

DUMPING IN THE INTERNATIONAL BACKYARD: EXPORTATION OF HAZARDOUS WASTES TO MEXICO

LUIS R. VERA-MORALES*

“Some people think of Mexico as a big trash can.”¹

I.	INTRODUCTION	354
II.	INTERNAL LEGISLATION GOVERNING HAZARDOUS WASTE	357
	A. <i>U.S. Laws on Hazardous Waste Exports</i>	357
	1. The Resource Conservation and Recovery Act	357
	2. The Comprehensive Environmental Response, Compensation, and Liability Act.....	361
	B. <i>Mexican Legislation on Hazardous Waste Imports: The “Recycling” Option</i>	362
	1. The General Law on Ecological Equilibrium and Environmental Protection.....	362
	2. Regulations to the General Law Regarding Hazardous Wastes	363
III.	BILATERAL AND MULTILATERAL AGREEMENTS GOVERNING THE TRADE IN HAZARDOUS WASTE BETWEEN THE UNITED STATES AND MEXICO	365
	A. <i>Agreement Between the United States and Mexico on Cooperation for the Protection and the Improvement of the Environment in the Border Area</i>	366

* Associate, Head of Environmental Department, Santamarina y Steta, Mexico City, Mexico; LL.M., 1993, Tulane Law School-Energy and Environment Program; Specialization in Corporate and Economic Law, 1990, Universidad Panamericana; J.D., 1989, Escuela Libre de Derecho; B.A., Instituto Tecnológico y de Estudios Superiores de Monterrey. The author wishes to thank Mr. Paul Gormley for his insightful criticisms, assistance and contributions to this article.

1. Joel Simon, *Dirty Work*, CAL. LAW., Feb. 1993, at 40, 44.

B.	<i>The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal</i>	370
C.	<i>The North American Free Trade Agreement and the North American Agreement on Environmental Cooperation</i>	374
1.	NAFTA Environmental Provisions	374
2.	The North American Agreement on Environmental Cooperation.....	375
D.	<i>Controlling Agreement</i>	378
IV.	ENFORCEMENT OF EXISTING HAZARDOUS WASTE LAWS	379
A.	<i>Enforcement in the United States</i>	379
B.	<i>Enforcement in Mexico</i>	381
C.	<i>Enforcement Trends in Both Countries</i>	383
V.	PROPOSED STRATEGY AND FINAL CONSIDERATIONS	384

I. INTRODUCTION

In the United States, the hazardous waste disposal industry generates approximately \$15 billion each year.² This money comes from the between 60 million and 247 million tons of hazardous waste created in the United States each year, the largest volume in the world.³ This huge volume, which is quickly filling to capacity existing disposal sites in the United States, is expected to increase by the end of the century.⁴ The slow pace of constructing new sites, which are expensive and extremely unpopular, has exacerbated the problem.⁵ The shortage of disposal facilities has forced local governments and industry to search for alternative waste disposal solutions. As hazardous waste disposal costs in the United States increase⁶ and as government regulation of disposal methods tightens,

2. Barbara Scramstad, Comment, *Transboundary Movement of Hazardous Wastes from the United States to Mexico*, 4 TRANSNAT'L LAW. 253, 255 (1991) (citing *Frontline: Global Dumping Ground* (PBS Television Broadcast, Oct. 1990)).

3. Scramstad, *supra* note 2, n.6.

4. See Julienne I. Adler, Comment, *United States' Waste Export Control Program: Burying our Neighbors in Garbage*, 40 AM. U. L. REV. 885, 887 (1991).

5. *Id.*

6. See Barbara D. Huntoon, Note, *Emerging Controls on Transfers of Hazardous Waste to Developing Countries*, 21 LAW & POL'Y INT'L BUS. 247, 247 (1989). According to

some see exporting waste to countries with less stringent, and therefore less expensive, waste regulations as the most efficient, logical and cost-effective alternative to domestic hazardous waste disposal.⁷

With increasing frequency, U.S. generators are shipping their hazardous waste to Mexico. Although Mexican legislation prohibits any import of hazardous waste into Mexican territory solely for the purpose of storage, destruction or final disposal,⁸ waste finds its way in through the backdoor. Keeping with exceptions in Mexican legislation, the waste enters Mexico either as hazardous waste intended for recycling or as raw material. Very often either the importers or the exporters, or both, are aware that the transaction is a sham. Additionally, a great deal of waste is introduced by criminal operators.⁹

Once the waste enters Mexico, the importers often dispose of it improperly.¹⁰ For example, in 1990 U.S. Customs officials discovered lead waste in an empty truck returning to the United States. The officials tracked the waste to an American owned facility in Mexico which "recycled" batteries by cracking them open and disposing of the acid on the ground. The recycling facility would then send the extracted lead to the United States for resale.¹¹ In 1993, in response to felony charges in California for unlawfully transporting hazardous waste across the border, the facility owner pleaded no contest and paid a \$25 million fine.¹²

the author, legal disposal of a ton of highly toxic waste may cost as much as \$2,500, and up to \$350 per ton to dispose of less hazardous waste. *Id.*

7. Adler, *supra* note 4, at 887.

8. Ley General Equilibrio Ecológico y la Protección al Ambiente, art. 153, § III (1989) [hereinafter General Law]. The Regulations to the General Law as Regards Hazardous Wastes (1988), however, are less specific than the General Law by providing that "no authorization shall be granted to import hazardous wastes for the sole purpose of finally disposing it within [Mexican] national territory". *Id.* art. 53.

9. See Elizabeth C. Rose, *Transboundary Harm: Hazardous Waste Management Problems and Mexico's Maquiladoras*, 23 INT'L LAW 223, 225 (1989). According to Rose, there are three categories of export handlers: compliant waste handlers, sham recyclers, and criminal operators. *Id.*

10. See, e.g., Simon, *supra* note 1, at 44, 90.

11. Simon, *supra* note 1, at 41-42.

12. *U.S. Firm Charged With Transporting Toxins Across the Border*, THE NEWS, Dec. 16, 1993.

In order to get an understanding of the extent and growth of the movement of hazardous waste from the United States to Mexico, it is useful to look at the figures concerning hazardous wastes originating in the U.S. Environmental Protection Agency (EPA) Region VI. From October 1987 to September 1989, only 310 tons of liquid and solid hazardous waste were reported shipped from Region VI to Mexico.¹³ In 1988, that figure was 17,000 tons. In 1989, the volume grew to almost 28,000 tons.¹⁴ More recent figures indicate that at least 35,000 tons entered Mexico during 1992.¹⁵ These figures represent only "authorized" movement of hazardous waste southbound (those shipments which are for "recycling").

Conscious of the health hazards to citizens of both countries caused by the transboundary movement of hazardous wastes, Mexico and the United States have been collaborating to identify and monitor the flow of hazardous waste into Mexico. Efforts have been made both through multilateral and bilateral agreements addressing environmental protection in general, as well as through improvements at the common border.¹⁶ Additionally, domestic legislation and regulations in both countries provide for a better approach to the problem.¹⁷

Nevertheless, both the international agreements and the domestic measures fall short of adequately addressing the problem.¹⁸ Elements of both Mexican and United States laws ensure that hazardous waste will continue to arrive in Mexico from the United

13. Scramstad, *supra* note 2, at 256 (citing *Hazardous Waste Management and Maquiladoras Industry Manual*, joint U.S. EPA/SEDUE Publication by U.S./Mexico Hazardous Waste Group (Nov. 1989) at 3). EPA Region VI states are: Arkansas, Louisiana, New Mexico, Oklahoma and Texas. *Id.* n.12.

14. *Id.*

15. *El Economista*, Ano V, No. 1134, February 18, 1993, at 7. The unidentified reporter cited as a source the head of the Department of Hazardous Wastes within the General Direction for the Control and Prevention of Pollution of the then existing Ministry of Urban Development and Ecology (Secretaria de Desarrollo Urbano y Ecologia) (federal agency in charge of the environmental policy within Mexico's territory until May 25, 1992, when it was substituted by the Ministry of Social Development (Secretaria de Desarrollo Social)) [hereinafter SEDESOL]. Reforms to the Public Federal Administration Organic Law, Official Daily of the Federation, May 25, 1992.

16. See discussion *infra* part III.

17. See discussion *infra* part II.

18. See discussion *infra* part IV.

States. The purpose of this article is to identify the ways in which the existing legal regime encourages or facilitates the hazardous waste trade between the United States and Mexico. Section II presents the applicable domestic legislation in both the United States and Mexico, and shows how legislation encourages trade in hazardous waste. Section III discusses international agreements which govern the movement of hazardous wastes. Section IV examines enforcement of hazardous waste legislation in the United States and in Mexico. Finally, Section V proposes a strategy to address the problem, taking into consideration the existing inequalities between the two countries.

II. INTERNAL LEGISLATION GOVERNING HAZARDOUS WASTE

The existing domestic legislation in both the United States and Mexico encourages the movement of hazardous waste across the border. First, the strict mandates of the U.S. laws drive the producers of hazardous wastes to seek ways to dispose of the wastes outside of the United States. Second, the exceptions in Mexican laws for “recycling” hazardous wastes provide a mechanism for importers to bring wastes into Mexico.

A. *U.S. Laws on Hazardous Waste Exports*

In the United States, two federal laws focus on hazardous wastes. These laws are the Resource Conservation and Recovery Act (RCRA),¹⁹ and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).²⁰ While the laws perform very different functions, both have a similar effect by encouraging American producers of hazardous wastes to export wastes in order to escape liability under the Acts.

1. The Resource Conservation and Recovery Act

The RCRA, which amended the Solid Waste Disposal Act, regulates hazardous waste in the United States. When enacting RCRA, the United States Congress was concerned with protecting

19. 42 U.S.C. §§ 6901-992k (1988 & Supp. III 1991).

20. 42 U.S.C.A. §§ 9601-75 (West 1982 & Supp. V 1987).

human health and the environment²¹ through a system that tracks waste from its "cradle to its grave."²² The resulting manifest system traces the waste from the generator, through the transporters, to the disposers. At each stage in the life cycle of the waste, the statute imposes specific requirements for the treatment, storage and disposal of waste.²³ Specifically, Subchapter III of RCRA governs the conduct of those who generate and transport hazardous waste, as well as actions of the owners and operators of treatment, disposal and storage facilities.²⁴

In 1984, Congress amended RCRA with the Hazardous and Solid Waste Amendments.²⁵ These amendments devote an entire section to the export of hazardous waste.²⁶ Under the amendments, the regulatory process for hazardous waste exports begins when the generator prepares a control and transport document known as the Uniform Hazardous Waste Manifest.²⁷ That document must accompany the waste from the point of generation to its final destination.²⁸ Additionally, the generator must notify the EPA in advance of its intent to export of the proposed shipment.²⁹ The EPA

21. PERCIVAL, ET AL., ENVIRONMENTAL REGULATION, LAW, SCIENCE AND POLICY 214 (1992). The authors identify several objectives of RCRA: (1) to make land disposal of wastes safer than it had been previously; (2) to be a technology forcing statute by raising the cost of disposal on landfills; (3) to promote waste reduction; (4) to minimize direct regulation of U.S. production processes; (5) to encourage recycling; and (6) to maintain substantial state responsibility for the solid waste problem. *Id.*

22. Adler, *supra* note 4, at 894. Particularly, RCRA's system provides for five separate elements: (1) identification of the generators and of the type of waste generated; (2) tracking of the waste through a uniform "manifest" describing the waste, its quantity, the generator and the receiver, which must accompany transported hazardous waste from its generation point to its final off-site destination and disposal; (3) all the TSD facilities will be issued permits in order to allow EPA and the states to ensure their safe operation; (4) treatment storage disposal (TSD) facilities must follow EPA's restrictions and controls; and (5) generators, transporters and facilities are penalized if they do not comply with the regulations. PERCIVAL, *supra* note 21, at 224.

23. 42 U.S.C.A. §§ 6902(4), 6903(12), 6922, 6923(a), 6924 (West 1988 & Supp. III 1991).

24. *Id.* §§ 6921-39(b).

25. 42 U.S.C.A. § 6938 (West Supp. V 1987) (*amended by* Hazardous and Solid Waste Amendment Act of 1984, Pub. L. No. 98-616, § 245(a), 98 Stat. 3262).

26. *Id.*

27. *Id.* § 6938(e).

28. *Id.* § 6938(a)(1)(C).

29. *Id.* § 6938(c). The notification must include: (1) the name and address of the exporter; (2) the type and quantity of the waste; (3) the frequency at which the waste is to be

must then, through the United States Secretary of State, ask the destination country for its consent to accept the waste.³⁰ If the receiving country agrees to accept the shipment, the EPA must forward the consent to the exporter.³¹ The consent must be attached to the Manifest accompanying the shipment.³² When this process has been followed, the exporter may ship the waste in accordance with the specific instructions and conditions imposed in the consent. Finally, even if the EPA determines that the exporter's proposal is environmentally unsound, it cannot withhold authorization for the export when the importing nation gives consent.³³

The EPA regulations enacted pursuant to the statute impose additional requirements and safeguards. For example, within ninety days of the initial shipment, the consignee at the ultimate destination must send written confirmation to the exporter.³⁴ If this confirmation is not sent, the exporter is required to file a report of discrepancy with the EPA.³⁵

Recalling that Mexican law allows hazardous wastes into the country for recycling, the fact that a safe and environmentally sound recycling facility exists does not mean that importation approval is automatic. Even if the generator and transporter comply with all the statutory and regulatory requirements, Mexico may refuse to accept the shipment. For example, in 1988 the Mexican government rejected 270,000 tons out of a 300,000 ton hazardous waste shipment from the United States.³⁶ Mexico refused to accept the waste because it could not be recycled or reused as required by Mexican law.³⁷ When wastes are rejected, the primary exporter must redirect the shipment

exported and the period of time needed; (4) the ports of entry; (5) a description of how the waste will be transported and what will happen to the waste in the destination country; and (6) the name and address of the ultimate destination. *Id.*

30. 42 U.S.C.A. § 6938(d).

31. *Id.* § 6938(c).

32. *Id.* § 6938(a)(1)(C).

33. See Huntoon, *supra* note 6, at 256.

34. 40 C.F.R. § 262.55(b) (1992).

35. *Id.*

36. Scramstad, *supra* note 2, at 266-67.

37. Mexican law allows imports of hazardous waste only if it is for recycling or if it is to be used as a raw material. Mexico prohibits importation solely for disposal or storage. See General Law, *supra* note 8, art. 153, §§ II, III.

back to the United States, notify the EPA and instruct the transporter to revise the Manifest accordingly.³⁸

Congress provided for enforcement of RCRA's export requirements through several mechanisms. These mechanisms include administrative orders, civil actions and criminal penalties. First, the EPA may issue an administrative order when it determines that there has been a violation of any requirement in the statute.³⁹ This order may either require immediate compliance or compliance within a specific time period.⁴⁰ Furthermore, the order may include a revocation or suspension by the EPA of any permit issued under RCRA.⁴¹ In the administrative order, the EPA may also assess civil penalties of up to \$25,000 per day of noncompliance for each violation.⁴² Unless there is a particularly egregious violation, the EPA will issue an administrative order before commencing a civil action.⁴³ If the violator does not comply with the administrative order, the EPA may initiate a civil action for appropriate relief, including a temporary or permanent injunction.⁴⁴ Again, the violator is subject to a \$25,000 fine for each day in violation.⁴⁵ As mentioned above, the EPA may begin a civil enforcement action in federal court.⁴⁶ This civil action subjects the violator to injunctive relief and to penalties of up to \$25,000 per day of violation.⁴⁷

RCRA also provides for criminal penalties.⁴⁸ Criminal violations include the failure to file required reports, the transportation of hazardous waste without a Manifest, and the transport (or allowing the transport) of hazardous waste to an unpermitted facility.⁴⁹ Of particular relevance for this paper is that it is a crime to knowingly export a hazardous waste either without the

38. 40 C.F.R. § 262.54(g)(1) (1992).

39. 42 U.S.C.A. § 6928(a)(1) (West 1988 & Supp. III 1991).

40. *Id.* § 6928(a)(1).

41. *Id.* § 6928(a)(3).

42. *Id.* § 6928(a)(3).

43. Scramstad, *supra* note 2, at 268.

44. 42 U.S.C.A. § 6928(a)(1).

45. *Id.* § 6928(g).

46. *Id.* § 6928(a).

47. *Id.* § 6928(a)(3).

48. *Id.* § 6928(d).

49. *Id.* § 6928(d).

consent of the receiving country or in violation of an international agreement.⁵⁰ When the EPA finds a violation of RCRA, the criminal penalties can be harsh. The violator is subject to a penalty of up to \$50,000 per day of violation and imprisonment for up to five years in some cases.⁵¹ The penalties are particularly severe for an offense of “knowing endangerment.”⁵² Under the applicable statutory provision, a violator who places another person in “imminent danger of death or serious bodily injury” could face a fine of up to \$250,000 and fifteen years imprisonment.⁵³ The EPA may use all of these enforcement tools for any violation of the statute. It is clear, therefore, that the EPA can use RCRA’s enforcement provisions for violations of the export provisions.

2. The Comprehensive Environmental Response, Compensation, and Liability Act

While RCRA regulations govern prospective conduct, CERCLA⁵⁴ provides for remedial action. Congress enacted CERCLA as a response to the problems associated with environmental and health hazards at toxic waste sites across the United States.⁵⁵ Section 107 of CERCLA provides for liability for response and remediation costs if hazardous substances are released or if there is a “threatened” release.⁵⁶ The liability provision is far reaching: essentially, liable parties include the present and past owners or operators of disposal facilities, any person who arranged for disposal of hazardous wastes, and any person who accepted the wastes.⁵⁷ The statutory defenses to CERCLA liability, however, are

50. *Id.* § 6928(d)(6)(A)(B).

51. *Id.* § 6928(d).

52. *Id.* § 6928(e).

53. *Id.* § 6928(e). If the violator is an “organization” the maximum penalty is increased to \$1 million. *Id.* § 6928(e). The statute defines “organization” as “a legal entity, other than a government, established or organized for any purpose, and such term includes a corporation, company, association, firm, partnership, . . . or any other association of persons.” *Id.* § 6928(f)(5).

54. *Id.* §§ 9601-75 (West 1988 & Supp. III 1991).

55. Adler, *supra* note 4, at 897.

56. 42 U.S.C.A. § 9607(a)(4).

57. *Id.* § 9607(a). Liable persons under this section are also responsible for damages for injury to, destruction of, or loss of natural resources and the costs of any health assessments or health effects study carried out under CERCLA. *Id.* §§ 9607(a)(4)(C),(D).

very limited. CERCLA defendants may be able to prevail only if they can show that the release was caused by an act of God, a war, or an intervening unforeseeable act of a third party.⁵⁸

Under RCRA and CERCLA, the United States regulatory framework for hazardous waste disposal is very stringent. However, it is evident that both statutes are primarily concerned with domestic problems such as unsafe handling and disposal, rather than problems which the waste causes in other jurisdictions. This domestic stringency, and the lack of substantive safeguards against improper disposal abroad, encourages some producers of hazardous wastes to send wastes to Mexico to avoid both the regulatory rigors of RCRA, and potential liability under CERCLA.

B. Mexican Legislation on Hazardous Waste Imports: The "Recycling" Option

Mexico has a civil law system where the law is entirely codified. Mexican environmental laws, therefore, are concisely written and allow ample scope for administrative or judicial interpretation. This section will examine the General Law on Ecological Equilibrium and Environmental Protection and its Regulations.

1. The General Law on Ecological Equilibrium and Environmental Protection

In January 1988, Mexico enacted the General Law on Ecological Equilibrium and Environmental Protection (General Law) with the purpose of providing a detailed and comprehensive framework to govern the environment.⁵⁹ This paper will analyze the General Law only as it relates to regulation of hazardous waste. Article 3 of the General Law defines "waste" as "any material generated in the extraction, benefit, transformation, production, consumption, utilization, control or treatment processes, which quality does not allow it to be used again in the same process that

58. *Id.* § 9607(b).

59. Official Gazette of the Federation, Jan. 28, 1988.

generated it.”⁶⁰ “Hazardous waste” is more narrowly defined as that waste, whatever its physical state, which may represent a risk for the ecological equilibrium or the environment due to its corrosive, toxic, poisonous, reactive, inflammable, biological infectious or irritant characteristics.⁶¹ Article 153 of the General Law only allows the importation of hazardous waste for the limited purposes of treatment, recycling or reuse.⁶² Additionally, the treatment, recycling or reuse must conform to the applicable laws and regulations.⁶³ The statute absolutely prohibits the importation of hazardous wastes solely for the purpose of final disposal or storage.⁶⁴ If the Mexican government finds a violation of this prohibition, it can revoke an authorization for importing hazardous wastes. Additionally, the government can impose penalties in certain cases. For example, penalties can be imposed if authorities discover that the hazardous waste authorized to be imported presents a higher risk than that disclosed by the applicant.⁶⁵ Furthermore, Mexico may assess penalties when the import operation does not comply with the requirements set forth in the authorization.⁶⁶ Finally, penalties are authorized if there is evidence that data contained in the application was false.⁶⁷

2. Regulations to the General Law Regarding Hazardous Wastes

The Regulations to the General Law Regarding Hazardous Wastes⁶⁸ (Regulations on Hazardous Wastes) impose specific obligations on those generating, handling, transporting, importing or exporting hazardous wastes. The regulations additionally impose obligations on owners and operators of treatment, disposal or storage facilities.⁶⁹

60. General Law, *supra* note 8, art. 3.

61. *Id.* § XXVII.

62. *Id.* art. 153, § II.

63. *Id.*

64. *Id.* art. 153, §§ II & III.

65. General Law, *supra* note 8, art. 153, § VIII(a).

66. *Id.* § VIII(b).

67. *Id.* § VII(d).

68. Official Gazette of the Federation, Nov. 25, 1988.

69. Regulations on Hazardous Wastes, arts. 1-63 (1988).

The Regulations on Hazardous Wastes require handlers of hazardous wastes to get an authorization from the Mexican government.⁷⁰ Handling activities include the storage, transport, reuse, treatment, recycling, incineration and final disposal of hazardous wastes.⁷¹ Handlers must file an "Ecological Clearance Certificate," or "Guia Ecologica," for all imports or exports of hazardous wastes to or from Mexico.⁷² This certificate must indicate the ports the waste will pass through and the proposed mode of transportation.⁷³ The transporter has ninety days from the date the certificate is issued to import or export the waste.⁷⁴ Within fifteen days of when the shipment is made, the transporter must notify the Mexican Ministry of Social Development (SEDESOL),⁷⁵ formerly known as the Ministry of Urban Development and Ecology.⁷⁶ The Regulations on Hazardous Wastes also require the handler to provide a bond in order to assure compliance with Mexican law and with the terms of the authorization, and to assure reparation (even to a foreign country) in the event of an accident.⁷⁷

SEDESOL, together with its enforcement arm, the Attorney General's Office for the Protection of the Environment (Procuraduria Federal de Protección al Ambiente, or PROFEPA), has been given broad oversight and inspection authority to ensure enforcement of the General Law and its regulations.⁷⁸ SEDESOL can impose administrative as well as criminal penalties on violators. Administrative penalties include the imposition of fines, permanent or temporary shut-down of the facility, up to thirty-six hours of

70. *Id.* art. 10.

71. *Id.* art. 9.

72. *Id.* art. 43.

73. *Id.* art. 44.

74. *Id.* art. 49.

75. SEDESOL is the Mexican counterpart of the EPA.

76. *See supra* note 15.

77. Regulations on Hazardous Wastes, arts. 43-49.

78. In July 1992, SEDESOL's internal structure was modified in order to provide for two independent but interconnected organisms, the National Institute of Ecology (Instituto Nacional de Ecología or INE) as its regulatory arm, and PROFEPA, in charge of the enforcement of environmental provisions throughout the country. Official Gazette of the Federation, June 25, 1992.

administrative arrest and even the suspension, cancellation or revocation of any license, permit or authorization.⁷⁹

Criminal sanctions can also be imposed on the violators of hazardous waste handling provisions. Up to six years of imprisonment and fines equivalent to up to 10,000 days of the minimum daily wage in the Federal District can be imposed on an individual importing or recycling hazardous wastes either without or in violation of the corresponding authorization.⁸⁰

When enacted, both the General Law and the Regulations on Hazardous Wastes represented a serious and ambitious effort by the Mexican government to control the generation, handling and disposal of hazardous wastes. The magnitude and complexity of the problem which they were created to address, however, requires an even more sophisticated approach.

III. BILATERAL AND MULTILATERAL AGREEMENTS GOVERNING THE TRADE IN HAZARDOUS WASTE BETWEEN THE UNITED STATES AND MEXICO

As well as the relevant domestic legislation impacting the transportation of hazardous wastes, there are several relevant international agreements and treaties. These treaties often specifically address the international shipment of hazardous wastes.

In addition to domestic legislation in both the United States and Mexico, both nations have entered into several bilateral and multilateral agreements designed to coordinate efforts with regard to the solution of shared regional and global hazardous waste problems. For over a century the United States and Mexico have had a relationship which allows the countries to address such issues.

79. General Law, *supra* note 8, arts. 171-72.

80. *Id.* art. 184. As of December 1993, the minimum daily wage in the Federal District (Mexico City) was 14.57 in Mexican pesos or approximately \$4.55 in U.S. dollars at an exchange rate of 3.20 pesos to the dollar.

A. *Agreement Between the United States and Mexico on Cooperation for the Protection and the Improvement of the Environment in the Border Area*

The United States and Mexico have a long history of cooperation on border sanitation and related environmental quality issues. This history dates back to the 1889 Convention Between the United States and Mexico to Facilitate Carrying Out of the Principles Contained in the Treaty of November 12, 1884.⁸¹ That convention authorized an International Transboundary Commission to identify and resolve differences between the United States and Mexico over any issues that would potentially affect boundary waters. In this century, the 1944 Treaty Between the United States and Mexico on the Utilization of the Colorado and Tijuana Rivers and of the Rio Grande,⁸² established the International Boundary and Water Commission (IBWC), a body charged with undertaking “any sanitary measures or works which may be mutually agreed upon by the two governments.”⁸³ While the EPA now has jurisdiction over waste matters in the border area, the IBWC still handles water quality issues.⁸⁴ More recently, in 1978, the EPA and the Mexican Subsecretariat of Environmental Improvement of the Ministry of Health, signed a Memorandum of Understanding (MOU) that commits the nations to “a cooperative effort to resolve environmental problems of mutual concern in border areas.”⁸⁵ In addition, the MOU established parallel projects such as pollution abatement and control programs, spill detection plans, mutual review of national

81. Convention Between the United States of America and the United States of Mexico to facilitate the carrying out of the principles contained in the Treaty of November 12, 1884, Mar. 1, 1989, U.S.-Mex., 26 Stat. 1512 [hereinafter 1889 Treaty].

82. Treaty Between the United States of America and Mexico Respecting Utilization of the Colorado and Tijuana Rivers and of the Rio Grande, Feb. 3, 1944, U.S.-Mex., 59 Stat. 1219.

83. *Id.* art. 3.

84. The Resource Conservation and Recovery Act of 1976 authorizes the EPA to regulate hazardous waste. 42 U.S.C.A. §§ 6901-87 (West Supp. V 1987).

85. Memorandum of Understanding between the Subsecretariat for Environmental Improvement of Mexico and the Environmental Protection Agency of the United States for Cooperation on Environmental Problems and Transboundary Problems, June 14-19, 1978, U.S.-Mex., 30 U.S.T. 1576 [hereinafter MOU].

environmental policies and strategies, data gathering and exchange of information.⁸⁶

The agreement between the United States and Mexico on Cooperation for the Protection and the Improvement of the Environment in the Border Area (La Paz Agreement)⁸⁷ superseded the 1978 MOU.⁸⁸ According to the terms of the La Paz Agreement, there are several general objectives.⁸⁹ First, the parties wished to “establish a basis for cooperation for the protection, improvement and conservation of the environment.” Second, both nations wished to “agree on necessary measures to prevent and control pollution.”⁹⁰ Third, the parties wanted to provide the “framework for development of a system of notification for emergency situations.”⁹¹ Additionally, the La Paz Agreement provided for subsequent annexes to focus on specific environmental problems.⁹² Annex I addresses border sanitation problems in the San Diego-Tijuana area.⁹³ Annex II

86. *Id.* at 1576-77. *See also* Rose, *supra* note 9, at 233.

87. Agreement between the United States of America and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area, Aug. 14, 1983, U.S.-Mex., 22 I.L.M. 1025 [hereinafter La Paz Agreement]. The La Paz Agreement entered into effect on February 16, 1984, after both the United States and Mexico certified that it had completed domestic approval procedures. While under Mexican standards the La Paz Agreement has the character of an international convention (as it was signed by the President and ratified in the Senate), with the same force as the federal laws (just behind the value of Constitutional norms), it has a different value in the United States. In the United States it is an executive agreement and not a formal treaty, as it is effected by the President alone, and does not require the approval and support of Congress, as does a formal treaty. Mark A. Sinclair, Comment, *The Environmental Cooperation Agreement Between Mexico and the United States: A Response to the Pollution Problems of the Borderlands*, 19 CORNELL INT'L L.J. 87, 123 (1986). “An executive agreement lacks the enforceability of a treaty; its success depends on the continued political goodwill between national governments” and on “later Congressional support to fulfill executive commitments through funding and implementing legislation.” *Id.*

88. La Paz Agreement, *supra* note 87, art. 23.

89. *Id.* art. 1. According to some, however, the ultimate objective of the La Paz Agreement was to address the environmental concerns created by the growth of the economy and population near the border caused by the growth of the maquiladora industry. *Cf.* Scramstad, *supra* note 2, at 262 (citing La Paz Agreement, art. 6).

90. La Paz Agreement, *supra* note 87, art. 1.

91. *Id.*

92. *Id.* art. 3.

93. Agreement of Cooperation Between the United States of America and the United Mexican States for Solution of the Border Sanitation Problem at San Diego, California-Tijuana, Baja California, July 18, 1985, U.S.-Mex., 26 I.L.M. 18 (entered into force July 18, 1985) [hereinafter Annex I].

establishes a U.S.-Mexico Contingency Plan regarding pollution incidents along the border.⁹⁴ Annex III covers the transboundary movement of hazardous wastes and substances.⁹⁵

For the purposes of the La Paz Agreement, the EPA and SEDESOL are designated as the respective national coordinators.⁹⁶ Annex III of the La Paz Agreement defines “hazardous wastes” as those wastes which, as designated or defined by the domestic authority “if improperly dealt with in activities associated with them,” may result in damage to health or the environment.⁹⁷ The La Paz Agreement defines “activities” associated with hazardous wastes as “handling, transportation, treatment, recycling, storage, application, distribution, reuse or other utilization.”⁹⁸ For the purposes of this article, it is assumed that Annex III includes as hazardous wastes those wastes shipped into Mexico for recycling with the approval of the Mexican government, as well as wastes illegally transported into Mexico for final disposal.⁹⁹

In order to protect public health and to prevent environmental damage, Annex III establishes notification procedures for transboundary shipments of hazardous wastes. Specifically, Article 3 of Annex III provides that at least forty-five days prior to shipment the designated authority of the exporting country must report any proposed hazardous waste shipment to the designated authority of the importing country.¹⁰⁰ The notification must identify the exporter, the type and total quantity of the waste being exported, the period of time over which the waste will be exported, and the point of entry into the

94. Agreement of Cooperation Between the United States of America and the United Mexican States Regarding Pollution of the Environment Along the Inland International Boundary by Discharges of Hazardous Substances, July 18, 1985, U.S.-Mex., 26 I.L.M. 19 (entered into force Nov. 29, 1985) [hereinafter Annex II].

95. Agreement of Cooperation Between the United States of America and the United Mexican States Regarding the Transboundary Shipments of Hazardous Wastes and Hazardous Substances, Nov. 12, 1986, U.S.-Mex., 26 I.L.M. 25, U.S.-Mex. (entered into force Jan. 29, 1987) [hereinafter Annex III].

96. La Paz Agreement, *supra* note 87, art. 8.

97. Annex III, *supra* note 95, art. 1, paras. 2, 3.

98. *Id.* para. 4.

99. Rose, *supra* note 9, at 235. Annex III also covers wastes to be shipped back into the United States for disposal under the provisions of the “maquiladora” program. *Id.*

100. Annex III, *supra* note 95, art. III, paras. 1, 2.

importing country.¹⁰¹ Upon notification, the importing country's designated authority must either consent or object to the export within forty-five days.¹⁰² Even after the shipment has reached the importing country, that country may decide to return a shipment for any reason.¹⁰³ In that case, the exporting country must readmit it.¹⁰⁴

Annex III also compels the parties to ensure that their domestic laws and regulations are enforced to the fullest extent practicable.¹⁰⁵ Additionally, Annex III provides that both countries will "exchange information from monitoring and spot-checking transboundary shipments, to guarantee that the [] shipments conform with the respective domestic laws and with the requirements of the Annex."¹⁰⁶ While Annex III sets up the general export and import guidelines, the domestic laws of both countries actually articulate the national policies in this regard. However, the Agreement has few teeth. Even EPA officials recognize that the Agreement "[has not] even been monitored, much less enforced" by either Mexico or the United States.¹⁰⁷

The principle obstacles to compliance with the Agreement have been a lack of resources for enforcement of the Agreement in the United States and Mexico, a focus in both nations on domestic interests over the international concerns, and the lack of formal enforcement provisions.¹⁰⁸ Instead, the parties chose broad recommendations and general pledges of cooperation which have not proved sufficient to protect the environment.

101. *Id.*

102. *Id.* para. 4.

103. *Id.* art. IV.

104. *Id.*

105. *Id.* art. II, para. 2.

106. *Id.* para 3. Compare Scramstad, *supra* note 2, at 263.

107. Simon, *supra* note 1, at 89.

108. See Mark A. Sinclair, *The Environmental Cooperation Agreement Between Mexico and the United States: A Response to the Pollution Problems of the Borderlands*, 19 CORNELL INT'L L.J. 87, 133-34 (1986).

B. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

Both Mexico and the United States signed the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes (Basel Convention or Convention).¹⁰⁹ The Convention was adopted in March 1989 and entered into force in May 1992. As enacted, the Basel Convention symbolizes the struggle between industrialized and developing nations. The developing nations sought significant restrictions on the international export of hazardous wastes from the developed nations.¹¹⁰ The developed nations, however, preferred a treaty that would ensure their ability to export waste as a form of hazardous waste disposal.¹¹¹ As a result, some commentators characterize the Convention as a compromise treaty.¹¹² These commentators believe the Convention to be largely rhetorical and lacking in substance and effectiveness.¹¹³

While the ultimate goal of the Basel Convention is the reduction in the generation and transboundary movement of hazardous waste, it does not ban hazardous waste exports. Instead, the Convention promotes the free exchange of information and technology regarding hazardous waste transfers and disposal.¹¹⁴ As a preliminary matter, the Convention defines hazardous wastes as those wastes belonging to certain categories or having certain chemical characteristics.¹¹⁵ If a waste is not covered by this definition, the Basel Convention will still govern if the exporting nation, the

109. United Nations Environment Programme Conference of Plenipotentiaries on the Global Convention on the Control of Transboundary Movements of Hazardous Wastes, Mar. 22, 1989, 28 I.L.M. 657 [hereinafter Basel Convention].

110. Peter Obstler, *Toward a Working Solution to Global Pollution: Importing CERCLA to Regulate the Export of Hazardous Waste*, 16 YALE J. INT'L L. 73, 94 (1991) (noting that although many nations were unhappy with the treaty and have not signed it yet, "the Basel Convention is the most significant and broadly based multilateral, international agreement on hazardous waste exports in existence today").

111. *Id.*

112. *Id.* See also Scramstad, *supra* note 2, at 283-84.

113. Scramstad, *supra* note 2, at 283-84. See also Obstler, *supra* note 110, at 94.

114. Basel Convention, *supra* note 109, art. 10.

115. *Id.* art. 1, para. (1)(a).

importing nation, or any transit nation, considers the waste to be hazardous under domestic legislation.¹¹⁶

The Basel Convention imposes several obligations upon the signatory parties. First, parties to the Convention may prohibit specific wastes from coming into their territory.¹¹⁷ The obligation therefore falls on other nations to prohibit the export of waste to a country which has prohibited its import. Additionally, even if the destination state has not categorically prohibited the import of a certain hazardous waste, parties can only allow the shipment if the importing state has given formal written consent for the specific shipment.¹¹⁸ Another obligation under the Basel Convention is of particular importance to this article. If an exporting nation has reason to believe that the destination country cannot dispose of the waste in an environmentally sound manner, then the exporting party has a duty to prohibit the export.¹¹⁹ Similarly, parties may only authorize international movements of hazardous waste in one of the following cases: (i) when the exporting state lacks the necessary facilities, technological capacity or suitable disposal sites to dispose of the waste in an environmentally sound and efficient manner; (ii) when the importing state requires the wastes “as a raw material for recycling or recovery industries;” or (iii) when the shipment in question is “in accordance with other criteria as decided by the Parties.”¹²⁰

The Basel Convention relies heavily on the conduct of the exporting party. For example, if a nation prohibits imports of hazardous wastes, the Convention requires the exporting nation to prohibit the shipment. Similarly, the exporter must prevent shipments to destinations which cannot dispose of the hazardous waste in an environmentally sound manner. While the Basel Convention does not establish the specific means by which the parties should comply, it is clear that the exporter must take positive steps. Therefore, it is reasonable to expect that exporting parties should do whatever is necessary to prevent exports to nations where hazardous waste

116. *Id.* art. 1, para. (1)(b).

117. *Id.* art. 1, para. (1)(a).

118. Basel Convention, *supra* note 109, art. 4, para. (1)(c).

119. *Id.* art. 4, para. (2)(e).

120. *Id.* art. 4, para. (8)(a), (b).

imports are prohibited, or where the disposal will not be performed in an environmentally sound manner.

The extensive system of restrictions provided for by the Convention parallels the Mexican and United States regulatory schemes. For example, the Basel Convention provides for notification and informed consent requirements as well as certification and movement restrictions.¹²¹ Also, each party to the Convention is required to propose domestic legislation both to prevent and penalize illegal hazardous waste transfers.¹²² The Basel Convention specifically requires that in the case of “illegal traffic” in hazardous wastes caused by the conduct of the exporter or the generator, that the exporting government must require the exporter or the generator to return the waste to its point of origination.¹²³ If, on the other hand, the illegal traffic results from conduct of the importer or disposal facility, then the importing nation must ensure that the waste is disposed of in an environmentally sound manner. Finally, parties must adopt a protocol to set suitable “rules and procedures in the field of liability and compensation for damage resulting from the transboundary movement and disposal of hazardous wastes.”¹²⁴

Notwithstanding the scheme established by the Basel Convention, the Convention states that its provisions shall not apply to transboundary movements of hazardous wastes between nations which are already governed by bilateral, multilateral or regional agreements.¹²⁵ Such agreements, however, must be compatible with the environmentally sound management of hazardous wastes as

121. *Id.* art. 6.

122. *Id.* art. 9, para. 5.

123. The Basel Convention defines “illegal traffic” of hazardous wastes as any transboundary movement:

- (a) without notification to all States pursuant to the provisions of the Convention, or
- (b) without the consent of a State concerned, or
- (c) with consent obtained from States concerned through falsification, misrepresentation or fraud, or
- (d) that does not conform in a material way with the documents, or
- (e) that results in deliberate disposal (e.g. dumping) of hazardous wastes.

Basel Convention, *supra* note 109.

124. Basel Convention, *supra* note 109, art. 12.

125. *Id.* art. 11, para 1.

required by the Convention.¹²⁶ Consequently, the La Paz Agreement and its Annex III, specifically created to address transboundary movements of hazardous wastes between Mexico and the United States, will essentially preempt the Basel Convention. The Basel Convention will not apply as long as the La Paz Agreement ensures an environmentally sound management of hazardous wastes.¹²⁷

However, the La Paz Agreement does not ensure an “environmentally sound management” of hazardous wastes which are legally sent to Mexico. Should the Basel Convention apply, the U.S. exporters would be required not only to obtain consent for the export to Mexico, but would also be subject to the decision of the U.S. government with regard to the environmental soundness of the disposal facility in Mexico. The Basel Convention would force the United States to take a more proactive approach to hazardous waste exports. It would give the United States the right to prohibit an export, but would also impose an obligation to do so under certain circumstances. Additionally, with regard to illegal shipments, if the shipment is the result of a failure on the part of an exporter such as the United States, the Convention places the burden on the exporter to return the wastes to its point of origin. If the shipment is the result of a failure on the part of an importer such as Mexico, then the Convention places the burden on the importer to dispose of the wastes in an environmentally sound manner.

It is suggested that the Basel Convention does not “add much substance to the myriad of regulations already in place in the United States and Mexico.”¹²⁸ In spite of this criticism, commentators recognize the Convention’s value as an international acknowledgment of each country’s responsibility in the hazardous waste market.¹²⁹

126. *Id.*

127. *Id.*

128. Scramstad, *supra* note 2, at 283-84.

129. *Id.* at 284.

C. *The North American Free Trade Agreement and the North American Agreement on Environmental Cooperation*

The North American Free Trade Agreement (NAFTA) entered into effect on January 1, 1994.¹³⁰ The three signatory nations, the United States, Mexico and Canada, agreed to participate in NAFTA after a long political struggle.¹³¹ NAFTA has created the “largest market in the world, consisting of over 360 million consumers and a \$6 trillion output,”¹³² a market twenty percent larger than that of the European Community.¹³³ NAFTA’s main goal is to “promote economic growth through expanded trade and investment.”¹³⁴ The participating nations intend to achieve this goal by gradually eliminating restrictions to the movement of goods and investment.¹³⁵

1. NAFTA Environmental Provisions

Several sections of NAFTA address environmental issues. For example, Section B of Chapter 7, concerning Agriculture, addresses sanitary and phytosanitary measures.¹³⁶ These measures protect human or animal life or health from pollutants in foods, and protect animal or plant life or health from pests or disease.¹³⁷ Similarly, Chapter 9, Standard-Related Measures, addresses any

130. North American Free Trade Agreement, Dec. 11, 1993, 32 I.L.M. 605 [hereinafter NAFTA].

131. In the summer of 1990, Mexico and the United States agreed to explore the possibility of a free trade agreement with Canada. On September 25, 1990, President Bush informed Congress that he had decided to commence free trade negotiations with Mexico, and on February 5, 1991, the heads of the three countries announced their intention to enter a trilateral free trade agreement. Michael S. Feeley & Elizabeth Knier, *Environmental Considerations of the Emerging United States-Mexico Free Trade Agreement*, 2 DUKE J. COMP. & INT’L L. 259, 262 (1992).

132. *Id.* at 263 (citing U.S. DEPARTMENT OF COMMERCE, NORTH AMERICAN FREE TRADE AGREEMENT: GENERATING JOBS FOR AMERICANS 3 (update May 1991) [hereinafter DEPARTMENT OF COMMERCE UPDATE]).

133. *Id.* n.29.

134. *Id.* at 263 (citing DEPARTMENT OF COMMERCE UPDATE, at 3). Additionally, through NAFTA the United States intended to liberalize services, eliminate nontariff barriers and remove regulations and controls in the automobile manufacturing industry. *Id.*

135. *Id.*

136. NAFTA, *supra* note 130, ch. 7, § B.

137. NAFTA, *supra* note 130, art. 712.

standard other than sanitary and phytosanitary measures that “may directly or indirectly affect trade in goods or services.”¹³⁸

NAFTA’s treatment of sanitary and phytosanitary measures is similar to its treatment of standards-related measures.¹³⁹ In either category, the parties have certain rights and obligations.¹⁴⁰ Essentially, a party may enact any standards-related measure, including those which relate to protection of health or the environment. Furthermore, a party may enact measures to enforce the standards-related measure. If the standard is not a sanitary or phytosanitary standard, NAFTA expressly allows the prohibition of imports of a party failing to comply with the standards. The Agreement does provide, however, that standards may not be used to create “unnecessary obstacles” to treat goods or services of one nation less favorably than goods of another.¹⁴¹

Chapter 11 of NAFTA, which addresses investment, may also have an impact on environmental issues by providing that for NAFTA parties “it is inappropriate to encourage investment by relaxing domestic health, safety or environmental measures.”¹⁴² Chapter 11 additionally provides for consultation among the parties when one party believes the other has provided such an investment incentive.¹⁴³

Finally, in the event of a conflict, NAFTA defers to certain international agreements such as the Convention on International Trade of Endangered Species of Wild Flora or Fauna, the Montreal Protocol on Substances that Deplete the Ozone Layer and, significantly, the Basel Convention.¹⁴⁴

2. The North American Agreement on Environmental Cooperation

Although characterized by some as the “greenest” trade agreement ever negotiated by the Bush administration, NAFTA’s

138. See NAFTA, *supra* note 130, ch. 9, art. 901.

139. Jeffrey B. Groy & Gail L. Wurtzler, *International Implications of U.S. Environmental Laws*, 8 NAT. RESOURCES & ENV’T 15, Fall 1993, at 7, 54.

140. *Id.*

141. *Id.*

142. NAFTA, *supra* note 130, ch. 11, art. 1114 (2).

143. *Id.*

144. *Id.* art. 104 (1).

silence on environmental issues was a reason for protest from both environmental organizations and the U.S. Congress.¹⁴⁵ In order to get an extension of his "fast track" negotiation authority, and to deflect criticisms, in May of 1991 President Bush assured Congress that "environmental and labor issues would receive extraordinary consideration in the NAFTA process."¹⁴⁶ President Clinton reaffirmed the United States' support of the main text of NAFTA, which was signed on December 17, 1992. The U.S. Senate ratified NAFTA in November 1993. President Clinton supported NAFTA subject to additional treatment of the environmental issues in a supplementary accord now known as the North American Agreement on Environmental Cooperation (Side Agreement).¹⁴⁷ Among the objectives of the Side Agreement are: (i) to ensure that economic growth created as a result of NAFTA is consistent with goals of sustainable development;¹⁴⁸ (ii) to increase cooperation among the parties in order to preserve, protect, and enhance the environment; (iii) to create and improve environmental laws, regulations, and policies;¹⁴⁹ and (iv) to improve the enforcement of environmental laws and regulations.¹⁵⁰

In order to achieve these goals, the parties agreed to adopt measures which would improve the permitting schemes and provide more frequent inspections.¹⁵¹ Additionally, the parties agreed to penalize violations, taking into account their nature and gravity, the economic benefit obtained from them by the violator, and the clean-up costs involved.¹⁵² Furthermore, the Side Agreement creates a Commission for Environmental Cooperation.¹⁵³ The Commission consists of a Commission's Council comprised of the three countries'

145. H.R. DOC. No. 392, 102d Cong., 2d Sess., 2 (1992) (statement of William K. Reilly, Administrator, EPA).

146. Alan C. Raul & Paul E. Hagen, *The Convergence of Trade and Environmental Law*, 8 NAT. RESOURCES & ENV'T, Fall 1993, at 3, 51.

147. Canada-Mexico-United States: North American Agreement on Environmental Cooperation, Sept. 8-14, 32 I.L.M. 1480 (entered into force Jan. 1, 1994) [hereinafter Side Agreement].

148. *Id.* art. 1(b).

149. *Id.* art. 1(f).

150. *Id.* art. 1(g).

151. Side Agreement, *supra* note 147, art. 5(1).

152. *Id.* art. 5(3).

153. *Id.* art. 8(1).

chief environmental officials,¹⁵⁴ a Secretariat headed by an Executive Director chosen by the Council,¹⁵⁵ and a Joint Advisory Committee.¹⁵⁶

The Side Agreement provides for participation in an open process. For example, citizens of the three parties are permitted to submit to the National Advisory Committee their concerns and comments relating to the full spectrum of environmental issues.¹⁵⁷ The Secretariat may act on these submissions to develop fact-finding reports, which will be made public if two of the three parties concur.¹⁵⁸ Furthermore, the Side Agreement creates a consultative process for the Council to discuss issues, including those brought to light through the public submission process and through the Secretariat's fact-finding activities.¹⁵⁹ If consultations fail to resolve a matter involving nonenforcement of a nation's environmental law, the Side Agreement gives the issue special attention.¹⁶⁰ Finally, if a party claims that another party has persistently failed to effectively enforce its environmental laws in such a way that the nonenforcement affects traded goods or services, the matter may be referred to a dispute settlement panel.¹⁶¹ The panel may assess sanctions against a party which fails to correct problems of nonenforcement.¹⁶²

It is important to realize that the Side Agreement does not resolve the particular environmental problems affecting the parties. Instead, it provides mechanisms to assure that existing or future laws, regulations and programs can better be enforced and applied. Therefore, while the La Paz Agreement and the Basel Convention stipulate specific duties regarding movements of hazardous wastes, the Side Agreement establishes mechanisms which will facilitate compliance with those specific duties.

154. *Id.* arts. 8(2), 9(1).

155. *Id.* art. 11(11).

156. Side Agreement, *supra* note 147, art. 16(1).

157. *Id.* art. 17.

158. *Id.* art. 14(1).

159. *Id.* art. 15.

160. *Id.* art. 23.

161. Side Agreement, *supra* note 147, art. 24.

162. *Summary Descriptions of NAFTA Supplemental Accords issued by U.S. Trade Representative Mickey Kantor*, 10 Int'l Trade Rep. (BNA) 1385 (Aug. 13, 1993).

As of today, the effect of NAFTA and its Side Agreement on hazardous waste exports is uncertain. It is not likely that domestic implementing legislation pursuant to NAFTA in either the United States or Mexico will significantly change current provisions related to hazardous waste trade. Any direct influence of NAFTA is even more improbable due to the provision in NAFTA expressly allowing for the application of the Basel Convention in case of a conflict with a NAFTA provision in the context of transboundary movements of hazardous waste. As discussed above, the Basel Convention may, in turn, be disregarded by applying the La Paz Agreement.¹⁶³

D. Controlling Agreement

NAFTA does not expressly provide that the Basel Convention should control in the context of hazardous waste shipments between the United States and Mexico. However, the Basel Convention should be regarded as the controlling agreement. While one may contend that Article 11 of the Basel Convention permits Mexico and the United States to decide that the La Paz Agreement should govern their transboundary shipments of hazardous waste, the La Paz Agreement would still need to be compatible with the “environmentally sound management” standard of the Basel Convention. Given the lack of enforcement of the La Paz Agreement, it will be difficult to contend that NAFTA would meet this standard.

There are additional obstacles to enforcement of international agreements. For example, the obligations under the Basel Convention, such as ensuring that the importing nation will dispose of the waste in an environmentally sound manner, may be subject to broad interpretation.

“Environmentally sound management” may sound like a high standard.¹⁶⁴ However, its subjectivity and vagueness works against the purpose of the drafters. The United States, a highly industrialized exporting country, may only seek assurances that the importing

163. See, *supra* notes 126 to 127 and accompanying text.

164. *Id.* art. 2(8). “Environmentally sound management of wastes or other wastes means taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such works.” *Id.*

country will manage the waste in the best affordable manner within reasonable standards, and that the importing country will enforce its standards to the extent possible within the limits of its national legislation. However, the importing nation may object to the exporting nation's demand for the implementation of stricter requirements. The importing nation may claim that the exporting nation is illegally interfering in the domestic matters of the importing state. The Basel Convention would at least provide a sufficient basis for countering these arguments.

IV. ENFORCEMENT OF EXISTING HAZARDOUS WASTE LAWS

Despite efforts in both the United States and Mexico to provide effective measures to regulate transboundary movements of hazardous waste, legal, social and administrative obstacles have prevented significant progress.

A. Enforcement in the United States

Together, RCRA and CERCLA provide an integrated regulatory and liability system for hazardous waste treatment, storage and disposal activities performed in the United States. However, neither statute "adequately addresses the serious ramifications attendant to sending the waste abroad."¹⁶⁵ Furthermore, the stringent enforcement of this legislation in the United States encourages hazardous waste-producing industries to send wastes abroad.¹⁶⁶

RCRA does not authorize extraterritorial application of its provisions. Moreover, the Supreme Court has decided that absent a clear legislative intent, domestic legislation is presumably limited to domestic application.¹⁶⁷ This principle derives from the assumption that Congress is primarily concerned with domestic conditions rather than conditions outside the territorial jurisdiction of the United States.¹⁶⁸ Similarly, CERCLA does not apply extraterritorially. CERCLA applies only in the United States, its navigable waters, or

165. Adler, *supra* note 4, at 902.

166. See Adam L. Moskowitz, Comment, *Criminal Environmental Law: Stopping the Flow of Hazardous Wastes to Mexico*, 22 CAL. W. INT'L L.J. 166, 169 (1991).

167. *Foley Bros., Inc. v. Filardo*, 336 U.S. 281, 285 (1949).

168. *Id.*

territory under its jurisdiction.¹⁶⁹ Consequently, foreign governments or citizens of foreign countries do not have standing to invoke RCRA or CERCLA remedies for hazardous waste disposal conducted outside the United States.¹⁷⁰

The EPA, however, has implemented a Program to Control Exports of Hazardous Waste (Program) which relies heavily on the U.S. Customs Service.¹⁷¹ The U.S. Customs Service has authority to search suspect hazardous waste shipments, and to seize and detain the waste when there is reasonable cause to believe a transporter is exporting illegally.¹⁷² The Program has been largely unsuccessful for two reasons. First, the EPA contends that the Program is not an EPA priority and that it is not able to provide support because of severe resource constraints.¹⁷³ Second, customs officials along the United States-Mexico border generally focus their energy on searching for weapons, drugs and illegal immigrants. In any event, traffic from the United States to Mexico rarely is inspected. Even when customs inspectors examine the southbound traffic "the officials often lack both the knowledge and the equipment needed for on-site testing which could identify hazardous waste."¹⁷⁴

The basic problem is that a "legal" exportation cannot be halted because of the limited consent system for the export of hazardous wastes under RCRA. Additionally, it is almost impossible to prevent illegal exportation because of difficulty in differentiating a hazardous waste from a raw material without a detailed on-the-spot chemical analysis.¹⁷⁵ For example, without the proper equipment it would be impossible for a customs agent to distinguish between a product solvent intended for legitimate use in a Mexican factory from a spent solvent going to sham recyclers or to illegal disposal sites.

169. CERCLA, 42 U.S.C.A. § 9601(8) (West 1988).

170. Adler, *supra* note 4, at 903.

171. Export Administration Act of 1979, 50 U.S.C. App. §§ 2401-13 (1988 & Supp. 1991).

172. *Id.*

173. Adler, *supra* note 4, at 907, (*citing* ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF THE INSPECTOR GENERAL PROGRAM TO CONTROL EXPORTS OF HAZARDOUS WASTE, REPORT OF AUDIT, No. E1D37-05-0456-80855 (1988)).

174. Moskowitz, *supra* note 166, at 171. The author notes that only two investigators cover four western states and the U. S. Territories in the Pacific. *Id.*

175. Rose, *supra* note 9, at 232.

With such difficulties, the Program is impossible to effectively enforce under the current scheme.

Under RCRA, the United States has no authority to nullify an agreement between an exporting facility and an importing country even if the United States has a reason to believe that the destination country does not have facilities to handle waste adequately and safely.¹⁷⁶ Under the Basel Convention, however, the United States may be able to prevent the export of the shipment. This is because the Basel Convention allows the United States to prohibit waste exports to Mexico if the United States has reason to believe that Mexico cannot dispose of such waste in an environmentally sound manner.¹⁷⁷ Furthermore, the Basel Convention permits the United States and Mexico to decide that the La Paz Agreement should control their transboundary shipments of hazardous wastes. If the United States and Mexico do so, the La Paz Agreement must still be compatible with the “environmentally sound management” standard required by the Basel Convention.¹⁷⁸

B. Enforcement in Mexico

As discussed above, hazardous waste generated in the United States can legally be imported to Mexico for recycling purposes. Exporters take advantage of this legal loophole in order to get rid of their hazardous waste. Once the hazardous waste is brought into Mexico and “recycled,” there is no statutory guidance as to what should happen to the waste. In particular, there is no obligation on the recycler to return the recycled waste to the country of origin. The only requirement is that the waste must be disposed of in an authorized way. This disposal takes place, of course, within Mexican territory. The problem is that Mexican laws allow the U.S. hazardous waste exporter to pay the recycling fee and then forget about the waste. As far as the exporter is concerned, the waste is now disposed and the material produced in the recycling activity is a Mexican problem. The situation is worsened by the typical noncompliance by the Mexican recycler with Mexico’s final disposal laws. The

176. Adler, *supra* note 4, at 889. See *supra* notes 16-47 and accompanying text.

177. See Obstler, *supra* note 110.

178. Basel Convention, *supra* note 109, art. 11(1).

Mexican recycling company has no reason to comply with these laws since they are not regularly enforced. Even when the laws are enforced, the relatively small penalties imposed by the Mexican authorities are not significant enough to discourage the practice.

Undoubtedly, the purpose of the current Mexican legislation is to deter violators, including international haulers, local sham recyclers, and criminal operators. However, a lack of resources to fight the problem has ensured that enforcement efforts have only been directed to the worst offenders. This lack of comprehensive enforcement has provoked commentators and environmentalists who say that the legislation is impressive only superficially.¹⁷⁹

There are several reasons for the lack of comprehensive enforcement. First, as a developing country, Mexico's need for increased economic growth has thwarted a vigorous implementation of the laws. Mexico fears that strong enforcement will hinder foreign investment and the resulting industrial expansion. Second, because of the difference in economic development between the United States and Mexico, and scarce enforcement resources, Mexico has different national priorities in the area of environmental protection. The funds available to the federal and local governments in Mexico for the resolution of the vast pollution problems "go to maintaining or providing the basic necessities such as clean drinking water, sewage treatment, solid waste disposal, and rodent control."¹⁸⁰

Third, because Mexico's General Law is relatively new, as are its regulations, clear rules and definitions have not yet been formulated for the interpretation of the often ambiguous wording of the statutory provisions. Ambiguities allow arbitrary imposition of administrative penalties due to strict, and commonly unconstitutional, construction of the laws by the government inspectors.¹⁸¹ A fourth obstacle to effective enforcement is the lack of complete and reliable information. As of 1991, less than twenty-five percent of the industrial facilities were submitting the mandatory monthly reports

179. Moskowitz, *supra* note 166, at 179. *Cf.* Rose, *supra* note 9, at 239. Although it is true that greater enforcement efforts have been carried out in the past 2 or 3 years.

180. Rose, *supra* note 9, at 240.

181. This is one of the most common complaints from the regulated industry. Although in most cases a remedy to a harsh penalty can be obtained, the companies prefer to reach an agreement with the authority in order to avoid a court confrontation.

regarding handling activities.¹⁸² Consequently, any attempt to stop illegal handling, including recycling or disposal activities, must come from the individual efforts of only a few inspectors. These inspectors often work without the institutional support of the corresponding Mexican agency.¹⁸³

Generally, enforcement of hazardous waste laws in Mexico is hampered by a lack of manpower, training and funding. These problems are coupled with the inefficiency and corruption within SEDESOL and the Customs authorities at the border. Because of these obstacles, it has been almost impossible to identify illegal shipments and to stop unauthorized final disposal practices of hazardous wastes until the harm has already been inflicted.¹⁸⁴

C. *Enforcement Trends in Both Countries*

As we have seen, the pervasiveness of the American system, CERCLA and RCRA, makes it expensive to dispose of hazardous waste within U.S. borders. Furthermore, despite the availability of the technology to do so, American industry has neither the incentive nor the will to reduce the hazardous waste it produces. As a consequence, the United States produces more waste, resulting in an even greater need to export.¹⁸⁵ In the United States, there has been some enforcement against illegal exporters under RCRA section 3017.¹⁸⁶ Several cases have been prosecuted in the United States based on the lack of consent from the Mexican authorities to proposed shipments of hazardous wastes into Mexico.¹⁸⁷

Similarly, in Mexico over the past three years there has been a large increase in the number of inspections of industrial facilities.¹⁸⁸

182. Moskowitz, *supra* note 166, at 179.

183. For examples of this sporadic effort, see Rose, *supra* note 9, at 232 and Simon, *supra* note 1, at 90.

184. Simon, *supra* note 1, at 42.

185. Adler, *supra* note 4, at 908.

186. 42 U.S.C. § 6938 (1988).

187. Simon, *supra* note 1, at 44.

188. Verde Sera, publication of the Mexican Ecological Movement, No. 2, at 3. In accordance with the Chief Inspector of Procuradurium Federal de Protección al Ambiente (PROFEPA), federal inspectors are divided into 30 inspection groups, each in charge of conducting an average of 2 visits per working day. Additionally, as of 1993, PROFEPA contracted with external companies and technicians to conduct independent visits. From

These inspections have resulted in the imposition of administrative penalties in ninety-five percent of the cases.¹⁸⁹ In the border area, due to a lack of manpower and resources, inspection efforts have concentrated on the worst offenders. These efforts hopefully will serve as a deterrent for other violators. In every case, penalties have been assessed, from administrative fines to closure of the facilities. No criminal conviction for illegal final disposal or unauthorized recycling has been documented.¹⁹⁰ While the recent enforcement trends may be encouraging, the efforts are clearly insufficient given the magnitude of the problem. Additionally, the economic incentives, and the odds, are favorable enough that Mexican companies and individuals will continue to carry out the illegal practices.¹⁹¹ The financial rewards simply outweigh the risk that is taken and the punishment that could be imposed.

V. PROPOSED STRATEGY AND FINAL CONSIDERATIONS

There are a number of reasons why generators of hazardous waste in the United States send their waste to Mexico. These reasons include: (1) strict enforcement of environmental laws within the United States and the corresponding rise of the costs of disposal of wastes;¹⁹² (2) the geographic proximity of the United States to Mexico;¹⁹³ (3) the existence of a legal mechanism for exporting the waste as recyclable hazardous waste or raw materials;¹⁹⁴ (4) the lack of tracking capabilities of the Mexican government regarding

December, 1992, through May, 1993, approximately 7,000 visits were conducted on industrial facilities. Interview with Hector Munoz Gallo, chief inspector of PROFEPA (Jan. 14, 1994).

189. *Id.*

190. *Id.*

191. *Id.*

192. See Huntoon, *supra* note 6, at 247. Although the author notes that some developing countries have accepted hazardous waste for as little as \$40 per ton, in Mexico, for example, the legal disposal of low-toxicity hazardous waste cannot be obtained for less than \$250 per ton. Telephone interview with Mr. Francisco Diaz, Sales Manager of Residuos Industriales Multiquim, S.A., (Jan. 25, 1994) (RIMSA is the sole hazardous waste handling company authorized by SEDESOL to operate within Mexican territory as of December 1993).

193. Adler, *supra* note 4, at 893 (noting that short traveling distances provide less opportunity for accidents while transporting hazardous substances).

194. Rose, *supra* note 9, at 230.

imported wastes; (5) weak enforcement of applicable Mexican disposal standards;¹⁹⁵ and (6) the reluctance of American industries “to incur the short-term costs of implementing source reduction methods such as reusing plastics and recycling paper, glass, and metals.”¹⁹⁶ Essentially, Mexico offers the American exporters cheaper and less restrictive methods of disposal.

As this paper illustrates, current efforts to resolve the problems of transboundary movement of hazardous waste are hindered by many factors. Some of these factors are structural, legal or political. Clearly, the movement of waste across the United States-Mexico border is not going to stop simply by devoting more resources to implement the existing laws. It is essential to cut the incentives to export hazardous wastes from the United States. A \$15 billion-a-year industry cannot be curtailed merely by putting more and better-trained inspectors and customs officials along both sides of the border. The ineffectiveness of such an approach has been demonstrated by the strength of the illegal drug trade. Better legislation based on novel principles is needed.

This is not to say that added enforcement is not important: clearly it is. What this paper suggests is that resources are misdirected because the laws governing hazardous waste transport do not address the root of the problem. Liability must be placed on the exporter of the improperly disposed hazardous wastes. It is their conduct which must be controlled and restricted. For the purposes of this discussion, the generators of the hazardous wastes are located in the United States. Therefore, the implementation of a better legal strategy will depend largely upon how much responsibility the United

195. According to Mr. Sergio Reyes Lujan, former President of the National Institute of Ecology, the policy-formation arm of SEDESOL, during 1993 strong efforts on the part of the government were devoted to the preparation of inspectors in order to increase the quality and quantity of the inspections. Inspections increased from 5,000 in 1992 to 15,000 in 1993. Sergio Reyes Lujan, Address at conference on: Current Mexican Environmental Legislation and its Future (Jan. 7, 1994). Even though the number of inspections increased substantially from 1992 to 1993, the quality of same is doubtful. As of January, 1994, SEDESOL, through the Attorney General Office for the Protection of the Environment (PROFEPA), its enforcement arm, had only four inspectors with ten or more years of experience, twenty-five inspectors with two-year experience on a temporary basis and ninety trainees almost all of them inexperienced. They represent the basic inspection force of the federal government. Interview with Hector Munoz Gallo, *supra* note 188.

196. Adler, *supra* note 4, at 893.

States government is willing to accept and reflect in the appropriate legislation.

This paper proposes a two-fold strategy. First, it is obvious that more financial resources and technical expertise will have to be available in order to better regulate the trade. Second, both the United States and Mexico must either amend their laws to remove loopholes, or implement newer, more effective, legislation particularly addressing the problem.

With regard to changing the laws governing the import and export of hazardous wastes, the United States should amend RCRA. Specifically, the United States should require the exporter to demonstrate to the EPA that the exportation is absolutely necessary and that a better alternative could not be found in the United States. The analysis of alternative methods should take into consideration not only the recycling and disposal costs, but also the practical and technical advantages of the various disposal facilities. The selection should focus on the best disposal or recycling methods available. Because of the technology deficiency in Mexican hazardous waste recycling and disposal facilities, this provision would practically exclude all proposed shipment to Mexico. An additional advantage is that such a provision would impose an obligation on the EPA to authorize shipments only where there is a reasonable expectation that the wastes are going to be handled in a professional and safe manner. Such an obligation would ensure that any foreign facility selected would be in compliance with requirements as stringent as those in effect in the United States. This requirement also would be consistent with the purpose, and would heighten the protections of the Basel Convention.

A second and more radical approach would require a total ban on exportation of hazardous wastes abroad. This approach is favored by many environmental groups, but is considered politically impractical. This approach was rejected by the delegates to the Basel Convention. In the United States, commentators have proposed innovative legislation to address some of these concerns. For example, the "Foreign Environmental Practices Act,"¹⁹⁷ modeled after

197. Scramstad, *supra* note 2, at 288 (citing Alan Neff, *Not in Their Backyards Either: A Proposal for a Foreign Environmental Practices Act*, 17 *ECOLOGY L.Q.* 477, 479 (1990)).

the Foreign Corrupt Practices Act,¹⁹⁸ would extend the reach of the U.S. environmental laws outside U.S. territory.”¹⁹⁹ Similarly, the Waste Export Control Act,²⁰⁰ contains “mechanisms to eliminate the enforcement problems of the present waste export control program.”²⁰¹

Mexico must also amend its hazardous waste legislation, insisting that all material resulting from the recycling or treatment of imported hazardous waste be returned to the country of origin immediately after recycling. This obligation would apply to all material produced, hazardous or not, and must be undertaken by the exporter, by the importer and by the transporter. Furthermore, the obligation must be guaranteed sufficiently with a bond. A bond is crucial because if the parties fail to follow the legal requirements, the wastes could be disposed of in an environmentally sound manner.

While the above proposals only address the “legal” importation of hazardous wastes, their implementation could eliminate the existing loopholes causing the majority of the problem. The proposals could also prove effective against criminal introduction of hazardous wastes. However, sufficient improvements in the criminal area can only be achieved if the existing provisions are better enforced in both countries. Such improved enforcement is possible because NAFTA and its Side Agreement provide the necessary scheme to conduct criminal enforcement efforts.²⁰² To be successful in protecting its environment, the Mexican government must consider criminal prosecution as a fundamental tool to be used against sham recyclers and related violators.

Whatever approach is followed, the ultimate purpose of reform in the hazardous waste trade should be to leave the generators of hazardous wastes with two alternatives: keep generating the tremendous amounts of waste and pay the price of an environmentally sound disposal, or reduce production of hazardous waste through

198. Foreign Corrupt Practices Act, 15 U.S.C. §§ 78dd-1 to 78ll (1988 & Supp. IV 1992).

199. Scramstad, *supra* note 2, at 288.

200. *Id.* at 889 (citing H.R. 2525, 101st Cong., 1st Sess. (1989)).

201. Adler, *supra* note 4, at 915.

202. *See supra* notes 151-153 and accompanying text.

internal recycling and more efficient processing methods.²⁰³ Currently, the goal of Mexican and U.S. laws is to protect each nation's respective citizens and environment.²⁰⁴ The ultimate goal, should be to make the transboundary movement of hazardous waste expensive and inconvenient, so that the generating industry will be forced to reduce and recycle its own wastes.

To achieve this end, a combination of approaches would prove the most effective strategy in the long run. However, interests other than a clean environment are the priority for U.S. decision makers. The United States had the opportunity to support a real restriction to transboundary movements of hazardous wastes when the Basel Convention was negotiated. Rather than prevent the exportation of such wastes, however, the United States preferred an ineffective limited trade system which actually encourages the illegal exportation of waste.²⁰⁵ With such an example of the U.S. international policy on transboundary movements of hazardous wastes, despite the pressure of the international community for a different outcome, there is little hope that the United States will modify its current policy and legislation with respect to Mexico.

Hazardous waste flow into Mexico will only stop when domestic and international pressures and education make the United States stop considering Mexico as its backyard. Only then can real legislative change be expected and will cooperation finally succeed. Until such legislative change occurs within the United States, the perpetuation of a profound inequality will continue.

203. Moskowitz, *supra* note 166, at 185, 186.

204. *Id.* at 282.

205. Adler, *supra* note 4, at 916.