that:

- Used, intact CRTs that are sent for *reuse* are not solid wastes and therefore not regulated under RCRA as a hazardous waste.¹⁸²

¹⁷⁶ 40 C.F.R. § 266.80(a)(7).

¹⁷⁷ 40 C.F.R. §§ 261.4(a)(22), 261.39–41; Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. 42,928 (July 28, 2006). The rule became effective on January 29, 2007. *Id.*

¹⁷⁸ See Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. at 42,928.

¹⁷⁹ See *id.* at 42,930–31. EPA’s selective use of the cited data is discussed below.

¹⁸⁰ 40 C.F.R. §§ 261.4(a)(22), 261.39–41.

¹⁸¹ Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. at 42,929.

¹⁸² See 40 C.F.R. § 261.4(a)(22)(i); Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. at 42,929.

- Used, intact CRTs that are sent for *recycling* within the United States are not solid wastes unless speculatively accumulated.¹⁸³
- Used, intact CRTs that are exported for recycling are solid wastes.¹⁸⁴
- Used, “broken” CRTs that are exported for recycling are not solid wastes.¹⁸⁵
- Processed glass that has been removed from CRTs for recycling, even if exported, is not a solid waste.¹⁸⁶

Thus, all CRTs exported for recycling are classified as a solid waste (and, if they exhibit a hazard characteristic, a hazardous waste) unless otherwise excluded.

EPA has established a set of “conditional exclusions” that apply to CRTs that are exported for recycling.¹⁸⁷ In general, the regulations

¹⁸³ See 40 C.F.R. § 261.4(a)(22)(i); Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. at 42,929. This position is based on doubtful authority. EPA states that these recycled CRTs are not solid wastes since “EPA does not regulate unused commercial chemical products that are reclaimed.” *Id.* This is a reference to EPA’s definition of solid waste which does not include “commercial chemical products listed in 40 C.F.R. § 261.33” that are reclaimed. 40 C.F.R. § 261.2(c)(3). EPA has on several occasions stated that the reference to “listed” commercial chemical products, in fact, includes all unused commercial chemical products. See GABA & STEVER, *supra* note 14, at 2:11. EPA can say whatever it wants, but the regulation is limited to commercial chemical products that have been formally designated in 40 C.F.R. § 261.33, and at least one court has rejected EPA’s position. See *United States v. Self*, 2 F.3d 1071 (10th Cir. 1993).

¹⁸⁴ See Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. at 42,938. EPA claims that, unlike domestic recycling of unbroken CRTs, unbroken CRT exported for recycling “are not handled as valuable commodities.” *Id.* at 42,938. EPA, however, claims that processed CRT glass exported for recycling is not a solid waste “since there is no information available to us indicating that this material is not handled as a commodity when exported.” *Id.* The issue of EPA’s authority to treat exported hazardous waste differently from domestic hazardous waste is discussed *infra* notes 420–433 and accompanying text.

¹⁸⁵ 40 C.F.R. §§ 261.39(a)(5), 261.4(a)(22)(iii).

¹⁸⁶ 40 C.F.R. § 261.39(c).

¹⁸⁷ The exclusions apply both to “used, broken” CRTs and “unbroken, intact” CRTs exported for recycling. The conditional exclusions themselves are found at 40 C.F.R. § 261.4(a)(22)(ii)–(iv) which cross-reference the substantive restrictions found at 40 C.F.R. § 261.39–40. Note that compliance with the requirements of the conditional exclusion simply exempts exported CRTs from classification as a solid waste; exporters that do not comply with the conditional exclusion requirements for CRTs would still be in compliance with RCRA if they satisfied the general Subpart E or H requirements for the export of hazardous wastes.

establish a notice and consent regime.¹⁸⁸ However, rather than simply cross-referencing the Subpart E and H regulations, EPA has curiously established similar, but not identical, export requirements through its conditional exclusion, and the regulations do not distinguish between exports to OECD and non-OECD countries.¹⁸⁹

Substantive Conditions. The conditional exclusion includes substantive requirements on the management of the CRTs prior to recycling. These include conditions on proper storage, labeling, and containment during transit.¹⁹⁰ They also include limitations on “speculative accumulation” prior to recycling.¹⁹¹

Covered Person. The requirements of the conditional exclusion generally apply to “exporters.”¹⁹² Neither the CRT regulation nor the general RCRA regulations contain a definition of “exporter.”

Notice Requirements. The exporter is required to submit a “Notice of Intent” to export to EPA within sixty days of the initial shipment.¹⁹³ This notice may cover activity for the next twelve months.¹⁹⁴ The information required in the CRT notice is essentially identical to that required under Subpart E and similar to that required under Subpart H.¹⁹⁵

¹⁸⁸ 40 C.F.R. § 261.39(a)(5).

¹⁸⁹ This at least raises the question of whether exports of CRTs to OECD countries satisfy the requirements of the OECD Directive. In a remarkable statement, EPA essentially provides an argument for circumventing all OECD requirements. See U.S. ENVTL. PROT. AGENCY, RCRA-2004-0010, RESPONSE TO COMMENTS DOCUMENT (2004). According to EPA, the United States is only obligated to comply with the OECD Directive only for the export of materials classified as hazardous waste under United States law, and, thus, the United States can establish different and less restrictive export requirements for shipments to OECD countries as long as EPA imposes the relaxed requirements through a conditional exclusion from classification as a solid waste. *Id.* at 21–24. The use of conditional exclusions to circumvent (or curiously to ensure) notice and consent requirements for exports is discussed below, *infra* note 430 and accompanying text.

¹⁹⁰ 40 C.F.R. § 261.39(a)(1)–(3).

¹⁹¹ 40 C.F.R. § 261.39(a)(4).

¹⁹² 40 C.F.R. § 261.39(a)(5).

¹⁹³ 40 C.F.R. § 261.39(a)(5)(i).

¹⁹⁴ *Id.*

¹⁹⁵ In the preamble to the CRT rule, EPA stated that it:

considered simply requiring exporters of CRTs for recycling to comply with the current notice and consent requirements in 40 CFR part 262. These requirements, however, rely on the hazardous waste manifest and other Subtitle C provisions that EPA is not imposing on used CRTs. Consequently, we are promulgating separate (although very similar) export requirements that will apply exclusively to conditionally exempt CRTs exported for recycling.

Consent Requirements. The export of CRTs for recycling is prohibited without the consent of the receiving country, but consent of the transit country is not required.¹⁹⁶ This would be the case even if the export were to an OECD country covered by the Subpart H regulations.¹⁹⁷ EPA provides the exporter with an “Acknowledgment of Consent” from the receiving country.¹⁹⁸

Manifest Requirement. There is no manifest requirement for the domestic shipment of CRTs destined for export, but the “Acknowledgment of Consent” must accompany the shipment.¹⁹⁹

Exception Reporting. There is no requirement to notify EPA if the exporter does not receive any Acknowledgment of Receipt of the shipment by the recycling facility. Nor is there any requirement that the recycler provide such acknowledgment.

Duty to Reimport. There is no explicit duty to reimport or take back if the wastes cannot be accepted at the recycling facility. Rather, the regulations require “re-notification” if the shipment cannot be delivered to the primary or alternate recycler to “allow” the exporter to send the shipment to a “new recycler.”²⁰⁰

Reporting and Record-keeping. There is no annual reporting requirement and, since exported CRTs are conditionally excluded from classification as a solid waste,²⁰¹ the general reporting requirements applicable to domestic generators of hazardous waste would not apply. Exporters must keep copies of all notices and acknowledgements of consent for a period of three years.²⁰²

F. Printed Circuit Boards

Printed circuit boards, recycled to reclaim their metal content, are an item of international commerce.²⁰³ Although there is significant concern

Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. at 42,938. The small differences in the content of the notice appear to reflect that the CRT requirements only apply to a specific type of waste.

¹⁹⁶ See 40 C.F.R. § 261.39(a)(5)(v).

¹⁹⁷ The Subpart H regulations require consent by the transit country, but CRT exports are not subject to the Subpart H requirements. See *supra* notes 114–119 and accompanying text.

¹⁹⁸ 40 C.F.R. § 261.39(a)(5)(v).

¹⁹⁹ 40 C.F.R. § 261.39(a)(5)(vii).

²⁰⁰ 40 C.F.R. § 261.39(a)(5)(viii).

²⁰¹ 40 C.F.R. § 261.40.

²⁰² 40 C.F.R. § 261.39(a)(5)(ix).

²⁰³ See, e.g., SEPTEMBER 2008 GAO REPORT, *supra* note 2, at 14–15.

about the environmental and human health effects associated with their recycling,²⁰⁴ EPA has exempted printed circuit boards that are recycled from classification as a solid waste.²⁰⁵ They are thus exempted from any export requirements.

The exclusion operates in two ways. First, all “scrap metal” that is being recycled is exempt from classification as a solid waste.²⁰⁶ EPA has taken the position that whole circuit boards sent for recycling are classified as scrap metal, and thus not regulated as a hazardous waste.²⁰⁷ Second, shredded circuit boards sent for recycling are subject to a “conditional exclusion.”²⁰⁸ They are exempt only if 1) “[s]tored in containers sufficient to prevent a release to the environment prior to recovery” and 2) “[f]ree of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.”²⁰⁹ Through these exclusions, scrap metal and printed circuit boards that would otherwise be classified as a hazardous waste are free from any export controls under RCRA.

G. *Industrial Ethyl Alcohol*

In one curious and well-hidden provision, EPA has excluded industrial ethyl alcohol sent for reclamation from all hazardous waste requirements, but specifically subjected the “person initiating” or the “intermediary arranging” for a shipment to a foreign country to notice and consent export requirements under Subpart E.²¹⁰ This regulation was adopted in 1986 as part of EPA’s original Subpart E regulatory promulgation, and it is one of the few export requirements that apply to

²⁰⁴ See generally Huabo Duan et al., *Examining the Technology Acceptance for Dismantling of Waste Printed Circuit Boards in Light of Recycling and Environmental Concerns*, 92 J. ENVTL. MGMT. 392 (2011).

²⁰⁵ 40 C.F.R. § 261.4(a)(14).

²⁰⁶ 40 C.F.R. § 261.4(a)(13). “Scrap metal” is defined as “bits and pieces of metal parts (e.g.,) [sic] bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.” *Id.* § 261.1(c)(6). It thus does not include other materials that may have high concentrations of metals that are sent for recycling.

²⁰⁷ See Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. 42,928, 42,930 (July 28, 2006); see also GABA & STEVER, *supra* note 14, at 2:25 for a discussion of the scope of the “scrap metal” exclusion.

²⁰⁸ 40 C.F.R. § 261.4(a)(14).

²⁰⁹ *Id.*

²¹⁰ 40 C.F.R. § 261.6(a)(3)(i).

a hazardous waste that does not have a domestic manifest requirement.²¹¹ Although adopted prior to the Subpart H regulations, the regulation provides that its export requirements apply “unless provided otherwise in an international agreement as specified in § 262.58.”²¹² Presumably this would subject industrial ethyl alcohol to the Subpart H requirements if exported for recycling to an OECD country.

H. Conditional Reclamation Exclusion: 40 C.F.R. 261.4(a)(25)

In 2008, EPA promulgated a lengthy (and somewhat bizarre) provision that “conditionally exempts” most materials exported for reclamation from classification as a solid waste.²¹³ This provision was included as a part of set regulations that “conditionally exempt” reclaimed waste from classification as a hazardous waste.²¹⁴ Under the domestic provisions, “hazardous secondary materials” that are sent for reclamation at facilities “under the control” of the generator are excluded from classification as solid wastes.²¹⁵ Hazardous secondary materials sent for reclamation at a facility operated by a third party, the “transfer-based” exclusion, are also exempt from classification as a solid if a rather elaborate set of conditions is met.²¹⁶

In addition to the domestic reclamation exclusions, the 2008 regulation provides an express exclusion for “hazardous secondary materials” exported for reclamation.²¹⁷ Although this exclusion does not apply to the

²¹¹ The explanation has a nice “Dukes of Hazard” quality. EPA explained that it initially declined to impose any domestic regulatory requirements on industrial ethyl alcohol since the Bureau of Alcohol, Tobacco and Firearms already imposed notice and tracking requirements similar to RCRA. Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. 28,664, 28,671 (Aug. 8, 1996). EPA stated that “[s]ince notice and tracking requirements are placed on these wastes domestically in lieu of EPA’s requirements, EPA believes that this is the type of waste for which notification and consent should apply for exports. Thus, the final regulation includes an amendment to 40 CFR 261.6 regarding spent industrial ethyl alcohol when exported for recycling.” *Id.*

²¹² 40 C.F.R. § 261.6(a)(3)(i).

²¹³ See 40 C.F.R. § 261.4(a)(25); Revisions to the Definition of Solid Waste, 73 Fed. Reg. 64,668, 64,718 (Oct. 30, 2008). As discussed below, the provision is bizarre because of its apparent complete irrelevance and EPA’s failure to identify any cost implications associated with its promulgation.

²¹⁴ See Gaba, *supra* note 15 for a detailed discussion of these provisions.

²¹⁵ 40 C.F.R. §§ 261.2(a)(2)(ii), 261.4(a)(23).

²¹⁶ See 40 C.F.R. § 261.4(a)(24).

²¹⁷ 40 C.F.R. § 261.4(a)(25). In addition to the specific conditional export exclusion, EPA also promulgated a mechanism for a generator to make a “non-waste” determination. *Id.*

export of SLABs or CRTs regulated under other specific controls,²¹⁸ it would potentially apply to any other hazardous waste exported for reclamation.

Under this “export reclamation exclusion,” EPA establishes a notice and consent requirement, but, as a condition of the exclusion, the regulation incorporates most, but not all, of the substantive requirements applicable to the “transfer-based” domestic exclusion.²¹⁹ Unlike the domestic transfer-based exclusion, the export reclamation exclusion does not require that generators determine if the foreign reclaimer satisfies certain financial assurance requirements.²²⁰ Nor is the foreign reclamation facility subject to environmental restrictions that would apply to domestic recyclers.²²¹

§ 260.30. Wastes that qualify for the non-waste determination may be exported with no restrictions. *Id.* § 261.4(c).

²¹⁸ EPA achieves this limitation by a rather odd bit of cross-referencing. Rather than simply stating that the export exclusion does not apply to CRTs or SLABs, the exclusion requires compliance with certain “third-party” provisions. 40 C.F.R. § 261.4(a)(24)(iii). This section provides that the exclusion does not apply to any material subject to specific conditional exclusion requirements under 261.4 [such as CRTs] or SLAB management requirements. *Id.* EPA drafting at its finest.

²¹⁹ 40 C.F.R. § 261.4(a)(25) (The regulation requires as a condition of exclusion that “the hazardous secondary material generator complies with the applicable requirements of paragraphs (a)(24)(i)–(v) of this section (excepting paragraph (a)(v)(B)(2) of this section for foreign reclaimers and foreign intermediate facilities).”). In the preamble to the 2008 rule, EPA stated:

Included by reference in 40 CFR 261.4(a)(25), the generator must comply with the requirements of 40 CFR 261.4(a)(24)(i)–(v), which comprise the hazardous secondary material generator requirements under the transfer-based exclusion, such as speculative accumulation and reasonable efforts.

U.S. ENVTL. PROT. AGENCY, EPA530-R-10-006, REVISIONS TO THE DEFINITION OF SOLID WASTE FINAL RULE COMPILATIONS: THE REASONABLE EFFORTS CONDITION 1 (2010) [hereinafter REVISIONS TO THE DEFINITION OF SOLID WASTE].

²²⁰ The export reclamation exclusion does not require compliance with the financial assurance requirements at 40 C.F.R. § 261.4(a)(24)(vi)(F). The export reclamation exclusion expressly excludes compliance with section 261.4(a)(24)(v)(B)(2) that requires the generator determine if the foreign recycler has properly notified government entities that the “financial assurance” requirement was met. *Id.* § 261.4(a)(24).

In an odd argument, EPA explains the decision not to impose these requirements thusly:

Since foreign reclaimers and foreign intermediate facilities are not subject to U.S. regulations, they cannot comply with the notification and financial assurance requirements under [the] rule.

REVISIONS TO THE DEFINITION OF SOLID WASTE, *supra* note 219, at 2 (quoting Revisions to the Definition of Solid Waste, 73 Fed. Reg. 64,668, 64,698 (Oct. 30, 2008)). This author did not know that the inability to legally compel a foreign entity to comply with a regulatory requirement therefore made it impossible for the facility to comply with the requirement.

²²¹ The export reclamation exclusion, for example, does not require compliance with the condition, applicable to the transfer-based exclusion at § 261.4(a)(24)(vi)(D), that the third

The notice and consent requirements of export reclamation exclusion are long and complex and largely parallel the notice requirements in Subpart E and Subpart H.²²² There are, however, some odd quirks. The export reclamation exclusion expressly provides for “tacit consent” for exports to “OECD member countries.”²²³ Although EPA generally treats exports to Mexico and Canada differently than exports to other OECD members, this exclusion includes them among OECD countries.²²⁴ Thus, EPA is applying tacit consent authorization for exports to Mexico in a manner not expressly authorized by the Mexico/U.S. Agreement.²²⁵ Additionally, consent for export is only expressly required of the receiving country,²²⁶ but it appears that objections by a transit country can preclude tacit consent for shipments to OECD countries.²²⁷ Exporters (called “hazardous secondary material generators” in the regulation) are also required to comply with annual reporting requirements.²²⁸

The “export reclamation exclusion” may be of limited significance. On its face, it does not apply to the export of CRTs or SLABs.²²⁹ Further, any generator who could take advantage of the complex and detailed requirements of the export reclamation exclusion could more simply meet its RCRA obligations by complying with the relatively simple Subpart G or H requirements. Thus, the only “advantage” to a generator of using this exclusion is to avoid classifying its materials as a hazardous waste.²³⁰ Indeed, EPA apparently never attempted to document the consequence of this exclusion; in the economic analysis of the entire regulation, EPA never calculated any cost savings associated with the export reclamation

party manage the hazardous secondary material in a manner at least as environmentally protective as that employed for analogous raw materials.

²²² 40 C.F.R. § 261.4(a)(25)(i)–(iv).

²²³ 40 C.F.R. § 261.4(a)(25)(vii).

²²⁴ EPA helpfully notes that “Canada and Mexico, though they are OECD Member countries, typically require written consent for exports to their countries.” *Revisions to the Definition of Solid Waste*, GOVPULSE, <http://govpulse.us/entries/2008/10/30/E8-24399/revisions-to-the-definition-of-solid-waste> (last visited Nov. 8, 2011).

²²⁵ Although not discussed by EPA, this disregard of its international hazardous waste obligations is consistent with EPA’s view that if the exemption from an international requirement is phrased as a “conditional exclusion,” the requirement does not apply. See RESPONSE TO COMMENTS DOCUMENT, *supra* note 189, at 29.

²²⁶ 40 C.F.R. § 261.4(a)(25)(vii).

²²⁷ *Id.*

²²⁸ 40 C.F.R. § 261.4(a)(25)(x)–(xi).

²²⁹ See *supra* note 218 and accompanying text.

²³⁰ This is not a trivial consequence of the regulation and it may promote recycling, but this was not the apparent rationale for the exclusion.

exclusion.²³¹ As of December 2010, no generator had taken advantage of this exclusion.²³²

IV. THE OPERATION OF THE EPA REGULATORY REGIMES

Claims about the export of hazardous waste from the United States range from the benign to the apocalyptic. For some, the United States is exporting hazardous wastes of a type and in quantities that imperil the health and safety of poor citizens in less-developed countries.²³³ For others, there is simply no significant export of hazardous wastes from the United States except to Canada and Mexico.²³⁴ Both sides may be correct.

A. *Reported Exports: What's Going Where?*

Information about the exports of materials under EPA's export regimes is difficult to come by. As of December 2010, virtually no information was available from EPA on the Internet.²³⁵ Anecdotal information

²³¹ The Regulatory Impact Analysis prepared for the final set of reclamation exclusions states that it "does not separately estimate industry cost savings impacts for these two different types (i.e., offsite and export) of recycling exclusions for Exclusion 2. The generator export tonnages and generator exporter facility counts are embedded in the generator impacts for this exclusion, but not separately reported." MARK EADS, ECONOMIST, U.S. ENVTL. PROT. AGENCY & DPRA INC., REGULATORY IMPACT ANALYSIS: USEPA'S 2008 FINAL RULE AMENDMENTS TO THE INDUSTRIAL RECYCLING EXCLUSIONS OF THE RCRA DEFINITION OF SOLID WASTE 35 (2008) [hereinafter RIA]. The RIA also states that it "does not estimate the annual fraction (percentage) of affected hazardous secondary materials which may be exported for recycling. However, this is a baseline RCRA Subtitle C requirement (40 CFR 262.53 & 262.56) so no incremental cost impact is expected." *Id.* at 181.

In other words, the RIA does not estimate the cost of notice and consent requirements of the exclusion since they would otherwise be applicable. It also does not document any cost savings attributable to the exclusion.

²³² Email from Eva Kreisler, U.S. Env'tl. Prot. Agency, Office of Int'l Enforcement Compliance Div., to Jeffrey M. Gaba, Professor of Law, Dedman Sch. of Law (Oct. 26, 2010) (on file with author).

²³³ See, e.g., Dr. Zada Lipman, *Trade in Hazardous Waste: Environmental Justice Versus Economic Growth*, BASEL ACTION NETWORK, <http://www.ban.org/library/lipman.html> (last visited Nov. 8, 2011).

²³⁴ See, e.g., *Import/Export Requirements*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/osw/hazard/international/imp-exp.htm> (last visited Nov. 8, 2011).

²³⁵ The only online export information that EPA provides involves exports to non-OECD countries. See *Proposed Hazardous Waste Exports to Non-OECD Countries*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/epawaste/hazard/international/non-oecd.htm> (last modified Sept. 22, 2011). See *infra* note 448 and accompanying text for more commentary on public access to information.

has appeared in a variety of sources, including several reports of the Government Accountability Office regarding the export of CRTs.²³⁶

In response to a Freedom of Information Act (“FOIA”) request, EPA provided information for this article regarding documents submitted under EPA export regulations. The information supplied by EPA included a summary of Notices of Intent received by EPA between 1995 and 2010 (Table 1), a summary of hazardous waste export data from annual exporter reports, including information on CRT exports (Table 2), and a summary of reported export notices for SLABs (Table 3).

This information confirms that, at least among persons that comply with EPA regulations, approximately ninety percent of exports, by number of Notices of Intent, numbers of shipments, and by tonnage, are going to Canada.²³⁷ The remaining exports are roughly divided between shipments to Mexico and all other OECD countries.²³⁸ By far the largest share, by “tonnage,” of shipments to OECD countries (other than Canada and Mexico) goes to the Republic of Korea.²³⁹ Information in an EPA summary of individual Notices of Intent does not indicate that any particular type of waste predominates: the waste codes include a number of listed wastes and wastes that exhibit all of the four hazard characteristics.²⁴⁰ The documents supplied in response to the FOIA request do not provide significant information regarding the means of disposal or recycling employed by the reported exports. Although this information must be included in the Notices of Intent submitted by exporters, neither the summary of Notices of Intent nor the Acknowledgments of Consent contain this information.

²³⁶ See GOV'T ACCOUNTABILITY OFFICE, GAO-10-626, ELECTRONIC WASTE: CONSIDERATIONS FOR PROMOTING ENVIRONMENTALLY SOUND REUSE AND RECYCLING 9 (July 2010). The report states that “[a]s of March 2010, EPA reported 16 notifications, with acknowledgments of consent from the receiving country, for a company to export CRTs for recycling. . . . All 16 consents to export came from two importing countries—Canada and the Republic of Korea.” *Id.* at 9 n.6. The Report also states that EPA reported that 108 one-time notifications for export of used, unbroken CRTs for reuse (not recycling) as of May 2010. See *id.* In an earlier report, the GAO stated that “[a]s of June 2008, twenty-five countries have submitted forty-seven notices for export of CRTs for recycling to EPA. These companies informed EPA that they intended to responsibly recycle CRTs at facilities in Brazil, Canada, Korea, Malaysia and Mexico.” See AUGUST 2008 GAO REPORT, *supra* note 2, at 7 n.11.

²³⁷ See *infra* Table 1. Average exports to Canada were 1990 out of 2126, which is 93.6% of all exports.

²³⁸ EPA also provided Acknowledgments of Consent provided from the period 1/2/2010–7/29/2010. All of the 245 Acknowledgments of Consent involved shipments to Canada. Information available from author.

²³⁹ See *infra* Table 2.

²⁴⁰ See *infra* Tables 1, 2; Email from Eva Kreisler, U.S. Env'tl. Prot. Agency, Office of Int'l Enforcement Compliance Div., to Jeffrey M. Gaba, Professor of Law, Dedman Sch. of Law (Dec. 7, 2010) (on file with author).

TABLE 1: SUMMARY OF NOTICES OF INTENT*

Waste Stream & Notices Workload by Calendar Year

Waste Streams (WS) / Notices

9/23/11

From	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL	AVG
Canada	2,650 686	2,170 682	1,597 784	1,530 548	1,735 519	1,832 513	1,702 444	1,679 416	1,534 387	1,023 358	776 360	1,273 362	2,625 463	3,758 567	3,370 530	29,854 7,619	1,990 508
Mexico	5 5	24 24	53 53	5 5	15 15	20 20	16 16	20 20	19 19	29 29	13 13	24 17	6 6	30 30	37 37	316 309	21 21
Taiwan¹		18 18	119 119	153 153	169 169	121 121	44 44	21 21	21 21	17 15	13 13	12 12	10 10	5 5	4 4	727 725	52 52
OECD²	165 165	135 135	177 177	122 122	28 28	17 17	18 18	13 13	14 14	13 13	13 13	20 20	15 15	33 33	28 28	811 811	54 54
Malaysia³		2 2	23 23	11 11	11 11	15 15	11 11	8 8	4 4	2 2	1 1	11 10	5 5	5 5	15 15	124 123	9 9
Costa Rica⁴				4 4	4 4	0 0	9 9	0 0	0 0	14 3	0 0	4 3	0 0	0 0	0 0	35 23	3 2
Philippines⁵								0 0	1 1	10 3	2 2	1 1	0 0	3 3	1 1	18 11	2 1
Total WS	2,820 856	2,349 861	1,969 1,156	1,825 843	1,962 746	2,005 686	1,800 542	1,741 478	1,593 446	1,108 423	818 402	1,345 425	2,661 499	3,834 643	4,055 615	31,885 9,621	2,126 641

* Data as provided by EPA, see *supra* note 240¹ Because shipments under notices from Taiwan are not subject to the limit of one year (or other constraints) typical of bilateral agreements, notices are usually filed less often than annually² Includes all OECD countries except Canada and Mexico, which have bilateral agreements with the United States³ Pursuant to Malaysia-U.S. bilateral agreement effective in 1996⁴ Pursuant to Costa Rica-U.S. bilateral agreement effective in 1997⁵ Pursuant to Philippines-U.S. bilateral agreement effective in 2001

Exports

To	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL	AVG
Canada	2,144	2,709	3,333	3,580	4,856	6,293	5,826	6,931	6,616	6,044	5,393	7,553	8,817	8,545	10,179	88,819	5,921
	580	720	675	768	772	845	837	867	686	677	587	526	658	551	677	10,426	695
Mexico	30	22	27	28	35	23	22	22	22	22	37	34	24	24	25	397	26
	30	22	27	28	28	23	22	22	22	22	26	24	24	24	25	369	25
OECD	30	12	10	23	17	36	34	21	16	19	17	27	23	24	29	338	23
	28	12	9	10	16	36	34	21	16	19	17	27	23	23	29	345	23
Total WS	2,204	2,743	3,370	3,631	4,908	6,352	5,882	6,974	6,654	6,085	5,447	7,614	8,864	8,593	10,233	89,554	5,970
Total Notices	638	754	711	806	816	904	893	910	724	718	630	577	705	623	731	11,140	743

Cathode Ray Tube Exports (NOTE: For CRT there is one WS per Notice)

To	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL	AVG
Canada																12	12
																12	12
Mexico																17	17
																17	17
South Korea																3	3
																3	3
Costa Rica																1	1
																1	1
Malaysia																1	1
																1	1
Indonesia																1	1
																1	1
Total WS																35	35
Total Notices																35	35

Imports + Exports (Including CRT)—Combined Totals

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL	AVG
Total WS	5,024	5,092	5,339	5,456	6,870	8,357	7,682	8,715	8,247	7,193	6,265	8,959	11,525	12,427	14,323	121,474	8,131
Total Notices	1,494	1,615	1,867	1,649	1,562	1,590	1,435	1,388	1,170	1,141	1,032	1,002	1,204	1,266	1,381	20,796	1,419

TABLE 2: SUMMARY OF ANNUAL REPORTS**

Summary Hazardous Waste Export Data from OECA Annual Exporter Reports

Receiving Country	2001 (note 1)			2002 (note 1)			2003 (note 2)			2004 (note 2)		
	No. of Exporters	No. of Shipments	Tons Shipped	No. of Exporters	No. of Shipments	Tons Shipped	No. of Exporters	No. of Shipments	Tons Shipped	No. of Exporters	No. of Shipments	Tons Shipped
Asia:												
Korea	0	0	0	1	341	6,975	1	348	7,017	1	574	7,017
Japan	0	0	0	0	0	0	0	0	0	0	0	0
Totals for Asia:		0	0		341	6,975		348	7,017		574	7,017
Europe:												
Belgium	0	0	0	1	7	122	3	9	125	0	0	0
Finland	0	0	0	0	0	0	0	0	0	0	0	0
France	0	0	0	1	13	259	1	14	272	1	3	61
Germany	1	34	372	1	2	1	1	29	379	2	2	2,155
The Netherlands	2	30	395	3	37	621	2	25	399	0	0	0
Norway	1	1	390	0	0	0	1	30	356	1	69	1,203
Sweden	0	0	0	0	0	0	1	13	148	0	0	0
Switzerland	0	0	0	0	0	0	0	0	0	0	0	0
Totals for Europe:		65	1,157		59	1,003		120	1,679		74	3,419
North America:												
Canada	305	28,191	330,407	239	18,048	267,703	258	16,618	263,065	228	19,680	299,889
Mexico	12	836	78,059	15	1,459	143,376	14	1,382	137,510	13	1,271	135,869
Totals for North America:		29,027	408,465		19,507	411,078		18,000	400,576		20,951	435,758
Total U.S. exports:		29,092	409,623		19,907	419,057		18,468	409,271		21,599	446,194
Note 1:	Two entries from one exporter did not include any destination information, and so are not included in the summaries.											
Note 2:	Four entries from two exporters in this calendar year did not include any destination information, and so are not included in the summaries.											
Note 3:	Some exported amounts were reported in units other than tons. For amounts reported in liquid units (e.g., liters, gallons), a density equal to water was assumed to convert to tons. Specific conversion factors used are listed below.											

** Data as provided by EPA, see *supra* note 240.

2005			2006			2007			2008			2009		
No. of Exporters	No. of Shipments	Tons Shipped	No. of Exporters	No. of Shipments	Tons Shipped	No. of Exporters	No. of Shipments	Tons Shipped	No. of Exporters	No. of Shipments	Tons Shipped	No. of Exporters	No. of Shipments	Tons Shipped
1	340	12,102	0	0	0	8	1,395	31,944	7	1,150	23,824	8	717	15,555
0	0	0	0	0	0	0	0	0	0	0	0	1	6	120
	340	12,102		0	0		1,395	31,944		1,150	23,824		723	15,675
1	2	18	2	53	698	2	27	686	2	32	558	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	7	116	0	0	0	1	2	13	1	1	7	0	0	0
1	1	31	6	19	254	4	21	135	3	42	129	2	12	75
0	0	0	0	0	0	2	13	919	2	4	59	1	55	1,103
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	165		72	952		63	1,753		79	753		67	1,179
204	15,834	230,330	208	15,084	228,558	203	18,892	279,361	188	20,918	331,203	174	14,092	240,804
8	936	89,214	16	1,723	161,026	15	1,556	150,088	16	1,543	143,547	10	1,077	48,182
	16,770	319,545		16,807	389,583		20,448	429,450		22,461	474,750		15,169	288,986
	17,120	331,811		16,879	390,535		21,906	463,147		23,690	499,328		15,959	305,840

Note 3 (Continued):

CU-YDS to Liters	Liters to Kg	Kg to TONS	GRAMS to TONS	GALS to Liters	LBS to TONS	METRIC TON to TON	DRUMS TO GALS
764.5549	1	.001102	1.11.E-06	3.785412	0.0005	1.102311	55
Note 4:	Total number of exporters is not additive, since a facility may export waste to more than one of the listed receiving countries.						
Note 5:	Table contains rounding error.						

TABLE 3: EXPORT NOTICES FOR SPENT LEAD-ACID BATTERIES

Country of Import	Total Number of Notices
Canada	685
Spain	3
Mexico	16
Korea	49
Peru	1
Philippines	1
Total:	755

Limited data was also provided regarding the export of SLABs. The export of SLABs for recycling was not regulated until 2010, and therefore Notices of Intent have only been received for a portion of this year.²⁴¹ The information indicates that Canada received by far the largest number of Notices of Intent involving exports, but that the second largest number involved shipments to Korea.²⁴² Note that exporters sent two Notices of Intent for export to the non-OECD countries of Peru and the Philippines.²⁴³ No information was available as to whether either country gave consent. Since both of these countries have ratified the Basel Convention,²⁴⁴ a decision to consent to these exports from the United States should violate their obligations under Basel.

Information was supplied on the export of CRTs, but this information is problematic. EPA's conditional exclusion for CRTs became effective in January 2007,²⁴⁵ but, prior to this exclusion, waste CRTs exported for reclamation should have been subject to the Subpart E notice and consent requirements. It does not appear, however, that any of the Subpart E Notices of Intent summarized by EPA for the period 1995–2009 involved exports of CRTs. A 2008 GAO Report states that “as of June 2008,” forty-seven Notices of Intent to export CRTs had been submitted.²⁴⁶ In response to the FOIA request for this article, EPA provided information that shows

²⁴¹ See *supra* notes 167–68 and accompanying text.

²⁴² See *supra* Table 3.

²⁴³ See *id.*

²⁴⁴ *Basel Convention's Ratifications*, *supra* note 3.

²⁴⁵ See *supra* notes 187–189 and accompanying text.

²⁴⁶ SEPTEMBER 2008 GAO REPORT, *supra* note 2, at 3 n.3, 10 n.9. These notices were for exports to Brazil, Canada, Korea, Malaysia, and Mexico. *Id.*

no Notices of Intent submitted for export of CRTs prior to 2009. The information for the year 2009 indicates that thirty-five Notices of Intent to export CRTs were submitted.²⁴⁷ These included exports to non-OECD members including Costa Rica, Malaysia, and Indonesia.²⁴⁸ These three countries have also ratified Basel,²⁴⁹ but since they do not have an appropriate bilateral agreement on exports of hazardous waste from the United States, acceptance of the CRT shipments should also violate their obligations under Basel.

EPA promulgated its “reclamation exclusion” in 2008, but EPA has stated that it has not received any Notices of Intent under this provision.²⁵⁰

B. Compliance with EPA Export Requirements: Are Exporters of RCRA-Regulated Materials Complying with EPA Regulations?

There are, for obvious reasons, little data on the amounts of hazardous waste that are being exported in violation of EPA export requirements.²⁵¹ The U.S. hazardous waste system, both domestic and international, essentially relies on self-reporting: generators are responsible for determining whether their material meets the definition of hazardous waste and is subject to export controls.²⁵²

In a series of reports, the Government Accountability Office (“GAO”) has been critical of EPA enforcement efforts with respect to exports of

²⁴⁷ See *supra* Table 1.

²⁴⁸ The United States has bilateral agreements authorizing imports of hazardous waste from Malaysia and the Philippines. See REGULATIONS GOVERNING HAZARDOUS WASTE GENERATORS, *supra* note 9, at III-49. EPA has no agreements authorizing the exports of hazardous waste to any non-OECD country.

²⁴⁹ *Basel Convention’s Ratifications*, *supra* note 3.

²⁵⁰ Email from Eva Kreisler, U.S. Env’tl. Prot. Agency, Office of Int’l Enforcement Compliance Div., to Jeffrey M. Gaba, Professor of Law, Dedman Sch. of Law (Oct. 26, 2010) (on file with author).

²⁵¹ As one knowledgeable observer stated:

It is difficult to estimate accurately the amount of such unreported exports because some exporters may give notice of intent to export but ultimately decide not to export; however, some estimates indicate that waste export trade is as much as eight times more than reported, not including smugglers who elude customs.

F. James Handley, *Hazardous Waste Exports: A Leak in the System of International Legal Controls*, [1989] 19 ENVTL. L. REP. (ENVTL. L. INST.) 10,171, 10,174–75. “According to one EPA official, ‘many exporters don’t bother to give notice because there isn’t any enforcement.’” *Id.* at 10,175.

²⁵² See 40 C.F.R. § 262.11 (2010).

CRTs.²⁵³ The GAO found EPA's enforcement "lacking"²⁵⁴ and reported that EPA had no plans to develop any enforcement strategies to assure compliance.²⁵⁵ The Director of EPA's Waste and Chemical Enforcement Division was quoted as stating that inspections to determine compliance with environmental laws are "labor intensive,"²⁵⁶ and EPA has stated that it largely relies on "tips and complaints" to identify violations of the CRT regulations.²⁵⁷ Although improved coordination with Customs and Border Control agents has been suggested,²⁵⁸ improved enforcement of EPA's existing requirements through government inspection does seem Sisyphean.

The most significant problem is how to identify hazardous wastes subject to RCRA export requirements that are destined for non-OECD countries.²⁵⁹ The GAO identified considerable concern with the potential illegal export of CRTs to non-OECD Asian countries, including China and India.²⁶⁰ It was GAO efforts that led to EPA's only prosecution for violation of regulations for an export to Hong Kong.²⁶¹ Unless it is clear that particular types of materials, such as SLABs, are subject to EPA export controls, it remains difficult, if not impossible, to effectively police exports at the border.

Additionally, enforcement can be difficult since classification as a hazardous waste may depend on the intended use in the receiving country. A "secondary material" that is being reused is not a solid; the same material if recycled is a solid waste.²⁶² This is particularly an issue with used CRTs. If CRTs are exported for reuse they are not subject to notice and

²⁵³ See GOV'T ACCOUNTABILITY OFFICE, GAO-10-626, ELECTRONIC WASTE: CONSIDERATIONS FOR PROMOTING ENVIRONMENTALLY SOUND REUSE AND RECYCLING 8–10 (2010); SEPTEMBER 2008 GAO REPORT, *supra* note 2, at 12–14; AUGUST 2008 GAO REPORT, *supra* note 2, at cover page; GOV'T ACCOUNTABILITY OFFICE, GAO-06-47, ELECTRONIC WASTE: STRENGTHENING THE ROLE OF THE FEDERAL GOVERNMENT IN ENCOURAGING RECYCLING AND REUSE 23–24 (2005); GOV'T ACCOUNTABILITY OFFICE, GAO/PEMD-93-24, HAZARDOUS WASTE EXPORTS: DATA QUALITY AND COLLECTION PROBLEMS WEAKEN EPA ENFORCEMENT ACTIVITIES 8–9, 12–13 (1993).

²⁵⁴ SEPTEMBER 2008 GAO REPORT, *supra* note 2, at cover page, 12–14.

²⁵⁵ *Id.* at 14.

²⁵⁶ AUGUST 2008 GAO REPORT, *supra* note 2, at 29.

²⁵⁷ *Id.*

²⁵⁸ SEPTEMBER 2008 GAO REPORT, *supra* note 2, at cover page.

²⁵⁹ The GAO engaged in "sting" operations to identify persons willing to export CRTs in apparent violation of EPA regulations. AUGUST 2008 GAO REPORT, *supra* note 2, at 23–24.

²⁶⁰ See *id.* at cover page.

²⁶¹ See generally EarthECycle, LLC, EPA Docket No. RCRA-HQ-2009-0001 (2009) (amended complaint, compliance order and notice of opportunity for hearing).

²⁶² See 40 C.F.R. § 261.2(a), (c) (2010).

consent requirements; if they are exported for recycling they are.²⁶³ At the point of export, however, there is no way of identifying whether or not a CRT is being exported for recycling. To address the enforcement problem raised by this situation, EPA subjects exporters of used CRTs exported for reuse to submit a one-time notice to allow enforcers to “verify” that the CRTs are exported for reuse.²⁶⁴

C. Are E-Wastes Being Properly Identified as Hazardous Wastes?

Much of the concern on exports of hazardous waste has focused on the export of electronic “e-wastes” for recycling to non-OECD countries, including China. EPA’s regulations directly address the issue of e-wastes through two provisions. First, through the “conditional exclusion” of CRTs, EPA has imposed notice and consent requirements on the export of used CRTs for recycling.²⁶⁵ Second, EPA has excluded the export of printed circuit boards from export controls.²⁶⁶ Any other hazardous e-wastes, including computers, keyboards, cell phones, even computer “mouses,” should be subject to the Subpart E or H export requirements.

EPA has, however, done a remarkably poor job in clarifying the hazardous waste status of most other e-wastes. This involves two questions. When is used electronic equipment considered to be “solid waste”? What e-waste is classified as a “hazardous” solid waste?

EPA has established policies that give some guidance on when used electronic equipment will be classified as a “solid waste.” In general, it appears that electronic equipment sent for “reuse” is not a waste; e-waste

²⁶³ See *supra* notes 182–84 and accompanying text.

²⁶⁴ EPA describes its rationale as follows:

The Agency notes that intact CRTs exported for reuse are identical in appearance to those exported for recycling. Consequently, to help ensure that the intact CRTs are actually reused abroad, we are requiring persons who export used, intact CRTs for reuse to submit a one-time notification to the Regional Administrator with contact information and a statement that the notifier plans to export used, intact CRTs for reuse. These notifications will allow regulatory authorities to contact the notifier, when appropriate, to ask for verification that the CRTs are exported for reuse instead of recycling or disposal.

Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. 42,928, 42,939 (July 28, 2006).

²⁶⁵ See *supra* note 187 and accompanying text.

²⁶⁶ See *supra* notes 203–09 and accompanying text.

sent for recycling or disposal would be a waste.²⁶⁷ This, of course, creates the problem that identifying exported electronic equipment as e-wastes requires a determination of whether they are being exported for reuse or recycling. For used computers, there may be no obvious visual means to determine their intended future use.

The other major problem is determining whether e-wastes constitute "hazardous wastes." No e-waste is a "listed" hazardous waste; e-wastes would be hazardous only if they exhibit a hazard characteristic. EPA apparently has taken the position that no e-waste, other than CRTs and circuit boards, exhibits a hazard characteristic. In 2008 GAO reported that "EPA has stated repeatedly, however, that to its knowledge, other types of electronic equipment do not fail its threshold toxicity test and are thus are not currently regulated."²⁶⁸

EPA's statement is baffling. The basis for EPA's conclusion that CRTs exhibit the toxicity characteristic is data from certain studies contained in the administrative record for the CRT rule.²⁶⁹ These studies themselves indicate that a wide variety of electronic components, in addition to

²⁶⁷ In the preamble to its CRT conditional exclusion, EPA described its position on determining the waste status of other electronic materials. It stated:

With respect to non-CRT electronic materials, the Agency uses the same line of reasoning that is outlined above for CRTs to determine that the materials are not solid wastes if they are reused or only require repair and are not sent for processing or reclamation. That is, if an original user sends electronic materials to a reseller because he lacks the specialized knowledge needed to determine whether the units can be reused as products, the original user is not a RCRA generator. The materials are not considered solid wastes until a decision is made to recycle them in other ways or dispose of them.

Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. at 42,930.

²⁶⁸ See AUGUST 2008 GAO REPORT, *supra* note 2, at 2 n.2. In the preamble to its CRT conditional exclusion proposal, EPA wrote that it "is studying certain non-CRT electronic materials to determine whether they consistently exhibit a characteristic of hazardous waste. However, we are not currently aware of any non-CRT computer components or electronic products that would generally be hazardous wastes." Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes and Mercury-Containing Equipment, 67 Fed. Reg. 40,508, 40,512 (proposed June 12, 2002).

²⁶⁹ See generally TIMOTHY G. TOWNSEND ET AL., U.S. ENVTL. PROT. AGENCY, EPA-HQ-RCRA-2004-0010-0006, RCRA TOXICITY CHARACTERIZATION OF COMPUTER CPUs AND OTHER DISCARDED ELECTRONIC DEVICES (2004), available at <http://www.ees.ufl.edu/homepp/townsend/Research/ElectronicLeaching/default.asp> [hereinafter RCRA TOXICITY CHARACTERIZATION]. This report discusses the complexity of applying the standard TCLP to complex electronic equipment and presents results using several extraction methodologies. See generally *id.*

CRTs, may exhibit the toxicity characteristic for lead.²⁷⁰ Indeed, there is as much information to indicate that e-wastes, including whole computers, computer keyboards, and cell phones, can exhibit the same toxicity characteristic as CRTs.²⁷¹ Yet EPA appears to assume that CRTs are the only e-wastes that would be subject to existing export controls.²⁷²

Thus, back to compliance issues. EPA regulations place the responsibility on the generator to determine whether a solid waste exhibits a hazardous characteristic.²⁷³ Exporters should not be able to violate requirements for hazardous waste exports because they are uncertain about the status of their wastes. Since there is reason to believe that much of the electronic waste, other than CRTs, being exported for recycling is subject to EPA export requirements, this is a compliance issue that EPA must address through regulation, guidance, and enforcement policies.²⁷⁴

V. EPA'S AUTHORITY TO REGULATE THE EXPORTS OF HAZARDOUS WASTE

Whatever the merits (or demerits) of EPA's implementation of its existing export regulations, there are significant questions about the scope of EPA's legal authority to regulate exports. Perhaps the most significant questions relate to the effect of international agreements on EPA's authority to regulate the export of hazardous waste. There are also questions as to whether EPA has authority to regulate exports more stringently than it now does.

A. *What is the Effect of International Agreements on EPA's Authority to Regulate the Export of Hazardous Waste?*

EPA clearly has authority to regulate the export of hazardous wastes. Section 3017(a)(1) establishes a requirement that exporters

²⁷⁰ *Id.* at 4-1.

²⁷¹ *Id.*; see also Yadong Li et al., *TCLP Heavy Metal Leaching of Personal Computer Components*, J. ENVTL. ENGINEERING, Apr. 2006, at 497, 497; TIMOTHY G. TOWNSEND ET AL., STATE UNIV. SYS. OF FLA., ASSESSMENT OF TRUE IMPACTS OF E-WASTE DISPOSAL IN FLORIDA (2003), available at <http://www.bvsde.paho.org/bvsacd/cd48/wasteflorida.pdf>.

²⁷² These hazardous e-wastes would not be subject to the "scrap metal" exclusion which applies to whole circuit boards nor to the "shredded circuit board" conditional exclusion. See *supra* notes 203-209 and accompanying text. E-wastes might not be subject to export controls if generated as excluded "household hazardous waste" or if generated by "conditional exempt small quantity generators." If commingled with other hazardous wastes, even these e-wastes would be subject to universal waste export rules. See *supra* notes 203-09 and accompanying text.

²⁷³ See 40 C.F.R. § 262.11 (2010).

²⁷⁴ See *infra* notes 437-47 and accompanying text.

comply with a congressionally defined “base” notice and consent regime, and section 3017(b) delegates authority to EPA to promulgate domestic regulations to implement these requirements.²⁷⁵ EPA regulations that apply to countries with which the United States has no export agreements fall exclusively under the authority of this base program.²⁷⁶

But section 3017 does more than require compliance with a congressionally defined set of notice and consent requirements; in those cases where the United States has entered into an international agreement, section 3017(a)(2) requires that exports “conform” to that agreement rather than the base program.²⁷⁷ EPA has also been delegated authority to adopt regulations implementing the requirements of an applicable international agreement.²⁷⁸ Section 3017 thus apparently both requires compliance with international agreements and confers authority on EPA to adopt regulations implementing these agreements.

If section 3017 purported to implement international agreements in existence at the time of its adoption, there would be little doubt that this would be an appropriate mechanism by which Congress could ensure that such agreements were given domestic effect.²⁷⁹ Section 3017 was, however, adopted as part of the Hazardous and Solid Waste Amendments of 1984,²⁸⁰

²⁷⁵ RCRA § 3017(a)(1), (b) (codified as amended at 42 U.S.C. § 6938(a)(1), (b) (2006)). Section 3017(b) specifically requires EPA to promulgate regulations “necessary to implement this section.” *Id.* at § 3017(b) (codified as amended at 42 U.S.C. § 6938(b) (2006)). Additionally, section 2002(a)(1) grants the Administrator the authority to adopt “such regulations as are necessary to carry out his functions” under RCRA. *Id.* § 2002(a)(1) (codified as amended at 42 U.S.C. § 6912(a)(1) (2006)).

²⁷⁶ See *supra* note 36 and accompanying text. Notice that EPA’s regulations do not fall under “treaty based” or “non-treaty based” authority. The Subpart H regulations apply to exports subject to the OECD Decision. See *supra* note 112 and accompanying text. The Subpart E regulations, however, apply not only to all exports of hazardous waste not subject to international agreements, but also to all exports to Canada and Mexico governed by the bilateral treaties. See *supra* notes 84–87 and accompanying text.

²⁷⁷ RCRA § 3017(a)(2) (codified as amended at 42 U.S.C. § 6938(a)(2) (2006)). The requirement to conform to an international agreement operates in lieu of the base program. See *supra* note 37. In addition to defining the requirements of Subtitle C to require that exports conform to an international agreement, Congress has also expressly made it a separate crime to export in a manner that is not “in conformance” with an applicable international agreement. RCRA § 3008(d)(6) (codified as amended at 42 U.S.C. § 6928(d)(6) (2006)).

²⁷⁸ Section 3017(b) requires EPA to adopt regulations “to implement this section,” and this presumably extends to a requirement to promulgate regulations governing the prohibition in section 3017(a)(2) on exports unless “in conformance” with appropriate international agreements. RCRA § 3017(a)(2), (b) (codified as amended at 42 U.S.C. § 6938(a)(2), (b) (2006)).

²⁷⁹ See *infra* note 298 and accompanying text.

²⁸⁰ RCRA § 3017 (codified as amended at 42 U.S.C. § 6938 (2006)).

and in 1984 there were no applicable international agreements in existence. Thus, through section 3017(a)(2) Congress purported to “incorporate by reference” the requirements of future international agreements.²⁸¹

Congress’s apparent attempt to incorporate future international agreements raises a series of questions:

- Do the bilateral agreements with Canada and Mexico or the OECD Decision create domestic legal obligations in the absence of additional implementing legislation or regulations?
- Do these international agreements provide authority to EPA to adopt implementing regulations that would otherwise not be authorized under RCRA in the absence of the agreements?
- Do these agreements require EPA to exercise its otherwise existing authority to implement their requirements?
- If the Basel Convention were ratified, could EPA implement its requirements without additional statutory authority?

These questions involve serious, and largely unresolved, issues of constitutional, administrative, and international law. The answers to these questions have both substantive and procedural implications for EPA’s regulatory authority to implement a program for the control of exports of hazardous waste.

1. The Legal Effect of the Bilateral Agreements with Canada and Mexico

The nature of the agreements between the United States and Canada and the United States and Mexico raise a threshold issue about their domestic effect. The Constitution provides that “all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land, and the Judges in every State shall be bound thereby,”²⁸² and, under the Constitution, treaties require ratification by a vote of two-thirds of the Senate.²⁸³ Neither the Mexico nor

²⁸¹ RCRA § 3017(a)(2) (codified as amended at 42 U.S.C. § 3968(a)(2) (2006)).

²⁸² U.S. CONST. art. VI, cl. 2.

²⁸³ *Id.* art II, § 2.

Canada agreements are “treaties”; neither was ratified by the Senate; indeed, both agreements were executed, “on behalf of the Government of the United States,” by the Administrator of the EPA.²⁸⁴ Both, however, purport to create binding obligations between the countries.

The Mexico and Canada Agreements would be classified as “international executive agreements.”²⁸⁵ “International executive agreements” of this sort do not have an express constitutional status, but there is wide consensus that they have the status, at least within the realm of international law, of “treaties” that have been ratified pursuant to the constitutional mechanism of Senate ratification.²⁸⁶ Such is the view of the Department of State, and there is authority that such agreements can preempt state law requirements and govern private claims against foreign governments.²⁸⁷

²⁸⁴ Canada/U.S. Agreement, *supra* note 49. The 1986 Canada/U.S. Agreement was signed by Lee Thomas, then Administrator of EPA. *Lee M. Thomas*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/history/administrators/thomas.html> (last visited Nov. 8, 2011). The original La Paz Agreement was signed by President Reagan, La Paz Agreement, *supra* note 55, but Annex III that governs exports was signed by Administrator Thomas. Mexico/U.S. Agreement, *supra* note 55.

²⁸⁵ See 3 VED P. NANDA & DAVID K. PANSIUS, LITIGATION OF INTERNATIONAL DISPUTES IN U.S. COURTS § 14:11. The Restatement (Third) of Foreign Relations Law section 303 describes the bases on which the President may execute an “International Agreement.” These include through treaty, with congressional authorization or approval, or by the President’s own authority that falls under the President’s independent constitutional power. RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 303 (1987) [hereinafter RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW]. There is considerable debate over the legitimacy of agreements concluded through Senate ratification (treaties) or by congressional authorization or approval (congressional-executive agreements). Congressional-executive agreements have been used to bypass the obstacle of Senate ratification. See generally Mark Tushnet, *Constitutional Workarounds*, 87 TEX. L. REV. 1499 (2009); see also Myres S. McDougal & Asher Lans, *Treaties and Congressional-Executive or Presidential Agreements: Interchangeable Instruments of National Policy: I*, 54 YALE L.J. 181 (1945). The operation of section 3017(a)(2) is distinguishable from a congressional-executive agreement in that the congressional authorization is not for a specific agreement, but is essentially a blank check to authorize and implement all future treaties, the content of which is unknown to the Congress that adopted RCRA section 3017(a)(2).

²⁸⁶ See RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW, *supra* note 285, § 111 cmt. d (international agreements of the United States other than treaties, see *id.* § 303, and customary international law, while not mentioned explicitly in the Supremacy Clause, are also federal law and as such are supreme over state law). See generally Donald P. Oulton, *A Review of Executive Agreements from the Standpoint of Current Case Law*, 23 SUFFOLK TRANSNAT’L L. REV. 101 (1999); David J. Kuchenbecker, *Agency-Level Executive Agreements: A New Era in U.S. Treaty Practice*, 18 COLUM. J. TRANSNAT’L L. 1 (1979).

²⁸⁷ See *Weinberger v. Rossi*, 456 U.S. 25 (1982) (describing executive agreements as having the status of treaties in certain contexts); *Dames & Moore v. Regan*, 453 U.S. 654 (1981) (recognizing agreement settling claims with Iran); *United States v. Belmont*, 301 U.S.

Certainly international executive agreements, entered into without Senate ratification as a treaty, have been given domestic effect when implemented by adoption of implementing legislation.²⁸⁸ Notwithstanding a rather “black letter” view that international agreements have the status of treaties, the full scope of the domestic effects of an international executive agreement remains uncertain.²⁸⁹

For our purposes, however, assuming that the Canada and Mexico Agreements have the same domestic status as treaties, the question remains as to whether they directly apply to private parties or confer additional domestic authority on EPA.

As a matter of international law, treaties create obligations between governments, but it is an established element of U.S. constitutional law that treaties are effective as federal law and may create domestic obligations.²⁹⁰ This domestic effect can arise in two ways. First, treaties may be “self-executing” and create enforceable obligations without other implementing authority.²⁹¹ Determination of whether a treaty is to be construed as “self-executing” and therefore immediately effective as a matter of domestic law involves a question of interpretation based on the language of the treaty and the intention of the parties.²⁹² As one court put it, “[t]he self-execution question is perhaps one of the most confounding in treaty law.”²⁹³ Even if construed as “self-executing,” the Supreme Court has stated that there

324 (1937) (recognizing legitimacy of an international executive agreement through which the United States resolved claims with the Soviet Union); *see also* Kuchenbecker, *supra* note 286, at 13 (describing the evolution of the position of the Department of State on the status of international executive agreements).

²⁸⁸ The North American Free Trade Agreement (“NAFTA”), for example, was negotiated and executed by the President and approved by legislation, not Senate ratification. *See* Bruce Ackerman & David Golove, *Is NAFTA Constitutional?*, 108 HARV. L. REV. 799, 802–03 (1995).

²⁸⁹ RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW, *supra* note 285, § 303 confines pure executive agreements to areas that fall directly within the President’s independent constitutional power. Courts have upheld the legitimacy of international executive agreements in areas, such as negotiation of claims between governments, that seem to fall within the President’s authority to conduct foreign affairs. *See id.*

²⁹⁰ U.S. CONST. art. VI. Article VI provides that treaties made under the authority of the United States are “the supreme Law of the Land.” *Id.*; *see* *Medellin v. Texas*, 552 U.S. 491 (2008); *Foster v. Neilson*, 27 U.S. (2 Pet.) 253, 314 (1829); *see also* RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW, *supra* note 285, § 111.

²⁹¹ *See Medellin*, 552 U.S. at 504–05.

²⁹² *See United States v. Postal*, 589 F.2d 862 (5th Cir. 1979); RESTATEMENT (SECOND) FOREIGN RELATIONS LAW OF THE UNITED STATES § 154 (1965).

²⁹³ *Postal*, 589 F.2d at 876.

is a “background presumption” that treaties do not create private enforceable rights.²⁹⁴

The second basis by which treaties may gain domestic legal effect is through adoption of domestic legislation conferring authority to implement the treaty.²⁹⁵ Although a treaty can become effective through Presidential agreement and consent by two-thirds of the Senate,²⁹⁶ any domestic implementing legislation would be subject to the full domestic law-making process including bicameral agreement of both chambers of Congress and presentment to the President.²⁹⁷ In *Missouri v. Holland*, for example, the Court considered the scope of constitutional authority to enter a treaty governing protection of migratory birds, but the treaty itself was given domestic effect through federal legislation specifically implementing its requirements.²⁹⁸

Thus, an immediate question arises as to whether the Canada or Mexico Agreements are “self-executing.” If self-executing, there would be little doubt that EPA would have the authority to implement their requirements through regulations. It is, however, unlikely that these agreements could be construed as “self-executing” based on their own terms and the understanding of the parties. Neither agreement expressly provides that it is to be self-executing; both agreements refer to subsequent adoption of domestic legislation or enforcement through domestic laws or regulations.²⁹⁹

²⁹⁴ *Medellin*, 552 U.S. at 506 n.3.

²⁹⁵ *See id.* at 505 (quoting *Igartúa-De La Rosa v. United States*, 417 F.3d 145, 150 (2005) (en banc)); *see also* John F. Coyle, *Incorporative Statutes and the Borrowed Treaty Rule*, 50 VA. J. INT'L L. 655 (2010).

²⁹⁶ U.S. CONST. art. II, § 2, cl. 2.

²⁹⁷ *See Medellin*, 552 U.S. 491.

²⁹⁸ *Missouri v. Holland*, 252 U.S. 416 (1920).

²⁹⁹ The Canada/U.S. Agreement directs its obligations to the actions of the governments and provides that

[t]o the extent any implementing regulations are necessary to comply with this Agreement, the Parties will act expeditiously to issue such regulations consistent with domestic law. Pending such issuance, the Parties will make best efforts to provide notification in accordance with this Agreement where current regulatory authority is insufficient. The Parties will provide each other with a diplomatic note upon the issuance and the coming into effect of any such regulations.

Canada/U.S. Agreement, *supra* note 49, at art. 5.3. Canada and the United States amended the Agreement in 1992 to apply to municipal solid waste, but the United States apparently has taken the position that this amendment cannot be implemented without subsequent domestic legislation. *See infra* note 300. The Mexico/U.S. Agreement provides that “[e]ach Party shall ensure, to the extent practicable, that its domestic laws and regulations are enforced with respect to transboundary shipments of hazardous waste.” Mexico/U.S. Agreement, *supra* note 55, at art. II.2. The Agreement also imposes liability for exports in violation of the Agreement, but provides that this is to be enforced “when applicable

It is the United States position, for example, that the provisions of the Canada/U.S. Agreement addressing “municipal solid waste” cannot be implemented without additional legislative action.³⁰⁰ If not “self-executing,” the agreements themselves would, thus, not create enforceable obligations on exporters. As significantly, if not self-executing, the agreements would not themselves confer authority on EPA to adopt implementing regulations not otherwise authorized by RCRA.

If these agreements are not self-executing, what is the effect of the provisions of section 3017 that require exports to “conform” to future agreements? On the one hand, the provisions of section 3017(a)(2) may simply require EPA to exercise its existing “base” authority to establish regulations that conform to the requirements of any future agreements.³⁰¹ In this view, section 3017(a)(2) does not broaden EPA’s authority nor establish obligations on exporters. It is simply a directive to EPA on how it should use its existing authority.

But there are serious problems with this construction. First, section 3017 purports affirmatively to prohibit exports that do not conform to international agreements and section 3008(d)(6) makes such action a crime.³⁰² Thus, the language of RCRA does more than direct EPA to implement regulations, the violation of which would constitute a civil or criminal violation; it directly imposes requirements and sanctions based on compliance with the agreements themselves. Second, if section 3017(a)(2) merely directed EPA to exercise its existing authority to implement international agreements, then the language would be superfluous. Any properly executed international agreements would, at a minimum, require the U.S. government to exercise its existing authority to implement their requirements.

The other possible reading is that section 3017 gives future international agreements immediate domestic effect and confers authority on EPA to implement their requirements. Thus, EPA could adopt regulations implementing the specific requirements of the Mexico and Canada Agreements

in accordance with its national laws and regulations.” *Id.* art. XIV.2. The Mexico/U.S. Agreement, however, has perhaps a stronger claim to being self-executing; it provides that the “[t]ransboundary shipments of hazardous waste and hazardous substances across the common border of the Parties shall be governed by the terms of this Annex and their domestic laws and regulations.” *Id.* art. II.1.

³⁰⁰ See, e.g., U.S. ENVTL. PROT. AGENCY, EPA530-K-06-004, WASTE SHIPMENTS BETWEEN THE UNITED STATES AND CANADA 7 (2007), available at <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=P10019VS.txt> (explaining that provisions of bilateral agreement dealing with municipal solid waste cannot be implemented until domestic legislation is passed).

³⁰¹ RCRA § 3017(a)(2) (codified as amended at 42 U.S.C. § 6938(a)(2) (2006)).

³⁰² RCRA §§ 3008(d)(6), 3017 (codified as amended at 42 U.S.C. §§ 6928(d)(6), 6938 (2006)).

based on section 3017(a)(2) and section 3017(b). That is the most straightforward reading of the language. Congress has not equivocated; compliance with future international agreements is an obligation under RCRA and EPA must implement those obligations through its regulations.³⁰³

But there are serious constitutional problems in construing section 3017 to confer domestic effect on the Mexico and Canada agreements. As noted, section 3017 was adopted as part of the Hazardous and Solid Waste Amendments of 1984, two years *before* the United States entered the Mexico and Canada Agreements.³⁰⁴ To construe section 3017 to confer domestic effect on these (otherwise non-self-executing) agreements would mean that they have been given domestic effect without having gone through the full domestic law-making process. In other words, an earlier Congress will have delegated authority to the Executive (or to the Executive and the Senate in the case of formal Treaties) to make future domestically binding agreements without going through the constitutional legislative process.

The Supreme Court's formalistic treatment of the constitutional requirements for adoption of legislation suggests that such a construction of section 3017(a) would be unconstitutional. In decisions beginning with *Immigration and Nationalization Service v. Chadha*, the Supreme Court has rejected the authority of Congress to create mechanisms, such as legislative vetoes or line-item vetoes, that produce binding legislative decisions without satisfying the constitutional requirements of bicameral concurrence and presentment to the President necessary for the adoption of legislation.³⁰⁵ Construing section 3017(a) to incorporate subsequently enacted international agreements would thus endow these subsequent agreements with legislative effect without satisfying these formal requirements.³⁰⁶

³⁰³ Memorandum from Robert A. Burton, Assoc. Adm'r, Office of Fed. Procurement Policy & Edwin Piñero, Fed. Envtl. Exec., Office of Fed. Procurement Policy, to Fed. Agency Envtl. Execs. and Agency Senior Procurement Executives [sic] (Oct. 13, 2005), *available at* http://www.fedcenter.gov/_kd/Items/actions.cfm?action=Show&item_id=3144&destination=ShowItem.

³⁰⁴ Compare RCRA §3017(f) (codified as amended at 42 U.S.C. § 6938(f) (2006)) *with* Canada/U.S. Agreement, *supra* note 49.

³⁰⁵ *Immigration & Naturalization Serv. v. Chadha*, 462 U.S. 919 (1983) (rejecting use of legislative veto); *see* *Clinton v. New York*, 524 U.S. 417 (1998) (rejecting legislation authorizing use of line item veto by President); Harold H. Bruff, *Legislative Formality, Administrative Rationality*, 63 TEX. L. REV. 207, 212 (1984) (describing *Chadha* as rigidly formalist in requiring constitutional formalities for actions with "legislative effect").

³⁰⁶ This problem is not avoided by Congress having adopted the mechanism in a properly enacted legislation. The legislative veto provision at issue in *Chadha* had been adopted

Thus, there are strong reasons to question whether section 3017 of RCRA can give domestic legislative effect to international agreements not specifically contemplated by Congress when section 3017(a) was adopted. Construing section 3017 to confer authority on EPA to adopt regulations to implement a future, non-self-executing agreement would most starkly raise the constitutional issue of whether Congress can confer domestic rule-making authority to implement a treaty subsequently negotiated by the President and ratified by the Senate. The issue is perplexing and not yet resolved by the Supreme Court.

The analogy to the Supreme Court's treatment of legislative vetoes and line-item vetoes is not, however, perfect. Treaties and other international agreements stand on a different constitutional basis than legislation, and there is no doubt that the President and Senate, through ratification of a "self-executing" treaty, can create binding domestic obligations. There is also little doubt that at least some class of international "executive agreements" can have binding domestic effect without implementation through domestic legislation.³⁰⁷ Thus, the constitutional requirements of bicameralism and presentment are not required to make binding domestic law when the law arises through international agreement. Thus, if subsequent agreements, such as the Mexico and Canada Agreements, stand on the same constitutional footing as formal treaties and were construed as self-executing, the constitutional problems would be avoided.

But this raises a new issue: are the actions of a prior Congress relevant in construing a subsequent international agreement as self-executing? In other words, can section 3017 avoid constitutional problems by construing the provision, not independently to give international agreements domestic effect, but rather to serve as a basis for construing future agreements as self-executing? It seems unlikely that courts would use a provision adopted by Congress in 1984 as a basis for interpreting a subsequent treaty as self-executing. As "confounding" as the "self-executing" construction question may be, the interpretations in treaties on this issue generally focus on factors contemporaneous with ratification of the treaties and not on the actions of Congress taken decades before. If the future agreements are not themselves construed as self-executing (and thus enforceable

in legislation that had been enacted with bicameral adoption and presentment to the President. *See Chadha*, 462 U.S. 919. The Supreme Court rejected the proposition that "initial statutory authorizations" would not shield a subsequent legislative act taken without compliance with constitutional requirements. *See id.* at 987 (Court rejects contrary position of Justice White in dissent).

³⁰⁷ *See supra* note 286 and accompanying text.

without the need for subsequent regulations), we are back to the fundamental question of whether section 3017 can be read to confer authority on EPA to adopt regulations implementing new agreements.

The uncertainty about whether the Canada and Mexico treaties are directly enforceable under RCRA or whether, through section 3017(a)(1) and section 3017(b), they create new authority for EPA to adopt domestic regulations is certainly interesting, but hardly crucial.³⁰⁸ The terms of these agreements largely mirror the requirements of the base congressionally mandated notice and consent regime under section 3017(a)(1) that EPA clearly has the authority to impose. In other words, EPA need not rely on the agreements to justify adoption of the enforceable Subpart E regulations that govern exports to Mexico and Canada. Indeed, EPA cannot have relied on their authority; the general Subpart E requirements that apply to the export of wastes to these countries were promulgated before the agreements were made and the same Subpart E requirements apply to exports to countries with which the United States has no international agreements.³⁰⁹

Which is not to say that there are not several interesting questions that arise if the bilateral agreements create obligations that EPA is *required* to implement. The EPA regulations governing exports to Canada, for example, do not appear to be fully consistent with the requirements of the Canada/U.S. Agreement. This agreement, for example, expressly provides for "tacit consent"; if Canada has not responded to a Notice of Intent within thirty days of receipt of the notice, then consent is automatically presumed.³¹⁰ The Subpart E regulations that govern exports to Canada do

³⁰⁸ The more significant question, discussed below, is whether section 3017 confers authority on EPA to implement future international agreements, such as the Basel Convention, without the need for additional implementing legislation. See *infra* notes 338–364 and accompanying text.

³⁰⁹ The Subpart E regulations were promulgated in 1986, and nowhere in the preambles either to the proposed or final regulations does EPA refer to those or any treaties. Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. 28,664 (Aug. 8, 1986). Nor does EPA expressly cite treaties as a basis for its legal authority to adopt the Subpart E regulations. The preamble to the final 1986 Subpart E regulations, for example, states:

These regulations are being promulgated under the authority of sections 2002(a), 3002, 3003, 3006, 3007, 3008 and 3017 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6912(a), 6922, 6923, 6926, 6927, and 6937.

Id. As discussed below, this statement is, however, ambiguous since it is possible that section 3017 could be construed as a source of authority to implement requirements of international agreements.

³¹⁰ Canada/U.S. Agreement, *supra* note 49, at art. 3(d).

not allow for the export of waste based on such tacit consent. Any breach of the Agreement would presumably be “enforceable” only by the government of Canada against the government of the United States. An additional, and problematic, question is whether section 3017 gives private parties a cause of action under RCRA’s judicial review provisions to challenge the actions of the administrator in adopting regulations that do not comply with the terms of an international agreement. This issue is specifically addressed below with respect to implementation of a decision of the OECD.

2. The Legal Effect of the OECD Decision

The issues of EPA’s obligation and authority to implement the OECD Decision are different, and in many ways more complex, than those arising from implementation of treaties and other international executive agreements. The OECD was created by a 1960 Convention ratified by the Senate in 1961.³¹¹ The terms of the OECD Convention expressly provide that the OECD can “take decisions which, except as otherwise provided, shall be binding on all the Members.”³¹² The Convention further provides, however, that “[n]o decision shall be binding on any Member until it has complied with the requirements of its own constitutional procedures.”³¹³

At the time of ratification of the OECD Convention, the United States position on the significance of OECD decisions on United States authority was expressly addressed as part of the Senate ratification process.³¹⁴ The Senate ratification document states it was ratified “with the interpretation and explanation of the intent of the Senate that nothing in the convention . . . confers any power on the Executive to bind the United States in substantive matters beyond what the Executive now has, or to bind the United States without compliance with applicable procedures imposed by domestic law.”³¹⁵ Thus, contemporaneous material indicates that

³¹¹ Convention on the Organization for Economic Cooperation and Development, Dec. 14, 1960, 12 U.S.T. 1728 [hereinafter Convention on the Organization for Economic Cooperation and Development].

³¹² *Id.* at art. 5(a).

³¹³ *Id.* at art. 6.3.

³¹⁴ See Richard Schwartz, *Are the OECD and UNCTAD Codes Legally Binding?*, 11 INT’L L. 529, 529–30 (1977).

³¹⁵ Convention on the Organization for Economic Cooperation and Development, *supra* note 311, at 1751:

WHEREAS the Senate of the United States of America by their resolution of March 16, 1961, two-thirds of the Senators present concurring therein, did advise and consent to the ratification of the said Convention and the two protocols relating thereto “with the interpretation and

the United States never intended, by ratification of the OECD Convention itself, to give subsequent OECD Decisions the power to confer authority not otherwise authorized by domestic statute.

Additionally, there are reasons to doubt that the OECD Decision obligates EPA to adopt regulations, even if otherwise within EPA's authority, that are necessary to implement the OECD Decision. The effect of such an obligation would be to delegate to an international authority the power to impose requirements of domestic agencies. Although there is growing debate about the constitutionality of a delegation of authority to international organizations to impose binding obligations on the United States, there is limited case law.³¹⁶ In *Medellin v. Texas*, the United States Supreme Court rejected an argument that a judgment of the International Court of Justice ("ICJ"), issued under the Vienna Convention on Consular Relations, created federal obligations that were binding on state courts.³¹⁷ The Supreme Court concluded that neither the terms of the Convention itself nor a Presidential memorandum that purported to implement the Convention provided that decisions of the ICJ would have domestic effect on state proceedings.³¹⁸ *Medellin*, however, dealt with the specific terms of the Vienna Convention and with the effect of an ICJ judgment arising from an international adjudication; it is of limited guidance in evaluating the effect of an international "regulatory" decision taken pursuant to a treaty.

This issue was, however, directly addressed by the D.C. Circuit in *NRDC v. EPA*,³¹⁹ and the case strongly suggests that the OECD Decision does not impose binding obligations on EPA. *NRDC v. EPA* dealt with the scope of domestic obligations arising under the Montreal Protocol on Substances that Deplete the Ozone Layer.³²⁰ The Senate had ratified the Protocol in 1988 and Congress had specifically incorporated it into domestic

explanation of the intent of the Senate that nothing in the convention, or the advice and consent of the Senate to the ratification thereof, confers any power on the Executive to bind the United States in substantive matters beyond what the Executive now has, or to bind the United States without compliance with applicable procedures imposed by domestic law, or confers any power on the Congress to take action in fields previously beyond the authority of Congress, or limits Congress in the exercise of any power it now has."

³¹⁶ See Edward T. Swaine, *The Constitutionality of International Delegations*, 104 COLUM. L. REV. 1492 (2004); Julian G. Ku, *The Delegation of Federal Power to International Organizations: New Problems with Old Solutions*, 85 MINN. L. REV. 71 (2000).

³¹⁷ *Medellin v. Texas*, 552 U.S. 491 (2008).

³¹⁸ *Id.* at 498–99.

³¹⁹ *Natural Res. Def. Council v. Env'tl. Prot. Agency*, 464 F.3d 1 (D.C. Cir. 2006).

³²⁰ See generally *id.*

law through amendments to the Clean Air Act.³²¹ Under the Protocol, the United States and other parties agreed to phase out the production and use of certain ozone depleting chemicals, and pursuant to the Protocol, the parties subsequently adopted “decisions” that specified the requirements for the phaseout of methyl bromide, an ozone-depleting chemical subject to the Protocol.³²² EPA subsequently promulgated domestic regulations that purported to implement these decisions.³²³ NRDC sought judicial review of the regulations, claiming that EPA had failed to implement the requirements of the decisions.³²⁴ Its legal argument was simple: the Protocol, implemented through domestic legislation, created binding domestic obligations; the Protocol authorized the Parties subsequently to impose binding obligations through its “decisions”; therefore, the decisions adopted pursuant to the terms of the Protocol imposed domestically enforceable requirements on EPA.³²⁵

The court stated that the issue of the domestic effect, not of a treaty, but of the decision of an international organization was one of first impression, and it characterized the implications of this issue as follows:

NRDC’s interpretation raises significant constitutional problems. If the “decisions” are “law”—enforceable in federal court like statutes or legislative rules—then Congress either has delegated lawmaking authority to an international body or authorized amendments to a treaty without presidential signature or Senate ratification, in violation of Article II of the Constitution.³²⁶

Rather than confront the constitutionality of the position, the court stated that it was “far more plausible to interpret the Clean Air Act and

³²¹ 42 U.S.C. § 7671c(h); 464 F.3d at 2. This section requires EPA to phase out production of methyl chloride on a schedule “that is in accordance with, but not more stringent than, the phaseout schedule of the Montreal Protocol Treaty as in effect on October 21, 1998.” 42 U.S.C. § 7671c(h). Note that this statutory provision does not purport to implement future phaseout schedules negotiated by the parties.

³²² 464 F.3d at 2.

³²³ Pursuant to the Protocol, the parties adopted Decision IX/6 that established guidelines for determining the phaseout of methyl bromide and Decision Ex. I/3 that provided specific requirements for production of methyl bromide relating to the “critical use” provisions of the Protocol. Protection of Stratospheric Ozone: Process for Exempting Critical Uses From the Phaseout of Methyl Bromide, 69 Fed. Reg. 76,982 (Dec. 23, 2004). EPA promulgated regulations purporting to implement these Decisions. *Id.*

³²⁴ 464 F.3d at 5.

³²⁵ *Id.* at 8.

³²⁶ *Id.*

Montreal Protocol as creating an ongoing international political commitment rather than a delegation of lawmaking authority to annual meetings of the Parties.³²⁷ Whatever the implications of creating a “political commitment,” the court was clear that the decisions did not create enforceable domestic obligations on EPA.³²⁸ Although it did not resolve the issue, the court strongly suggested that it would be unconstitutional for a treaty (and its subsequent domestic implementing legislation) to confer authority on an international organization to adopt subsequent binding obligations with domestic effect.³²⁹

There are a number of implications that arise if the OECD Decision neither creates a binding obligation on EPA to adopt regulations consistent with its terms nor confers additional rule-making authority on EPA. First, EPA relied on the “binding” effect of the OECD Decision to avoid providing an opportunity for public comment on its original Subpart H regulations.³³⁰ Under the Administrative Procedure Act, agencies must provide notice and an opportunity for public comment on proposed regulations unless “good cause” exists to forgo the comment period.³³¹ EPA explained that “good cause” existed in part because the Subpart H regulations merely codified the “binding” requirements of the OECD Decision.³³² It likened the promulgation of the Subpart H regulations to simple regulatory codification of statutory provisions.³³³ If EPA’s action in promulgating export requirements addressed by the OECD Decision is not simply ministerial codification of otherwise binding requirements, then its good cause rationale for avoiding notice and comment is, at the least, suspect.³³⁴

³²⁷ *Id.* at 9.

³²⁸ *Id.*

³²⁹ Further, the court rejected the argument that the decisions of the parties were simply interpreting ambiguous, but otherwise applicable, treaty provisions. The court expressly stated that the decisions, rather than interpreting ambiguous treaty terms, were filling “treaty gaps.” 464 F.3d at 9. Thus, the court did not reach the issue of whether treaty terms themselves, rather than subsequently adopted “regulations,” could create enforceable obligations on the EPA.

³³⁰ Implementation of OECD Council Decision C(92)39, 61 Fed. Reg. 16,290, 16,291 (Apr. 12, 1996).

³³¹ 5 U.S.C. § 553(b) (2006).

³³² Implementation of OECD Council Decision C(92)39, 61 Fed. Reg. at 16,291.

³³³ In EPA’s view, promulgation of the Subpart H regulations implemented a binding OECD Decision and was “analogous to a codification of statutory requirements, in which an agency assumes the ministerial, nondiscretionary functions of translating requirements to regulatory form.” *Id.*

³³⁴ EPA did provide other reasons for invoking the good cause exception, including the need for international consistency and the need for regulations that would allow other OECD countries to trade with the United States in conformance with the Basel Convention. *Id.*

Second, if the OECD Decision does not provide additional authority to implement its requirements, EPA's Subpart H regulations must be based on authority generally available under RCRA.³³⁵ In other words, if EPA has adopted more stringent requirements under Subpart H than those adopted under Subpart E, those different, and more stringent, requirements must be justified by more than a reference to the OECD Decision; they must be requirements that are otherwise justified under RCRA.

EPA has, in fact, imposed requirements under Subpart H that are not required under Subpart E. These include, among others:

- tacit consent,
- a requirement that transit countries consent to the shipment,
- a requirement that any alternative disposal facilities employ "environmentally sound management,"³³⁶ and
- a contractual obligation between the exporter and the receiving facility.³³⁷

If these requirements can be justified under existing RCRA authority, then EPA may have the authority to impose more stringent regulations (at least regulations consistent with the Subpart H regulations) on the export of wastes to non-OECD countries. In other words, if EPA can justify

These other reasons may justify the substance of the regulations, but they do not suggest a "good cause" to justify eliminating the opportunity to comment on the content of regulations not legally mandated by the OECD Decision.

³³⁵ In the preamble to its original 1996 Subpart H regulation, EPA stated that authority to promulgate the regulations arose under sections 2002(a) and 3017(a)(2) and (f) of RCRA. *Id.* It also stated that "EPA has determined that no statutory change to the Resource Conservation and Recovery Act (RCRA) is needed because RCRA currently authorizes EPA to promulgate rules governing imports and exports of hazardous waste, and contains adequate authority to promulgate the requirements of the Decision." *Id.* EPA's statements, however, suggest that it was relying on a claim of unique authority to implement an international agreement, rather than general authority to implement the set of base notice and consent requirements, as the basis for the Subpart H regulations. In its preamble to the 2010 revisions to the Subpart H regulations, EPA somewhat more expansively, but still ambiguously, stated that the regulations were promulgated under authority "found in sections 1006, 2002(a), 3001–3010, 3013, and 3017" of RCRA. Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236, 1238 (Jan. 8, 2010).

³³⁶ The term "environmentally sound management" comes from the Basel Convention. Basel, *supra* note 3, at art. 2.8.

³³⁷ 40 C.F.R. §§ 262.83–.85 (2010).

“take-back” and “environmentally sound management” requirements for OECD exports, it should be able to justify such a requirement for exports to non-OECD countries. This has implications, among other things, on EPA’s ability to a single set of export regulations and to implement the requirements of the Basel Convention without additional statutory authority.

3. Could EPA Implement a Ratified Basel Convention?

The United States has signed and the Senate has consented to ratification of the Basel Convention on Transboundary Movement of Hazardous Wastes.³³⁸ The United States has not, however, submitted documentation to the Secretariat of the Basel Convention, and therefore the United States has not, as a matter of international law, ratified Basel.³³⁹ As a non-ratifying party, the export of hazardous wastes to virtually all other countries is prohibited under Basel to all countries other than the OECD countries with whom we have an appropriate international agreement.³⁴⁰

The reason that the United States has not ratified Basel is the universal assumption that the requirements of Basel could not be implemented unless Congress enacted legislation granting EPA additional authority.³⁴¹ In testimony to Congress, the Administrator of EPA and the Assistant Secretary of State for Environment stated that the United States could not ratify the Basel Convention until Congress had adopted amendments to RCRA that conferred authority on EPA to implement the Convention.³⁴² In the early 1990s, a number of bills were actually introduced in Congress that would have provided additional statutory authority to regulate the export of hazardous wastes; however, they had little promise.³⁴³

A number of perceived inadequacies in existing RCRA authority to implement Basel have been identified. In testimony to Congress, then EPA Administrator William Reilly identified a number of Basel requirements

³³⁸ The United States signed the Basel Convention on March 20, 1990. *See Basel Convention’s Ratifications*, *supra* note 3. The Senate consented to ratification on August 11, 1992. *See* 138 Cong. Rec. 22,861 (1992).

³³⁹ *See* Basel, *supra* note 3, at art. 22; SEPTEMBER 2008 GAO REPORT, *supra* note 2, at 15 n.12.

³⁴⁰ *See supra* notes 78–81 and accompanying text.

³⁴¹ *See, e.g.*, AUGUST 2008 GAO REPORT, *supra* note 2, at 36 & n.31; Stephen Johnson, *The Basel Convention: The Shape of Things to Come for United States Waste Exports?*, 21 ENVT. L. 299 (1991); Coyle, *supra* note 295.

³⁴² *Hearings on Envtl. Prot.*, testimony of W. Reilly, *supra* note 5.

³⁴³ *See* Johnson, *supra* note 341, at 318–320.

that EPA did not have authority to implement. In the Administrator's words:

We do not have authority to control municipal solid waste; we do not have a notice and consent requirement with respect to exports of our hazardous wastes; and we don't have any authority to recover the cost of any waste that we are obligated to have returned to the United States once we learn that it has been disposed of inappropriately in an unsound manner abroad. Those are all requirements of the convention and therefore, the implementing legislation is necessary to fulfill its terms.³⁴⁴

Other potential deficiencies in existing RCRA authority include the inability to prohibit the export of hazardous waste if the waste will not be managed in an "environmentally sound" manner,³⁴⁵ and the inability to prohibit the export of hazardous wastes to countries that are not a party to Basel or with which we have entered into an appropriate international agreement.³⁴⁶

Could EPA implement these Basel requirements under its existing authority? As discussed above, it is at least arguable that section 3017 confers authority on EPA to implement the requirements of any applicable international agreement governing the export of hazardous waste to which the United States is a party. If ratified, the provisions of Basel would fall under section 3017(a)(2) and would thus arguably be either directly enforceable or subject to EPA regulatory authority. The ability of Congress to prospectively confer domestic effect on subsequently ratified treaties may be questionable, but the question has not been answered.

Further, is it so clear that EPA could not adopt the requirements of Basel under its existing RCRA authority? Certainly, specific implementing legislation would clarify and provide certainty, but it is worth considering what, if any, additional authority EPA would need to implement Basel. EPA has asserted that adequate authority exists under RCRA to

³⁴⁴ *Hearings on Env'tl. Prot.*, testimony of W. Reilly, *supra* note 5.

³⁴⁵ See Johnson, *supra* note 341, at 315.

³⁴⁶ Can EPA ban the export of wastes to non-Basel members? The issue is probably moot. At this point, 176 countries have ratified the Basel Convention. See *Basel Convention's Ratifications*, *supra* note 3. Not a single hazardous waste export reported to EPA in the last ten years has been to a country that is not a party to Basel. Compare *id.* with *infra* Table 1. The issue of whether EPA could ban exports to non-OECD countries even without United States ratification of Basel is discussed below.

implement the OECD Decision, and the OECD Decision was revised in 2001 specifically to “harmonize” its provisions with the Basel Convention.³⁴⁷ Further, EPA has stated that the OECD Decision is consistent with the “environmentally sound management” requirements of Basel and thus, under Article 11 of Basel, it qualifies as an agreement that will allow trade between the United States and the members of the OECD who are Basel parties.³⁴⁸ If EPA can implement the OECD Decision, why not Basel?

Consider Administrator Reilly’s objections. First, he states that RCRA, unlike the Basel Convention, does not allow for the regulation of the export of nonhazardous municipal waste.³⁴⁹ This may be true, but must ratification of Basel wait for this authority?³⁵⁰ The Canada/U.S. Agreement was amended to regulate the export of municipal solid waste between the

³⁴⁷ The introduction to EPA’s 2010 Subpart H regulations notes that “[t]he goal of the 2001 OECD Decision was to harmonize the procedures and requirements of the OECD with those of the Basel Convention.” Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes, 75 Fed. Reg. 1236, 1238 (June 8, 2010); *see also* Request for Information Concerning Transfrontier Movements of Wastes Destined for Recovery Operations Within the OECD Area, 64 Fed. Reg. 44,722 (Aug. 17, 1999) (EPA information request analyzing issues associated with harmonizing the OECD Decision and the Basel Convention). The Preamble to the 2001 OECD Decision notes that the purpose of revisions to the original OECD Decision was to seek “harmonization” with Basel and to continue the applicability of the Decision under Article 11 of the Basel Convention. OECD Decision, *supra* note 62, at 6.

³⁴⁸ In the preamble to its 1996 Subpart H regulations, EPA stated that:

The Decision, which entered into force before May 5, 1992, satisfies the requirements of Article 11 of the Basel Convention because it is a pre-existing multilateral agreement compatible with the environmentally sound management of wastes as required by the Convention. Therefore, today’s promulgation of Subpart H as part of the RCRA hazardous waste export and import regulations, which is necessary to implement the Decision, will make it possible for persons within the United States to continue exporting and importing Basel-covered RCRA hazardous waste for recovery within the OECD, even if other OECD countries are Parties to the Basel Convention.

Implementation of OECD Council Decision C(92)39, 61 Fed. Reg. 16,290, 16,291 (Apr. 12, 1996). EPA has also stated that the Mexico and Canada treaties satisfy Article 11. *See* Revisions for the Requirements to the Requirements for: Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236, 1247 (Jan. 8, 2010).

³⁴⁹ *Hearings on Envtl. Prot.*, testimony of W. Reilly, *supra* note 5, at 642.

³⁵⁰ Section 3017 generally applies only to Subtitle C hazardous wastes. RCRA § 3017(a) (codified as amended at 42 U.S.C. § 6938(a) (2006)). *See infra* notes 393–409 and accompanying text. If section 3017(a)(2) confers authority to implement international agreements, it is limited to those provisions dealing with hazardous waste, and it would not provide a basis for regulating “municipal solid waste” under the Canada/U.S. Agreement or “other wastes” under Basel.

countries,³⁵¹ but that ratified international obligation has apparently not yet been implemented.³⁵²

Second, he states that RCRA does not contain authority to require notice and consent on the export of hazardous wastes.³⁵³ On its face this is obviously wrong; RCRA does contain such a requirement,³⁵⁴ and EPA imposes this requirement on the export to countries with which we have no treaties.³⁵⁵ He may, however, have been referring to a potential concern that the definition of “hazardous wastes” under Basel is broader than the definition of Subtitle C hazardous wastes regulated under RCRA, and that regulations issued under section 3017 could not fully address the scope of Basel wastes.³⁵⁶ The definition of hazardous waste under the OECD Decision is now quite similar to that contained in the Basel Convention, and it is not clear the extent to which the U.S. national definition of hazardous waste is inconsistent with the OECD Decision October 31, 2011 or Basel.³⁵⁷

Third, Administrator Reilly identified concerns with “recovering” the costs of wastes that must be reimported.³⁵⁸ This is not expressly a concern about the authority to impose a “reimport” or “take-back” requirement. EPA apparently has concluded that RCRA provides such authority since it has adopted a “take-back” requirement as part of the Subpart E and Subpart H regulations.³⁵⁹ Rather, the Administrator’s expressed concern was over the government’s authority to recover any costs it expends if obligated to take back wastes. The government’s cost recovery authority is not, however, relevant to its Basel obligations. While cost recovery authority may be a good idea, the Basel Convention does not require it.

Finally, perhaps the most significant concern regarding ratification of Basel relates to EPA’s ability to implement the Basel requirement that

³⁵¹ Amendment to Canada/U.S. Bilateral Agreement, *supra* note 49.

³⁵² See commentary *supra* note 49.

³⁵³ *Hearings on Env'tl. Prot.*, testimony of W. Reilly, *supra* note 5, at 642.

³⁵⁴ RCRA § 3017(c)–(e) (codified as amended at 42 U.S.C. § 6938(c)–(e) (2006)).

³⁵⁵ See *supra* notes 275–76 and accompanying text.

³⁵⁶ See Grant L. Kratz, *Implementing the Basel Convention into U.S. Law: Will it Help or Hinder Recycling Efforts?*, 6 BYU J. PUB. L. 323, 328–29 (1992).

³⁵⁷ In 1999, EPA issued an “information request” seeking comments on the implications of the OECD efforts to harmonize the OECD Decision with the Basel Convention. Request for Information Concerning Transfrontier Movements of Wastes Destined for Recovery Operations Within the OECD Area, 64 Fed. Reg. 44,722 (Aug. 17, 1990). This request contained an extensive discussion of the potential differences between the OECD class of green and amber wastes and the waste covered by Basel. See *id.*

³⁵⁸ *Hearings on Env'tl. Prot.*, testimony of W. Reilly, *supra* note 5, at 642.

³⁵⁹ 40 C.F.R. §§ 262.54, 262.82 (2010).

exports be prohibited unless they will be managed in an “environmentally sound manner” in the importing country.³⁶⁰ The significance of this requirement is questionable given the ambiguity of the term under Basel.³⁶¹ Nonetheless, this provision would presumably require that EPA have the authority to prohibit exports based on the adequacy of their management in the importing country. As discussed below, EPA’s position on its authority to consider “extraterritorial environmental” impacts in establishing export requirements is somewhat inconsistent.³⁶² But the OECD Decision and EPA’s implementing Subpart H regulations currently include requirements based on “environmentally sound” management in the importing country.³⁶³ If EPA has existing authority to implement the OECD Decision, it may have authority to implement comparable requirements of the Basel Convention. The more general question of EPA’s authority to ban the exports of hazardous waste based on the environmental impact in the receiving country is discussed below.³⁶⁴

B. Could EPA Ban the Export of Hazardous Wastes to Non-OECD Countries?

The primary concern relating to the export of hazardous wastes has been the potential for mismanagement in less-developed countries.³⁶⁵ Both perceived economic incentives and inadequate institutional capacity suggest that a notice and consent regime will not adequately address the human health and environmental concerns arising from the export of hazardous wastes to these countries. This has led for calls to adopt the

³⁶⁰ Basel, *supra* note 3, at art. 4.2(g). Additionally, Article 4.9(a) also requires that the exporting country allow exports only if it, the exporting country, does not have the capacity or facilities to dispose of the wastes in an “environmentally sound and efficient manner.” *Id.* at art. 4.9(a). The United States has stated its “understanding” that under Basel, “an exporting State may decide that it lacks the capacity to dispose of wastes in an ‘environmentally sound and efficient manner’ if disposal in the importing country would be both environmentally sound and economically efficient.” *See Basel Convention’s Ratifications, supra* note 3.

³⁶¹ A variety of technical guidelines describing “environmentally sound management” practices have been issued to implement the Basel requirement. *See Technical Guidelines, BASEL CONVENTION*, <http://www.basel.int/meetings/sbc/workdoc/techdocs.html> (last visited Nov. 8, 2011).

³⁶² *See infra* notes 390–93 and accompanying text.

³⁶³ *See, e.g.*, 40 C.F.R. § 262.82(d), (e).

³⁶⁴ *See infra* notes 379–93 and accompanying text.

³⁶⁵ *See, e.g.*, Andrew Webster-Main, *Keeping Africa Out of the Global Backyard: A Comparative Study of the Basel and Bamako Conventions*, 26 ENVIRONS ENVTL. L. & POL'Y J. 65 (2002).

“Basel Ban” that would prohibit, under the Basel Convention, the export of hazardous wastes to certain less-developed countries.³⁶⁶ Congress has also considered, but not adopted, amendments to RCRA that would ban the export of hazardous wastes to countries with whom the United States does not have a specific waste export agreement.³⁶⁷

Could EPA, under its existing RCRA authority, ban the export of hazardous wastes to non-OECD countries with which the United States has no export agreements? Section 3017 generally provides EPA with the authority to implement a base notice and consent regime and other requirements contained in an appropriate bilateral treaty.³⁶⁸ EPA has on several occasions, however, flatly stated that it does not have the authority to ban the exports of waste because section 3017 only provides for a “notice and consent” regime, not an outright ban.³⁶⁹

But EPA’s response is clearly inadequate. Congress conferred authority on EPA to implement more than the base “notice and consent”

³⁶⁶ EPA, without explanation, has stated that it does not have the authority to implement the Basel Ban. *See Johnson, supra* note 341, at 315. Certainly, EPA does not have authority under the terms of the Basel Convention; not only is the United States not a ratifying party, but the Basel Ban is, by most accounts, not an enforceable obligation even among ratifying parties.

³⁶⁷ *See Johnson, supra* note 341, at 318–20.

³⁶⁸ RCRA § 3017 (codified as amended at 42 U.S.C. § 6938 (2006)).

³⁶⁹ In the preamble to its 2010 OECD/SLAB rule-making, EPA responded to a request by the Basel Action Network to ban the export of hazardous wastes to non-OECD countries stating:

EPA cannot grant this request since the statute does not give EPA the legal authority to implement an outright ban on hazardous waste exports. Specifically, RCRA section 3017 prohibits exports of hazardous waste unless either: (1) The shipments are covered under and conform to the terms specified in an agreement between the U.S. and the receiving country; or (2) the exporter has submitted written notification to EPA, obtained written consent from the receiving country via EPA, attached a copy of the written consent to the RCRA hazardous waste manifest for each shipment, and ensures that the shipments comply with the terms of the receiving country’s consent. Moreover, section 3017 directs the State Department, on behalf of EPA, to forward a copy of the notification to the intended country of import within 30 days of EPA receiving a complete notification concerning a proposed waste export that would not be covered under the terms of an existing international agreement. Therefore, an outright ban regarding all exports of any individual hazardous waste (*e.g.* SLABs) or all hazardous wastes to non-OECD countries would require changes to the statutory language and is outside the scope of this regulatory action.

Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236, 1247 (Jan. 8, 2010).

requirements of section 3017(a); section 3017(h) authorizes EPA to promulgate “other standards” for the export of hazardous waste under the provisions of sections 3002 and 3003 of RCRA.³⁷⁰ Under section 3017(f), these “other standards” can only apply to exports to countries with which the United States does not have an international agreement.³⁷¹ In other words, Congress clearly contemplated that EPA have the authority to impose something beyond the base notice and consent requirements for exports to countries with which we have no applicable international agreements. Determining whether EPA could ban the export of wastes to non-OECD countries thus hinges on its authority under section 3017(h).

EPA appears to have used its authority to impose “other standards” under section 3017(h) in only one instance. EPA’s Subpart E regulations require notification, but not consent, of countries through which exported wastes transit.³⁷² Although the base requirements of section 3017(a)(1) require notice and consent by the receiving country, they impose no requirements relating to transit countries.³⁷³ Noting an OECD Decision requiring notice to transit countries, EPA stated “[a]ccordingly, EPA has exercised its authority pursuant to section 3017(h) to require exporters to notify EPA of any countries through which a hazardous waste will pass en route to the receiving country.”³⁷⁴ Thus, under section 3017(h), EPA imposed domestic obligations based on extraterritorial concerns.³⁷⁵

The question whether section 3017(h) allows EPA to regulate exports based on concerns about their effect on “human health and the environment”³⁷⁶ outside the United States remains unaddressed. Several arguments can be made that EPA does not have such authority. First, Congress in section 3017 presumably established a policy of relying on notice and consent of the receiving country even in the absence of an appropriate bilateral treaty between the United States and the receiving country. This policy is consistent not only with general international principles regarding state sovereignty but also international environmental documents, including the Stockholm and Rio Declarations, which generally ratify the authority of countries to establish their own internal environmental

³⁷⁰ RCRA § 3017(h) (codified as amended at 42 U.S.C. § 6938(h) (2006)).

³⁷¹ *Id.* § 3017(f) (codified as amended at 42 U.S.C. § 6938(f) (2006)).

³⁷² 40 C.F.R. § 261.39(a)(5)(iv)–(v) (2010).

³⁷³ *Id.* § 3017(a)(1) (codified as amended at 42 U.S.C. § 6938(a)(1) (2006)).

³⁷⁴ Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. 8744, 8755 (proposed Mar. 13, 1986).

³⁷⁵ RCRA § 3017(h) (codified as amended at 42 U.S.C. § 6938(h) (2006)).

³⁷⁶ *Id.* §§ 3017(h), 3018 (codified as amended at 42 U.S.C. §§ 6938(h), 6939 (2006)).

policies.³⁷⁷ This argument, however, ultimately begs the question; Congress imposed a base notice and consent requirement, but it also conferred authority on EPA to impose other standards for the export of hazardous waste.³⁷⁸ Thus, whatever presumptive policy of “notice and consent” endorsed by Congress, Congress also specifically authorized other requirements in appropriate circumstances.

Second, the limited case law addressing the issue suggests that RCRA does not have “extraterritorial” effect. At least one court has held that United States exporters are not liable for creating an “imminent and substantial endangerment” for wastes managed outside the United States.³⁷⁹ It seems unlikely that RCRA would be construed to authorize EPA to regulate or penalize conduct occurring outside of the United States.³⁸⁰ A conclusion that RCRA does not provide EPA authority to regulate conduct outside of the United States begs the relevant issue. The question with which we are confronted is whether EPA can regulate the domestic management of hazardous wastes by prohibiting their export to certain countries.³⁸¹

Third, EPA’s authority to impose “other standards” on exports is based on its authority under sections 3002 or 3003.³⁸² These sections allow EPA to regulate generators and transporters “as may be necessary to protect human health and the environment.”³⁸³ It is other sections of RCRA, including section 3004, that confer authority to regulate “treatment, storage and disposal facilities” themselves in order to protect human health and the

³⁷⁷ See Tarlock, *supra* note 6, at 43 n.37.

³⁷⁸ RCRA § 3017 (codified as amended at 42 U.S.C. § 6938 (2006)).

³⁷⁹ *Amlon Metals v. FMC Corp.*, 775 F. Supp. 668 (S.D.N.Y. 1991) (citizen suit for “imminent and substantial endangerment” not available for endangerment arising in another country). *Cf.* *Basel Action Network v. Mar. Admin.*, 370 F. Supp. 2d 57 (D.D.C. 2005) (claimed RCRA violation for export of defunct naval vessels for disposal does not authorize RCRA citizen suit since any prior export would be a wholly past violation and any future export would not be a basis to allege a current imminent and substantial endangerment). The court also held that there is a presumption against territorial effect of United States statutes and the National Environmental Policy Act did not have extraterritorial effect. *Id.* at 71.

³⁸⁰ See Jonathan Remy Nash, *The Curious Legal Landscape of the Extraterritoriality of U.S. Environmental Laws*, 50 VA. J. INT’L L. 997 (2010); Randall S. Abate, *Dawn of a New Era in the Extraterritorial Application of U.S. Environmental Statutes: A Proposal for an Integrated Judicial Standard Based on the Continuum of Context*, 31 COLUM. J. ENVTL. L. 87 (2006).

³⁸¹ See *Envtl. Def. Fund v. Massey*, 986 F.2d 528 (D.C. Cir. 1993) (conclusion that NEPA requires assessment of environmental impacts abroad does not imply that NEPA has extraterritorial reach since the obligation to perform assessment is directed at domestic federal actor).

³⁸² RCRA §§ 3002–03 (codified as amended at 42 U.S.C. §§ 6922–23 (2006)).

³⁸³ *Id.* § 3002(a) (codified as amended at 42 U.S.C. § 6922(a) (2006)).

environment,³⁸⁴ and Congress did not cross-reference these authorities as a basis for imposing “other” export requirements.³⁸⁵ This at least suggests that Congress did not intend for EPA to establish “other standards” based on concerns about the operation of foreign recycling and disposal facilities. On the other hand, a prohibition on generators and transporters from exporting wastes to non-OECD countries is not a specific regulation of the foreign facilities, and a prohibition on exporters could be seen as “necessary” to protect human health and the environment. As noted, EPA has used its “other standards” authority to impose a requirement to notify transit countries, and this obligation is based on extraterritorial concerns.³⁸⁶

Ultimately, the authority of EPA to prohibit exports to non-OECD countries comes down to whether EPA can regulate domestic conduct under RCRA based on concerns about extraterritorial environmental effects. As discussed above, EPA has tailored its export regulations based on concerns about the environmental impacts in the receiving country. In justifying its decision to impose a notice and consent requirement on the export of SLABs, EPA stated that it:

would like to focus on the use of preventative measures to decrease the proportionate risks to human health and the global environment. There are inherent human health and environmental hazards associated with a significant amount of SLABs being exported across borders without the knowledge and consent of receiving countries and/or SLABs being exported to countries with substandard smelting infrastructures. Amending the current RCRA hazardous waste regulations to include the notification and consent requirements would help ensure that SLABs are exported to countries with the capacity to handle them in an environmentally sound manner and to aid countries with tracking the movements and life-cycle management of SLABs inside their borders. . . .

EPA believes that the potential reduction in risk to human health and the environment with this proposed modification will outweigh the incremental increase in burden to SLAB exporters.³⁸⁷

³⁸⁴ *Id.* § 3004 (codified as amended at 42 U.S.C. § 6924 (2006)).

³⁸⁵ *See id.* §§ 3302–04 (codified as amended at 42 U.S.C. §§ 6922–24 (2006)).

³⁸⁶ *See supra* note 375 and accompanying text.

³⁸⁷ Revisions to: the Requirements for Transboundary Shipments of Hazardous Wastes Between OECD Countries, 73 Fed. Reg. 58,388, 58,391 (proposed Oct. 6, 2008).

Thus, concerns about mismanagement of recycled SLAB outside of the United States formed part of its justification for regulating the export of recycled SLABs otherwise largely exempt from domestic regulation.³⁸⁸

EPA also considered environmental effects outside the United States in developing conditional exclusions. Although EPA initially declined to regulate the export of conditionally excluded CRTs, in the final rule, EPA imposed a basic notice and consent requirement. In its “Response to Comments” document, EPA explained:

The comments, and data submitted by the commenters, have convinced us that unfettered export of CRTs for recycling could lead to environmental harm. Information in the record shows that exported electronics may not be handled as valuable commodities in foreign countries. In fact, there is documentation that they are sometimes managed so carelessly that they pose possible human health and environmental risks from such practices as open burning, land disposal, and dumping into rivers.³⁸⁹

Similarly, in its “reclamation exclusion,” EPA imposed a notice and consent requirement “so that it can ensure that the hazardous secondary materials are reclaimed rather than disposed of or abandoned.”³⁹⁰ In that same rule, EPA established a domestic exclusion for wastes that reclaimed “under the control of the generator.”³⁹¹ EPA, however, declined to apply this domestic exclusion to exported wastes. EPA stated that it did not apply the “under the control” test because “EPA would not be able to ensure the close management and monitoring by a single entity of hazardous secondary materials in a foreign country.”³⁹² Thus, consideration of potential mismanagement outside the United States formed the basis of EPA’s conditional exclusions of exported wastes.³⁹³

³⁸⁸ EPA also justified imposing the notice and consent requirement because it was consistent with section 3017 and there were advantages to consistency with OECD requirements. *See id.*

³⁸⁹ RESPONSE TO COMMENTS DOCUMENT, *supra* note 189, at 22. EPA made similar comments in the preamble to the final CRT conditional exclusion. *See Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes*, 71 Fed. Reg. 42,928, 42,938 (July 28, 2006).

³⁹⁰ Revisions to the Definition of Solid Waste, 73 Fed. Reg. 64,668, 64,698 (Oct. 30, 2008).

³⁹¹ *Id.* at 64,699.

³⁹² *Id.* at 64,738.

³⁹³ As discussed above, EPA’s logic in both the CRT and reclamation exclusions is subtler than “mere” concern about avoiding environmental harm in the receiving country. *See Gaba, supra* note 30, at 88. Rather, EPA justified imposing conditions on the export of

EPA has thus used concerns about extraterritorial environmental effects to justify imposing a notice and consent requirement in a manner consistent with section 3017(a).³⁹⁴ It has also relied on its authority under section 3017(h) to impose a notice requirement for transit countries.³⁹⁵ And section 3017(h) clearly authorizes the regulation of generators and transporters “as may be necessary to protect human health and the environment.”³⁹⁶ At a minimum, the question of EPA’s authority to prohibit the export of hazardous wastes under section 3017(h) based on concerns about their impact on human health and the environment in countries with which the United States does not have an international agreement cannot be dismissed as lightly as EPA has in the past.

C. *What are the Limits of EPA’s Authority to Exclude Hazardous Waste from RCRA Export Controls?*

Section 3017 requires EPA to regulate the export of Subtitle C hazardous wastes.³⁹⁷ EPA has, however, used two distinct bases from excluding materials that might fall within the basic Subtitle C definition of hazardous waste from export controls. First, EPA regulations generally provide that only Subtitle C hazardous wastes are subject to mandatory export controls, and thus the exclusion of a material from classification as a hazardous waste exempts the material from export controls.³⁹⁸ Second, EPA regulations generally provide that only materials subject to a domestic manifest requirement are subject to notice and consent requirements.³⁹⁹ Amongst other things, this requirement excludes all CESQG hazardous wastes from any export controls.⁴⁰⁰ Can EPA exclude materials that would otherwise be regulated hazardous wastes on either of these bases?

1. *Exclusion from Classification as a Subtitle C Hazardous Waste*

Section 3017 does not apply generally to “hazardous wastes”; rather the section applies to “hazardous waste identified or listed” under

materials based on the rather circular argument that potential improper management is evidence that the material is a waste. *Id.* at 93. In other words, EPA imposed requirements to avoid the classification that would justify the requirements.

³⁹⁴ RCRA § 3017(a) (codified as amended at 42 U.S.C. § 6938(a) (2006)).

³⁹⁵ *Id.* § 3017(h) (codified as amended at 42 U.S.C. § 6938(h) (2006)).

³⁹⁶ *Id.* §§ 3002, 3017(h) (codified as amended at 42 U.S.C. §§ 6293, 6938(h) (2006)).

³⁹⁷ *Id.* § 3017(a) (codified as amended at 42 U.S.C. § 6938(a) (2006)).

³⁹⁸ See Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. 28,664, 28,671, 28,679 (Aug. 8, 1986).

³⁹⁹ *Id.* at 28,669.

⁴⁰⁰ *Id.*

Subtitle C of RCRA.⁴⁰¹ In other words, the export requirements only apply to materials regulated as hazardous waste under Subtitle C.⁴⁰² In EPA's view, any material which is not classified as a Subtitle C hazardous waste is thus not subject to export controls under section 3017.⁴⁰³ The express statutory limitation of section 3017 to the export of Subtitle C wastes is compelling support for this position.⁴⁰⁴ At a minimum, this means that the export of nonhazardous solid wastes not otherwise regulated under Subtitle C, including nonhazardous municipal wastes, cannot be regulated under section 3017.⁴⁰⁵

There are, however, a significant number of wastes that meet the definition of Subtitle C hazardous wastes, either because they have been listed or exhibit a hazard characteristic, which EPA has expressly excluded from classification as a Subtitle C hazardous waste. 40 C.F.R. § 261.4 is chock-a-block full of an increasing number of wastes that EPA has, by regulation, excluded from classification as a Subtitle C hazardous waste, and, in most cases, this exclusion has the effect of totally exempting the waste from export controls.⁴⁰⁶ If EPA has properly excluded a material from classification as a Subtitle C hazardous waste, then it does follow that the material is not subject to export controls under section 3017. The legitimacy of excluding a material from export controls would thus hinge on the legitimacy of EPA's decision to exclude the material from classification as a Subtitle C hazardous waste and not on any separate requirements of section 3017.

⁴⁰¹ RCRA § 3017(a) (codified as amended at 42 U.S.C. § 6938(a) (2006)).

⁴⁰² As discussed above, section 3001 of RCRA authorizes EPA to "identify or list" hazardous wastes for purposes of regulation under Subtitle C, RCRA § 3001(b) (codified as amended at 42 U.S.C. § 6921(b) (2006)), and EPA regulations provide that "solid wastes," defined in 40 C.F.R. § 261.3(a), will be hazardous wastes if they either exhibit a hazard characteristic or are "listed" by EPA. 40 C.F.R. § 261.3(a) (2010).

⁴⁰³ Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. at 28,671.

⁴⁰⁴ With limited exceptions, regulations established under Subtitle C (which includes section 3017) are limited to the class of Subtitle C hazardous wastes defined by EPA regulations. *See* 40 C.F.R. § 261.1(a), (b).

⁴⁰⁵ This also means that EPA cannot under RCRA regulate the export of materials that are classified as hazardous wastes by the importing country but not by the United States under RCRA. Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. at 28,671. And, as noted above, this means that EPA does not have the authority under section 3017 to impose requirements on the export of nonhazardous OECD "green" wastes. *See supra* note 49 and accompanying text.

⁴⁰⁶ 40 C.F.R. § 261.4 (2010). Scrap metal exported for recycling, for example, is exempt from any export controls because EPA has exempted scrap metal from classification as a hazardous waste. *Id.* § 261.4(13)(a).

2. The Exclusion of Non-Manifested Hazardous Waste

Section 3017 generally imposes a notice and consent requirement on the export of any Subtitle C hazardous waste; it contains no exclusion for hazardous wastes that are not subject to a manifest requirement.⁴⁰⁷ EPA adopted the “manifest exclusion” as part of its original 1986 export regulations,⁴⁰⁸ and at that time it stated that, in its view:

Congress could not have intended to regulate for export those “hazardous wastes” which EPA does not regulate domestically. It is highly unlikely that Congress would have been more concerned about wastes exported than wastes in its own backyard.⁴⁰⁹

Parts of EPA’s rationale for this conclusion are less than compelling. According to EPA, Congressional intent to take an “equally firm” stand on the export of hazardous waste as on domestic regulation means that if hazardous wastes are exempt from manifest requirements they are exempt from any export controls.⁴¹⁰ EPA acknowledged that non-manifested wastes may still be subject to some domestic RCRA requirements, but nonetheless concluded that exclusion from the manifest requirements justified exclusion from any notice and consent requirement on export.⁴¹¹ According to EPA, “the function served by the manifest domestically is similar to the function served by the notification and consent internationally.”⁴¹² These functions include providing information about the waste and a tracking document to ensure proper delivery of the waste.⁴¹³ But the notice and consent requirement for the export of hazardous waste obviously serves the additional purpose of providing governments the opportunity to object to

⁴⁰⁷ RCRA § 3017(a) (codified as amended at 42 U.S.C. § 6938(a) (2006)). The Canada/U.S. Agreement is, however, expressly limited to hazardous wastes that are subject to the manifest requirement. Canada/U.S. Agreement, *supra* note 49, at art. 1(b) (“Hazardous waste” is defined “with respect to the United States, hazardous waste subject to a manifest requirement in the United States.”).

⁴⁰⁸ Hazardous Waste Management System, Exports of Hazardous Waste, 51 Fed. Reg. at 28,671.

⁴⁰⁹ *Id.* at 28,670.

⁴¹⁰ *Id.*

⁴¹¹ *Id.* at 28,670–71.

⁴¹² *Id.* at 28,670.

⁴¹³ Hazardous Waste Management System, Exports of Hazardous Waste, 51 Fed. Reg. 28,664, 28,670–71 (Aug. 8, 1986).

the import of wastes.⁴¹⁴ Under EPA's interpretation, if EPA has eliminated the manifest requirement, governments are deprived of this opportunity.

One other argument made by EPA does, however, more clearly support the exclusion of non-manifested waste from the requirements of section 3017.⁴¹⁵ Section 3017(a)(1)(C) requires that a copy of the importing country's written consent be "attached to the manifest accompanying each waste shipment."⁴¹⁶ This language at least suggests that Congress contemplated that all wastes subject to export controls would have a manifest. It is also, of course, possible to read this section as requiring that exports of hazardous wastes be accompanied by a manifest even if not subject to a domestic manifest requirement. EPA's argument that this language supports applying export controls only to manifested wastes loses some force from the fact that EPA does impose notice and consent requirements on some hazardous wastes, such as SLABs, that are exempt from domestic manifest requirements.⁴¹⁷

Ultimately, however, EPA's general exclusion of non-manifested wastes is based on EPA's judgment that such wastes pose little environmental risk and therefore do not need to be regulated through a notice and consent regime.⁴¹⁸ EPA, in other contexts, has been rebuffed in its attempts to narrow the scope of RCRA based on its views of the environmental need and the administrative burden of regulation.⁴¹⁹ Given the unequivocal scope

⁴¹⁴ *Id.* at 28,671.

⁴¹⁵ EPA also justified excluding wastes that are not subject to a manifest requirement by arguing that, if there was no manifest requirement, EPA would be unable to police the export of hazardous waste. *Id.* This argument would be more compelling if, as noted, EPA did not impose notice and consent requirements on certain wastes, such as SLABs, that are exempt from a domestic manifest requirement. Such wastes must still be accompanied by an Acknowledgment of Consent and the exporter must still notify EPA. *See supra* Part III.D.

⁴¹⁶ RCRA § 3017(a)(1)(C) (codified as amended at 42 U.S.C. § 6938(a)(1)(C) (2006)).

⁴¹⁷ *See generally* Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236 (Jan. 8, 2010).

⁴¹⁸ Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. at 28,671.

⁴¹⁹ In the early days of RCRA, EPA attempted to adopt a regulatory exclusion for special "low-toxicity and high-volume" wastes, Gaba, *supra* note 30, at 97, and for generators of less than 1000 kilograms per month of hazardous waste. *See* Richard Ottinger, *Strengthening of the Resource Conservation and Recovery Act in 1984: The Original Loopholes, the Amendments, and the Political Factors Behind Their Passage*, 3 PACE ENVTL. L. REV. 1, 14 (1985). There was considerable controversy and Congress subsequently provided special statutory treatment for "special wastes" and authorized the reduced treatment of "conditionally exempt small quantity generators" that generated 100 kilograms per month or less of hazardous waste. 40 C.F.R. § 261.5 (2010).

of section 3017, EPA's blanket exclusion of non-manifested hazardous wastes from export controls is, at the very least, questionable.

D. Can EPA Regulate the Export of Hazardous Wastes that are Exempt from Domestic Regulation?

Although EPA generally has taken the positions that it can only regulate exports of Subtitle C hazardous wastes that are subject to domestic regulation,⁴²⁰ EPA has paradoxically also asserted authority to regulate the export of wastes that are not domestically regulated and that are excluded from classification as hazardous wastes.⁴²¹ In other words, EPA has taken the position that it can exempt hazardous wastes from domestic regulation while at the same time imposing notice and consent export requirements.⁴²²

It has accomplished this feat on one of two bases. First, EPA has consistently claimed the authority to impose less stringent regulatory requirements on Subtitle C hazardous wastes that are recycled.⁴²³ 40 C.F.R. Part 266 contains a set of regulations applicable to the recycling of specified wastes or to specific recycling techniques.⁴²⁴ EPA apparently claims that it can use this authority either to exempt or substantially reduce the domestic regulation of Subtitle C hazardous waste while still imposing a notice and consent requirement if the wastes are exported.⁴²⁵ Thus, EPA has excluded recycled SLABs, a Subtitle C hazardous waste, from domestic regulation while imposing export requirements.⁴²⁶

Second, EPA has used the technique of "conditional exemption" to exempt materials from classification as hazardous wastes while at the same time imposing regulatory requirements as a condition of the exclusion.⁴²⁷ Thus, EPA has excluded recycled CRTs from classification as a hazardous waste but required that exporters comply with notice and consent requirements.⁴²⁸ EPA's rationale for the use of "conditional exemptions"

⁴²⁰ Hazardous Waste Management System; Exports of Hazardous Waste, 51 Fed. Reg. at 28,670.

⁴²¹ See Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236.

⁴²² Gaba, *supra* note 30, at 105–07.

⁴²³ *Id.* at 96.

⁴²⁴ 40 C.F.R. § 266 (2010).

⁴²⁵ See, e.g., Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1239.

⁴²⁶ See *id.*

⁴²⁷ Gaba, *supra* note 30, at 88.

⁴²⁸ Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, 71 Fed. Reg. 42,928, 42,928–99 (July 28, 2006).

is not altogether clear; it appears to vary depending on whether the waste is excluded from classification as a “solid waste” under section 261.4(a) or as a “hazardous waste” under section 261.4(b).

EPA’s conditional exclusions from classification as a “solid waste” have been justified, in part, based on a conclusion that the materials, if managed as required by the conditional exclusion, will be managed in a “commodity-like” rather than waste-like manner, and will thus not have the “element of discard” necessary to classify the material as a solid waste.⁴²⁹ Both in its CRT exclusion and its “reclamation exclusion,” EPA claims that the notice and consent condition is justified in order to ensure that the exported wastes will be properly managed in a commodity-like manner.⁴³⁰ In other words, EPA claims that it can exempt domestically recycled wastes from classification as a solid waste while at the same time imposing export controls on those same materials based on concerns that the materials will not be properly managed outside the United States.

EPA’s conditional exclusions from classification as a “hazardous” solid waste have been based on a distinct (but similar) rationale. Under sections 1003 and 3001 of RCRA, EPA can classify a solid waste as hazardous if there is a plausible basis for concluding the waste will be “mismanaged.”⁴³¹ Thus, EPA has conditionally excluded certain wastes based on a conclusion that, if managed according to the conditions, there is no plausible likelihood that it will be mismanaged.⁴³² In these cases, EPA does not claim that the materials are not solid wastes, but rather that under RCRA it may exclude a waste from classification as a hazardous waste if there is no plausible risk of mismanagement.⁴³³ Although based on a different legal justification than that used to exclude “solid wastes,” the bottom line is similar. EPA can impose a notice and consent requirement on exported wastes based on concerns about the way it will be managed outside the United States.

EPA’s claim that it can impose notice and consent requirements on wastes exported for recycling while at the same time imposing little or no domestic regulation suggests that EPA could, for example, exempt domestic regulation of recycled scrap metal while still imposing notice and consent

⁴²⁹ *See id.* at 42,934.

⁴³⁰ *See id.* at 42,938 (notice and consent in CRT exclusion necessary since they may not be handled as a “commodity.”); Revisions to the Definition of Hazardous Waste, 73 Fed. Reg. at 64,698 (notice and consent requirements in the reclamation exclusion “help determine that the materials are not discarded.”).

⁴³¹ *See Gaba, supra* note 30, at 111.

⁴³² *Id.* at 107–09.

⁴³³ *Id.* at 108.

requirements on exported scrap metal. More significantly, this also suggests a way for EPA to exempt domestically recycled electronic wastes from regulation while still implementing export controls.

VI. IMPROVING THE REGULATION OF HAZARDOUS WASTE EXPORTS

Although EPA may have authority to regulate the export of wastes more stringently, there are steps it could take to improve its regulation of wastes currently subject to its export requirements.

A. *Clarify Determination of the Toxicity Characteristic for E-Wastes*

Much of the concern on exports of hazardous waste focuses on the export of electronic wastes for recycling.⁴³⁴ E-wastes that exhibit a hazardous characteristic exported for reclamation have always been subject to the Subpart E notice and consent requirements,⁴³⁵ but EPA has generally taken the position that only circuit boards, CRTs, and CRT glass exhibit a hazardous characteristic.⁴³⁶ Thus, EPA has assumed that all other e-wastes are exempt from export controls since they are not Subtitle C hazardous wastes.

As discussed above, however, the same data that led EPA to conclude that CRTs exhibit a hazard characteristic also suggest that other e-wastes are hazardous.⁴³⁷ Given that the obligation to make a hazard determination falls on the generator,⁴³⁸ exporters of e-wastes should be concerned about their potential for liability. Indeed, a few citizen suits against such exporters might focus their minds wonderfully.

It would, however, be appropriate for EPA to step up to the plate and clarify the hazardous waste status of most e-wastes. First, EPA can undertake additional studies to determine the possibility that various categories of e-wastes exhibit a characteristic. If EPA finds some level of likelihood that a type of e-waste exhibits a characteristic, it should act to enforce. Generators have the obligation to determine if their materials constitute hazardous wastes,⁴³⁹ and, with sufficient data generated by EPA,

⁴³⁴ See *supra* note 2 and accompanying text.

⁴³⁵ 40 C.F.R. § 262.50 (2010).

⁴³⁶ See *supra* note 268 and accompanying text.

⁴³⁷ See *supra* note 270 and accompanying text.

⁴³⁸ 40 C.F.R. § 262.11.

⁴³⁹ *Id.*

generators would be hard-pressed to rely on “knowledge of process” to justify a determination that the waste is not hazardous.⁴⁴⁰

Second, EPA could adopt clarifications of the Toxicity Characteristic Leachate Procedure (“TCLP”) to specify the methodology to be used in assessing the toxicity of products like e-wastes. The current methodology for performing a TCLP does not adequately address the problem of obtaining appropriate samples from products.⁴⁴¹ Studies used by EPA have discussed alternative methodologies and EPA should evaluate whether alternative techniques for measuring the toxicity of electronic products should be adopted.

Finally, one presumes that EPA is less than enthusiastic about bringing the class of discarded and reclaimed e-wastes into the domestic hazardous waste system. The policy and environmental implications of classifying e-wastes as hazardous for domestic regulation is beyond the scope of this article, but there are methods EPA could use to ensure minimal notice and consent requirements for exports while exempting domestic management. EPA could, as it has for CRTs, exclude other e-wastes from classification as a solid waste but impose a “conditional exclusion” requirement for exported e-wastes. Alternatively, EPA could adopt the approach it uses in regulating SLABs: special regulatory treatment of recycled e-wastes which eliminates domestic manifest requirements while preserving a notice and consent obligation.

B. Provide Greater Transparency Regarding U.S. Hazardous Waste Exports

The entire system of export controls relies on the effectiveness of government policing of imports and exports through notice and consent. It is a safe assumption that the effectiveness of government supervision is enhanced by transparency and political accountability. In other words, the effectiveness of a notice and consent regime would be increased by publicizing information about exports.

At the moment, exporters of regulated materials must submit a notice of intent to EPA.⁴⁴² This notice of intent is shared with the United

⁴⁴⁰ *See id.* (requiring generators to make a hazardous waste determination and allowing them to make this determination, not through testing of the wastes, but based on their knowledge of the waste “in light of the materials or the processes used”).

⁴⁴¹ *See* RCRA TOXICITY CHARACTERIZATION, *supra* note 269, at 1-3 to 1-4.

⁴⁴² Revisions to the Requirements for: Transboundary Shipments of Hazardous Wastes Between OECD Member Countries, 75 Fed. Reg. 1236, 1247 (Jan. 8, 2010).

States Department of State and the governments of any importing or transit countries.⁴⁴³ Acknowledgements of consent to export are provided to exporters by EPA.⁴⁴⁴ Noteworthy is the absence of any public notice of transactions involving the export of hazardous waste.

EPA has recently taken one significant step in providing information about hazardous waste exports. Following adoption of the OECD/SLAB rules, EPA stated its intent "in the interests of transparency" to provide online public posting of summaries of Notices of Intent to export to non-OECD countries.⁴⁴⁵ This information is now available, but it is not clear how frequently the information is updated.⁴⁴⁶

Other than this new source of information about proposed exports to non-OECD countries, information about the export of materials subject to EPA's export regulations is buried in EPA files. One can find anecdotal information from EPA about the scope of exports and it is possible to obtain information through FOIA request. But haphazard, time-consuming, and costly methods of disclosure surely do not further the purposes of RCRA. It is certainly not consistent with the requirement of RCRA that "[p]ublic participation in the development, revision, implementation, and enforcement of any regulation, guideline, information, or program under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States."⁴⁴⁷

At a minimum, EPA should post summary information, such as that provided by EPA in response to a FOIA request, that includes information about the amounts and destinations of hazardous wastes exported from the United States. Public access to actual information about the annual

⁴⁴³ *Id.*

⁴⁴⁴ *Id.*

⁴⁴⁵ *See id.* EPA stated that it will post:

summary information for all future notices we receive concerning a proposed export of RCRA hazardous waste to a non-OECD country. The online information will list the exporter name, exporter address, waste text description, proposed receiving country, and consent status (*e.g.*, notice submitted to foreign country, whether the foreign country consents or objects). Moreover, EPA's cover letters for notices concerning exports to non-OECD countries will remind the countries, when appropriate, of the relevant Basel hazardous waste listing and the Basel Convention prohibition on transboundary shipments of hazardous waste between Basel parties and a non-party like the United States.

Id.

⁴⁴⁶ *Proposed Hazardous Waste Exports to Non-OECD Countries*, *supra* note 235. This is the current correct link to the online information; the web address specified in the OECD/SLAB rule is not accurate.

⁴⁴⁷ RCRA § 7004(b)(1) (codified as amended at 42 U.S.C. § 6974(b)(1) (2006)).

number of exports and their destination would be consistent with EPA's public participation obligations and provide some greater confidence in the export program.⁴⁴⁸

But posting of "after the fact" exports summaries does not fully ensure appropriate public participation. Why doesn't EPA simply post online information regarding all Notices of Intent to export, and not simply those regarding exports to non-OECD countries? Immediate posting of information about Notices of Intent would allow interested members of the public to identify pending exports and have greater ability to assure compliance with RCRA and proper management in the receiving country.

This is not to say that there are not both legal and political problems with publicizing Notices of Intent. The legal problem primarily arises from prohibitions on disclosure of Confidential Business Information ("CBI"). The Freedom of Information Act and EPA regulations provide an exception from public disclosures of CBI.⁴⁴⁹ Additionally, both the Canada/U.S. Agreement and the Mexico/U.S. Agreement contain limitations on the publication of CBI.⁴⁵⁰

EPA now deals with the issue of CBI in export notices in a number of ways. First, 40 C.F.R. § 260.2(b) provides that any information submitted pursuant to Parts 260–265 and 268, including specifically information contained in Notices of Intent ("NOI") to export, will not be classified as CBI unless the party submits a claim of confidentiality at the time the notice is submitted.⁴⁵¹ Therefore, for most NOIs, the exporter will have waived claims of confidentiality unless a specific claim has been submitted with the notice. Although this may waive the right to assert confidentiality by the exporter, EPA has stated that this does not waive claims of CBI by other parties.⁴⁵² To address confidentiality claims by these parties, EPA has on several occasions published notices requesting other "affected parties" to submit information about confidentiality claims with respect to previously submitted NOIs.⁴⁵³ Under EPA's approach, if no party submits information in response to the notice, claims of confidentiality have been waived.

⁴⁴⁸ EPA's current procedures for dealing with confidential business information, discussed below, would be adequate to allow publication of periodic summary information about waste exports.

⁴⁴⁹ See 5 U.S.C. § 552(b)(4) (2006); 40 C.F.R. § 2.203 (2010).

⁴⁵⁰ See Canada/U.S. Agreement, *supra* note 49, at art. 8; Mexico/U.S. Agreement, *supra* note 55, at art. XIII.

⁴⁵¹ 40 C.F.R. § 260.2(b).

⁴⁵² 40 C.F.R. § 262.54(e).

⁴⁵³ See, e.g., Inquiry to Learn Whether Businesses Assert Business Confidentiality Claims, 76 Fed. Reg. 362, 363 (Jan. 4, 2011); Inquiry to Learn Whether Businesses Assert Business Confidentiality Claims, 75 Fed. Reg. 44,951 (notice July 30, 2010).

This process is further complicated by limiting language in 40 C.F.R. § 260.2(b). The requirement in section 260.2(b) to submit a contemporaneous claim of confidentiality is limited to NOIs submitted under the export requirements specified in Parts 260–265 and 268.⁴⁵⁴ This includes export requirements for most wastes, but it does not include NOIs submitted for universal waste exports because the universal waste export requirements are contained in 40 C.F.R. Part 273.⁴⁵⁵ Therefore, EPA has concluded that it is necessary to provide an opportunity for parties exporting universal wastes to have notice and an opportunity to assert CBI claims prior to disclosure of universal waste NOIs.⁴⁵⁶

Could EPA address CBI concerns in a way that allowed publication of pending NOIs? Obviously EPA does not consider CBI concerns sufficient to prohibit the publication of the type of summary information it makes available regarding NOIs for export to non-OECD countries. It is unlikely that the requirements of the international agreements impose a greater barrier than FOIA.

EPA could also shorten the process of asserting CBI claims. EPA currently requires that persons submitting a NOI under Subpart E assert any CBI at the time of submission.⁴⁵⁷ EPA should obviously amend this rule to require persons submitting a NOI under the universal waste rules to also assert a claim at the time of submission. Further, under the OECD Decision and EPA's Subpart H regulations, information from the receiving facility must be submitted prior to export,⁴⁵⁸ and EPA could amend 40 C.F.R. section 260.2(b) to provide that any receiving facility also waives confidentiality if not asserted at the time of submission of the NOI.

Most significantly, the limited data that would need to be published to provide sufficient public information regarding a pending NOI, such as the type of waste and the names of importing and transit countries, should not qualify as confidential business information or trade secrets.

C. *Don't Ratify Basel*

As discussed above, ratification of the Basel Convention by the United States may require nothing more than filing of a notice with the

⁴⁵⁴ 40 C.F.R. § 260.2(b).

⁴⁵⁵ See, e.g., 40 C.F.R. § 273.

⁴⁵⁶ Inquiry to Learn Whether Businesses Assert Business Confidentiality Claims, 76 Fed. Reg. at 363; Inquiry to Learn Whether Businesses Assert Business Confidentiality Claims, 75 Fed. Reg. at 44,951.

⁴⁵⁷ See 40 C.F.R. § 273 subpt. E.

⁴⁵⁸ See OECD Decision, *supra* note 62; 40 C.F.R. §§ 262.80–.89.

Secretariat. There are also reasons to believe that all of the requirements of Basel could be adopted as domestic regulations under the current provisions of RCRA. The United States is thus in a position to join the international community as a party to Basel. But it shouldn't. International control of the exports of hazardous waste from the United States to non-OECD countries may be better served by not ratifying Basel.

Under existing EPA regulations, all exports of hazardous waste to non-OECD countries are currently subject to notice and consent requirements.⁴⁵⁹ However, as a non-ratifying party to the Basel Convention, the export of hazardous wastes from the United States to those countries violates their obligations under Basel. In other words, as long as we do not ratify Basel, any export of hazardous waste to a non-OECD country should presumptively be a violation of legal obligations of the importing country.

To be sure, absent United States ratification, the export of hazardous waste in violation of Basel does not violate RCRA. Thus, at the moment, exports to non-OECD countries violates their laws, not ours, and there is no role for enforcement by the United States.⁴⁶⁰ But it is difficult to believe that the situation would be improved by the United States ratification of the treaty.⁴⁶¹ Following ratification, even with adoption of a RCRA regulatory requirement that authorized exports only if managed in an "environmentally sound manner,"⁴⁶² exports would presumptively be allowed and proof of violations would require a case-by-case assessment to determine if a given export complied with Basel requirements. Current e-wastes being sent for reclamation would not be any more effectively regulated if the United States ratifies Basel. If classified as a Subtitle C hazardous waste, they should now be subject to notice and consent requirements. If not classified as Subtitle C hazardous wastes, ratification of Basel will not ensure better regulation.

The current presumptive violation of Basel arising from the exports from the United States to other than an OECD country provides

⁴⁵⁹ *Proposed Hazardous Waste Exports to Non-OECD Countries*, *supra* note 235.

⁴⁶⁰ Ratification of Basel by the United States might, however, have implications on the ability of private parties to bring damage claims arising from improper disposal under the Alien Torts Claims Act ("ATCA"). The ATCA provides United States jurisdiction for private tort claims arising from violation of the "law of nations or a treaty of the United States." 28 U.S.C. § 1350 (2006). There are arguments that the ATCA already applies if improper disposal is a violation of customary international law. *See* Raechel Anglin, *International Environmental Law Gets Its Sea Legs: Hazardous Waste Dumping Claims Under the ATCA*, 26 YALE L. & POL'Y REV. 231, 262 (2007).

⁴⁶¹ Ratification of Basel would also do little to address the significant compliance problems associated with identifying exports that should be regulated as hazardous wastes.

⁴⁶² Anglin, *supra* note 460, at 249.

certainty and at least the opportunity to use public pressure on the receiving country to decline to consent to the transaction. As discussed above, however, greater transparency in the process might help assure greater public pressure on importing countries to decline to offer affirmative consents to import.

CONCLUSION

EPA's complex set of regulations governing the export of hazardous waste creates a series of paradoxes. On the one hand, it appears that the export of materials that EPA acknowledges as hazardous waste is confined to OECD countries. Thus, many of the most contentious issues regarding trade in hazardous waste with less developed countries may be moot. On the other hand, EPA's inadequate handling of the hazardous waste status of many e-wastes makes complacency about EPA's regulatory program ill-advised.

EPA's export regulations are both simple and complex. They are simple because most, but not all, materials that constitute Subtitle C hazardous wastes are subject to "notice and consent" requirements for export. They are complex because of the dizzying set of different regulations that EPA has promulgated to impose these requirements and the differing rationales that EPA has employed. EPA could do a better job of implementing and simplifying its existing requirements and particularly clarifying the hazardous waste status of e-wastes.

Further, EPA has also claimed authority to exempt materials from classification as a hazardous waste and thus immune from export controls. Curiously, through this same rationale, EPA has justified exempting domestic wastes from regulation while imposing export requirements.

Finally, RCRA itself creates a constitutional and statutory paradox. EPA both embraces and denies that it has authority to implement international agreements. The issue has inherent constitutional interest, but it also has environmental consequence. If Congress can provide domestic effect to any future international agreements, then EPA has authority fully to implement OECD Decisions and the Basel Convention. If Congress has not or cannot provide for the binding effect of future international agreements, then portions of section 3017 become meaningless and there are questions about the content of and procedures used to adopt EPA's export regulations.