

Symposium on The New Judicial Federalism: A New Generation

Bordering on Disaster: A New Attempt to Control the Transboundary Effects of Maquiladora Pollution

Elizabeth A. Ellis

Follow this and additional works at: <https://scholar.valpo.edu/vulr>



Part of the [Law Commons](#)

Recommended Citation

Elizabeth A. Ellis, *Bordering on Disaster: A New Attempt to Control the Transboundary Effects of Maquiladora Pollution*, 30 Val. U. L. Rev. 621 (1996).

Available at: <https://scholar.valpo.edu/vulr/vol30/iss2/9>

This Notes is brought to you for free and open access by the Valparaiso University Law School at ValpoScholar. It has been accepted for inclusion in Valparaiso University Law Review by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at scholar@valpo.edu.



Notes

BORDERING ON DISASTER: A NEW ATTEMPT TO CONTROL THE TRANSBOUNDARY EFFECTS OF MAQUILADORA POLLUTION

I. INTRODUCTION

Maria del Socorro understands life's hardships better than most people her age.¹ In 1992, at the age of seventeen, she gave birth to a stillborn child at a hospital in Matamoros, a city located at the northern border of Mexico.² The child died from a rare birth defect called anencephaly, a condition that causes a fetus to develop without a brain.³

Maria del Socorro's story is tragic; unfortunately she is not alone.⁴ Dozens of other mothers in Matamoros, as well as in the neighboring city of Brownsville, Texas, have given birth to children with the same condition.⁵ In Matamoros, medical researchers have documented forty-two cases of anencephalic babies.⁶ In the Brownsville area, medical researchers have documented thirty cases of babies born without fully developed brains.⁷

The cause of anencephaly remains a mystery. However, a prime suspect is the transboundary pollution⁸ effect due to chemical air or water emissions⁹

1. Gaynell Terrell, *Tragic Puzzle Grips Families on the Border—Plant Pollution May Cause Brain Not to Develop*, HOUS. POST, May 17, 1992, at A1 [hereinafter *Tragic Puzzle*].

2. *Id.*

3. *Id.*

4. *Not in Any Backyard—We Have a Stake in Funding Border Birth Defects' Cause*, HOUS. POST, May 27, 1992, at A16. Numerous anencephalic babies are born to poor Hispanic-surname women in Brownsville, Texas and across the Rio Grande River in Matamoros, Mexico. *Id.*

5. Gaynell Terrell, *Researchers Laud Study on Valley Brain Defects*, HOUS. POST, May 22, 1992, at A33. Few anencephalic babies are born alive, and those that are born alive die within hours. *Tragic Puzzle*, *supra* note 1, at A1. With no brain, and misshapen, incomplete skulls, anencephalic babies have no chance for survival. *Id.*

6. *Tragic Puzzle*, *supra* note 1, at A1.

7. *Id.* The parents of most of these infants have lived within a 2.4 mile-radius of the Brownsville-Matamoros border. Terrell, *supra* note 5, at A33.

8. "Transboundary pollution occurs when a pollution source in one country creates a pollutant that crosses into the territory of another country, producing adverse effects." Jeffrey L. Roelofs, *United States - Canada Air Quality Agreement: A Framework for Addressing Transboundary Air Pollution Problems*, 26 CORNELL INT'L L.J. 421, 421 (1993). See also ENVIRONMENT AND TRADE

from the maquiladoras.¹⁰ The maquiladoras, established in the 1960s to aid in the development of Mexico's economy, are foreign-owned assembly plants located on the northern border of Mexico.¹¹ These plants import raw materials or component parts duty free¹² and then export the finished product to the country of origin.¹³

The environmental pollution and resulting health problems that the maquiladoras create are not limited to the Matamoros and Brownsville area; these problems extend throughout the border between the United States and

43-44 (Seymour J. Rubin & Thomas R. Graham eds., 1982) (stating that transboundary pollution involves the direct impact of pollutive activities carried out in one country on one or more other countries) [hereinafter Rubin].

9. Emissions are the discharge of pollutants. LEGAL THESAURUS/DICTIONARY 272 (1985).

10. Terrell, *supra* note 5, at A33. Five maquiladora plants operating in Matamoros, Mexico have just recently settled lawsuits alleging that their pollution caused the rare birth defect, anencephaly, in babies born in Texas. *5 Firms Settle Birth Defects Lawsuits—More Plants in Mexico Face Action*, HOUS. POST, June 21, 1994, at A11. The five firms are Breed Automotive Inc., Wickes Manufacturing Co., Ranco de Mexico S.A. de C.V., Gobar Systems Inc., and Leonard Electric Products Co. *Id.* Each of the five companies will pay \$10,714 to eight of the families under a June 1, 1994, settlement approved by Texas District Judge Ben Euresti. *Id.* See also Steve Brunzman, *Coalition Cites Danger From Border—Controls Needed for 2100 Factories*, HOUS. POST, July 9, 1994, at E2 (stating that Brownsville area families have filed suit against 88 maquiladoras for the traumatic neural defect of anencephaly which killed their babies).

Three more companies settled lawsuits alleging that their pollution caused the rare brain and spinal defects among babies in Cameron County days, just days before the scheduled trial date. James E. Garcia, *GM, Companies Settle Lawsuit Over Brain Defects in Valley*, AUSTIN AM.-STATESMAN, Aug. 26, 1995, at B9. The three companies include General Motors Corp., Preservation Products, and the Brownsville Public Utility Board.

Medical literature is scarce with reference to the cause of anencephaly. Gaynell Terrell, *EPA Expected to Fund Study of Babies Born Without Brains*, HOUS. POST, May 21, 1992, at A1. The following data supports the proposition that maquiladora pollution emissions are the prime suspects for the cause of anencephaly. *Id.* Anencephaly occurs at a rate of about 10 per 10,000 cases in the United States each year. *Tragic Puzzle, supra* note 1, at A19. Brownsville, which is situated near the maquiladoras, has a rate which has exceeded the national average for the past three years - 16.66 per 10,000 in 1989, 30.16 per 10,000 in 1990, and 11.59 per 10,000 in 1991. *Id.*

11. Frances L. Ansley, *North American Free Trade Agreement: The Public Debate*, 22 GA. J. INT'L & COMP. L. 329, 339 (1992).

12. A duty is a tax charged by a government on imports. THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 406 (1980).

13. David Voigt, Note, *The Maquiladora Problem in the Age of NAFTA: Where Will We Find Solutions?*, 2 MINN. J. GLOBAL TRADE 323, 324 (Summer 1993). The main attraction of this program is that the assembly plants do not have to pay a duty for assembly on the goods they import. *Id.* The only cost these plants incur upon exporting the goods back to the country of origin is the value added in Mexico. Ansley, *supra* note 11, at 339. The cost of labor is the only value added in Mexico and because labor is relatively cheap, the cost these manufacturing plants incur is very slight. See *infra* notes 59-67 and accompanying text.

Mexico.¹⁴ The magnitude of this harmful pollution is attributable to Mexico's lax enforcement of environmental laws.¹⁵ Due to the transboundary effect of this weak enforcement, the United States and Mexican governments have made mutual attempts to control the border pollution problem.

14. The United States/Mexico border stretches for 2000 miles and includes an area which extends 62 miles on each side. U.S. ENVIRONMENTAL PROTECTION AGENCY ET AL., INTEGRATED ENVIRONMENTAL PLAN FOR THE U.S.-MEXICO BORDER AREA I-1 (working draft, Aug. 1, 1991) [hereinafter EPA SUMMARY]. California, Arizona, New Mexico, and Texas make up the southern border of the United States. *Id.* Baja California, Sonora, Chihuahua, Coahuila, Nuevo Leon, and Tamaulipas make up the northern border of Mexico. *Id.* For the remainder of this note, the United States-Mexico border shall be referred to as the "border."

The southern states of the United States are continually affected by pollution caused by the well-developed maquiladora industry. Sonia Nazario, *Boom and Despair: Mexican Border Towns Are a Magnet for Foreign Factories, Workers and Abysmal Living Conditions*, WALL ST. J., Sept. 22, 1989, at R26. For example, a public health emergency was in effect in Arizona for six months due to the toxic industrial pollution and untreated sewage transported by the Nogales Wash. Robert Suro, *Border Boom's Dirty Residue Imperils U.S.-Mexico Trade*, N.Y. TIMES, Mar. 31, 1991, at A1. The Nogales Wash is the body of water which flows from Nogales, Sonora to Nogales, Arizona. Brenda Hustis, Note, *The Environmental Implications of the North American Free Trade Agreement*, 28 TEX. INT'L L.J. 589, 599 (1993).

15. Many environmentalists believe that the pollution problem at the border is actually caused by Mexico's lack of environmental standards and a weak legal environmental framework. Robert Housman et al., *Enforcement of Environmental Laws Under a Supplemental Agreement to the North American Free Trade Agreement*, 5 GEO. INT'L ENVTL. L. REV. 593, 594 (1993). It is probably an inaccurate representation to state that Mexico has lax environmental standards. Mexican officials have developed their own environmental standards using those of the United States as a guideline. *Mexico's Environmental Laws and Enforcement*, 2 NO. 3 MEX. TRADE & L. REP. 9, 9 (Mar. 1992). In fact, Mexico's air pollution program uses ambient, health-based criteria that are similar to the NAASQ (National Ambient Air Quality Standards) in the United States. *Id.* In addition, Mexico has an environmental statute comparable to that of the United States. Dennis DeConcini, *Now Is the Time for Talks to Stress Sound Environmental Policy - Trade Negotiations Provide the United States and Mexico With the Opportunity to Address Common Problems Facing Our Border Communities*, ARIZ. REPUBLIC, July 4, 1991, at A15. See also Justin Ward & Glenn T. Prickett, *Overview*, ENVIRONMENT, May, 1992, at 3 (noting that United States Environmental Protection Agency officials have touted Mexico's environmental statute as a solid foundation that is based on the United States' environmental law and experience) [hereinafter *Overview*].

Mexico's comprehensive environmental statute, known as the General Law on Ecological Balance and Environmental Protection, assigns administrative responsibility to the Secretaria de Desarrollo Urbano y Ecología (SEDUE); allocates jurisdictional authority among federal, state and local governments; and provides a protective environmental framework by regulating air, water and hazardous waste. See generally General Law of Ecological Equilibrium and Environmental Protection, Diario Oficial de la Federación [D.O.] Jan. 28, 1988 [hereinafter General Law]. Despite the existence of this law, environmental conditions in Mexico are atrocious. Hustis, *supra* note 14, at 604. The majority of the criticism of Mexico's polluted environment is directed not at the lack of legislation, but rather at the lack of funding for enforcement of the environmental law. *Id.* at 607. See also J. Owen Saunders, *NAFTA and the North American Agreement on Environmental Cooperation: A New Model for International Collaboration on Trade and the Environment*, 5 COLO. J. INT'L ENVTL. L. & POL'Y 273, 277 n.14 ("It is generally conceded that the enforcement rather than the substance of Mexican environmental laws is the real problem to be addressed . . .").

The United States and Mexican governments entered into two agreements to address the transboundary pollution created by the maquiladoras.¹⁶ The first agreement is the Agreement Between the United States and Mexico on Cooperation for the Protection and Improvement of the Environment on the Border Area (La Paz Agreement).¹⁷ The second agreement is the Integrated Environmental Plan for the United States-Mexico Border Area (Border Plan).¹⁸ However, neither of these two agreements has successfully curtailed the transboundary pollution affecting the border.¹⁹ These agreements lack funding to support pollution control initiatives and enforcement mechanisms to ensure compliance with environmental laws.²⁰

As a result of the failure of both the La Paz Agreement and the Border Plan, the issue of transboundary pollution, especially its effect on the environment as a result of increased trade,²¹ was significant in the negotiations

16. See *infra* notes 17-18.

17. 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, 22 I.L.M. 1025 (1983) [hereinafter La Paz Agreement]. Prior to the La Paz Agreement, the United States and Mexico made attempts to address the environmental problems in the border area. Stanley M. Spracker, *Environmental Protection and International Trade: NAFTA as a Means of Eliminating Environmental Contamination as a Competitive Advantage*, 5 GEO. INT'L ENVTL. L. REV. 669, 673 (1993). In 1944, Mexico and the United States organized the International Boundary and Water Commission to coordinate border sanitation projects. *Id.* As early as 1978, the governments of the United States and Mexico recognized the environmental dilemmas created by transboundary pollution and the need to manage them jointly. Angela C. Montez, Note, *The Run Past the Border: Consequences of Treating the Environment Under NAFTA as a Border Issue*, 5 GEO. INT'L ENVTL. L. REV. 417, 423 (1993). As a result, both governments pledged their cooperation toward addressing the environment by executing a Memorandum of Understanding. *Id.* However, the agreement lacked specifics with regard to both the nature of the environmental problem and potential solutions. *Id.* The two countries did not specify the steps they would take to alleviate the broadly defined problem. *Id.* at 423 n.41. Because the Memorandum of Understanding was superseded by the La Paz Agreement, this note will begin its analysis of prior attempts to confront the border pollution problem with the La Paz Agreement.

18. Integrated Environmental Plan for the U.S.-Mexico Border Area I-1 (First Stage, 1992-1994) (1991) *microformed on* EP1.2 (U.S. Environmental Protection Agency) [hereinafter Border Plan].

19. See Montez, *supra* note 17, at 423-27.

20. *Id.* "Although the La Paz Agreement set ambitious goals to improve the environment, the agreement lacks enforcement procedures, and thus has had a minimal deterrent effect." *Id.* at 424. The Border Plan is just as ineffective, because it too lacks enforcement mechanisms and substantive procedures to implement the recovery strategies. *Id.* at 426.

21. Free trade will cause an increase in the transportation of goods from one country to another since a duty will not be assessed against the importation of those goods. DR. RAVI BATRA, *THE MYTH OF FREE TRADE: A PLAN FOR AMERICA'S ECONOMIC REVIVAL* 220-24 (1993). Thus, more ships, trucks, and cars will be needed to transport the goods. *Id.* Therefore, environmental pollution will increase as more fuel is burned. *Id.*

Concern over the relationship between international trade and the environment was heightened in 1991 by the report of a dispute resolution convened under the General Agreement on Tariffs and

of the North American Free Trade Agreement (NAFTA).²² The United States, Canada, and Mexico signed NAFTA in 1992.²³ Prior to its enforcement date of January 1, 1994,²⁴ a great deal of controversy surrounded NAFTA and its recognition of environmental conditions at the border.²⁵ A primary concern among environmentalists in relation to NAFTA was that by enacting such a monumental trade agreement,²⁶ and by focusing extensively on the development of free trade,²⁷ any harmful effect on the environment would be of secondary importance.²⁸ Recognizing that these environmental concerns could seriously affect the passage of NAFTA,²⁹ President Bill Clinton initiated the drafting of

Trade (GATT). THE COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL QUALITY 126 (1992). The conflict involved the United States Marine Mammal Protection Act, which bans the importation of tuna from countries whose fishing fleets have an incidental catch of dolphin in excess of the United States' dolphin mortality standard. *Id.* This dispute illustrates the controversy between the regulation of a product for the characteristics of the product itself and the regulation of a product for the way in which it is processed. For a further analysis of this controversy and its impact on NAFTA, see *infra* notes 335-42 and accompanying text.

22. Canada-Mexico-United States: North American Free Trade Agreement, Dec. 17, 1992, 32 I.L.M. 605 (1993) (entered into force Jan. 1, 1994); Canada-Mexico-United States: North American Free Trade Agreement, Dec. 17, 1992, 32 I.L.M. 289 (1993) (entered into force Jan. 1, 1994) [collectively hereinafter NAFTA].

23. GARY C. HUFBAUER & JEFFREY J. SCHOTT, NAFTA - AN ASSESSMENT 1 (1993).

24. Marc Sandalow, *House Approves NAFTA*, SAN FRANCISCO CHRON., Nov. 18, 1993, at A1.

25. After the signing of NAFTA, its passage took a little over one year due to the well-noted general fear that NAFTA, as drafted, did not effectively address the environmental problems at the U.S.-Mexico border. Farah Khakee, Comment, *The North American Free Trade Agreement: The Need to Protect Transboundary Water Resources*, 16 FORDHAM INT'L L.J. 848, 848 (1992-1993). However, the only environmental concerns that existed did not relate solely to the United States and Mexico border. *Id.* Other environmental concerns were also present, such as those conditions at the United States and Canada border. *Id.* These conditions, however, are beyond the scope of this note. The analysis of NAFTA presented herein, specifically its environmental side agreement, is strictly limited to its effectiveness as an environmental regulatory instrument of the border between the United States and Mexico.

26. NAFTA is the most comprehensive free-trade pact (short of a common market) ever negotiated between regional trading partners. HUFBAUER & SCHOTT, *supra* note 23, at 1.

27. The main goal of NAFTA is the promotion of economic growth through the expansion of trade and investment created by allowing for a staged elimination of barriers to the flow of goods and investment. U.S. DEPARTMENT OF COMMERCE, NORTH AMERICAN FREE TRADE: GENERATING JOBS FOR AMERICANS 3 (1991). As envisioned by the United States, NAFTA would involve over 360 million consumers and a six trillion dollar output. *Id.* at v. These figures would make NAFTA the largest market in the world, exceeding the European Community market by 20%. *Id.*

28. "Environmental groups have expressed concern that the proposed NAFTA will allow ecological degradation to occur throughout Mexico, as it has in the border area, if adequate controls are not incorporated into the treaty." Montez, *supra* note 17, at 418.

29. As Bill Richardson, U.S. Rep. of New Mexico states:

What will decide the fate of [NAFTA in Congress] . . . will not be the commercial trade side, will not be intellectual property rights, or banking or many of the other bilateral issues that have been negotiated extensively over the past two or three years. What will decide the passage of the free trade agreement in the Congress . . . will be the issue of the environment.

the North American Agreement on Environmental Cooperation (NAAEC).³⁰

With the purpose of providing environmental protection under free trade, the NAAEC represents the United States' and Mexico's third attempt to solve the environmental conditions at the border caused by the transboundary effects of maquiladora pollution.³¹ Although the NAAEC is a supplemental agreement to NAFTA, it is nonetheless considered a part of NAFTA and thus has the same legally binding effect on the parties.³² However, despite its binding nature, many environmentalists question whether this agreement will serve as an effective regulatory instrument of transboundary pollution at the border.³³

This Note examines the transboundary effects of maquiladora pollution at the border and the United States' and Mexico's mutual attempts to solve this problem. This Note argues that the NAAEC, as it is currently drafted, will be ineffective in its attempts to protect the border from the transboundary effects of maquiladora pollution. Like the La Paz Agreement and the Border Plan, the NAAEC lacks sufficient funding to support pollution control initiatives and enforcement mechanisms capable of forcing compliance with environmental laws.³⁴ Section II of this Note will discuss the historical background of the

James E. Bailey, *Free Trade and the Environment - Can NAFTA Reconcile the Irreconcilable?*, 8 AM. U. J. INT'L L. & POL'Y 839, 839 (1993).

30. Canada-Mexico-United States: North American Agreement on Environmental Cooperation, Sept. 14, 1993, 32 I.L.M. 1480 (1993) (entered into force Jan. 1, 1994) [hereinafter NAAEC].

31. Robert Housman & Paul M. Orbuch, *Integrating Labor and Environmental Concerns into the North American Free Trade Agreement: A Look Back and a Look Ahead*, 8 AM. U. J. INT'L L. & POL'Y 719, 787-90 (1993) [hereinafter Orbuch]. The La Paz Agreement and the Border Plan embody the first two attempts. See *infra* text accompanying notes 132-74, 175-235.

32. Montez, *supra* note 17, at 434-35. For further analysis of treaties and their role in international law, see *infra* notes 108-26 and accompanying text.

33. *Canada - Cracks in the NAFTA Accord*, Chemical Business Newsbase, EUROPEAN CHEMICAL NEWS, Aug. 12, 1994, available in WESTLAW, INT-NEWS File (noting that although the NAFTA agreement is a step in the right direction, it still lacks a specific mandate to pursue specific incidences).

34. For an analysis of the NAAEC's insufficient funding see *infra* text accompanying notes 343-70.

Unlike the La Paz Agreement and the Border Plan, the NAAEC, via its status as a supplemental agreement to NAFTA, incorporates an enforcement mechanism. Frederick M. Abbott, *Integration Without Institutions: The NAFTA Mutation of the EC Model and the Future of the GATT Regime*, 40 AM. J. COMP. L. 917, 934 (1992). However, this mechanism, a legislative body, actually lacks the power to enforce decisions on the offending parties. *Id.* It is more of an advisory panel which serves as a mediator for any disputes between the parties. *Id.* at 934-35. Structured very similarly to the legislative body present within the European Union, it is most likely that, like the European Union's legislative body, the NAAEC's legislative body will be ineffective in controlling the transboundary pollution caused by the offending party. For a comparative analysis of the European Union's legislative body and the NAAEC's legislative body and their attempts to control transboundary pollution, see *infra* text accompanying notes 371-417.

maquiladoras and the resulting transboundary pollution on the border.³⁵ To place the United States' and Mexico's agreements to control the border pollution problem within their proper context, Section III will discuss the basic principles of international law as they relate to environmental law and will address the purpose and legal effect of treaties.³⁶ Section IV will then discuss and analyze prior attempts by the United States and Mexico to effectively address the transboundary effects of the pollution created by the maquiladoras.³⁷ Section V will discuss the current attempt to curtail the United States-Mexico transboundary pollution problem by analyzing the NAAEC.³⁸

Section VI will address the effectiveness of the NAAEC by making a comparative analysis to the European Union model.³⁹ Finally, Section VII proposes an amendment to the NAAEC which will create an international environmental standard to which a party's facilities must adhere to receive free trade benefits under NAFTA.⁴⁰ Unlike the current NAAEC which applies to the parties' governments only,⁴¹ the proposed amendment will allow this standard to be enforced on an individual level by targeting the profit margin of those facilities which do not comply.⁴²

The proposed amendment will serve as an effective enforcement mechanism because it will provide each facility with an economic incentive to comply with the established standard.⁴³ By establishing this economic incentive, the amendment will solve the problem of insufficient funding to support pollution control initiatives.⁴⁴ This incentive will also function as a strong enforcement mechanism by ensuring voluntary compliance with environmental laws.⁴⁵ Thus, the proposed amendment will make the NAAEC a more effective instrument to protect the border from the transboundary effect of maquiladora pollution.

35. See *infra* text accompanying notes 46-86.

36. See *infra* text accompanying notes 87-127.

37. See *infra* notes 128-235 and accompanying text.

38. See *infra* notes 236-380 and accompanying text.

39. See *infra* notes 381-417 and accompanying text.

40. See *infra* notes 418-510 and accompanying text.

41. NAAEC, *supra* note 30, at pmb1.

42. See *infra* text accompanying note 442.

43. See *infra* text accompanying notes 453-59.

44. See *infra* text accompanying notes 447-62.

45. See *infra* text accompanying notes 467-74.

II. MEXICO, THE UNITED STATES, AND TRANSBOUNDARY POLLUTION

A. Mexico's Maquiladoras: A Historical Perspective

In 1942, the United States experienced labor shortages in the railroad and agricultural industries as many American workers were drafted and sent to war.⁴⁶ Due to this labor shortage, the United States entered into an agreement with Mexico by which migrant Mexican laborers were permitted to enter the United States and work.⁴⁷ As a result of this agreement, the Bracero Program was created, and many Mexican laborers relocated to the northern border of Mexico⁴⁸ to partake in the benefits of the seasonal agricultural jobs in the United States.⁴⁹

The Bracero Program was a successful operation which benefitted both the United States and Mexico. For the United States, this program solved the agricultural labor shortage problem.⁵⁰ For Mexico, this program provided an employment opportunity for over 400,000 Mexican laborers.⁵¹ However, despite the benefits of this program, unrest increased in the United States among labor groups which exerted political pressure for its termination.⁵²

As the result of mounting political pressure, the United States terminated the Bracero Program in 1964 and deported 185,000 Mexican laborers.⁵³ The majority of these dislocated workers settled at the border, resulting in an unemployment rate exceeding seventy percent in some Mexican border cities.⁵⁴

46. William C. Gruben, *Mexican Maquiladora Growth: Does it Cost U.S. Jobs?*, ECON. REV., Jan. 1990, at 17.

47. William Langewiesche, *The Border*, ATLANTIC MONTHLY, May 1992, at 68.

48. Gruben, *supra* note 46, at 17. The majority of the Mexican laborers who participated in the Bracero Program originally resided in the interior of Mexico. *Id.*

49. *Id.* Although initially the Bracero Program provided for jobs in both the railroad and agricultural industries, as the program developed, there were only agricultural opportunities for the migrant Mexican laborer. *Id.*

50. *Id.*

51. KITTY CALAVITA, *INSIDE THE STATE* 55 (1992). In 1956, there were 445,197 Mexican workers legally employed in the United States under the Bracero Program. *Id.* However, at the time the United States terminated the program, there were an estimated 185,000 Mexican laborers employed under its auspices. Gruben, *supra* note 46, at 17.

52. Gruben, *supra* note 46, at 17.

53. *Id.*

54. *Id.* Once the Bracero Program was phased out, the majority of the Mexican workers settled along the border, often crossing to the United States illegally to work, leaving their families on the Mexican side. Thomas G. Sanders, *Maquiladoras: Mexico's In-Bond Industries*, UFSI REP. 2 (1986). The border cities were also major targets for rural dwellers who hoped for the possibility of getting jobs across the border. *Id.* at 2-3. However, the supply of labor quickly exceeded the demand as the population exploded in the border cities. *Id.* at 3. For example, between 1940 and 1950, the border city of Ciudad Juarez experienced an annual population increase of 9.09%. *Id.*

Due to the excessive unemployment rate, the northern Mexican border experienced high levels of economic underdevelopment.⁵⁵

In 1965, to alleviate the depression and chronic unemployment that plagued the northern border, the Mexican government unilaterally established the Border Industrialization Program.⁵⁶ The government hoped that the creation of this program would result in increased foreign investment and regional industrialization, both of which were necessary to alleviate impoverished social conditions at the border.⁵⁷ To achieve these goals, the government permitted the creation of the maquiladora industry.⁵⁸

A maquiladora is a foreign-owned assembly plant, usually located in Mexico's border region,⁵⁹ which is permitted to temporarily import raw materials and intermediate goods duty free.⁶⁰ The goods are either assembled or processed, and then re-exported for sale in the United States and other markets, subject only to a duty on the costs of Mexican labor to assemble or process the goods.⁶¹ Because these rules make it easy for the United States and other foreign producers to use Mexico's low-cost labor to compete with Asian producers, Mexico has effectively achieved its goals of increased foreign investment and regional industrialization.⁶²

Between 1950 and 1960, it experienced an annual population increase of 7.75%. *Id.*

55. Stephen Lerner, Comment, *The Maquiladoras and Hazardous Waste: The Effects Under NAFTA*, 6 *TRANSNAT'L LAW* 255, 257 (1993).

56. Gruben, *supra* note 46, at 17.

57. Joseph LaDou, *Deadly Migration*, *TECH. REV.*, July 1991, at 49.

58. Lerner, *supra* note 55, at 257. The maquiladora industry consists of foreign-owned assembly plants, the majority of which are located at the border. Gruben, *supra* note 46, at 17. The creation of this industry was quite a change from the Mexican economic nationalism, which provided that a minimum of 51% of the ownership interest in a firm operating in Mexico be controlled by nationals. James R. Taylor, *Industrialization of the Mexican Border Region*, *N.M. BUS.*, Mar. 1973, at 3. These manufacturing operations resemble assembly operations in Hong Kong, Taiwan, and Japan, where multinational corporations import product components to be assembled and re-exported to the United States and other markets. *Id.*

59. Mexican law originally required maquiladoras to locate on the border; however, these plants are now allowed to locate in the interior. Gruben, *supra* note 46, at 17. Despite Mexico's relaxation of restrictions on plant location, more than 80% of maquiladora employment is still on the border. *Id.*

60. Montez, *supra* note 17, at 420. In 1991, nearly 1800 factories were in operation under the Border Industrialization Program in northern Mexico, employing about half a million workers. LaDou, *supra* note 57, at 49. The owners of these factories include IBM, General Electric, Motorola, Ford, Chrysler, General Motors, RCA, Eastman Kodak, Zenith, Sony, Hitachi and TDK. *Id.*

61. Sandy Tolan, *Border Boom*, *N.Y. TIMES*, July 1, 1990, at 17, 19-20.

62. Each year the maquiladoras contribute an estimated three billion dollars in foreign exchange earnings to the Mexican economy. LaDou, *supra* note 57, at 49. These earnings now exceed revenues from tourism, and are second only to Mexico's oil and gas exports. *Id.*

In addition to the attraction of cheap labor, foreign investors, particularly American investors, were attracted to Mexico's maquiladora industry because of Mexico's lax enforcement of its environmental laws.⁶³ Until recently, Mexican environmental officials have done little to force the maquiladoras to adhere to the country's tough new environmental laws.⁶⁴ Therefore, many American investors have established maquiladoras to avoid the stringent environmental laws in the United States.⁶⁵ This industrial growth led to a significant population increase as workers migrated to the border to take advantage of the numerous job opportunities.⁶⁶ As a result, both this industrial and population growth have strained the region, causing serious environmental and health conditions on both sides of the border.⁶⁷

B. Mexico's Maquiladoras: A Look at Current Border Conditions

The current conditions at the border are mainly attributable to Mexico's lack of environmental controls.⁶⁸ Without effective enforcement, the maquiladora owners are unrestrained in the operation of their factories and the processing of their goods.⁶⁹ As a result, ecological damage pervades the

63. Tolan, *supra* note 61, at 20. Mexico's lax environmental regulation is attributable to its lack of funding to enforce the regulations. Hustis, *supra* note 14, at 607. Effective regulation requires a substantial personnel effort; however, until recently, Mexico's environmental agency, SEDUE, had a total of only 19 inspectors responsible for enforcing the air, water, and hazardous waste laws in an estimated 120,000 facilities located throughout Mexico. U.S. GEN. ACCOUNTING OFFICE, U.S.-MEXICO TRADE: INFORMATION ON ENVIRONMENTAL REGULATIONS AND ENFORCEMENT 8-9 (1991). Because of the lack of personnel, Mexico is unable to regulate the polluting industries strictly and must rely on a program of voluntary industrial compliance with environmental regulations. Mary E. Kelly et al., *U.S.-Mexico Free Trade Negotiations and the Environment, Exploring the Issues*, 26 COLUM. J. WORLD BUS. 42, 46 (1991).

64. Tolan, *supra* note 61, at 20.

65. *Id.* at 31. Many owners and managers of maquiladoras readily admit that they relocated to Mexico partly because hazardous processes are unwelcome in the United States, and because Mexico does not create any serious obstacles to their activities. LaDou, *supra* note 57, at 50.

66. The border has always attracted Mexicans seeking work, but since the maquila program began in 1965, the flow northward has become a torrent. Nazario, *supra* note 14, at R26. Examples include the population of Nogales which quadrupled since 1970 and now approaches 250,000. Tolan, *supra* note 61, at 20. Ciudad Juarez, located just across the border from El Paso, was once the size of Nogales, but now has a population of 1.5 million, with 60 new families arriving each day in search of work. *Id.*

67. See *infra* text accompanying notes 68-86.

68. Richard Vaznaugh, *Extraterritorial Jurisdiction - Environmental Muscle of the North American Free Trade Agreement*, 17 HASTINGS INT'L & COMP. L. REV. 207, 213 (1993).

69. *Unscrubbed Mexican Plants Stir Controversy*, COAL & SYN FUELS TECH., June 28, 1993, available in LEXIS, News Library, Asapii File [hereinafter *Unscrubbed Plants*]. Without regulatory measures on processing methods, many plants in the maquiladora region will cause a significant decline in air quality in Mexico and the United States. *Id.* The EPA estimates that without SO₂ scrubbers, the Carbon II plant in Mexico will be the tenth largest SO₂ emitter in North America. U.S. EPA Official: *Mexico's Carbon III Coal Fired Project a Factor in NAFTA*, UTIL. ENV'T

region as clouds of pollutants, rising from the facilities, envelop surrounding areas.⁷⁰ In Texas alone, these emissions contribute an annual 200,000 tons of sulphur dioxide, thus seriously threatening Texas' air quality.⁷¹

The reckless activities of the maquiladoras in the disposing of their hazardous waste have also significantly contributed to the contamination of the region.⁷² Rather than shipping toxic substances back across the border for disposal, many facilities dump their hazardous waste into local rivers and ditches.⁷³ In Privada Uniones, a small town in Matamoros, such behavior has resulted in levels of xylene tested at 52,700 times the United States drinking water standard.⁷⁴

Although the maquiladoras have seriously polluted the border environment, it is the impact on the health of United States and Mexican citizens that draws the most attention.⁷⁵ In Mexico, children suffer from facial deformities and

REP., Feb. 18, 1994, available in LEXIS, News Library, Curnws File.

70. Nazario, *supra* note 14, at R26.

71. *Unscrubbed Plants*, *supra* note 69, at Curnws File. The effects of these emissions are felt throughout the southern region of Texas. Cameron A. Grant, Comment, *Transboundary Air Pollution: Can NAFTA and NAAEC Succeed Where International Law Has Failed?*, 5 COLO. J. INT'L ENVTL. L. & POL'Y 439, 439-40 (1994). In Eagle Pass, Texas, Big Bend National Park experiences up to 60% reduction in visibility on what's considered to be a clear day. *Id.* at 439. In El Paso, the EPA has declared the surrounding air in violation of federal air-quality standards. Bill Waters, *Quality of Border Air in El Paso, Juarez is a Growing Concern*, ARIZ. REP., Sept. 4, 1988, at A6. The impact of this pollution affects local industry as well. Grant, *supra* at 440. Because United States' law cannot bind foreign industry, foreign polluters are able to pollute the surrounding United States airspace with impunity, forcing United States industry to compensate. *Id.*

72. James Garcia, *Border River Laden with Wastes*, AUSTIN AM.-STATSMAN, Sept. 29, 1991, at A1.

73. Don Fitz, *Blueprint for Ecological Disaster - Mexican Trade Agreement Puts Environment at Further Risk*, ST. LOUIS POST DISP., Dec. 4, 1992, at 3C. The Texas Water Commission counted only 143 tons of toxic waste shipped north to Texas by the maquilas in 1987, but it estimates that plants in Ciudad Juarez alone produced 5000 tons of it. Nazario, *supra* note 14, at R26. The EPA, which has tracked returning waste since 1985, can only identify 26 maquiladoras, out of more than 1500 maquiladoras operating at the border, that have actually made such shipments. *Id.* As a result of this practice, the local rivers are covered with a thick foam of bacteria, industrial chemicals, and heavy metals. Fitz, *supra* at 3C.

74. Bruce Selcraig, *Up Against the Wall in Mexico*, INT'L WILDLIFE, Mar./Apr. 1992, at 14. Xylene is noted as causing brain hemorrhaging as well as lung, liver, and kidney damage. Bruce Selcraig, *Border Patrol*, SIERRA, May/June 1994, at 62 [hereinafter *Border Patrol*].

The main contributor to the excessive level of xylene is the Northfield, Illinois based Stepan Chemical plant. *Id.* Videotapes document Stepan workers dumping chemical wastes into nearby holding ponds adjacent to residential communities. *Id.* See also *Primetime Live* (ABC television broadcast, Apr. 1, 1993), transcript available in LEXIS, News Library, ABCNEW File.

75. See generally *More Texas-Mexico Border Babies Born Without Brains*, CHI. TRIB., June 9, 1995, at 2; *NAFTA Fails to Stop Pollution, Group Says U.S.-Mexico Border is Still Contaminated*, CHI. TRIB., Jan. 2, 1996, at 7.

mental retardation as a result of prenatal exposure to highly toxic solvents and PCBs.⁷⁶ In the United States, thirty-five percent of the children in San Elizario, Texas are infected with hepatitis A by the age of eight.⁷⁷ Other health problems stemming from the pollution include lupus, cancer, and anencephaly, all of which are attributed to the careless dumping of maquiladora toxins.⁷⁸

In addition to maquiladora pollution, the social conditions in the local communities pose a serious threat to environmental safety.⁷⁹ As the number of workers exceeds the availability of housing, many families are forced to settle into slums.⁸⁰ Lacking sewage systems and wastewater treatment facilities, these slums dump raw sewage into local groundwaters, thereby exacerbating the waters' already contaminated state.⁸¹

The dumping of sewage poses a serious, if not fatal, threat to the health of border residents.⁸² In July of 1994, a thirteen-year-old boy from near Laredo,

76. *Border Patrol*, *supra* note 74, at 60. These children, known as "Mallory children," were born to mothers who worked with these chemicals at the now closed Mallory capacitor plant. *Id.* Other birth defects include deformed hands and webbed feet. Selcraig, *supra* note 74, at 16.

77. Council on Scientific Affairs, *A Permanent U.S.-Mexico Border Environmental Health Commission*, 263 JAMA 3319, 3320 (1990). "Incidence rates (combined) for hepatitis A and hepatitis of unspecified form are 103 per 100,000 in [a Texas county bordering the maquiladora region] vs. 12.8 per 100,000 in Texas overall for 1983." *Id.*

78. Demetria Martinez, *To Explore NAFTA's Future, Visit Nogales*, NAT'L CATH. REP., Jan. 7, 1994, at 12. A recent University of Arizona study found that Nogales, Arizona, with 18 cases of lupus diagnosed according to rigid criteria, has the highest projected rate of lupus ever recorded anywhere. *Id.* About 40 cases of cancer are diagnosed in this city each month. *Id.* at 13. Health officials attribute these health conditions to the Nogales Wash which flows by 200 private wells from which many families draw water. *Id.* The Nogales Wash is polluted with highly carcinogenic byproducts of industrial processes as well as fecal chloroform levels which are 16 million times higher than the United States allows. *Id.*

79. Montez, *supra* note 17, at 421. The creation of most border town communities is a direct result of the inception of the maquiladora program. Tolan, *supra* note 61, at 17. The resulting social conditions of these communities constitute a significant part of the maquiladora problem. Voigt, *supra* note 13, at 328 n.26. Thus, references to maquiladora pollution include both industrial and residential pollution.

80. Since the inception of the maquiladora program, population has experienced dramatic growth. Tolan, *supra* note 61, at 17, 20. This growth rate has far exceeded the infrastructure's capability of providing sufficient housing for residential communities. Michael S. Feeley & Elizabeth Knier, *Environmental Considerations of the Emerging United States-Mexico Free Trade Agreement*, 2 DUKE J. COMP. & INT'L L. 259, 272-73 (1992) [hereinafter Feeley].

81. David C. Warner, *Health Issues at the U.S.-Mexican Border*, 265 JAMA 242, 244 (1991). Along its entire United States border, Mexico has no municipal treatment plant, thus the dumping of sewage is inevitable. Selcraig, *supra* note 74, at 15. One such example is the border town of Nuevo Laredo which alone dumps an estimated 25 million gallons of raw sewage into the Rio Grande every day. *Id.*

82. Nazario, *supra* note 14, at R27.

Texas died from an amoebic brain infection after swimming in the Rio Grande.⁸³ American health officials traced the infection to the twenty-four million gallons of raw sewage that Nuevo Laredo, Mexico pumps into the river each day.⁸⁴

Looking at the border region, it is apparent that the creation of the maquiladoras has seriously affected environmental and health conditions in both the United States and Mexico.⁸⁵ The international environmental consequences of this industry have, out of necessity, created closer relations between the United States and Mexico. Thus, a closer look at the relationship between the principles of international law and environmental safety illustrates the rights and obligations of both the United States and Mexico in confronting the transboundary effects of maquiladora pollution.⁸⁶

III. INTERNATIONAL LAW AND TREATIES

A. *International Law and the Environment*

International law is binding on all nation states.⁸⁷ One of the fundamental elements of international law is that nation states are endowed with the inherent characteristic of sovereignty.⁸⁸ Rooted in this concept of sovereignty are the notions of autonomy and the free exercise of nation state rights.⁸⁹

83. Allen R. Myerson, *Trade Pact's Environmental Efforts Falter*, N.Y. TIMES, Oct. 17, 1994, at C1, C4.

84. *Id.* A similar incident occurred in San Diego. Two surfers almost died of an inner ear infection which can infect the brain and is caused by exposure to fecal matter. Nazario, *supra* note 14, at R27.

85. Vaznaugh, *supra* note 68, at 213.

86. *See infra* text accompanying notes 87-107.

87. LOUIS HENKIN ET AL., INTERNATIONAL LAW 149 (3d ed. 1993).

88. Kurt C. Hofgard, *Is This Land Really Our Land?: Impacts of Free Trade Agreements on U.S. Environmental Protection*, 23 ENVTL. L. 635, 667 (1993). State sovereignty derives its authority from longstanding custom and the United Nations Declaration on Friendly Relations. *Declaration on Principles on International Law Concerning Friendly Relations and Cooperation Among States in Accordance with the Charter of the United Nations*, G.A. Res. 2625, U.N. GAOR 6th Comm., 25th Sess. Supp. No. 28, at 12, U.N. Doc. A/8082 (1970).

89. HENKIN ET AL., *supra* note 87, at 16. The essential quality of statehood in a state system is the autonomy of each state. *Id.* "State autonomy suggests that a state is not subject to any external authority unless it has voluntarily consented to such authority." *Id.* *But see* Boutros Boutros-Ghali, *Empowering the United Nations*, 71 FOREIGN AFF. 89 (Winter 1992-93). Recently, the traditional notions of sovereignty have been reexamined. *Id.* at 99. In today's world, where international cooperation has become increasingly important, states may be called upon to sacrifice some of their sovereignty. *Id.*

The notion of absolute sovereignty is not prevalent in all areas of international law.⁹⁰ Instances exist in which nation states may not independently exercise their rights, especially at the expense of another nation state's rights. One example is international environmental law.⁹¹ In the area of international environmental law, many judicial and arbitral decisions have placed a legal obligation on nation states by holding them responsible for environmental degradation caused by the transboundary effects of their pollution.⁹²

*Trail Smelter Arbitration*⁹³ laid the foundation of international law's basic principle of state responsibility and its relation to transboundary pollution.⁹⁴

90. ALEXANDRE KISS & DINAH SHELTON, INTERNATIONAL ENVIRONMENTAL LAW 119-20 (1991) [hereinafter KISS].

91. Rejection of absolute sovereignty acknowledges the fact that activity within a state's territorial bounds ceases to be within the exclusive competence of that state, and becomes instead a matter of international concern, if such action causes transnational effects. BURNS H. WESTON ET AL., INTERNATIONAL LAW AND WORLD ORDER 360 (2d ed. 1990). For a general discussion on international environmental law, see ENVIRONMENTAL PROTECTION - THE INTERNATIONAL DIMENSION (David A. Kay & Harold K. Jacobson eds., 1983); ENVIRONMENTAL PROTECTION AND INTERNATIONAL LAW (W. Lang et al. eds., 1991); INTERNATIONAL LAW AND POLLUTION (Daniel Barstow Magraw ed., 1991); THE EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL AGREEMENTS: A SURVEY OF EXISTING LEGAL INSTRUMENTS (Peter H. Sand ed., 1992).

92. Responsibility for transborder pollution is not unique to nation states. HENKIN ET AL., *supra* note 87, at 1382. The EPA has also placed this responsibility on each individual state of the United States. *Id.* For cases discussing this responsibility, see *New Jersey v. New York*, 283 U.S. 473 (1931), *New York v. New Jersey*, 256 U.S. 296 (1921), *Georgia v. Tennessee Copper Co.*, 237 U.S. 474 (1915), *Georgia v. Tennessee Copper Co.*, 206 U.S. 230 (1907), *Missouri v. Illinois*, 200 U.S. 496 (1906).

93. *Trail Smelter Arb. (U.S. v. Canada)*, 3 R.I.A.A. 1911 (1941).

94. Within the realm of customary international law, a state is responsible for environmental harm caused outside its border by acts within the limits of its jurisdiction. KISS, *supra* note 90, at 348-49. This principle was codified in *Trail Smelter* and defined in various international texts. *Id.* Principle 21 of the Stockholm Declaration provides that states have the responsibility to ensure that activities under their jurisdiction or control do not cause damage to the environment of other states or to areas beyond national jurisdiction. *Id.* The principle of state responsibility is also apparent in the Third Restatement of the Foreign Relations Law of the United States. Specifically, Section 601 of the Restatement provides that:

(1) A state is obligated to take such measures as may be necessary, to the extent practicable under the circumstances, to ensure that activities within its jurisdiction or control

(a) conform to generally accepted international rules and standards for the prevention, reduction, and control of injury to the environment of another state or of areas beyond the limits of national jurisdiction, and
 (b) are conducted so as not to cause significant injury to the environment of another state or of areas beyond the limits of national jurisdiction.

(2) A state is responsible to all other states

(a) for any violation of its obligations under Subsection

(1)(a), and

(b) for any significant injury, resulting from such violation to the environment of areas

In *Trail Smelter*, a Canadian company operated a smelting plant in British Columbia.⁹⁵ Sulphur dioxide fumes, emitted from the smelter, caused damage across the border in the State of Washington.⁹⁶ The arbitral tribunal held Canada responsible and directed injunctive relief and the payment of an indemnity.⁹⁷ In its holding, the tribunal declared that a state always owes a duty to protect other states against injurious acts by individuals within its jurisdiction.⁹⁸ This duty entails the enactment of necessary environmental legislation, the enforcement of environmental laws, the prevention or termination of an illegal activity, or the punishing of the individual or corporation responsible for the transboundary pollution.⁹⁹

This principle of state responsibility and the preservation of other states' rights is also addressed in *Corfu Channel*.¹⁰⁰ In *Corfu Channel*, the court stated that each state has an obligation to use its territory in a manner which is consistent with the rights of other states.¹⁰¹ Thus, under this reasoning, a state has a duty to inform other states of an event which can cause harm to their environment and should attempt to reduce the effects of the pollution infringing upon the rights of those other states.¹⁰²

beyond the limits of national jurisdiction.

(3) A state is responsible for any significant injury, resulting from a violation of its obligation under Subsection (1), to the environment of another state, or to its property, or to persons or property within that state's territory or under its jurisdiction or control.

RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 601 (1987). *But see* ARMIN ROSENCRANZ, *THE INTERNATIONAL LAW AND POLITICS OF ACID RAIN IN WORLD CLIMATE CHANGE: THE ROLE OF INTERNATIONAL LAW AND INSTITUTIONS* (1983) (noting that *Trail Smelter* was a unique situation and that the circumstances of that case are unlikely to arise again).

95. *Trail Smelter*, 3 R.I.A.A. at 1917.

96. *Id.*

97. *Trail Smelter Arb. (U.S. v. Canada)*, 3 R.I.A.A. 1911, 1959, 1966 (1941).

98. *Id.* at 1963-64. In its holding, the Tribunal reasoned that "under principles of international law, . . . no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein . . ." *Id.* at 1965.

99. *KISS*, *supra* note 90, at 125.

100. *Corfu Channel (U.K. v. Alb.)*, 1949 I.C.J. 4. In *Corfu Channel*, two British warships were severely damaged and some crewmembers were killed when the ships encountered mines while passing through the territorial waters of Albania. *Id.* at 10. At the time of the incident, the British ships were exercising their right of innocent passage. *Id.*

Although this case does not deal with disputes relating to environmental harm caused by transboundary pollution, it is an important decision in defining the obligations of a state as it relates to other states. Along with *Trail Smelter*, this case is helpful in understanding the principle of state responsibility within the context of international law.

101. *Id.* at 22.

102. *See KISS*, *supra* note 90, at 121. A state has the right to have its territory respected. *Id.* This right includes not having to accept the resulting deterioration of its environment due to the polluting activities taking place in another state. *Id.*

Both *Trail Smelter* and *Corfu Channel* illustrate a general principle of international law which holds states responsible for environmental harm caused outside their jurisdiction by acts occurring within their jurisdiction.¹⁰³ This principle of state responsibility is generally accepted within the realm of international law and therefore is basic to all legal systems.¹⁰⁴ Based upon this acceptance, this principle has become established law and is used to hold a state responsible in cases involving the extraterritorial effects of jurisdictional activities.¹⁰⁵ However, such state responsibility for environmental harm is not derived solely from general principles of international law,¹⁰⁶ but may also be created by a treaty which is another and perhaps more effective source of international law.¹⁰⁷

B. *Treaty Law—Its Binding Nature and Relationship with the Principles of International Law*

A treaty is a written agreement between two or more states containing

103. See *supra* text accompanying notes 98 and 101.

104. HENKIN ET AL., *supra* note 87, at 116. The obligation of a state to use its territory in a manner consistent with the rights of other states (*sic utere tuo ut alienum non laedas*) is often noted as a recognized general principle of international law in international legal writing and judicial decisions. *Id.*

105. INTERNATIONAL RESPONSIBILITY FOR ENVIRONMENTAL HARM 22-26 (Francesco Francioni & Tullio Scovazzi eds., 1991). See also EXPERT GROUP ON ENVIRONMENTAL LAW OF THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT 127 (1987) (noting that a state has an international obligation to responsibly use a natural resource or to prevent or abate an environmental interference).

106. A state obligation can also be created by other sources of international law, such as treaties, judicial decisions, international custom, and the teachings of publicists of various nations. HENKIN ET AL., *supra* note 87, at 51-52.

107. There are three sources of international law which are defined in the Third Restatement of the Foreign Relations Law of the United States. Specifically, § 102 of the Restatement provides that:

(1) A rule of international law is one that has been accepted as such by the international community of states

- (a) in the form of customary law;
- (b) by international agreement; or
- (c) by derivation from general principles common to the major legal systems of the world.

(2) Customary international law results from a general and consistent practice of states followed by them from a sense of legal obligation.

(3) International agreements create law for the states parties thereto and may lead to the creation of customary international law when such agreements are intended for adherence by states generally and are in fact widely accepted.

(4) General principles common to the major legal systems, even if not incorporated or reflected in customary law or international agreement, may be invoked as supplementary rules of international law where appropriate.

RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 102 (1987).

mutual promises with respect to their relationship within the realm of international law.¹⁰⁸ According to the principle of *pacta sunt servanda*,¹⁰⁹ one of the basic principles of international law, treaty-made promises are binding on the nations that make them.¹¹⁰ Thus, a treaty is a powerful source of law against the signatory states.¹¹¹ Furthermore, a treaty fosters international stability by fulfilling the reasonable expectations of the parties to the treaty.¹¹²

When a dispute arises between two or more states, a court first determines

108. LORD MCNAIR, *LAW OF TREATIES* 4 (1986).

109. *Pacta sunt servanda* is the Latin phrase for the norm that all treaties must be obeyed by the parties. WESTON ET AL., *supra* note 91, at 3 n.1.

110. *Id.* at 44. According to Professor Alfred P. Rubin of the Fletcher School of Law and Diplomacy, the principle of *pacta sunt servanda* did not evolve from international law. *Id.* at 70. Rather, Professor Rubin observed that the principle that all treaties are binding can be traced back to the doctrine of divine law. *Id.* He states that under this doctrine, the binding nature of treaties and promises can be readily explained by the peoples' understanding that promises were made to God directly. *Id.* at 71. With this understanding, the people would keep promises to avoid the wrath of God. *Id.*

111. *Id.* at 44. Article 13 of the Draft Declaration of Rights and Duties of States adopted by the International Law Commission in 1949 provides that "[e]very State has the duty to carry out in good faith its obligations arising from treaties and other sources of international law, and it may not invoke provisions in its constitution or its laws as an excuse for failure to perform this duty." HENKIN ET AL., *supra* note 87, at 149.

The United States also recognizes the legal significance of treaty rights and obligations. U.S. CONST. art. VI. Specifically, Article VI of the Constitution provides that, in addition to "[t]his Constitution and the Laws of the United States . . . made in [p]ursuance thereof; . . . all Treaties made, or which shall be made, under the Authority of the United States, shall be the Supreme Law of the Land . . ." U.S. CONST. art. VI, § 2. Thus, the significance of this article is that treaties are co-equal with federal statutes. R. Jeffrey Kelleher, *NAFTA and the European Union - Comparison and Contrast*, 2 SAN DIEGO JUST. J. 19, 24 (1994). Under the Supremacy Clause doctrine, a treaty is supreme over all inconsistent state enactments and earlier enacted federal statutes. *Id.* Yet, like all treaties, it is subordinate to the United States Constitution and later enacted federal statutes. *Id.* Therefore, if a later act of Congress conflicts with an earlier treaty, that act of Congress will only supersede that agreement as it applies to the domestic law of the United States. RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 115 (1)(A) (1987). The congressional act does not, however, affect the application of the treaty in the international arena. *Id.* at (b). The United States is still held responsible for its international obligation or for the consequences of a violation of that obligation despite the fact that the obligations created under the treaty are no longer effective domestic law. *Id.*

112. M. MCDUGAL ET AL., *THE INTERPRETATION OF AGREEMENTS AND WORLD PUBLIC ORDER* 3 (1967). Even in a community which aspires only to minimum public order, agreements are indispensable for establishing stability in peoples' expectations. *Id.* In such a community, agreements serve to assure that values are shaped and shared by persuasion rather than by coercion. *Id.* Agreements also serve to organize initiatives for the effective employment of resources in the maximum production and distribution of valued social outcomes. *Id.* at 4.

whether a treaty exists to define the rights and obligations of the disputing states.¹¹³ Such examination does not suggest that a hierarchy exists among the sources of international law.¹¹⁴ Rather, it is logical for a court to conclude that if the disputing states have drafted a treaty, this treaty will provide the most clarity and precision regarding the rights and obligations of each state.¹¹⁵

In the event that a treaty does not provide such clarity and precision, the court will incorporate the relevant general principles of international law to aid in the determination of these rights and obligations.¹¹⁶ However, general principles, when used as "gap-fillers," have proven to be an unsatisfactory guide and dangerous to legal development.¹¹⁷ Such principles do not precisely define the intent of the disputing states and thus leave room for a subjective and indeterminate analysis by the court.¹¹⁸

To avoid this danger, parties to an international agreement should incorporate the desired principles of international law from the very beginning of the treaty-making process. By incorporating these principles, parties can directly define their application to the treaty.¹¹⁹ Thus, a treaty itself can become black letter law in determining the rights and obligations of the parties.¹²⁰

113. 8 DR. J.H. W. VERZIJL, *INTERNATIONAL LAW IN HISTORICAL PERSPECTIVE* 106 (1976). Article 38 of the Statute of the International Court of Justice states that when deciding international disputes, the court is to apply international agreements which establish rules expressly recognized by the contesting states. *Id.* at 106. The court is also to apply international custom as evidence of a general practice accepted as law. *Id.* The general principles of law recognized by civilized nations, judicial decisions, and the teachings of the most highly qualified publicists of the various nations are also to be used by the court in the determination of a dispute. *Id.*

114. HENKIN ET AL., *supra* note 87, at 94-95. Although there is no hierarchy of sources, there is a general practice and understanding among states and international lawyers that priority is given to treaties in settling disputes between parties. *Id.* The rights and duties of states are first determined by their agreement as expressed in treaties, just as is the case of individuals whose rights are specifically determined by any contract which is binding upon them. 1 SIR HERSCH LAUTERPACHT, *INTERNATIONAL LAW: COLLECTED PAPERS* 86-87 (E. Lauterpacht ed., 1970).

115. HENKIN ET AL., *supra* note 87, at 97-98.

116. VERZIJL, *supra* note 113, at 106.

117. HENKIN ET AL., *supra* note 87, at 111. General principles of international law may be useful to fill a gap, but in essence they are too elementary and too obvious to permit detached evaluation of conflicting interests. *Id.* Their generality makes specific legal appreciation of the implications of a given situation very difficult. *Id.*

118. VERZIJL, *supra* note 113, at 106. The interpretation of general principles of law lends itself to a great deal of uncertainty. *Id.* There is confusion as to whether the principles are to denote general principles of public international law or universal principles of law embodied in national legal systems. *Id.* There is also confusion as to whether the Court of Justice has the power or the duty to engage in law-making with these general principles when treaty language is lacking. *Id.*

119. *Id.* at 105-06.

120. HENKIN ET AL., *supra* note 87, at 100.

In essence, the parties can use the treaty to codify the general principles of international law pertinent to their agreement.¹²¹ This codification replaces the lack of precision inherent in the principles of international law, when they exist apart from a treaty, with a concise and definitive form of law specific to the parties' intentions.¹²² Thus, it is less likely that the interpretation of a rule adopted and supported by the parties is subject to the court's discretion.¹²³

Treaties are of growing importance in international law as modern technology, communication and trade weaken international boundaries which once isolated states from each other.¹²⁴ As a result of a growing interdependence between states, protection of the environment has become a significant concern.¹²⁵ Many parties resort to treaties or other mutual agreements to address these concerns.¹²⁶ The mutual attempts of the United States and Mexico to address the border environment are one such example.¹²⁷

IV. ATTEMPTS TO ADDRESS THE PROBLEM

The maquiladoras have caused extensive environmental damage on both sides of the border.¹²⁸ Yet, it is only in the past twenty years that the United States and Mexican governments have acknowledged the extent of this problem.¹²⁹ Together, the governments have attempted to address this problem by entering into agreements directed solely towards the alleviation of

121. Codification is the restatement of existing law. HERBERT W. BRIGGS, THE INTERNATIONAL LAW COMMISSION 11-12 (1965). With respect to environmental agreements, a principle that the parties may want to codify is the notion of "*sic utere tuo ut alienum non laedas*." See *supra* note 104.

122. HENKIN ET AL., *supra* note 87, at 100.

123. *Id.* at 111. A weakness of the general principles of international law is that they leave the result of a dispute unpredictable. *Id.* If a principle is not specifically delineated in a treaty, then its application to that treaty will most likely occur in a subjective manner, thus letting discretion prevail over justice. *Id.* On the other hand, if the parties are careful to specifically outline the application of a principle in the treaty, then the court can take an objective approach in deciding the dispute and let the intent of the parties determine the rights and obligations of each. *Id.* See also Richard R. Baxter, *Treaties and Customs*, 129 RECUEIL DES COURS 25, 101 (1970).

124. MICHAEL B. AKEHURST, A MODERN INTRODUCTION TO INTERNATIONAL LAW 25 (6th ed. 1987).

125. BATRA, *supra* note 21, at 215-16.

126. PATRICIA W. BIRNIE & ALAN E. BOYLE, INTERNATIONAL LAW & THE ENVIRONMENT 11 (1992).

127. See *infra* text accompanying notes 128-235.

128. As a result of the maquiladoras, virtually every environmental medium on both sides of the border, including water, land, and air, has experienced significant degradation. Housman et al., *supra* note 15, at 595 (1993). See *supra* text accompanying notes 68-84 for a further analysis of the environmental effects of the maquiladoras.

129. It was not until 1978 that both Mexico and the United States made an effort to address environmental concerns regarding the border. Lerner, *supra* note 55, at 259.

the transboundary effects of maquiladora pollution.¹³⁰ Two efforts to address the border environment damage are the La Paz Agreement and the Border Plan.¹³¹

A. La Paz Agreement

1. Background and Purpose of the Agreement

The maquiladoras have industrialized the northern Mexican border.¹³² This industrialization, combined with the increasing population, has taken a substantial toll on the border environment.¹³³ In 1983, in response to this growth and consequent environmental degradation, Mexico and the United States signed the La Paz Agreement.¹³⁴

The purpose of the La Paz Agreement is to address environmental problems that have developed in the border area.¹³⁵ Specifically, the Agreement was designed to foster cooperation between the United States and Mexican governments in their attempts to secure environmental safety at the border region.¹³⁶ Although the Agreement itself is general in nature, annexes to the Agreement specify the particular border environmental problems that need resolution.¹³⁷

130. *Id.* at 259-61.

131. Throughout this note, the La Paz Agreement and the Border Plan are purposely referred to in the present tense. This reference reflects the fact that both agreements are still in effect today. The language of NAFTA expressly recognizes the continuing vitality of the La Paz Agreement. NAFTA, *supra* note 22, at annex 104.1 (recognizing the rights and obligations of the United States and Mexico as agreed upon in the La Paz Agreement). NAFTA does not explicitly refer to the Border Plan because it does not have the effect of a treaty. *Id.* For an analysis of the La Paz Agreement see *infra* text accompanying notes 132-74. For an analysis of the Border Plan see *infra* text accompanying notes 175-234.

132. Santos Gomez, Comment, *Environmental Risks Related to the Maquiladora Industry and the Likely Environmental Impact of NAFTA*, 6 LA RAZA L.J. 174, 179 (1993).

133. *Id.* at 174-75 n.4.

134. See Khakee, *supra* note 25, at 856 (stating that the United States and Mexico signed the La Paz Agreement as a cooperative attempt to solve environmental problems in a 100 kilometer wide area on each side of the border).

135. Lerner, *supra* note 55, at 259.

136. La Paz Agreement, *supra* note 17, art. 6. The La Paz Agreement seeks the coordination of national programs and scientific and educational exchanges of information. *Id.* The Agreement also encourages environmental monitoring and the assessment of the impact of pollution on the environment. *Id.* In addition, the La Paz Agreement promotes the periodic exchange of information and data on likely sources of pollution in the parties' respective territory which may produce polluting incidents. *Id.*

137. The Agreement grants to the parties the right to create annexes as the need arises: "Pursuant to this Agreement, the Parties may conclude specific arrangements for the solution of common problems in the border area, which may be annexed thereto. Similarly, the Parties may

Currently, five supplemental annexes have been added to the La Paz Agreement.¹³⁸ Each annex addresses a specific goal which requires a cooperative effort between the governments to reduce the transboundary pollution and ensure environmental protection at the border.¹³⁹ One way in which the parties attempt to achieve this protection is by addressing the effects of the pollution created by the maquiladoras.¹⁴⁰ The parties drafted Annex V as an attempt to control the impact of the maquiladora pollution on the sister cities¹⁴¹ along the border.¹⁴² As a means of controlling this pollution, the

also agree upon annexes to this Agreement on technical matters." *Id.* art. 3.

138. The five annexes are:

Annex I to the 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 - 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 (1987) [hereinafter Annex I].

Annex II to the 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 - 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 (1987) [hereinafter Annex II].

Annex III to the 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 - Agreement of Cooperation Regarding the Transboundary Shipments of Hazardous Wastes and Hazardous Substances, Nov. 12, 1986, U.S.-Mex., 26 I.L.M. 25 (1987) [hereinafter Annex III].

Annex IV to the 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 - Agreement of Cooperation Between the United States of America and the United Mexican States Regarding Transboundary Air Pollution Caused by Copper Smelters Along Their Common Border, January 29, 1987, U.S.-Mex., 26 I.L.M. 33 (1987) [hereinafter Annex IV].

Annex V to the 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 - Agreement of Cooperation Regarding International Transport of Urban Air Pollution, Oct. 3, 1989, U.S.-Mex., 29 I.L.M. 29 (1990) [hereinafter Annex V].

139. The first annex seeks the improvement of sewage systems and a potable water supply through a proposed waste-water treatment facility at the border. Annex I, *supra* note 138, para. 1. The second annex seeks the creation of a joint contingency plan to improve detection and response measures to pollution caused by hazardous substances at the border. Annex II, *supra* note 138, arts. II-III. The third annex seeks the creation of a legal and procedural framework for the transborder shipment of hazardous waste. Annex III, *supra* note 138, art. III. The fourth annex seeks the creation of a monitoring, recordkeeping, and reporting system to limit sulphur dioxide emissions at the border and ensure compliance by the copper smelters. Annex IV, *supra* note 138, art. II.

140. Annex V, *supra* note 138, art. II (stating the parties' intent to reduce the transboundary pollution created by border industries).

141. Sister cities are pairs of cities, one on each side of the border, which generally experience the same environmental effects created by the maquiladoras. The sister cities include Tijuana, Baja California and San Diego, California; Mexicali, Baja California and Calixico, California; San Luis Rio Colorado, Sonora and Yuma, Arizona; Nogales, Sonora and Nogales, Arizona; Agua Prieta, Sonora and Douglas, Arizona; Naco, Sonora and Naco, Arizona; Las Palomas, Chihuahua and Columbus, New Mexico; Ciudad Juarez, Chihuahua and El Paso, Texas; Ojinaga, Chihuahua and

parties sought to harmonize the United States' and Mexico's air pollution control standards.¹⁴³ It is probable that, by encouraging the compatibility of air pollution control standards, the parties recognize that it will be easier to ensure environmental protection since they will be striving for the same level of environmental safety.¹⁴⁴

The La Paz Agreement is definitely an ambitious attempt to regulate the border environment.¹⁴⁵ The specificity of the five annexes demonstrates the United States and Mexican governments' desires to curtail the transboundary pollution problem.¹⁴⁶ However, specificity alone will not guarantee the success of the La Paz Agreement.¹⁴⁷ To be effective, the La Paz Agreement needs to provide for enforcement mechanisms to ensure the parties' adherence to their obligations and funding provisions to ensure the continuation of the La Paz Agreement and the realization of its goals.¹⁴⁸ Thus, a closer look at the La Paz Agreement demonstrates that it is the absence of enforcement mechanisms and funding provisions which makes this Agreement a failure in

Presidio, Texas; Ciudad Acuna, Coahuila and Del Rio, Texas; Piedras Negras, Coahuila and Eagle Pass, Texas; Nuevo Laredo, Tamaulipas and Laredo, Texas; Reynosa, Tamaulipas and McAllen, Texas; and Matamoros, Tamaulipas and Brownsville, Texas. ENVIRONMENTAL PROTECTION AGENCY, SUMMARY - ENVIRONMENTAL PLAN FOR THE MEXICAN-U.S. BORDER AREA 7 (1992), cited in Voigt, *supra* note 13, at 325 n.12.

142. Annex V, *supra* note 138, app.

143. *Id.* art. V. Specifically, Article V of Annex V states, "In order to make more effective the implementation of this Annex, the Parties shall jointly explore ways to harmonize, as appropriate, their air pollution control standards and ambient air quality standards in accordance with their respective legal procedures." *Id.*

Harmonization is not the achievement of identical regulations or standards. Candice Stevens, *Harmonization, Trade, and the Environment*, 5 INT'L ENV'T AFFAIRS 42, 42-43 (1993). Rather, harmonization is the converging of international methods for developing and administering standards. *Id.* Although harmonization is primarily a trade promoting concept, this does not mean that related environmental benefits do not also sometimes accrue. *Id.* at 43.

144. Stevens, *supra* note 143, at 42-48.

145. Montez, *supra* note 17, at 424.

146. See *supra* notes 139-40.

147. Gomez, *supra* note 132, at 193-95 (discussing obstacles to effective enforcement). Prior to the creation of the La Paz Agreement, neither the United States nor the Mexican government had seriously attempted to resolve the transboundary pollution problem affecting the border. *Id.* at 184-85. Their previous efforts rested solely on cooperation between the governments. *Id.* Therefore, when drafting the La Paz Agreement, the United States and Mexico remained with the familiar and thus only addressed cooperative efforts between the parties to achieve specific goals. *Id.* The precision in the annexes is helpful in attaining environmental protection since this precision specifically delineates the obligations of the parties. *Id.* However, no matter how specific or precise these provisions are, they are useless in providing environmental protection if there is no funding to implement them and no enforcement mechanism to ensure party compliance with them. Malissa H. McKeith, *The Environment and Free Trade: Meeting Halfway at the Mexican Border*, 10 UCLA PAC. BASIN L.J. 183, 194 (1991).

148. Voigt, *supra* note 13, at 337.

regulating transboundary pollution.¹⁴⁹

2. Critical Analysis

The La Paz Agreement fails to alleviate transboundary pollution for two reasons. First, the Agreement neglects to account for enforcement mechanisms.¹⁵⁰ When negotiating an international environmental agreement, accounting for enforcement mechanisms is a necessity to ensure the success of the agreement.¹⁵¹ Accountability of enforcement mechanisms is important because there is such a wide latitude of environmental protection among nations.¹⁵² Although agreements are generally negotiated in good faith, ensuring the availability of enforcement mechanisms is a viable way of guaranteeing conformity to the provisions of the agreement and fulfilling the expectations of the parties.¹⁵³

When the United States and Mexico drafted the La Paz Agreement, they purposely avoided the creation of a binding obligation.¹⁵⁴ The Agreement does not commit the parties to adopt specific measures to protect the environment.¹⁵⁵ Rather, it encourages the parties to reduce pollution "to the

149. See *infra* text accompanying notes 150-68 for an analysis of the absence of enforcement mechanisms. See *infra* text accompanying notes 169-74 for an analysis of the absence of funding provisions.

150. Voigt, *supra* note 13, at 337.

151. J. CLARENCE DAVIES III, *THE POLITICS OF POLLUTION* 175 (1970). As it is with any pollution control program, the ultimate goal of an international environmental agreement is achieving environmental protection through the parties' compliance with the provisions of the agreement. *Id.* Enforcement mechanisms can ensure this compliance. LAWRENCE E. SUSSKIND, *ENVIRONMENTAL DIPLOMACY* 22 (1994). Without effective enforcement mechanisms, the implementation of an agreement's objectives is difficult. *Id.* Most countries comply with most existing international agreements, but there are instances in which countries blatantly disregard the obligations created by an agreement. *Id.* Thus, enforcement mechanisms are beneficial to an agreement because such mechanisms allow the imposition of sanctions against the violating country and help prevent future transgressions. *Id.*

152. In the case of Mexico and the United States, this disparity is well recognized. Although Mexico has environmental laws comparable to the United States' environmental laws, Mexico is lax in enforcing these laws. Gomez, *supra* note 132, at 191. Thus, where the U.S. environmental movement is well established, Mexico's is still embryonic. *Id.* at 193.

153. Compliance with global environmental agreements rests on enforcement mechanisms strong enough to impose the law. SUSSKIND, *supra* note 151, at 113.

154. Voigt, *supra* note 13, at 337. The absence of a binding force may be the result of sovereignty concerns. SUSSKIND, *supra* note 151, at 101. Because international law enshrines the right of sovereignty, all efforts to monitor performance, establish the accuracy of claims of noncompliance, punish proven noncompliers, or impose remedial action must be accepted voluntarily by the parties to a treaty. *Id.*

155. La Paz Agreement, *supra* note 17, art. 2.

fullest extent practical."¹⁵⁶

The La Paz Agreement's qualified language imposes no obligatory duties upon the contracting parties and thus makes the goal of environmental protection elusive.¹⁵⁷ The Agreement does not define what is "practical," but rather leaves this determination within the discretion of the parties.¹⁵⁸ If a party decides that the necessary measures to ensure environmental protection are not practical, then that party is not obligated to adopt them.¹⁵⁹ Thus, if each party is allowed to individually determine what is practical with respect to environmental protection, effective protection is not guaranteed.

The La Paz Agreement attempts to ensure compliance with environmental laws by providing for a national coordinator from each party.¹⁶⁰ The purpose of the coordinators is to monitor the behavior of both parties and encourage compliance with environmental laws.¹⁶¹ However, the Agreement does not provide a coordinator with enforcement powers to remedy the other coordinator's failure to ensure compliance with environmental laws.¹⁶² If one party fails to ensure environmental protection and engages in pollution activities, the other coordinator has no recourse to remedy this defect.¹⁶³ Thus, the

156. Article 2 of the Agreement states, "The Parties undertake, to the fullest extent practical, to adopt the appropriate measures to prevent, reduce and eliminate sources of pollution in their respective territory which affect the border area of the other." *Id.*

157. Voigt, *supra* note 13, at 337.

158. La Paz Agreement, *supra* note 17, art. 2. This same ambiguity exists in Annex III, art. II. Specifically, Annex III provides in pertinent part that "[e]ach party shall ensure, to the extent practicable, that its domestic laws and regulations are enforced . . ." Annex III, *supra* note 138, art. II.

159. SUSSKIND, *supra* note 151, at 22. The La Paz Agreement specifically states that a party need only adopt environmental measures to the fullest extent practical. La Paz Agreement, *supra* note 17, art. 2. This language is problematic in an environmental regulatory scheme because states will always act in their own self-interest. SUSSKIND, *supra* note 151, at 22. Thus, if the state's interest lies in the modernization of society through the strengthening of its economy, the adoption of environmental measures will not be practical because such measures will be inconsistent with that state's self-interest. *Id.* This inconsistency is best illustrated by the phenomenon of pollution havens which exist because a country foregoes the protection of the environment to stimulate economic expansion. *See infra* notes 264-74 and accompanying text.

160. The national coordinator for the United States is the Environmental Protection Agency (EPA) and the national coordinator for Mexico is the Secretaria de Desarrollo Urbano y Ecologia (SEDUE), through the Subsecretaria de Ecologia. La Paz Agreement, *supra* note 17, art. 8.

161. *Id.*

162. *Id.* Specifically, Article 8 grants unto each coordinator the ability to "coordinate and monitor implementation of this Agreement, [and] make recommendations to the Parties . . ." *Id.*

163. Provision 1.2 of the Joint Contingency Plan provides: "The functions and responsibilities of the On-Scene Coordinator will be:

- (a) To coordinate and direct measures related to the detection of polluting incidents;
- (b) To coordinate and direct response measures"

Annex II, *supra* note 138, app. I.

transboundary pollution is not alleviated.

The La Paz Agreement also fails to provide for a general legislative body to ensure compliance by the parties.¹⁶⁴ The existence of a general legislative body would help ensure environmental protection by placing obligations on the individual parties.¹⁶⁵ However, the Agreement leaves the establishment of such legislative authority to the parties' discretion.¹⁶⁶ Thus, it is clear that the La Paz Agreement is not intended to place binding obligations upon the contracting parties.¹⁶⁷ The Agreement is simply an ineffective, cooperative attempt to solve environmental problems at the border.¹⁶⁸

The lack of funding provisions to ensure compliance with environmental laws is another example supporting the notion that the La Paz Agreement is practically ineffective.¹⁶⁹ For the Agreement to be effective, monetary resources must be available to support promotion of the activities encompassed within the provisions.¹⁷⁰ Yet the Agreement goes no further than recognizing the need for funding.¹⁷¹ With no specific provision for securing monetary resources, the success of the Agreement is questionable.¹⁷² The Agreement intends to protect the environment by creating wastewater facilities, monitoring systems, and programs to address hazardous substances.¹⁷³ However, the lack

Again, such language does not grant the coordinator the power to take remedial action should a party engage in a polluting incident or fail to adhere to response measures. To improve environmental cooperation, the La Paz Agreement should be strengthened with the power to cite offenders for environmental abuses. See DeConcini, *supra* note 15, at A15.

164. See generally Annex IV, *supra* note 138.

165. Scott Budlong, *Article 130r(2) and the Permissibility of States Aids for Environmental Compliance in the EC*, 30 COLUM. J. TRANSNAT'L L. 431, 432-33 (1992) (noting that the existence of a legislative body allows for the promulgation of community legislation which is binding on each member state).

166. In pertinent part, Article V of Annex IV provides: "The Parties will promote legislative authority, as may be necessary, to provide for the abatement of transboundary air pollution" Annex IV, *supra* note 138, art. V.

167. Voigt, *supra* note 13, at 337.

168. *Id.*

169. The La Paz Agreement and its annexes are legally unenforceable, regardless of their lack of enforcement provisions. Voigt, *supra* note 13, at 343 n.121. Even with enforcement provisions, the agreement would be ineffective because it lacks the funding necessary to support enforcement. See Dianne Solis, *Jail Term Given in Cross-Border Pollution Case*, WALL ST. J., Dec. 16, 1993, at A11.

170. Solis, *supra* note 169, at A11.

171. Article 18 provides: "Activities under this Agreement shall be subject to the availability of funds" La Paz Agreement, *supra* note 17, art. 18. This same limitation is present in Annex V, which was specifically drafted to address transboundary pollution at the border. Annex V, *supra* note 138, art. VIII. Article VIII of Annex V provides, "Implementation of this Annex is dependent upon the availability of sufficient funding." *Id.*

172. McKeith, *supra* note 147, at 194 & n.50.

173. See *supra* note 139.

of a continual supply of funding to support the creation and operation of these initiatives undermines the deterrent effect of the Agreement.¹⁷⁴ Thus, with the La Paz Agreement's failure to provide funding to ensure compliance with environmental laws and with the prospect of increased trading relations between the United States and Mexico, concerns for environmental protection grew, thereby establishing the foundation for the Border Plan.

B. Border Plan

1. Background and Purpose of the Plan

The La Paz Agreement has been unsuccessful in its attempt to confront transboundary pollution.¹⁷⁵ This failure, along with the prospect of a free trade agreement between the United States, Mexico, and Canada, created a growing concern that the border environmental problem would be aggravated.¹⁷⁶ To allay these fears and promote environmentally sound development at the border, the United States and Mexican governments committed themselves once again to reinforcing border environmental protection.¹⁷⁷ This commitment was solidified in 1992 with the drafting of the Border Plan.¹⁷⁸

The purpose of the Border Plan is to improve coordination and cooperation between Mexico and the United States and to solve the problems of air pollution, soil pollution, poor water quality, and hazardous waste in the border

174. Montez, *supra* note 17, at 424.

175. See generally Voigt, *supra* note 13, at 337 (noting that "the La Paz Agreement and its annexes are a disappointing precedent among cooperative environmental efforts between the United States and Mexico."); Spracker, *supra* note 17, at 674 (stating that the "La Paz Agreement and its progeny have not resulted in a comprehensive approach to remediation or prevention of contamination of the United States-Mexico border area.").

176. "Now, with free-trade negotiations well under way, many legislators, activists and scholars on both sides of the border . . . fear [that] Mexico could become a polluter's haven." Juanita Darling, *Can Mexico Really Clean Up Its Act?*, L.A. TIMES, Nov. 17, 1991, at A1. "[I]t comes as no surprise that the proposed free-trade agreement with Mexico has raised fears about pollution problems along the border . . . [considering] disparities between environmental . . . enforcement in [Mexico] and the U.S." William K. Reilly, *The America's: Mexico's Environment Will Improve with Free Trade*, WALL ST. J., April 19, 1991, at A15.

177. Montez, *supra* note 17, at 424.

178. In negotiating the Border Plan, the Presidents of each country drafted a joint communique which embodied the commitments of each country. Border Plan, *supra* note 18, at II-1. In this communique, the Presidents emphasized the need for ongoing cooperation in the area of environmental protection. *Id.* They also instructed the authorities responsible for environmental affairs in their countries to prepare a comprehensive plan. *Id.* This plan would address the manner in which the authorities would periodically examine ways and means to reinforce border cooperation with respect to environmental protection. *Id.*

area.¹⁷⁹ Based largely on the La Paz Agreement, the Plan has four principal objectives.¹⁸⁰ These objectives include: 1) monitoring and collecting information on the environmental condition and causes of contamination in the border area; 2) strengthening the enforcement of current environmental laws existing in each country; 3) reducing the pollution through new initiatives; and 4) fortifying present pollution control programs through increased cooperative planning, training, and education.¹⁸¹

To achieve the first objective, the Border Plan creates a program to identify significant pollution sources.¹⁸² Once these sources are identified, the Plan purports to diminish their pollution through a discharge and emission monitoring program.¹⁸³ By monitoring the emissions of "all significant pollution sources,"¹⁸⁴ including major stationary sources, the Border Plan intends to ensure environmental protection by controlling pollutive activities at the border.¹⁸⁵ To achieve the second objective, the Border Plan encourages informational exchanges between the United States' environmental enforcement agency, the Environmental Protection Agency (EPA) and Mexico's environmental enforcement agency, the Secretaria de Desarrollo Urbano y

179. Mary Tiemann, *The Impact of Environmental Issues on NAFTA Implementation*, 3 NO. 2 MEX. TRADE & L. REP. 10, 14 (Feb. 1993).

180. EPA SUMMARY, *supra* note 14, at VI-1.

181. *Id.* at VI-1 to -2.

182. *Id.* at VI-28. The section entitled "Cooperative Enforcement Strategy" encompasses the purpose of this program. *Id.* Specifically, this section provides for the creation of an "accelerated program for identifying all significant pollution sources in the Border Area [and] discharge/emission monitoring programs for all significant polluting sources" *Id.*

183. *Id.*

184. *See supra* note 182.

185. Under this approach, it can be argued that the Border Plan improves upon the objectives stated within the La Paz Agreement. The La Paz Agreement only requires the identification and magnitude of emissions from major stationary sources. Annex V, *supra* note 138, art. II(1). According to the La Paz Agreement, major stationary sources are those with emissions greater than 97 metric tons (100 tons) per year, for which a specific air pollution control standard is in force. *Id.* art. I(3). They also include any other stationary source which the parties mutually designate as such. *Id.* Although the Agreement does not require the identification of mobile sources or area sources, the La Paz Agreement, nonetheless, defines these two sources. *Id.* art. I(6)-(7). Mobile sources include automotive, bus or truck vehicles, off-road vehicles, water vessels, and aircraft. *Id.* art. I(6). Area sources include all emitters of air contaminants other than major stationary sources and mobile sources. *Id.* art. I(7). The La Paz Agreement does not require the identification of mobile or area sources. *Id.* art. I(3).

Border Plan, *supra* note 18, at VI-28. The Border Plan does not define "significant pollution sources." Therefore, it is difficult to determine what is meant by this reference. This note treats this reference as including all pollution sources that have a detrimental effect on the border environment, including the specific sources defined in the La Paz Agreement.

Ecologia (SEDUE).¹⁸⁶ The purpose of these exchanges is to educate each agency on the most effective and efficient manner to protect its respective border from the debilitating effects of the maquiladora pollution.¹⁸⁷ By promoting this transfer of technology, the Border Plan intends to provide the parties with new techniques to exact compliance with environmental laws.¹⁸⁸ The goal of the Border Plan is that, by incorporating these new techniques into their environmental framework, the parties will be able to strengthen enforcement of environmental laws, thereby ensuring environmental protection at the border.¹⁸⁹

To achieve the third objective, the Border Plan encourages increased public participation in the control of border environmental conditions.¹⁹⁰ The Border Plan intends to use this participation as a means of ensuring the effective implementation of, and party adherence to, environmental control initiatives.¹⁹¹ Public participation will increase identification of polluting facilities, thus making the emission monitoring program more effective in diminishing pollutants.¹⁹² To achieve this end result, the Border Plan recommends that the public be given access to environmental data and indices on the border area, and be able to voice their concerns about environmental conditions to their appropriate agency.¹⁹³

To achieve the fourth and final objective, the Border Plan expands upon the goals of the second objective. To promote the protection of the environment, the Border Plan seeks to encourage cooperation beyond the exchange of

186. Border Plan, *supra* note 18, at VI-28. The section entitled "Effective Protection of Transboundary Environmental Resources" addresses this objective. *Id.* Specifically, this section provides that "SEDUE and EPA should take steps to assure that the environmental standards and requirements of each agency, and their enforcement, provide effective protection to transboundary environmental resources in the Border Area" *Id.*

187. *Id.* at VI-27. Section a(7) of SEDUE/EPA Cooperative Enforcement Strategy states that the parties are to "[f]acilitate personnel exchanges . . . as a means of sharing enforcement experiences and techniques." *Id.*

188. *Id.*

189. *Id.*

190. *Id.* at VI-31.

191. *Id.* at VI-32. The section entitled "Other Programs to Promote Public Awareness and Increase Public Participation." *Id.* at VI-31 to VI-32. Specifically, this section provides for the "[p]romot[ion] [of] increased environmental awareness in the border communities through private initiatives to address the specific public health and social infrastructural problems that contribute to adverse environmental conditions in the Border Area." *Id.* at VI-32.

192. *Id.* at VI-31.

193. *Id.*

enforcement techniques between the EPA and SEDUE.¹⁹⁴ The Border Plan attempts to establish ongoing educational exchanges and training seminars between the agencies to not only treat and control the pollution, but also to prevent it from occurring.¹⁹⁵

Upon examination of the four objectives discussed above, it is apparent that the Border Plan is an extensive, all-encompassing attempt to control environmental pollution.¹⁹⁶ However, despite these objectives, the Border Plan, like the La Paz Agreement, fails to regulate the transboundary effects of the maquiladora pollution as is evidenced by the continuing environmental conditions at the border.¹⁹⁷ Again, a critique of this Plan illustrates why it is unsuccessful.

2. Critical Analysis

The Border Plan fails in its objectives for four reasons.¹⁹⁸ First, the Plan lacks guaranteed funding.¹⁹⁹ An adequate amount of funding is necessary to ensure the realization of the Plan's objectives.²⁰⁰ Many of the Plan's objectives such as the emission monitoring system and the desire for workshop seminars require the expenditure of money.²⁰¹ Without sufficient monetary

194. The section entitled "SEDUE/EPA Cooperative Enforcement Strategy" addresses this objective. *Id.* at VI-2. Specifically, this section provides that "[training] [e]fforts will focus on methodologies for compliance evaluation and related environmental enforcement training presented in workshops, seminars, and practical applications." *Id.* at VI-27.

195. *Id.* at VI-31 (stating that the SEDUE and EPA should develop educational and information programs).

Id. at VI-29 (stating that the acceleration of environmentally sound development in the Border Area shall be assisted by technology transfer through treatment, control, and pollution prevention seminars).

196. Montez, *supra* note 17, at 425.

197. Justin Ward, senior resource specialist for the Natural Resources Defense Council, stated, "[The Border Plan] is a big disappointment all around." Karen Tumulty, *Free-Trade Talks Raise Questions that Alarm Environmentalists Commerce: Activists are Concerned that the Byproducts of Such an Agreement Could Be Filthy Air, Foul Water and Toxic Contamination*, L.A. TIMES, Nov. 17, 1991, at A19.

198. See *infra* text accompanying notes 199-234.

199. Spracker, *supra* note 17, at 701. The Mexican government committed \$460 million to the Border Plan. Montez, *supra* note 17, at 426. The United States committed \$142 million for Border Plan implementation in fiscal year 1992, and \$241 million in fiscal year 1993. *Bush to Announce Expanded Plan to Control Pollution on Border*, 15 INT'L ENVTL. REP. (BNA) 97 (Feb. 26, 1992), in Montez, *supra* note 17, at 426. Although the plan has a substantial amount of initial funding, with the estimated cost of cleaning the border at \$5 billion, the Border Plan needs to include methods of ensuring continued funding. PUBLIC CITIZEN, INC., BRIEFING BOOK FOR THE 103RD CONGRESS, WHY VOTERS ARE CONCERNED - ENVIRONMENTAL AND CONSUMER PROBLEMS IN GATT AND NAFTA 57 (1993).

200. Orbuch, *supra* note 31, at 798.

201. Lerner, *supra* note 55, at 261.

resources, these objectives cannot be implemented thereby undermining the Plan's effectiveness.²⁰²

The Border Plan attempts to address its own funding deficiency by recommending that facilities be charged for the pollution they create.²⁰³ Thus, the Border Plan recognizes that charges placed upon polluting facilities will reduce funding deficiencies.²⁰⁴ Such charges can be used as incentives to improve the facilities and diminish their pollutive effects.²⁰⁵ In addition to improving the facilities, the charges can be used to clean up the environment, thus alleviating the need for funding to support programs geared toward the same task.²⁰⁶

Essentially, the Border Plan attempts to incorporate the "polluter pay" theory into its framework to provide continual funding.²⁰⁷ However, the Border Plan falls short of this attempt because of the manner in which it promotes this theory.²⁰⁸ The inclusion of the theory is not mandated.²⁰⁹ Rather, it is referred to as something to be considered, therefore making it highly unlikely that such a mechanism will ever be incorporated.²¹⁰

The second reason the Border Plan fails to meet its objectives is because

202. It is specifically stated within the Plan that "environmental projects will be funded as resources become available." Border Plan, *supra* note 18, at VI-2. However, since there is no indication of how the parties plan to secure these resources, the funding of these projects remains questionable. According to James M. Strock, California's Secretary for Environmental Protection: "Without the necessary funding, no guarantee exists that the environmental and public health standards of either country will be achieved in the border region." Patrick McDonnell, *Environmental Fears Voiced . . .*, L.A. TIMES, Sept. 24, 1991, at B1.

203. Border Plan, *supra* note 18, at VI-28. Specifically the Plan provides that "[w]here pollution control facilities . . . are lacking or inadequate . . . consideration should be given to . . . use charges on pollution sources to pay for such facilities." *Id.*

204. *Id.*

205. *Id.*

206. *Id.*

207. The "polluter pay" theory is a method used in the United States to encourage offenders to comply with environmental standards. DAVIES, *supra* note 151, at 177. Under this theory, a polluting facility will have to internalize the costs of the pollution created by the firm by paying a monetary penalty. *Id.*

208. Bailey, *supra* note 29, at 870-71 (noting that the Border Plan does not specifically call for polluters to pay for the needed cleanup, but rather relies on funding from United States and Mexican taxpayers, thereby abandoning the traditional approach to funding environmental cleanup).

209. Border Plan, *supra* note 18, at VI-28.

210. Historically, because Mexico has resisted United States' efforts to control Mexican domestic policies, it is likely that Mexico would see the inclusion of this theory into their environmental regime as an imposition or an infringement of their sovereignty. Voigt, *supra* note 13, at 351.

it lacks enforcement mechanisms.²¹¹ Lack of enforcement mechanisms was one of the main reasons why the La Paz Agreement was unsuccessful.²¹² With respect to enforcement, the Border Plan recommends that the SEDUE and the EPA should take steps to ensure that each party complies with the environmental standards and requirements of its respective agency.²¹³ However, like the La Paz Agreement, the Border Plan does not provide a means for one party's agency to ensure that the other party complies with its agency's environmental regulations.²¹⁴

The Border Plan also attempts to secure enforcement of environmental laws by creating a Leadership Function.²¹⁵ Under this Function, the SEDUE and the EPA are to promote leadership among businesses by encouraging senior officials of companies operating plants in the border area to fully comply with the environmental laws of the territory within which it operates.²¹⁶ By creating this leadership role, the intent of the Border Plan is to improve industry standards by providing a role model for all to follow, thus reducing the need for enforcement personnel.²¹⁷

This approach is ineffective when applied to the maquiladoras. The main attraction of the maquiladora operation is low production costs due to the externalization of environmental costs.²¹⁸ For a maquiladora plant official to establish his plant as a leader in the industry, his plant would have to internalize the costs of pollution by complying with environmental laws. As a result of the competitive disadvantage, a maquiladora official may not be willing to abate pollution because he cannot rely on his competitors to do the same.²¹⁹

211. Alex Hittle of Friends of the Earth, describes the Border Plan as "a document of shoulds, coulds, woulds and maybes." Tumulty, *supra* note 197, at A19. Friends of the Earth is an environmental organization whose members are concerned that free trade will be achieved at the expense of the environment. *Id.* Other similar organizations are Sierra Club and Public Citizen. *Id.*

212. See *supra* notes 150-68 and accompanying text.

213. Border Plan, *supra* note 18, at VI-28.

214. Each agency has the power to stop violators within their own regulatory jurisdiction. Joel A. Gallob, *Birth of the North American Transboundary Environmental Plaintiff: Transboundary Pollution and the 1979 Draft Treaty for Equal Access and Remedy*, 15 HARV. ENVTL. L. REV. 85, 91 (1991). In the case of the maquiladoras, therefore, the EPA cannot assert its regulatory powers over the violating corporations without running into problems of sovereignty and jurisdictional reach, since the maquiladoras are on the Mexican side of the border. *Id.*

215. Border Plan, *supra* note 18, at VI-27.

216. *Id.*

217. *Id.*

218. Without effective environmental enforcement, maquiladoras do not have to incur the costs associated with compliance. See *supra* text accompanying notes 63-67.

219. Kevin C. Kennedy, *Reforming U.S. Trade Policy to Protect the Global Environment: A Multilateral Approach*, 18 HARV. ENVTL. L. REV. 185, 200 (1994).

In addition to the creation of the Leadership Function, the Plan must also assess penalties upon the polluting business activities to adequately enforce compliance.²²⁰ The Border Plan has outlined ambitious objectives, however it fails to provide the funding necessary to ensure the implementation of these objectives.²²¹ By assessing penalties against the polluting facility, the Plan would encourage compliance thereby reducing the pollution created.²²² Penalties would alleviate the need for the implementation of the pollution control objectives since there would be less pollution to control.

The third reason why the Border Plan fails to realize its objectives is because it neglects to provide for the gradual harmonization of United States and Mexican environmental laws.²²³ Whereas the La Paz Agreement provides for such harmonization,²²⁴ the Border Plan does not even mention the possibility of upward harmonization.²²⁵ The benefit of gradual upward harmonization is that, in the long run, it will make the elimination of transboundary pollution a more realistic achievement.²²⁶

In addition to harmonized standards, harmonized enforcement of these standards is essential to a successful pollution control program.²²⁷ If the Plan requires the United States and Mexico, which have divergent environmental enforcement, to harmonize their levels of enforcement, any comparative advantage that one country may have over the other will be eliminated.²²⁸ Furthermore, congruent levels of environmental enforcement between two

220. Montez, *supra* note 17, at 437. This relates back to the "polluter pay" theory described *supra* note 208.

221. Bailey, *supra* note 29, at 870.

222. Border Plan, *supra* note 18, at VI-28.

223. *Id.* The Plan provides only that the differences in the legal determination and treatment of hazardous waste in the two countries must be evaluated and addressed. *Id.* The Plan does not provide a manner in which to resolve these differences. *Id.*

224. *See supra* note 143.

225. Upward harmonization means that when a country, such as Mexico, becomes more developed, it will adopt environmental standards and levels of enforcement congruous with those of industrialized nations, such as the United States. Montez, *supra* note 17, at 436.

226. Stevens, *supra* note 143, at 45-46.

227. Ansley, *supra* note 11, at 434. No amount of harmonization will ensure environmental protection if these standards are not enforced. *Id.*

228. This wide divergence in environmental enforcement was something that concerned many environmentalists with respect to the maquiladoras. U.S. companies were establishing assembly plants in Mexico to take advantage of this divergence. *See supra* notes 63-67 and accompanying text. However, with upward harmonization of enforcement levels, there will be less of an incentive for companies to relocate to a different country because it will no longer be cheaper to pollute in the new location than it was in the original country. Montez, *supra* note 17, at 437.

countries will be more efficient²²⁹ and will not conflict with notions of sovereignty.²³⁰ However, by not providing for a specific framework in which the parties can harmonize their levels of environmental enforcement, the Border Plan subsidizes domestic industries, thus aggravating the transboundary pollution problem.²³¹

The fourth reason why the Border Plan fails to realize its objectives results from the lack of a legally binding effect upon the parties as an international agreement.²³² Unlike the La Paz Agreement, the provisions of the Border Plan did not receive congressional approval.²³³ Therefore, without treaty status, the Border Plan remains only an attempt at good neighborliness, providing no real legal assistance to the problem at hand.²³⁴

C. Conclusion

Despite these criticisms, both the La Paz Agreement and the Border Plan are valid attempts to place the relationship of trade and the environment in perspective.²³⁵ Although unsuccessful, each provides general guidelines which potential parties to a treaty must consider when negotiating an international environmental agreement. With this understanding and appreciation of the weaknesses of each attempt, an examination of the North American Agreement on Environmental Cooperation is required to determine whether this agreement can succeed as an effective regulatory instrument of transboundary environmental pollution at the border.

229. Harmonization of environmental enforcement brings efficiency by reducing the non-tariff barriers posed by testing and verification of products and the administration of standards. Stevens, *supra* note 143, at 47. "Such convergence keeps the costs of complying with different national regulations from modifying the relative industrial competition in international trade." *Id.* "It helps neutralize inter-country differences in environmental regulations and the shifts in foreign investment from varying environmental costs." *Id.*

230. The Mexican government would surely be offended if the United States attempted to impose environmental standards on Mexico. Voigt, *supra* note 13, at 351 n.166. However, with respect to controlling air pollution, Mexico and the United States already have similar environmental standards. See *supra* note 15. Thus, the harmonization of enforcement levels would not pose a threat to Mexico's sovereignty since it would only require Mexico to enforce the laws already present within its environmental regulatory framework.

231. Montez, *supra* note 17, at 437. The lenient environmental regulation in Mexico, as compared to the stricter regulation in the United States, is seen as a subsidy which attracts more violators to flock to the border to take advantage of the lower cost. *Id.*

232. Bailey, *supra* note 29, at 871-73.

233. Feeley, *supra* note 80, at 265.

234. Because the Border Plan lacks treaty status, enforcement mechanisms, and adequate funding, it remains limited in scope and of questionable practical value. *Id.*

235. Craig Kovarik, *NAFTA and Environmental Conditions on the United States-Mexico Border*, 2 KAN. J.L. & PUB. POL'Y 61, 69 (1993).

V. NORTH AMERICAN AGREEMENT ON ENVIRONMENTAL COOPERATION
(NAAEC)

A. Background

The NAAEC played a significant role in the passage of NAFTA. Prior to the creation of the NAAEC, there was much concern about the environmental effects, especially at the border, of the potential free trade agreement between the United States, Mexico, and Canada.²³⁶ This concern was well-founded for two reasons. First, NAFTA, intended primarily to be a trade agreement, provides very little in the way of environmental protection.²³⁷ The NAFTA provisions which affect the environment are found in Chapter 1,²³⁸ Chapter 7,²³⁹ Chapter 9,²⁴⁰ and Chapter 11.²⁴¹ Aside from these provisions,

236. See generally Tiemann, *supra* note 179. See also Tumulty, *supra* note 197, at A19.

237. Voigt, *supra* note 13, at 339; Saunders, *supra* note 15, at 284.

238. Chapter 1, Art. 104(1) provides:

1. In the event of any inconsistency between this Agreement and the specific trade obligations set out in:

(a) the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, done at Washington, March 3, 1973, as amended June 22, 1979,

(b) the *Montreal Protocol on Substances that Deplete the Ozone Layer*, done at Montreal, September 16, 1987, as amended June 29, 1990,

(c) the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, done at Basel, March 22, 1989, on its entry into force for Canada, Mexico and the United States, or

(d) the agreements set out in Annex 104.1 [including the La Paz Agreement], such obligations shall prevail to the extent of the inconsistency, provided that where a Party has a choice among equally effective and reasonably available means of complying with such obligations, the Party chooses the alternative that is the least inconsistent with the other provisions of this Agreement.

NAFTA, *supra* note 22, ch. 1, art. 104.

Although NAFTA incorporates these environmental agreements, the unfortunate reality is that they have failed to provide reliable deterrence to polluting firms operating in Mexico. Vaznaugh, *supra* note 68, at 211.

239. Chapter 7, Article 712 states that each party can adopt and maintain any sanitary measure necessary for the protection of human or animal life or health. NAFTA, *supra* note 22, ch. 7, art. 712. A party can also adopt any phytosanitary measure necessary for the protection of plant life or health. *Id.*

240. Chapter 9, Article 904(1) states that each party may adopt and maintain any standards-related measure for the purpose of ensuring safety, to protect human, animal or plant life or health, or to protect the environment or consumers. *Id.* ch. 9, art. 904(1). Each party may also apply any measure to ensure the enforcement of these standards. *Id.*

241. Chapter 11, Article 1106(2) states that a measure that requires an investment to use a technology to meet generally applicable health, safety or environmental requirements shall be construed in a manner that is consistent with other provisions of the agreement. *Id.* ch. 11, art. 1106(2).

NAFTA generally deals with Market Access,²⁴² Rules of Origin,²⁴³ Investments,²⁴⁴ and Intellectual Property.²⁴⁵

Secondly, environmental concern was well-founded because the Border Plan was intended to address any problems that NAFTA did not.²⁴⁶ Created by the Bush administration, the Border Plan was intended to negate any criticism directed towards NAFTA's omission of environmental provisions.²⁴⁷ However, the existence of this supplemental document did very little to suppress criticism or concern, especially since the Border Plan itself is ineffective in its attempts to control the border environment.²⁴⁸

The Bush administration tried to quiet these concerns by arguing that free trade would, in effect, provide for the improvement and not the degradation of the environment.²⁴⁹ This argument rested upon the belief that once Mexico's

242. *Id.* ch. 3. The chapter on Market Access addresses the elimination of trade barriers such as tariffs, custom duties, and export taxes. *Id.* This chapter also discusses the national treatment of goods by promoting the nondiscriminatory treatment of goods. *Id.*

243. NAFTA, *supra* note 22, ch. 4. The Rules of Origin chapter addresses the application of NAFTA benefits to goods originating in the territory of the parties. *Id.* This chapter also provides calculations to determine the origination of a product for the purpose of granting NAFTA benefits if the product originates from a non-NAFTA party but is assembled in the territory of a NAFTA party, or undergoes a tariff classification pursuant to Annex 401. *Id.*

244. *Id.* ch. 11. The chapter on Investment addresses the nondiscriminatory treatment of investors from the territories of NAFTA parties. *Id.* This chapter also provides that a NAFTA party cannot expropriate an investment in its territory of an investor from another party. *Id.*

245. *Id.* ch. 17. The chapter on Intellectual Property provides that each NAFTA party shall provide adequate protection and enforcement of intellectual property rights without creating barriers to trade. *Id.* This chapter also addresses the nondiscriminatory treatment of citizens of NAFTA parties with respect to the protection and enforcement of all intellectual property rights. *Id.*

246. The drafting of the Border Plan began after the initial negotiations of NAFTA. Bailey, *supra* note 29, at 868-69. The Plan was specifically drafted outside of NAFTA since legislators and environmental groups in the United States and Mexico believed that a border plan rather than a trade treaty was a better way to address the border environmental issues. Damian Fraser, *Environment Hit by too Free Trade*, FIN. TIMES, July 2, 1992, at P4. This decision explains why NAFTA lacks detailed environmental provisions. Bailey, *supra* note 29, at 869. The Border Plan was intended to remedy the environmental deficiencies of NAFTA and address all border environmental issues. *Id.* at 872.

247. Vaznaugh, *supra* note 68, at 221.

248. The Border Plan may have the environmental provisions that NAFTA omits, but without a way to enforce these provisions the Plan remains ineffective. See *supra* notes 211-22 and accompanying text.

249. Kovarik, *supra* note 235, at 62. The theory underlying this argument is that economic growth is directly related to environmental quality. *Id.* at 64. Therefore, as the nation's economy grows stronger, so will the public demand for increased environmental protection. *Id.* at 65. The result is that more of the nation's income is allocated to the environment, thereby improving the surrounding social and environmental infrastructure. *Id.* The relationship between the two is very simple. As William K. Reilly, former U.S. Environmental Protection Agency administrator, stated, "Poverty and environmental improvement do not coexist." Tumulty, *supra* note 197, at A19.

economy improved as a result of the benefits afforded by free trade, Mexico would allocate more money towards ensuring environmental protection.²⁵⁰ However, many critics were not willing to accept this argument.²⁵¹ These critics stated that, despite the extra economic resources generated by the maquiladoras, Mexico's protection of its environment did not improve.²⁵² These critics also argued that, because Mexico's current desire is to improve its economy, it is doubtful that concern for the environment will be a priority.²⁵³

With the election of President Bill Clinton,²⁵⁴ a new administration took control of NAFTA and was well aware of the fact that, if NAFTA was to be a success, a supplemental environmental agreement would have to be negotiated.²⁵⁵ Reflecting upon the failures of the prior two attempts to control the border environment, the administration drafted the NAAEC, which expanded upon the basic ideas established in both the La Paz Agreement and the Border Plan.²⁵⁶ The Clinton administration used the La Paz Agreement and the

250. The advocates of NAFTA support this belief by referring to a study performed by Princeton University on air-quality levels in developing nations. Kovarik, *supra* note 235, at 65. After reviewing 42 nations, the study showed that pollution increased during the initial stages of economic growth. *Id.* However, as the per capita income rose to approximately \$4,000, each additional dollar in growth resulted in a decrease of pollution as the country gained the ability to afford cleaner technology and more effective regulation. *Id.* Thus, focusing on the relationship between NAFTA and Mexico, which has an estimated per capita income of \$5,000, it is argued that the resulting economic growth from the free trade will result in reduced environmental pollution. *Id.*

251. NAFTA is not Mexico's first experiment with free trade. David T. Gibbons, *NAFTA vs. the Environment: The Courts' Mandate to Require the Preparation of Environmental Impact Statements for Trade Agreements*, 15 *HAMLIN J. PUB. L. & POL'Y* 101, 107 (1994). The maquiladora industry, which helped strengthen the Mexican economy, was the first attempt at free trade. *Id.* Considering the environmental disaster that occurred with this experiment, many critics do not agree that a stronger economy is equivalent to improvement of environmental conditions. *Id.*

252. Kovarik, *supra* note 235, at 66. Instead of producing environmental benefits at the United States and Mexico border, the economic growth created by the maquiladoras increased environmental degradation at the border. *See supra* notes 68-84.

253. Bailey, *supra* note 29, at 875. Mexico's recent legislative initiatives focused primarily on reversing the nation's economic condition as rapidly as possible. *Id.* Former President Salinas' primary objective since taking office in 1988 has been to modernize both the economy and the country. *Id.* In addition, Mexico has not hesitated to make the necessary changes in its laws and regulations in order to increase its attractiveness to foreign investors and businessmen. *Id.* Thus, considering these attempts at economic reform and advancement, it is doubtful that Mexico will seriously protect its environment. *Id.*

254. President Bill Clinton was elected into office on November 3, 1992. *THE WORLD ALMANAC AND BOOK OF FACTS 1995* 479 (1994). He is the nation's 42nd President. *Id.*

255. Saunders, *supra* note 15, at 283.

256. Xavier C. Vasquez, *The North American Free Trade Agreement and Environmental Racism*, 34 *HARV. INT'L L.J.* 357, 360 (1993). Recognizing the lack of funding and enforcement mechanisms in the La Paz Agreement and the Border Plan, the Clinton administration specifically drafted the NAAEC to include both of these elements. The enforcement mechanisms are established

Border Plan as a structural foundation, designing the NAAEC to correct the oversights present in these prior attempts.²⁵⁷ Therefore, it was hoped that the NAAEC would be the first successful agreement to comprehensively address environmental concerns at the border.²⁵⁸

B. Purpose of the Agreement

The purpose of the NAAEC is to ensure that economic growth under NAFTA is not achieved at the expense of environmental protection.²⁵⁹ The agreement attempts to achieve this goal by encouraging cooperation among the parties.²⁶⁰ The NAAEC strives for this mutual cooperation because the improved enforcement of environmental laws can only occur if the parties work together and aim for the same goal of environmental protection.²⁶¹

As a supplemental environmental agreement to NAFTA, the NAAEC is intended to promote the protection of the environment in a manner consistent with the terms negotiated under NAFTA.²⁶² Therefore, when promoting environmental safety, the NAAEC is meant to ensure that no trade distortion or new trade barrier is created.²⁶³ The NAAEC achieves this respective balance between trade and the environment in two ways. First, the NAAEC prevents the creation of pollution havens.²⁶⁴ A pollution haven is created when one

in the NAAEC through the creation of a Commission for Environmental Cooperation. NAAEC, *supra* note 30, arts. 8-18. The provision for funding is addressed, in part, in Article 43. *Id.* art. 43. The availability of funds is also addressed in Article 34, which allows for the imposition of monetary sanctions for behavior offensive to the purpose of the agreement. *Id.* art. 34.

257. Vasquez, *supra* note 256, at 360.

258. *Id.*

259. Jay L. Camillo, *North American Free Trade and the Environment*, BUS. AM., Oct. 18, 1993, at 39.

260. The desire for mutual cooperation is illustrated in Article 21 of the NAAEC. NAAEC, *supra* note 30, art. 1. In this article, the agreement lists as its objective the intent to increase cooperation between the parties to better conserve, protect and enhance the environment. *Id.* The agreement also seeks to strengthen the cooperation on the development and improvement of environmental laws, regulations, procedures, policies, and practices. *Id.*

261. Anne M. Driscoll, *Completing the Package: Supplemental Agreements on Environment, Labor, and Import Surges*, BUS. AM., Oct. 18, 1993, at 26.

262. One of the underlying objectives of the NAAEC is to support the environmental goals and objectives of NAFTA. NAAEC, *supra* note 30, art. 1(d).

263. *Id.* art 1(c). A trade distortion occurs when tariffs and other barriers are raised and when export subsidies are granted. Rubin, *supra* note 8, at 48. Trade barriers are environmental controls such as antipollution standards which discriminate between foreign and domestic producers and make it harder to import or export goods. *Id.* at 3-11.

264. A pollution haven results when businesses relocate to another country to take advantage of the savings associated with lax enforcement of that country's environmental laws. Hustis, *supra* note 14, at 613. A pollution haven acts as a trade distortion because the weak enforcement of environmental laws inherent in the creation of pollution havens serve as a subsidy. Richard A.

country's lax enforcement of environmental laws creates an economic incentive for another country's industries to relocate to the other country.²⁶⁵ The NAAEC prevents the creation of pollution havens by providing that each party ensure that its laws and regulations provide for high levels of environmental protection.²⁶⁶ The NAAEC also states that each party is to continue improving its laws and regulations necessary to protect the environment.²⁶⁷

The language in the NAAEC is consistent with NAFTA which states that it is inappropriate to encourage investment by relaxing domestic health, safety, or environmental measures.²⁶⁸ Thus, by requiring each party to improve its laws and ensure high levels of environmental protection, the NAAEC respects the trade obligations set out in NAFTA by eliminating the economic incentive for industry relocation.²⁶⁹ If each party commits itself to strict regulatory environmental enforcement, then the lower production costs associated with weak environmental regulation will no longer exist.²⁷⁰ Therefore, without the

Johnson, *Commentary: Trade Sanctions and Environmental Objectives in the NAFTA*, 5 GEO. INT'L ENVTL. L. REV. 577, 579 (1993). Subsidies undercut the market mechanism because the costs of environmental damage are not fully reflected in the market prices. *Id.* Thus, as such, subsidies create trade distortions by giving firms competitive advantages in international trade. *Id.* For example, an exporting country which is lax in enforcing its environmental rules can produce goods cheaper than their competitors in a country which stringently enforces its environmental rules because they do not incur pollution costs. Alisa Won, *Environmental Subsidies Under the GATT and the Polluter Pays Principle: A Case Study of the Republic of Korea*, 5 GEO. INT'L ENVTL. L. REV. 761, 763 (1993).

The possibility of creating pollution havens was a big concern during the negotiation of NAFTA and the NAAEC. Gomez, *supra* note 132, at 197-99. Many environmentalists were concerned that induced by NAFTA, the trade activity, combined with SEDUE's weak enforcement of environmental laws, would further aggravate the degradation of Mexico's natural resources and its environment. *Id.* These environmentalists were concerned that this weak enforcement would act as an incentive for United States' industries to relocate to Mexico. *Id.*

265. Kovarik, *supra* note 235, at 65-66. Generally, this relocation occurs without consideration of the potential adverse environmental effects because industries are mainly interested in the fewer regulatory compliance costs. *Id.* at 66. Therefore, the ability of industries, in countries with lax enforcement, to lower production costs by avoiding pollution prevention is the reason pollution havens are viewed as an unfair trade practice between countries. *Id.*

266. NAAEC, *supra* note 30, art. 3.

267. *Id.*

268. NAFTA, *supra* note 22, art. 1114(2).

269. Vaznaugh, *supra* note 68, at 222.

270. *Id.* Businesses are attracted to a country with weak environmental regulation because they can produce goods more cheaply there. *Id.* at 222-23. Goods can be produced at a lower cost in these countries because the businesses do not have to invest in pollution control mechanisms. *Id.* However, if a country stringently enforced its environmental laws, a business would either have to invest in pollution control mechanisms or pay damages to the injured individual or institution. *Id.* Therefore, it can be argued that if all three parties to NAFTA stringently enforce their environmental laws, then there will be no cost advantage to one party over the other.

incentive of lower production costs, an industry is not likely to relocate.²⁷¹

The NAAEC also respects its own environmental obligations. Eliminating economic incentives for industry relocation will allow the NAAEC to provide greater environmental protection.²⁷² If the NAAEC requires all parties to effectively enforce their environmental laws, then once again, there will be no incentive for industries to relocate.²⁷³ Therefore, the NAAEC will provide for greater environmental protection because it will reduce the burden created by industry relocation on a country's population, infrastructure, and environment.²⁷⁴

The NAAEC also achieves a respective balance between trade and the environment by preventing the discriminatory treatment of goods between parties.²⁷⁵ The discriminatory treatment of goods between parties occurs when a country seeks to protect the competitiveness of domestic industry by incorporating environmental costs into overall production costs.²⁷⁶ NAFTA specifically prohibits this by stating that discrimination will not occur against

271. A 1988 study found that of the 76 maquiladora plants surveyed from the city of Mexicali, 20 indicated that the lower production costs associated with the weaker environmental enforcement in Mexico were an important consideration in factory relocation. Bruce Stokes, *Greens Talk Trade*, NAT'L J., Apr. 13, 1992, at 864.

272. The NAAEC makes it clear that a party is not to encourage industry relocation by weakening its environmental laws. NAAEC, *supra* note 30, art. 3. Article 3 provides that "[e]ach Party shall ensure that its laws and regulations provide for high levels of environmental protection and shall strive to continue to improve those laws and regulations." *Id.* (emphasis added).

273. Hustis, *supra* note 14, at 613-14. Scholars have greatly debated the question of whether a country's weak enforcement of its environmental law actually acts as an incentive for industry relocation. *Id.* Some argue that from a purely economic point of view, environmental compliance costs play a minimal role in relocation decisions. James P. Duffy III, *The Environmental Implications of a North American Free Trade Agreement*, 10 HOFSTRA LAB. L.J. 561, 567 (1993). They argue that compliance costs actually play a minimal role in relocation decisions. *Id.* On the other hand, however, a 1990 study by the United States Government Accounting Office found that over the past two years, between eleven and twenty-eight Los Angeles wood furniture manufacturers relocated some, if not all, of their manufacturing operations to Mexico. Hustis, *supra* note 14, at 614. These manufacturers stated that the stringent control of air pollution emissions in Los Angeles as compared to Mexico was a major factor in their decision to relocate. *Id.*

274. Kovarik, *supra* note 235, at 66. The effects of such a burden are best illustrated by the maquiladoras at the border. See *supra* notes 68-86 and accompanying text. During NAFTA negotiations, many environmentalists argued that the potential influx of factories into Mexico under NAFTA would create additional strain on an already troubled area. Kovarik, *supra* note 235, at 66.

275. The nondiscriminatory treatment of goods refers to the fair application of standards to both domestic and imported products. Camillo, *supra* note 259, at 39.

276. Duffy, *supra* note 273, at 566.

parties' like products once they have been imported into a country.²⁷⁷ Recognizing this trade obligation, the NAAEC provides for public participation.²⁷⁸ Specifically, the NAAEC requires each party to publish or otherwise make its laws, regulations, procedures and administrative rulings pertaining to environmental matters available to interested persons and other parties.²⁷⁹

Public participation is helpful in ensuring the nondiscriminatory treatment of goods between parties because it allows the individuals and other parties to comment on a party's proposed environmental measures.²⁸⁰ If information regarding a party's procedure in discriminating against like products is made available for public comment, it will be less likely that a party will engage in such discriminatory treatment.²⁸¹ Public participation has such an effect because a party will not want to confront individuals and other parties demanding an explanation for its discriminatory behavior which, in effect, would be a blatant violation of NAFTA.²⁸²

Public participation is also helpful in ensuring environmental protection because compliance with environmental regulations is more apt to occur if the

277. NAFTA, *supra* note 22, art. 301(1). Specifically, Article 301(1) states that each party shall grant national treatment onto the goods of another party pursuant to Article III of GATT. *Id.* Article III of GATT guarantees that GATT members will not discriminate against like products once they have been imported into the host country. The General Agreement on Tariffs and Trade, *opened for signature*, Oct. 30, 1937, T.I.A.S. No. 1700, 55 U.N.T.S. 187, 198 [hereinafter GATT].

278. NAAEC, *supra* note 30, art. 4.

279. *Id.*

280. *Id.* art. 4(2)(b).

281. ANDRE NOLLKAEMPER, *THE LEGAL REGIME FOR TRANSBOUNDARY WATER POLLUTION: BETWEEN DISCRETION AND CONSTRAINT* 283-84 (1993).

282. *Id.* at 283-85. Public participation plays an important role in maintaining the mutual expectations of parties to an agreement. *Id.* at 284. Public participation also makes it very difficult for a country to hide or profit from its purposeful underperformance of treaty obligations. SUSSKIND, *supra* note 151, at 99. Thus, this public exposure is effective in improving compliance because a party will not want to expose itself to the public shame inherent in treaty violations. *Id.*

Publicly shaming the offending party by exposing treaty violations is something which greatly intimidates the offenders. *Id.* at 113. According to Oran Young, "Policymakers, like private individuals, are sensitive to the social opprobrium that accompanies violations of widely accepted behavioral prescriptions." Oran Young, *The Effectiveness of International Institution: Hard Cases and Critical Variables*, in *GOVERNANCE WITHOUT GOVERNMENT: ORDER AND CHANGE IN WORLD POLITICS* 160-92 (James N. Rosenau & Ernst-Otto Czempiel eds., 1992). This explains why countries sometimes resist reporting requirements, independent review of national laws, or other mechanisms designed to inform the public of offending parties' behavior. SUSSKIND, *supra* note 151, at 113.

public is allowed to partake in environmental policymaking.²⁸³ If the public is granted an opportunity to comment on a party's proposed environmental measures, then this opportunity can lead to a direct exchange of information and understanding between the public and a party's government on important environmental issues.²⁸⁴ This exchange will result in increased environmental protection because the understanding of each party's expectations will allow them to more effectively direct their cooperative efforts towards ensuring environmental safety.²⁸⁵

C. Critical Analysis

There are four reasons why the NAAEC, as it is currently structured, is an ineffective attempt to protect the United States and Mexico border from transboundary pollution. These four reasons include limited public participation in environmental affairs,²⁸⁶ the failure to account for the harmonization of process standards,²⁸⁷ a lack of funding to support environmental goals,²⁸⁸ and a relatively weak legislative body to ensure compliance with the provisions of the agreement.²⁸⁹ A closer look at each of these elements will illustrate the NAAEC's ineffectiveness.

1. Limited Public Participation

Unlike the La Paz Agreement, the NAAEC provides for transparency, which is the opportunity for public participation in governmental regulation of

283. Feeley, *supra* note 80, at 285-87. Public participation is what environmentalists propose as a solution to the lax environmental enforcement in Mexico. *Id.* If the Mexican citizens were given the opportunity to partake in environmental policymaking then they would be able to help in the monitoring of environmental compliance by Mexican industries, and thus there would be less of a strain on Mexican enforcement resources. *Id.*

284. Peter L. Lallas, *NAFTA and Evolving Approaches to Identify and Address "Indirect" Environmental Impacts of International Trade*, 5 GEO. INT'L ENVTL. L. REV. 519, 553-54 (1993).

285. *Id.* There is widespread agreement that public opinion is a crucial factor in the campaign for a cleaner and safer environment. DAVIES, *supra* note 151, at 77. This is because the attitudes of the general public form the ultimate parameters of governmental action. *Id.* Public opinion is also an important factor in weighing the costs and benefits of pollution control. *Id.* The fact that people worry about pollution is a significant cost of pollution. *Id.* at 78. Therefore, because public opinion weighs heavily in the political arena and the political arena makes the decisions about pollution, the peoples' concerns will play a significant role in government pollution programs. *Id.* at 77.

286. *See infra* text accompanying notes 290-317.

287. *See infra* text accompanying notes 318-42.

288. *See infra* text accompanying notes 343-70.

289. *See infra* text accompanying notes 373-417.

the environment.²⁹⁰ The inclusion of public participation is not, however, what makes the NAAEC ineffective.²⁹¹ Rather, the NAAEC fails to protect the environment because the extent of the public participation allowed is actually limited in scope.

Under the NAAEC, an individual may be able to see the inner workings of a party's attempt to regulate the environment, but if that individual has a complaint regarding a defect in the regulation, he or she has limited access to remedy the defect.²⁹² When an individual has a complaint, the NAAEC will only allow that individual to request a party's competent authorities to investigate that party's alleged violations of its environmental laws and regulations.²⁹³ Yet, although an individual may be able to request an investigation, this investigation will take place only after the authorities consider the individual's request in accordance with the laws of that party.²⁹⁴ Therefore, the effectiveness of this enforcement procedure depends on the parties granting their respective citizens access to the enforcement mechanisms of that party's environmental law. A brief comparison between the United States' enforcement mechanisms of its environmental law and the enforcement mechanisms of Mexico's environmental law supports this argument.²⁹⁵

290. NAAEC, *supra* note 30, art. 4. As its name suggests, transparency is a method which allows individuals to see the inner workings of each government's attempts to regulate pollution. Grant, *supra* note 71, at 456. The NAAEC promotes transparency and public participation by mandating "[e]ach Party [to] ensure that its laws, regulations, procedures and administrative rulings of general application respecting any matter covered by this Agreement are promptly published or otherwise made available in such a manner as to enable interested persons and Parties to become acquainted with them." NAAEC, *supra* note 30, art. 4(1).

The closest the La Paz Agreement comes towards including transparency is found in Article 16, which states, "All technical information obtained through the implementation of this Agreement will be available to both Parties. Such information may be made available to third parties by the mutual agreement of the Parties to this Agreement." La Paz Agreement, *supra* note 17, art. 16.

The Border Plan fares no better. It identifies the need to promote community relations activities and right-to-know policies, but only provides that the SEDUE *should* establish requirements for public availability of data on emissions and effluent of pollutants. Border Plan, *supra* note 18, at VI-31.

291. Public participation is essential to an effective environmental program. Jonathan Fisher, *We Are Talking About Our Children (Interview with Mexican President Carlos Salinas)*, INT'L WILDLIFE, Sept./Oct. 1992, at 50. Carlos Salinas de Gortari, the former Mexican President, once stated: "There is no way to solve the environmental challenges without social participation. It's not only a governmental responsibility, which it is, but it also requires a very strong social participation and I'm very satisfied with the growing movement of nongovernmental organizations in Mexico." *Id.*

292. Grant, *supra* note 71, at 456.

293. NAAEC, *supra* note 30, art. 6(1).

294. *Id.*

295. See *infra* notes 296-306.

In the United States, citizens are granted access to the enforcement mechanisms of the United States' environmental law.²⁹⁶ The United States government granted this access in the 1970s when it first allowed citizens to sue for the enforcement of environmental laws.²⁹⁷ The government granted this opportunity in response to increasing public concern regarding the lack of credible and effective state and federal enforcement programs.²⁹⁸

Since the inception of citizen standing for environmental lawsuits, the enforcement of United States' environmental laws has drastically improved.²⁹⁹ The citizens can act as a backup authority for federal and state enforcement of environmental laws.³⁰⁰ Thus, environmental protection is not sacrificed due to a lack of state or federal enforcement, because the citizens themselves are the environmental watchdogs of government and corporate action.³⁰¹

In contrast, Mexican citizens are not granted access to the enforcement mechanisms of Mexico's environmental law.³⁰² Mexico's federal environmental law, the General Law of Ecological Equilibrium and Environmental Protection, does not grant citizen standing to sue the government

296. J. MILLER, *CITIZEN SUITS: PRIVATE ENFORCEMENT OF FEDERAL POLLUTION CONTROL LAWS* 4 (1987).

297. *Id.*

298. *Id.* Perhaps the first state to incorporate citizen suits in its environmental laws was Michigan. Robert F. Blomquist, "Clean New World": *Toward an Intellectual History of American Environmental Law, 1961-1990*, 25 VAL. U. L. REV. 1, 32 (1990). Professor Sax authored Michigan's environmental citizen suit provisions which were passed into law in 1970. *Id.* Michigan's law gave citizens the right to enforce state environmental policies which were not being enforced by the executive branch of state government. *Id.* at 32-33. Many states have followed Michigan's example and have enacted environmental citizen suit provisions. *Id.* at 33.

With respect to federal law, all of the major environmental statutes have citizen enforcement provisions. Thomas O. McGarity, *Media-Quality, Technology, and Cost-Benefit Balancing Strategies for Health and Environmental Regulation*, 46 LAW & CONTEMP. PROBS. 159, 211 n.258 (1983). Examples include the Toxic Substances Control Act § 20, 15 U.S.C. § 2619 (1982); the Clean Water Act § 505, 33 U.S.C. § 1365 (1976); the Resource Conservation and Recovery Act § 7002, 42 U.S.C. § 6972 (1976 & Supp. 1981); and the Clean Air Act § 304, 42 U.S.C. § 7604 (Supp. V. 1980).

299. Housman et al., *supra* note 15, at 608. See also W. ROSENBAUM, *THE POLITICS OF POLLUTION* 72 (1973). See generally William H. Timbers & David A. Wirth, *Private Rights of Action and Judicial Review in Federal Environmental Law*, 70 CORNELL L. REV. 403 (1985).

300. MILLER, *supra* note 296, at 4 n.2 (quoting ENVIRONMENTAL POLICY DIVISION, CONGRESSIONAL RESEARCH SERVICE, *A LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS OF 1970* 226 (1970)).

301. Housman et al., *supra* note 15, at 608. But see Robert F. Blomquist, *Rethinking the Citizen as Prosecutor Model of Environmental Enforcement Under the Clean Water Act: Some Overlooked Problems of Outcome-Independent Values*, 22 GA. L. REV. 337 (1988), for a criticism of environmental citizen suits.

302. Feeley, *supra* note 80, at 286.

to enforce its environmental laws.³⁰³ Citizens can complain about these violations, however actual enforcement is left solely to SEDUE.³⁰⁴

This limitation on citizen involvement is detrimental to environmental protection in Mexico for two reasons. First, because corruption is prevalent in Mexico, it is not uncommon for SEDUE personnel to ignore environmental violations in exchange for a monetary "donation."³⁰⁵ Second, if an individual complains to SEDUE about Mexico's failure to enforce its environmental laws, the realization of this enforcement is problematic because the only way this enforcement will transpire is if SEDUE, in its discretion, decides to enforce the law against itself.³⁰⁶

This difference between enforcement procedures in the United States and in Mexico is important because it helps explain why the NAAEC is ineffective in protecting the border environment. Under the NAAEC, if an individual has a complaint against the United States, there is no difficulty in ensuring

303. Vaznaugh, *supra* note 68, at 215. Although Mexican citizens cannot sue the government for failure to enforce its environmental laws, they can theoretically sue polluting companies or individuals on a variety of environmentally related torts, such as negligence, strict liability, and various forms of intentional torts. *Id.* However, there are legal disincentives to sue. *Id.* These disincentives include damages limited to provable actual damages, lost earnings which are generally very low, mental anguish, and other intangible damages which are extremely hard to establish. *Id.* Punitive damages are not available. *Id.*

304. Under the General Law on Environmental Protection, SEDUE is responsible for the enforcement of all the environmental laws including air pollution, water pollution, noise pollution, and the import and export of hazardous waste. Daniel I. Basurto Gonzalez & Elaine Flud Rodriguez, *Environmental Aspects of Maquiladora Operations: A Note of Caution for U.S. Parent Corporations*, 22 ST. MARY'S L.J. 659, 674-75 (1991).

305. Widespread belief of corruption among enforcement-level regulatory officials engenders mistrust of [SEDUE's] willingness to compel compliance with environmental laws. Greg Block, *One Step Away From Environmental Citizen Suits in Mexico*, in MAKING FREE TRADE WORK IN THE AMERICAS 631 (B. Kozolchik ed., 1993). A citizen may be unaware of specific corruption among [SEDUE] employees; however, personal experience with other enforcement officials tends to confirm their suspicions. *Id.* If enforcement type activities, such as the collection of traffic fines, permit renewals, or inspections are infused with foul play, a citizen will expect environmental enforcement to incorporate the same corruptive manner. *Id.* The more the environmental enforcement activity resembles the enforcement tools familiar to the ordinary citizen, the more magnified the association between enforcement and corruption. *Id.*

306. Mexico's environmental law is enforced by the administrative authority of SEDUE. Vaznaugh, *supra* note 68, at 215. Therefore, under Mexico's legal scheme, if a Mexican citizen has a complaint regarding SEDUE's failure to enforce Mexico's environmental laws, the citizen's only recourse is to vent that complaint to SEDUE itself. RAUL BRANES, INSTITUTIONAL AND LEGAL ASPECTS OF THE ENVIRONMENT IN LATIN AMERICA, INCLUDING THE PARTICIPATION OF NONGOVERNMENTAL ORGANIZATIONS IN ENVIRONMENTAL MANAGEMENT 91-92 (1991). The success of this scheme is questionable, because without the threat of citizen suits, SEDUE has no legal incentive to enforce its own laws. Vaznaugh, *supra* note 68, at 218.

environmental safety.³⁰⁷ The individual can request the EPA to investigate the United States' alleged failure to enforce its environmental laws and regulations, and the EPA shall consider this request in accordance with the laws of the United States.³⁰⁸ Considering that the laws of the United States allow citizen action for government failure to enforce its environmental laws, there is a legal incentive to grant the individual's request because if the EPA fails to investigate the claim, the individual can readily pursue court action.³⁰⁹ Thus, either way there will be affirmative action and environmental protection will be achieved.

In Mexico, however, the situation is completely different. Under the NAAEC, if an individual requests the SEDUE to investigate Mexico's failure to enforce its environmental laws and regulations, the SEDUE shall consider the request in accordance with the laws of Mexico.³¹⁰ However, under Mexican environmental law, citizens pose no real threat to the government for its failure to enforce its environmental law.³¹¹ Thus, the individual's request will most likely be denied because there is no legal incentive for the SEDUE to grant the individual's request.³¹² Therefore, the NAAEC will prove ineffective in protecting the border environment because the cause of the pollution affecting the border is Mexico's failure to enforce its environmental laws.³¹³

Under the NAAEC, any interested person within the territory of NAFTA's parties may request that competent authorities investigate an alleged violation of the party's environmental laws.³¹⁴ Thus, a citizen from the United States can request Mexico's competent authority, the SEDUE, to investigate Mexico's alleged violations of its environmental laws.³¹⁵ However, because the request will be granted in accordance with Mexico's law, the United States citizen has

307. Because this complaint will proceed in accordance with the laws of the United States, either the EPA will investigate the claim, or the individual can bring suit against the agency for failure to enforce United States' environmental laws.

308. NAAEC, *supra* note 30, art. 6(1).

309. *See supra* text accompanying note 297-301.

310. NAAEC, *supra* note 30, art. 6.

311. Under Mexican law, citizens only have the right to complain about the Mexican government's failure to enforce its environmental laws before SEDUE, a political administrative authority. BRANES, *supra* note 306, at 91-92. However, because of the restricted democratic governance and corruption which prevails throughout the country, most Mexican citizens hesitate in making such complaints out of fear that such behavior will result in harm to themselves or their families. Housman et al., *supra* note 15, at 611-12.

312. Housman et al., *supra* note 15, at 612.

313. *See supra* text accompanying note 68.

314. NAAEC, *supra* note 30, art. 6.

315. *Id.*

very little chance for relief.³¹⁶ Mexican citizens do not have standing to pursue environmental violations, therefore the United States citizen will not have standing. In sum, because Mexico does not allow its citizens to directly pursue a remedy for Mexico's failure to enforce its environmental laws, this limitation on public participation will frustrate the NAAEC's ability to provide environmental protection at the border.³¹⁷

2. Harmonization of Process Standards

The NAAEC is ineffective in its attempt to protect the border from the transboundary effects of maquiladora pollution because it fails to provide the harmonization necessary to ensure environmental safety. In the context of the NAAEC, harmonization refers to the parties' adjusting their environmental policies so that these policies are compatible with each other on an international level.³¹⁸ To harmonize these environmental policies, the parties can either conform their product standards or their process standards.³¹⁹ Product standards are those standards which establish the physical or chemical composition of goods to prevent discriminatory treatment of goods in the course

316. Article 6 of the NAAEC specifically provides that when a party's competent authority is requested to investigate an alleged violation of the party's environmental laws, that request is to be granted in accordance with the law of that party. *Id.* art. 6(1).

317. Environmental scientists and Mexican citizens have attempted to overcome the limitations of their participation in effecting environmental protection in Mexico; however, these attempts have been unsuccessful. Vaznaugh, *supra* note 68, at 219. Mexican environmental critics have allegedly been hushed by firings, intimidation, and funding cuts for environmental research. *Id.* One example includes the 1992 closure of Mexico City's Center for Ecodevelopment. *Id.* This institution employed 35 of Mexico's leading researchers including Dr. Ivan Restrepo who is a well-known critic of Mexico's chemical-and-machine-intensive export agriculture. *Id.*

A second example is that of Jesus Arias Chavez, a physicist, professor, and well-known anti-nuclear activist. *Id.* In 1988, Arias' scientifically-oriented public interest institute and laboratory burned to the ground in a fire which investigators believe was the result of arson. *Id.* The perpetrators were never found. *Id.*

SEDUE has also harassed citizens who have complained about environmental violations. *Id.* A example includes a group of Mexican women who complained to SEDUE about the levels of chemicals in their neighborhoods. *Id.* Instead of helping reduce these levels of chemicals, a SEDUE official excluded ABC reporters from a meeting in which he accused the women of being foreign agents and warned that they were all under investigation. *Id.* at 219-20.

318. The pros and cons of international harmonization of environmental policies have been debated for 20 years or more. Stevens, *supra* note 143, at 42. The Agreement on Technical Barriers to Trade (the Standards Code) of the General Agreement on Tariffs and Trade (GATT) encourages the international harmonization of standards to avoid any trade distortion. *Id.* Previous environmental policy harmonization efforts tried to converge health and safety and environmental product standards as a way of facilitating international trade. *Id.* Now, however, as environmental concerns surpass trade considerations, the focus is on increasing the international compatibility of process standards, economic instruments, and eco-labelling schemes. *Id.*

319. KISS, *supra* note 90, at 155-59.

of free trade.³²⁰ Process standards impose a particular production procedure on a factory and are necessary to protect the environment.³²¹

Under the NAAEC, it appears that the parties' goal of harmonization is driven mostly by trade concerns rather than concerns for environmental protection.³²² The NAAEC specifically provides that harmonization is to occur in a manner which is consistent with NAFTA.³²³ Considering that NAFTA is a free trade agreement with the intent of preventing discriminatory treatment of parties' goods, it is logical to conclude that the harmonization desired is more for the purpose of reducing trade conflicts than it is for ensuring environmental safety.³²⁴ Thus, it seems likely that under the NAAEC, the parties' aim is to conform their product standards, not their process standards.

It is this failure to provide for the harmonization of process standards which makes the NAAEC ineffective in protecting the border from the transboundary effects of maquiladora pollution.³²⁵ To effectively ensure environmental protection, specifically at the border, the NAAEC needs to account for process standards.³²⁶ Accounting for process standards is important in protecting the

320. *Id.* at 158. See also Stevens, *supra* note 143, at 43 (noting that "[p]roduct standards set criteria for the design, content, operation, and disposal of products to minimize health and safety or environmental damage.").

321. KISS, *supra* note 90, at 158. See also Stevens, *supra* note 143, at 45 (stating that "[p]rocess standards are government environmental regulations on production methods, technologies, and practices, [which] include emission and effluent standards, performance and design standards, and practices prescribed for natural resource sectors.").

322. Harmonization usually stems from the desire to reduce potential trade conflicts arising from different product standards rather than from the need to achieve environmental goals. Stevens, *supra* note 143, at 45. Traditionally, free trade agreements would prohibit trade restrictions on the basis of environmental standards because such standards would frustrate the purpose of the agreement by creating trade barriers. Hustis, *supra* note 14, at 614. Thus, because of this concern, parties to a free trade agreement have generally been limited in their ability to protect their surrounding environment because these efforts are usually viewed as trade barriers. *Id.* at 614-15.

323. NAAEC, *supra* note 30, art. 10(3)(b). Article 10 of the NAAEC provides that "[c]ooperation on the development and continuing improvement of environmental laws and regulation [shall be strengthened] . . . (b) without reducing levels of environmental protection, establishing a process for developing recommendations on greater compatibility of environmental . . . standards . . . in a manner consistent with the NAFTA." *Id.*

324. See *supra* text accompanying notes 275-77.

325. Stevens, *supra* note 143, at 42-48 (noting that product standard harmonization is primarily a trade-promoting concept whereas process standard harmonization is an environment-enhancing concept).

326. See Harold Gilliam, *How Green is NAFTA? Two environmentalists—one pro, one con—take on the treaty*, SAN FRANCISCO CHRON., Oct. 24, 1993, at Z1 (commenting on the potential dangers involved for a party's environmental laws if process standards are not accounted for); *Environmentalists Agree NAFTA Side Pact Should Address Process Standards*, INSIDE U.S. TRADE, Feb. 12, 1993, at 8 (stating that protocol agreements should be drafted to clarify that environmentally unsound processes used in making goods should be actionable as trade

border environment because the pollution which affects the border is created by the maquiladoras' process of goods rather than by the composition of the goods themselves.³²⁷ Therefore, if the NAAEC incorporates harmonization of process standards, then the transboundary pollution problem at the border will not be as pronounced as it is today.³²⁸

The NAAEC's lack of process standard harmonization is readily understood given the fact that it is to respect the parties' rights and obligations under the General Agreement on Tariffs and Trade (GATT).³²⁹ These rights and obligations include the use of regulations on the quality and safety of goods being imported into a party's territory, but not on the processes by which other nations manufacture goods.³³⁰ Therefore, a party may place restrictions on the import of products if the product itself, and not the manner in which it is produced, creates a health or pollution hazard.³³¹

The only time GATT will allow restrictions to be placed on the manner in which goods are produced is if, as provided under Article XX(b), such a restriction is necessary to protect the life or health of humans, animals, or plants.³³² However, even then, the GATT places a substantial restriction upon

violations).

327. Selcraig, *supra* note 74, at 14 (noting that the calamitous pollution created by the maquiladoras is a result of the negligent handling of hazardous waste in the processing of goods).

328. Stevens, *supra* note 143, at 45-46 (noting that compatible process standards can be advantageous in controlling transborder environmental problems).

329. The NAAEC respects the goals of NAFTA. See *supra* note 323. NAFTA provides that the parties affirm their existing rights and obligations with respect to each other under GATT. NAFTA, *supra* note 22, art. 103(1).

The General Agreement on Tariffs and Trade (GATT) is the principal institution governing most international trade for the past 48 years. Matthew H. Hurlock, *The GATT, U.S. Law and the Environment: A Proposal to Amend the GATT in Light of the Tuna/Dolphin Decision*, 92 COLUM. L. REV. 2098, 2098-99 (1992). The purpose of the GATT is to conduct trade while raising standards of living, ensuring full employment, developing the full use of the resources of the world, and expanding the production and exchange of goods. *Id.* at 2099. These goals emerged after World War II as the countries that drafted and signed GATT believed that liberal trade, as compared to pre-War protectionist trade, was essential to improving the global economy. *Id.* Seven rounds of negotiations have resulted in a 75% decrease in tariffs, with trade growing from \$60 billion in 1950 to nearly \$4 trillion today. *Id.*

330. See *infra* notes 335-38 and accompanying text.

331. JOHN H. JACKSON, *THE WORLD TRADING SYSTEM: LAW & POLICY OF INTERNATIONAL ECONOMIC RELATIONS* 208 (1989) (noting the difficulty under GATT of justifying a requirement of pollution prevention, safety, or health protection on the manufacturing process).

332. GATT, *supra* note 277, at 262. Specifically, Article XX provides:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures. . .

a party's ability to afford such protection.³³³ A look at the *Tuna-Dolphin Dispute*³³⁴ illustrates this argument.

In the *Tuna-Dolphin Dispute*, the United States imposed a quantitative restriction on tuna imports from Mexico because of the manner in which these tuna imports were processed.³³⁵ Mexico complained to the GATT commission that the United States ban was an illegal trade barrier and the commission agreed.³³⁶ Under Article XX(b) of GATT, the commission stated that, for restrictions on goods on the basis of process standards to be permitted, they must be preceded by a timely effort to establish an international cooperative agreement to create the needed environmental protection.³³⁷ The commission also found that Article XX(b) could not be applied extraterritorially to protect the life or health of humans, animals, or plants outside its jurisdiction.³³⁸

(b) necessary to protect human, animal or plant life or health;

Id.

333. For a party's restriction on the import of goods to be found "necessary" under Article XX(b) of GATT, the party must demonstrate that there is "no alternative measure consistent with [GATT] which [a country] could reasonably be expected to employ to achieve its health policy objectives." Hurlock, *supra* note 329, at 2109. Thus, in effect, the GATT places an extremely heavy burden on the party trying to ensure environmental protection through its import prohibitions. *Id.*

334. United States - Restrictions on Imports of Tuna: Report of the Panel, GATT Doc. DS21/1 (Sept. 3, 1991), 30 I.L.M. 1594 (1991) [hereinafter *Tuna-Dolphin Dispute*].

335. The United States' purpose for restricting the tuna imports from Mexico was founded upon its environmental law, the Marine Mammal Protection Act. 16 U.S.C. § 1371(a)(2)(E) (1988 & Supp. II 1990). Under this Act, the imposition of embargoes on imports of fish and fish products is mandatory if a country uses a harvesting technology that causes an incidental taking of marine mammals or sea turtles in excess of United States' standards. *Id.* The purpose of the mandatory prohibitions under this Act is to protect United States' fishermen from foreign competitors that do not have to comply with high environmental standards. Hurlock, *supra* note 329, at 2112.

336. *Tuna-Dolphin Dispute*, *supra* note 334, at 1623.

337. *Id.* at 1620. The panel reasoned that an attempt at prior cooperative agreements to establish the needed environmental protection is necessary to protect GATT's multilateral framework for trade. *Id.* The panel reasoned that if each party could unilaterally determine the life or health protection policies, then the other contracting parties could not deviate from these policies without jeopardizing their rights under the GATT. *Id.*

338. *Id.* Although the text of the GATT does not clearly state whether the application of Article XX(b) is limited in its application to protection within a party's jurisdiction, the panel based its decision on the drafting history of the article. *Id.* By focusing on this history, the panel found that the intent of the drafters was to use sanitary measures to safeguard life or health of humans, animals or plants within the jurisdiction of the importing country. *Id.*

However, in 1994, three years after the *Tuna-Dolphin Dispute* panel made this decision, the issue of extraterritorial application of environmental laws under GATT was readdressed in the *Tuna-Dolphin Dispute II*. General Agreement on Tariffs and Trade: Dispute Settlement Panel Report on United States Restrictions on Imports of Tuna, 33 I.L.M. 839 (1994) [hereinafter *Tuna-Dolphin Dispute II*]. In deciding this dispute, the panel held that Article XX(b) could be applied extraterritorially, reasoning that under general principles of international law, states are not prohibited from regulating the conduct of their nationals outside their territory. *Tuna-Dolphin*

The significance of this decision on the harmonization sought under the NAAEC is that, without accounting for process standards, international environmental protection will be frustrated.³³⁹ Countries differ in their processing standards, and many times these differences take on a transboundary effect.³⁴⁰ By recognizing the obligations under GATT, and allowing the parties to pursue their rights under this agreement, the NAAEC self-terminates its ability to achieve effective environmental protection. If a government is no longer able to prohibit imports that fail to meet minimum health and sanitation standards, such a limitation will produce disastrous effects on the global environment.³⁴¹ Thus, to achieve its objectives while remaining consistent with those of NAFTA, the NAAEC should allow for the implementation of process standards in the determination of harmonization.³⁴²

3. Insufficient Funding

The extent of the environmental damage at the border due to a lack of funding to secure enforcement of environmental laws was at the forefront of environmentalists' concern during the negotiations of NAFTA and the NAAEC.³⁴³ The lack of funding is a legitimate concern considering that, as

Dispute II, *supra* at 892 para. 5.17. Although this reasoning is a drastic improvement from the panel's reasoning in the *Tuna-Dolphin Dispute*, the panel in the *Tuna-Dolphin Dispute II* still ultimately held that portions of the United States' Marine Mammal Protection Act violated GATT. *Id.* at 899 para. 6.1. For a further understanding of the panel's decision in the *Tuna-Dolphin Dispute II*, see Steve Charnovitz, *Dolphins and Tuna: An Analysis of the Second GATT Panel Report*, 24 ENVTL. L. REP. 10567 (1994), available in WESTLAW, ELR-NEWS.

339. Hustis, *supra* note 14, at 617.

340. For an example of the transboundary effect of differing process standards, see *supra* text accompanying notes 68-74.

341. Hustis, *supra* note 14, at 617. The biggest concern among NAFTA opponents is that environment and trade issues will be completely distinct from one another. *Id.* As a result, they fear that environmental protection will be sacrificed because the free trade objective takes absolute priority over measures designed to protect the environment. *Id.*

342. The NAAEC can implement process standards and still remain consistent with NAFTA. NAFTA, *supra* note 22, art. 712. Article 712(1) states: "Each Party may, in accordance with this Section, adopt, maintain or apply any sanitary or phytosanitary measure necessary for the protection of human, animal or plant life or health in its territory, including a measure more stringent than an international standard, guideline or recommendation." *Id.* Article 724 defines sanitary or phytosanitary measures as those that "a Party adopts, maintains or applies to (c) protect human life or health in its territory from risks arising from . . . a product . . . , or (d) prevent or limit other damage in its territory arising from . . . a product-related processing or production method." *Id.* art. 724.

Although Article 712 conflicts with GATT by expressly allowing for the use of processing standards as a measure to protect human, animal or plant life or health in its territory, such inconsistency is allowed under Article 103(2) which states: "In the event of any inconsistency between this Agreement and [GATT], this Agreement shall prevail to the extent of the inconsistency, except as otherwise provided . . ." *Id.* art. 103(2).

343. Vaznaugh, *supra* note 68, at 209-10.

both the La Paz Agreement and the Border Plan demonstrate, the availability of funding is crucial to the success of an environmental regulatory scheme.³⁴⁴ Effective enforcement of environmental laws requires sufficient funding to support environmental objectives.³⁴⁵

The NAAEC avoids the funding problems of the La Paz Agreement and the Border Plan because of its status as a supplemental agreement to NAFTA.³⁴⁶ Despite this status, the parties hesitate to rely solely on the resources generated by free trade under NAFTA to secure the NAAEC's goal of environmental protection.³⁴⁷ This hesitation is explained by the fact that environmental protection was not achieved despite the additional resources generated by the maquiladoras, Mexico's first experiment with free trade.³⁴⁸

Thus, the parties incorporate the use of economic sanctions into the NAAEC.³⁴⁹ Under this approach, the parties' intent is to secure the funding necessary to aid environmental protection by assessing a monetary penalty against a party which does not take advantage of the revenues brought by NAFTA to enforce its environmental laws.³⁵⁰ Yet, upon analyzing this

344. See *supra* notes 169-74, 199-210 and accompanying text.

345. Hustis, *supra* note 14, at 609. Adequate enforcement of environmental laws lies in the creation of an infrastructure to accommodate commercial and residential activities and in the development of the personnel and expertise necessary to ensure compliance with environmental regulations. Feeley, *supra* note 80, at 292. There must be an availability of substantial funding to accomplish this task. *Id.* However, Mexico's environmental agency has an operating budget for pollution control activities throughout Mexico equivalent to only six percent of the water pollution and hazardous waste budget for Texas alone. *Id.* at 293 n.232 (citing TEXAS CENTER FOR POLICY STUDIES, A RESPONSE TO THE BUSH ADMINISTRATION'S ENVIRONMENTAL ACTION PLAN FOR FREE TRADE NEGOTIATIONS WITH MEXICO 9 (1991)). Considering this limitation on Mexico's economic resources, it is unrealistic to assume that Mexico will be able to develop the necessary infrastructure and hire and train personnel to ensure environmental protection. *Id.* at 293. Thus, when drafting the NAAEC, the parties were concerned about including concrete sources of funding to ensure that money would be channeled into environmental protection. *Id.*

346. Unlike the La Paz Agreement and the Border Plan, the NAAEC will have sufficient availability of funding necessary to ensure environmental protection as a result of the additional economic resources derived from free trade under NAFTA. Feeley, *supra* note 80, at 293. Therefore, in the case of Mexico, the prosperity brought by NAFTA can alleviate the constraints on Mexico's budget and free up some funds for environmental protection. *Id.*

347. NAAEC, *supra* note 30, at annex 34 (providing for the use of economic sanctions to secure environmental protection).

348. Martinez, *supra* note 78, at 13.

349. NAAEC, *supra* note 30, at annex 34. The economic sanction is imposed against a party who displays a persistent pattern of failure to effectively enforce its environmental law. *Id.*

350. Under the principle of sovereignty, one party can not tell another party how to expend the funds it generates by free trade under NAFTA. NAAEC, *supra* note 30, art. 2(1)(f) (noting that each party, with respect to its territory, is to promote the use of economic instruments for the efficient achievement of environmental goals). Therefore, although a party has more money to work with because of the prosperity brought by NAFTA, it does not follow that a party will use these

funding scheme, it is apparent that environmental protection will not necessarily follow.³⁵¹

Under the NAAEC, a party may consult with another party which it believes demonstrates a persistent pattern of failure to enforce its environmental laws.³⁵² If the two parties cannot resolve the matter through their consultations, then they may present their dispute before an arbitral panel.³⁵³ If the panel determines that the complaining party has demonstrated a pattern of failure on the part of the defending party to effectively enforce its environmental laws, then the panel will recommend a plan for that party to adopt to remedy its pattern of nonenforcement.³⁵⁴ If the party fails to remedy this pattern, only then will the panel invoke the use of the economic sanctions.³⁵⁵

The NAAEC's goal of environmental protection is frustrated by the time the panel imposes economic sanctions against a nonconforming party. Once a party demonstrates a persistent pattern of failure to effectively enforce its environmental laws, environmental damage has already occurred.³⁵⁶ The NAAEC attempts to remedy this damage by using the sanctions imposed against

resources to ensure environmental protection. For example, in Mexico, the maquiladoras, a mini-NAFTA, created generous amounts of revenue but Mexico failed to invest these additional resources into environmental protection. Martinez, *supra* note 78, at 13. Therefore, if a party fails to enforce its environmental laws and a complaint is raised by another party, the NAAEC will use the funding generated by the economic sanctions to address the environmental concern. NAAEC, *supra* note 30, at annex 34.

Annex 34 of the NAAEC provides that the monetary sanctions imposed against a party shall be paid into a fund established by the council, and shall be expended at the direction of the council to improve or enhance the environment or environmental law enforcement of the noncomplying party. *Id.* Thus, by the existence of this annex, the parties are guaranteeing the availability of funding to be directed towards enhancing the environment. By granting the council the right to expend the economic sanction imposed against a noncomplying party to ensure environmental protection within that party's territory, the parties are preventing the sacrifice of environmental safety that would otherwise occur.

351. See *infra* notes 352-72.

352. NAAEC, *supra* note 30, art. 22(1).

353. *Id.* art. 24(1). The arbitral panel will be composed of members who are citizens of the parties, who have expertise or experience in environmental law or its enforcement, expertise or experience in the resolution of disputes which arise under international agreements, or other relevant scientific, technical or professional expertise or experience. *Id.* art. 25(2)(a). The panel shall consist of five members. *Id.* art. 27. The members are selected as follows. If there is a dispute between two parties, for example Mexico and the United States, then Mexico shall choose two members from the United States to be on the panel and the United States shall choose two members from Mexico to be on the panel. *Id.* The fifth panel member shall be elected jointly by the disputing parties, in this example by Mexico and the United States. *Id.*

354. *Id.* art. 31(2)(c).

355. *Id.* art. 34.

356. Grant, *supra* note 71, at 450.

a party to finance any cleanup project.³⁵⁷

The NAAEC also incorporates another mechanism to safeguard the availability of funding to finance a cleanup project.³⁵⁸ In the event that the nonconforming party fails to pay the economic sanction, the NAAEC allows the complaining party to suspend the nonconforming party's NAFTA tariff benefits.³⁵⁹ The purpose of this mechanism is twofold. First, it acts as an incentive for parties to comply with environmental laws, or at least adopt the arbitral panel's decision, to avoid having to pay a sanction with the potential recourse of a duty levied against the export of their goods.³⁶⁰ Second, if a duty is levied against the nonconforming party's goods, the complaining party can use this duty as an additional economic resource to aid in the alleviation of the environmental problem.³⁶¹ However, despite this additional funding, unless the nonconforming party either enforces its environmental laws or adopts the arbitral panel's recommended plan to remedy its nonenforcement, the complaining party will have little success in improving environmental conditions because the pollution will remain unabated.³⁶²

If environmental protection can only occur when a party has sufficient

357. *See supra* note 350.

358. NAAEC, *supra* note 30, art. 36.

359. *Id.* In pertinent part Article 36 provides that "[w]here a Party fails to pay a monetary enforcement assessment within 180 days after it is imposed by a panel . . . any complaining Party or Parties may suspend . . . the application to the Party complained against of NAFTA benefits in an amount no greater than that sufficient to collect the monetary enforcement assessment." *Id.*

Thus, under this mechanism, when a nonconforming party engages in international trade with the complaining party, the nonconforming party will temporarily have to pay a duty on the goods it wishes to export. *Id.* at annex 36B. This duty reflects the rate applicable to those goods immediately prior to the enactment of NAFTA or the Most-Favored-Nation rate applicable to those goods on the date the party suspends the NAFTA benefits, whichever is lesser. *Id.* The Most-Favored-Nation rate refers to that rate of duty which the parties grant to any other nation in treaties it has made or will make. LEGAL THESAURUS/DICTIONARY 503 (1985).

360. Myerson, *supra* note 83, at C4 (noting that although the NAAEC provides for the use of economic sanctions and trade sanctions for a party's failure to enforce its environmental laws, it is a part of the agreement that hopefully will never be used).

361. The additional resources that an effected party would have to work with are the tariffs paid by the violating party on the goods it exports to the effected party. *See* NAAEC, *supra* note 30, at annex 36B (stating that where a party suspends NAFTA tariff benefits, that party may increase the rates of duty on the originating goods of the violating party).

A tariff is a tax imposed on the importation of foreign merchandise. BLACK'S LAW DICTIONARY 1456 (6th ed. 1990).

362. By granting a violating party the option to accept the withdrawal of concession, the NAAEC provides very little in the way of future environmental protection. Abbott, *supra* note 34, at 935. By not requiring a violating party to conform its laws to decisions of dispute settlement, the NAAEC essentially allows the polluting behavior to continue and thus further aggravate environmental conditions. *Id.*

resources to commit to such protection,³⁶³ then the NAAEC's provision for economic sanctions is actually a weakening factor in its ability to effectively regulate the border environment and protect it from further degradation. For example, suppose that Mexico demonstrates a persistent pattern of failure to enforce its environmental laws, and such a failure has an effect on the United States.³⁶⁴ Suppose also that Mexico does not remedy this pattern of nonenforcement and thus temporarily loses out on its NAFTA tariff benefits because it refuses to pay the monetary sanction.³⁶⁵ In this example, Mexico no longer has sufficient resources to provide for the protection of its environment.³⁶⁶

In effect, what the NAAEC, in its current framework, creates through the use of economic sanctions as a source of funding is a "catch-22" scenario. Currently, Mexico has weak environmental regulations and enforcement because it lacks the necessary funding to support these initiatives.³⁶⁷ Therefore, Mexico requires the additional economic resources generated by NAFTA to effectively enforce its environmental laws and to create the needed environmental protection.³⁶⁸ However, Mexico can temporarily be denied these resources because it demonstrates a persistent pattern of failure to effectively enforce its environmental laws.³⁶⁹ Thus, without having the economic benefits granted under NAFTA, Mexico will place more reliance on the maquiladoras for economic development.³⁷⁰ Considering that the maquiladoras are the main cause of the pollution affecting the border, increased reliance on this industry, without effective enforcement of environmental laws, will only lead to environmental degradation. Thus, in sum, instead of ensuring the protection of the environment through the use of economic sanctions, the NAAEC only provokes its decay.

363. Karen Tumulty & Juanita Darling, *U.S., Mexico Unveil Border Strategy*, PHOENIX GAZETTE, Aug. 2, 1991, at B10 [hereinafter *Border Strategy*] (noting that environmental improvement is dependent upon a wealth of resources).

364. This hypothetical has real world application, considering the transboundary pollution generated by the maquiladoras and its effect on the United States. See *supra* notes 68-84 and accompanying text.

365. NAAEC, *supra* note 30, art. 36.

366. During the negotiations of NAFTA, the Bush administration contended that the free trade agreement would generate wealth for Mexico that it could invest in cleaning up its environment. *Border Strategy*, *supra* note 363, at B10. However, if this wealth can be suspended under the NAAEC, then it is quite difficult for Mexico to invest it in cleaning up its environment.

367. Duffy, *supra* note 273, at 567.

368. RESPONSE OF THE ADMINISTRATION TO ISSUES RAISED IN CONNECTION WITH THE NEGOTIATION OF A NORTH AMERICAN FREE TRADE AGREEMENT, FREE TRADE NEGOTIATIONS WITH MEXICO - ENVIRONMENTAL MATTERS (transmitted to Congress by the President on May 1, 1991).

369. See *supra* notes 68-74.

370. Feeley, *supra* note 80, at 284.

The fourth reason why the NAAEC fails to protect the United States and Mexico border from transboundary pollution is because it has an ineffective legislative body. The creation of a legislative body is mainly attributable to the United States.³⁷¹ The United States wanted to incorporate a legislative body into the NAAEC because it believed that the failure of the La Paz Agreement and the Border Plan was due to the absence of a legislative body to direct the parties and ensure compliance with environmental laws.³⁷² Thus, when drafting the NAAEC, the parties created a legislative body, known as the Commission for Environmental Cooperation (Commission), to address environmental concerns related to NAFTA.³⁷³ The Commission consists of a Council³⁷⁴ and a Secretariat.³⁷⁵ Together, these institutional components provide the parties with a forum to discuss issues and promote environmental protection.³⁷⁶ The legislative components of the NAAEC are somewhat similar to the legislative components within the European Economic Community,

371. Daniel Magraw & Steve Charnovitz, *NAFTA's Repercussions: Is Green Trade Possible?*, ENVIRONMENT, Mar. 1994, at 14 [hereinafter Magraw].

372. See *supra* text accompanying notes 150-68, 211-22. See also Michael McCloskey, *Safeguard the Environment*, WALL ST. J., July 8, 1993, at A13 (noting that the Border Plan lacks the teeth necessary to ensure environmental protection).

373. Grant, *supra* note 71, at 447.

374. NAAEC, *supra* note 30, art. 10. The council is the governing body of the Commission and is composed of the environmental ministers of all three countries. *Id.*

375. *Id.* art. 11. Headed by an executive director, the Secretariat reports to the Council on environmental issues of the trade agreement. *Id.*

The Commission also consists of a third component, the Public Advisory Committee, whose purpose is to ensure that the Council and the Secretariat receive representative input from each party. *Id.* art. 16. For purposes of this note, however, the analysis of the legislative body will be limited to the Council and the Secretariat, as the functions and responsibilities of each are typical of intergovernmental organizations.

376. The creation of this legislative body was an improvement from the La Paz Agreement, which only *promoted* legislative authority when necessary. See *supra* note 166 and accompanying text. With the negotiation of the NAAEC, however, the United States urged Mexico and Canada to create a strong agreement with actual legislative powers. Magraw, *supra* note 371, at 14. The United States sought such an agreement because it wanted to remove the ambiguity within the La Paz Agreement and instead create defined institutional elements which would provide for international environmental protection. *Id.* Thus, because the institutions of the NAAEC are the backbone of this agreement, the success of these institutions in addressing environmental concerns will ultimately determine the real value of this agreement. Saunders, *supra* note 15, at 284. Many environmentalists, however, doubt that these institutions will make an impact on the effectiveness of the NAAEC. SIERRA CLUB, ANALYSIS OF THE NORTH AMERICAN FREE TRADE AGREEMENT AND THE NORTH AMERICAN AGREEMENT ON ENVIRONMENTAL COOPERATION 19 (Oct. 6, 1993). These environmentalists argue that, given the past cooperative attempts between the United States and Mexico to confront environmental problems, there is little hope that another forum for discussion of these issues will produce meaningful results. *Id.*

officially redesignated as the European Union (EU).³⁷⁷ The EU Council makes important decisions regarding environmental protection, and the EU Commission essentially works under the direction of the EU Council.³⁷⁸ These roles are notably similar to the respective roles of the NAAEC's Council and Secretariat.³⁷⁹ Recognizing this similarity, a closer look at both the NAAEC's legislative body and the EU's legislative body as well as a comparative analysis as to the effectiveness of this approach in confronting transboundary pollution demonstrates the ineffectiveness of the NAAEC.³⁸⁰

377. The European Union (EU) is actually one of three separate communities which makes up the European Community (EC). Christina R. Meltzer, *The Environmental Policy of the European Economic Community to Control Transnational Pollution - Time to Make Critical Choices*, 12 LOY. L.A. INT'L & COMP. L.J. 579, 579 n.1 (1990). The two other communities are the European Coal and Steel Community, and the European Atomic Energy Community. *Id.* Currently, the EC consists of 12 member states. *Id.* These states are Germany, France, Britain, Italy, the Netherlands, Belgium, Luxembourg, Denmark, Ireland, Spain, Portugal and Greece. *Id.*

The law-making institutional components of the EC consist of the Commission, the Council, and the European Parliament. *Id.* at 584. Unlike the legislative components of the NAAEC, however, the EU's legislative bodies were not created solely for the protection of the environment. *Id.* at 579 n.1. These legislative components exist as the law-making body for all of the EU's policies, whether they relate to economic and monetary cooperation, regional policy, worker health and safety, research and development or environmental protection. Budlong, *supra* note 165, at 431 n.1. The purpose of having one legislative body for all of the EU's policies is to promote the theme of unity. Meltzer, *supra* at 579 n.1. This theme is engendered in the Merger Treaty, which the EU members signed in 1965. *Id.*

The EU system consisting of a single legislative body as the law-making power for all transnational affairs would never work under NAFTA. Kelleher, *supra* note 111, at 21. The United States would never accept a legislative scheme under which Mexico and Canada could legislate over it without its consent. *Id.* On the other hand, Canada and Mexico would never accept a scheme under which the United States could legislate unilaterally. *Id.* Therefore, the Commission created by the parties only regulates environmental policies within the NAFTA borders, while remaining sensitive to the individual rights of each party. NAAEC, *supra* note 30, art. 3, art. 37 (noting that the agreement will not be construed to interfere with a party's right to determine and enforce its own levels of domestic environmental protection).

Despite these differences in the scope of the legislative components within the EU and the NAAEC, a comparative analysis between the two is still helpful in determining the success of the NAAEC. The analysis will be limited to the EU's Commission and Council and the NAAEC's Secretariat and Council, because with respect to environmental protection, the responsibilities of these respective components are strikingly similar. *See infra* notes 385-405 and accompanying text.

378. Meltzer, *supra* note 377, at 585. The Council is the governing body of the EU because it has the far reaching discretion to adopt or reject the Commission's proposals. *Id.* at 585. The Commission, on the other hand, is not an independent policymaking institution. *Id.* One of its main functions is to exercise the powers conferred on it by the Council for the implementation of the rules that the Council lays down. David Dreyfuss, *The European Economic Community; E.E.C.; Common Market*, in 3A MODERN LEGAL SYSTEMS CYCLOPEDIA § 1.3, § 1.3(A)(3) (A. Redden ed., 1984).

379. *See supra* notes 374-75 and accompanying text.

380. *See infra* notes 381-416 and accompanying text.

VI. A COMPARATIVE ANALYSIS OF THE NAAEC AND THE EU

A comparative analysis between the EU's and the NAAEC's legislative bodies is important in understanding why the NAAEC, as it is currently structured, will not succeed in enforcing compliance and ensuring environmental protection at the United States and Mexico border. Specifically, this analysis is important for two reasons. First, the EU was created to foster commerce between the EU member states and did not specifically address the issue of environmental pollution until the early 1970s.³⁸¹ Similarly, NAFTA was created to foster free trade between its parties and does not effectively address the issue of environmental protection.³⁸² The issue of environmental protection was not fully addressed until the NAAEC, which was created only after NAFTA was drafted. Thus, in a sense, the EU's attempts to control transboundary pollution and the NAAEC's attempts to control transboundary pollution are similar because they are both afterthoughts to agreements whose primary goal is to foster trade.

Second, although the NAAEC is a new attempt at confronting transboundary pollution, the EU's attempts at controlling this problem are better established.³⁸³ For the past twenty years, the EU has been dedicated to the control of transboundary pollution, yet, despite this dedication, the problem continues to plague EU member states.³⁸⁴ Therefore, the EU's attempts and experiences serve as a model against which to compare the NAAEC and its projected attempts to demonstrate that time alone will not help the NAAEC succeed in confronting the transboundary effects of maquiladora pollution affecting the border.

A. *Institutional Similarities*

As a legislative institution of the EU, the EU Commission is composed of

381. Meltzer, *supra* note 377, at 586-87.

382. See *supra* text accompanying notes 236-41.

383. Although the early activities of the EU were mainly motivated by economic concerns, awareness of the need for environmental protection grew rapidly in the 1970s. Dirk Vandermeersch, *The Single European Act and the Environmental Policy of the European Economic Community*, 12 EUR. L. REV. 407, 409 (1987). The Council became more conscious of the need to pay special attention to the intangible burdens of an unclean environment. Meltzer, *supra* note 377, at 587. Thus, the Council departed from the essentially economic aims of the EU treaty and focused its attention on protecting the environment. *Id.* The result was a declaration, which stated that "[e]conomic expansion is not an end in itself: its first aim should be to enable disparities in living conditions to be reduced It should result in an improvement in the quality of life as well as in standards of living." *Id.* (quoting ROYAL COMMISSION ON ENVIRONMENTAL POLLUTION, NINTH REPORT: LEAD IN THE ENVIRONMENT 42 (1983)).

384. Meltzer, *supra* note 377, at 594.

members which represent the Community interests as a whole.³⁸⁵ Thus, these members are to be completely independent in the performance of their duties, and may neither seek guidance nor be influenced by any government or individual.³⁸⁶ In its role of assuring environmental protection, the EU Commission submits proposals to the EU Council for recommendations or opinions regarding environmental issues at the Commission's discretion.³⁸⁷ The EU Commission is intended to also serve as an investigative arm of the EU Council, preparing informal studies and reports at the EU Council's request.³⁸⁸

In comparison, the NAAEC's Secretariat has similar obligations and responsibilities to those of the EU's Commission.³⁸⁹ The Secretariat is composed of members who equitably represent the interests of the NAAEC parties.³⁹⁰ Like the EU Commission, the NAAEC Secretariat independently performs its duties without receiving instructions from any government or authority, and without being influenced by any party in carrying out its duties.³⁹¹ Under Article 11(6) of the NAAEC, the Secretariat is to submit to the Council the annual program and proposed cooperative activities for environmental protection.³⁹² In addition to this responsibility, the Secretariat is to work subordinate to the Council, providing technical, administrative, and operational support to the Council, as well as any other support that the Council directs.³⁹³

In contrast to the role of the Commission in the EU, the EU Council functions as the governing power.³⁹⁴ In this role, the Council is to make sure that the objectives of the EU treaty are attained.³⁹⁵ With respect to the objective of environmental protection, the Council is to consider the proposals set forth by the Commission, and may either adopt or reject these proposals and

385. *Id.* at 584.

386. Dreyfuss, *supra* note 378, § 1.3(A)(1).

387. *Id.* § 1.3(A)(3)(c).

388. *Id.*

389. *See infra* text accompanying notes 390-93.

390. NAAEC, *supra* note 30, art. 11(2)(c) (noting the importance of recruiting an equitable proportion of the professional staff from among the nationals of each party).

391. *Id.* art. 11(4). Specifically this provision states:

In the performance of [its duties, the Secretariat] shall not seek or receive instructions from any government or any other authority external to the Council. Each Party shall respect the international character of the responsibilities of the [Secretariat] and shall not seek to influence [it] in the discharge of [its] responsibilities. *Id.*

392. *Id.* art. 11(6).

393. *Id.* art. 11(5).

394. Dreyfuss, *supra* note 378, § 1.3(B) (noting that the Council alone has the power to make important decisions relating to the Community's development).

395. *Id.* § 1.3(B)(1).

their application to the furtherance of EU environmental safety.³⁹⁶ Generally, it is the self-interest of each Council member which leads to the rejection of these proposals.³⁹⁷ Because the Council members represent national points of view rather than the Community interest as a whole, this self-interest interferes with the adoption and promulgation of these proposals into law.³⁹⁸

Like the Council in the EU, the Council in the NAAEC also functions as a governing power, encompassing the many duties and responsibilities of the overall NAAEC Commission.³⁹⁹ In ensuring the promotion of environmental protection and cooperation between the parties, the Council has the discretion to allow the Secretariat to prepare reports on the cooperative functions relating to environmental safety.⁴⁰⁰ Even if the Council allows the Secretariat to prepare such a report, it is still within the discretion of the Council to determine whether that report should be made publicly available.⁴⁰¹ In addition, because the Council is represented by environmental ministers, each acting on behalf of his or her own country, self-interest may interfere with the report-making process, or the publication thereof.⁴⁰²

In conclusion, it appears that the legislative bodies of the NAAEC and the roles and functions of each are identical to those found in the EU. The only difference that exists between the two is the supranational authority of the EU's institutions and the international authority of the NAAEC's institutions.⁴⁰³ In the EU, the member states cede substantial sovereignty to the legislative

396. *Id.* § 1.3(A)(3).

397. Meltzer, *supra* note 377, at 582.

398. J. Kodwo Bentil, *Implementation of Common Market Environmental Protection Laws*, 128 SOLIC. J. 393, 393 (1984). With respect to environmental issues, many times the voting process is frustrated because the voting members do not share the same level of political commitment to environmental protection. Meltzer, *supra* note 377, at 582. As a result, these local perspectives have created a barrier to the achievement of overall improvement in environmental quality in the EU. Nigel Haigh, *Assessing EC Environmental Policy: Unweaving the Spider's Web*, EUR. ENVTL. REV., Feb. 1987, at 40.

399. NAAEC, *supra* note 30, art. 10.

400. *Id.* art. 13(1).

401. *Id.* art. 13(3).

402. Magraw, *supra* note 371, at 14.

403. The EU's institutions are supranational, rather than international, organizations because all laws adopted by the Council, including those dealing with environmental protection, are binding on the member states, and must be incorporated into the national law of each member state. Hans Scheuer, *The Work of the EEC-Commission Regarding Transboundary Rhine Pollution*, 9 INT'L BUS. LAW. 59, 59 (1981). For a better understanding of the nature of supranationality, see T.C. Hartley, *THE FOUNDATIONS OF EUROPEAN COMMUNITY LAW* 6-7 (1988). On the other hand, the NAAEC's institutions are international, rather than supranational, organizations because they must give deference to each party's right to create and enforce its own domestic environmental laws and levels of protection. NAAEC, *supra* note 30, art. 3 (noting the parties' right to create their own environmental laws and determine their own levels of enforcement).

institutions and are subject to binding legislation, whereas in the NAAEC, the parties retain their sovereignty, and are subject only to legislative recommendations.⁴⁰⁴ This difference however, has had no effect on the success, or lack thereof, of the EU's attempts to enforce environmental compliance.⁴⁰⁵ A brief look at the failure of the EU's attempts to enforce compliance and to control transboundary pollution will illustrate the potential difficulties that threaten the success of the NAAEC.

B. A Look at Attempts to Enforce Environmental Laws

As awareness of the need for environmental protection in the EU grew in the 1970s, the Council directed the Commission to develop an environmental policy for the Community.⁴⁰⁶ What resulted was a series of action programs that encompassed broad objectives for environmental policy.⁴⁰⁷ Despite the

404. Kelleher, *supra* note 111, at 19.

405. Meltzer, *supra* note 377, at 594-95.

406. *Id.* at 588 (citing ROYAL COMMISSION ON ENVIRONMENTAL POLLUTION, NINTH REPORT: LEAD IN THE ENVIRONMENT 42 (1983)).

407. *Id.* The programs and their objectives are as follows:

The First Action Programme, which was instituted on Nov. 22, 1973, called for the harmonization of national policies to improve the overall quality of life for the EU. *Id.* It also set forth the EU's policy objectives and proposed environmental protection requirements which established pollution levels that must be met after a certain date. *Id.*

The Second Action Programme, which was instituted in May, 1977, updated the First Action Programme. *Id.* at 588-89. The objective of this program was the promotion of unity and harmony among the EU member states in combating pollution. *Id.*

The Third Action Programme, which was in effect between 1982 and 1986, was more sophisticated and detailed than the first two programs. *Id.* at 589. It established a general framework for the management of resources intended to meet future needs, and required that the EU adopt preventive measures to ensure the protection of these resources, as well as other subject matters. *Id.* This plan also stated that future economic and social development depended upon the protection of the environment, and thus emphasized the following issues:

- (1) concern for the environment must be integrated into the planning of all activities, such as agriculture, energy, industry, transport, and tourism;
- (2) transboundary pollution should be combatted;
- (3) the transfrontier transport of waste, especially toxic and dangerous waste, should be reduced at its source;
- (4) pollution and nuisance should be reduced at its source;
- (5) clean technology should be developed, using the coordinated exchange of information between the member states;
- (6) environmental assessments should be made of all environmental impacts where human activity is likely to have significant effects on the environment.

Id. (quoting ROYAL COMMISSION ON ENVIRONMENTAL POLLUTION, NINTH REPORT: LEAD IN THE ENVIRONMENT 44 (1983)).

The Fourth Action Programme, which was in effect between 1987 and 1992, emphasized the enforcement of existing EU legislation. *Id.*

Council's adoption of these programs and their effect as EU legislation,⁴⁰⁸ compliance with the environmental objectives of these programs remains weak.⁴⁰⁹

The primary reason the EU is having difficulty enforcing its laws is because it is unable to uniformly enforce the laws equally upon each member state.⁴¹⁰ Although the laws that the EU Council promulgates state the results that the EU expects to achieve, the method of implementing these laws is left up to each member state to determine.⁴¹¹ Thus, due to the vague language of the laws, the individual member states undertake contradictory implementation and enforcement of these laws.⁴¹² Therefore, the EU is confronted with differing levels of enforcement among member states, which have resulted in serious problems regarding the transborder movement of pollution.⁴¹³

Considering the difficulties that the EU has experienced in attempting to control transboundary pollution, it is very likely that the NAAEC will encounter the same difficulties. As noted, the NAAEC and the EU have similar legislative bodies.⁴¹⁴ If the EU cannot assure environmental protection when its laws are binding upon each member state, it is doubtful that the NAAEC will be able to do so when it is only an hortatory agreement with no binding legislation.⁴¹⁵ In addition, the NAAEC is confronted with the same problem of non-uniform enforcement that the EU is experiencing. The NAAEC proposes the international environmental protection it hopes to achieve; however, in achieving this goal, the NAAEC allows each party to determine its own levels of environmental protection and its own environmental development policies.⁴¹⁶

408. EU law is created by the Council's adoption of a proposal. Meltzer, *supra* note 377, at 581-82. Once a proposal is adopted, this new law is supreme over all inconsistent national law and is binding on all members. Kelleher, *supra* note 111, at 25.

409. Meltzer, *supra* note 377, at 594-95.

410. *Id.* at 596.

411. *Id.* at 597.

412. Vandermeersch, *supra* note 383, at 424.

413. NIGEL HAIGH, *EEC ENVIRONMENTAL POLICY AND BRITAIN* 140-41 (2d ed. 1987).

414. *See supra* notes 385-405 and accompanying text.

415. In the EC, the member states are bound to obey final judgments. Abbott, *supra* note 34, at 935. There is no option to refuse to accept a judgment and instead accept the withdrawal of benefits. *Id.* There is a subordination of national sovereignty to the international organization. *Id.*

On the other hand, under the NAAEC the Commission does not have the power to make decisions which will bind Mexico, the United States and Canada. *Id.* at 934. If the arbitral panel reaches a conclusion that is adverse to one of the parties, that party can refuse to implement the panel's recommendations. *Id.* at 934-95. Instead, what the party can elect to do is suffer the withdrawal of trade concessions by the complaining party. *Id.* This option frustrates environmental protection because the violating party is not mandated to change his polluting behavior and thus the pollution effects continue to degrade the border environment. *See supra* notes 358-62 and accompanying text.

416. NAAEC, *supra* note 30, art. 3.

Therefore, varying levels of enforcement are inevitable. Without providing a guideline for the parties which will encourage uniform enforcement of environmental policies, the vague language of the NAAEC, like that found in the EU, will merely frustrate environmental protection at the border. Thus, to prevent this, the NAAEC must be amended if environmental protection is to become a reality.⁴¹⁷

VII. PROPOSAL: THE CREATION OF A NAFTA ENVIRONMENTAL STANDARD

The La Paz Agreement and the Border Plan are mutual attempts by the United States and Mexican government to control the effects of transboundary pollution created by the maquiladoras.⁴¹⁸ However, both of these attempts are unsuccessful as evidenced by the border conditions existing today.⁴¹⁹ The failure of these attempts can be attributed to the weak enforcement mechanisms of each,⁴²⁰ as well as the lack of funding to support pollution control initiatives.⁴²¹

In the wake of the prior failures to control the transboundary effects of maquiladora pollution, the United States and Mexican governments created the NAAEC. The intent of the governments when drafting the NAAEC was to create an agreement which would build upon the strengths of the La Paz Agreement and the Border Plan, while eliminating their weaknesses.⁴²² However, as it is currently drafted, the NAAEC is ineffective in protecting the border from the transboundary effects of maquiladora pollution.⁴²³ The NAAEC intends to provide funding to ensure environmental protection by allowing for the imposition of sanctions, yet these sanctions actually provoke

417. See *infra* section VII, notes 418-510 and accompanying text.

418. See *supra* text accompanying note 131.

419. See *supra* notes 68-84 and accompanying text.

420. For an analysis of the enforcement mechanisms provided within the La Paz Agreement, see *supra* notes 150-68 and accompanying text. For an analysis of the enforcement mechanisms provided within the Border Plan, see *supra* notes 211-22 and accompanying text.

421. For an analysis of the funding provided by the La Paz Agreement, see *supra* notes 169-74 and accompanying text. For an analysis of the funding provided by the Border Plan, see *supra* notes 199-210 and accompanying text.

422. Orbuch, *supra* note 31, at 790 (noting that the parties' intent was to focus solely on the United States-Mexico border problems). The strengths of the La Paz Agreement are its five annexes which delineate, in great detail, the goals it expects to achieve to ensure environmental protection at the border. See *supra* note 138. The strengths of the Border Plan are the goals it lays out within its objectives. See *supra* text accompanying notes 179-95.

423. Although the NAAEC has been in effect for nine months, virtually no results have occurred with respect to environmental protection. Myerson, *supra* note 83, at C1. Two new agencies handling the border area lack general managers and have yet to initiate cleanup projects. *Id.* As a result, pollution continues its disastrous transboundary effect and environmentalists who once supported the agreement are now pessimistic about its future success. *Id.*

continued environmental degradation.⁴²⁴ The NAAEC incorporates an enforcement mechanism through the creation of its legislative body; however, with minimal binding powers, it is unlikely that this legislative body will secure environmental protection.⁴²⁵

The NAAEC also attempts to protect the environment by allowing for increased public participation in a party's governmental execution of its environmental laws.⁴²⁶ However, because this participation can only take place within the confines of each party's law, such participation is limited in securing environmental protection.⁴²⁷ Further, the harmonization of product standards that the NAAEC promotes also inhibits its effectiveness in protecting the border from the transboundary effects of maquiladora pollution.⁴²⁸ It is the manner in which the maquiladoras process their products, and not the products themselves, that adversely affects the environment.⁴²⁹

Thus, the NAAEC must be amended to adequately protect the border from the transboundary effects of maquiladora pollution. To effectuate such protection, the NAAEC needs to incorporate a provision which will solve the funding, enforcement, public participation and harmonization problems that confront the current NAAEC. The proposed amendment, by restructuring the NAAEC, provides such a provision.

Currently, the NAAEC is structured to control maquiladora pollution after it occurs.⁴³⁰ However, with this type of approach, the pollution has already had its transboundary effect.⁴³¹ Therefore, under the proposed amendment, the NAAEC will be restructured in its attempt to procure environmental protection. Instead of trying to control the maquiladora pollution after it has occurred, the proposed amendment will allow the NAAEC to prevent additional pollution from occurring.

The proposed amendment intends to ensure this result by creating an international environmental standard. Under the current NAAEC, a party can only impose monetary sanctions against the government of a party for failure to effectively enforce its environmental laws. Because a maquiladora facility which is not complying with these environmental laws does not have to pay the

424. See *supra* text accompanying notes 367-70.

425. See *supra* text accompanying notes 406-17.

426. See *supra* text accompanying notes 278-79.

427. See *supra* text accompanying notes 314-17.

428. See *supra* text accompanying notes 318-42.

429. See *supra* notes 68-71, 78 and accompanying text.

430. See *supra* text accompanying notes 352-55 (noting that action will not be taken unless or until a party shows a persistent pattern of failure to enforce its environmental laws).

431. Grant, *supra* note 71, at 450.

sanction, this facility has no incentive to change its polluting behavior, and thus continues to aggravate the transboundary effects of its pollution. The proposed amendment confronts and remedies this problem.

Under the proposed amendment, a facility that wishes to engage in free trade under NAFTA must adhere to the international standard. If a facility chooses to engage in international trade without adhering to this standard, that facility must incur the costs associated with its violation of the standard. These costs will provide an economic incentive for a facility to comply with environmental laws, thus preventing pollution from occurring. Under this approach, the proposed amendment will solve the funding, enforcement, public participation, and harmonization problems confronting the current NAAEC. The less pollution there is to control, the less there is a need for funding to support pollution control initiatives.⁴³² The greater the economic incentive to comply with environmental laws, the less the need to enforce such compliance.⁴³³ The higher the cost of a good produced without adherence to the international standard, the greater the public awareness and participation there will be in effecting the sound environmental production of such goods.⁴³⁴ The more facilities that adhere to the international standard so as to benefit from free trade, the more realistic the harmonization of production processes.⁴³⁵

A. *The Creation of the NAFTA Environmental Standard*

To remedy the deficiencies of the current NAAEC and protect the border from the transboundary effects of maquiladora pollution, the NAAEC should be amended as follows:

432. For an analysis of the proposed amendment and its application to the funding problem, see *infra* text accompanying notes 446-62.

433. For an analysis of the proposed amendment and its application to the enforcement problem, see *infra* text accompanying notes 463-74.

434. For an analysis of the proposed amendment and its application to the public participation problem, see *infra* text accompanying notes 475-87.

435. For an analysis of the proposed amendment and its application to the harmonization problem, see *infra* text accompanying notes 488-504.

Annex 9⁴³⁶

A. Committee Name and Representation

1. The Council shall create a Transboundary Pollution Prevention Committee (Committee) whose main responsibility will be ensuring environmental safety at the border through the elimination of transboundary pollution.⁴³⁷

2. The Committee shall consist of equal representation among the Parties.⁴³⁸

B. Function of the Committee

1. The Committee shall encourage each Party to
 (a) effectively enforce its respective environmental laws and regulations and
 (b) comply with those laws and regulations.⁴³⁹

2. Recognizing the limitations on each Party's resources to oversee their respective facilities to ensure that their facilities are complying with the laws and regulations, the Committee shall recommend that the Parties mutually agree upon and adopt a NAFTA Environmental Standard (N.E.S.) within sixty days of ratification of this Amendment.⁴⁴⁰ Once adopted, this standard shall apply to all

436. The NAAEC consists of 51 articles. *See generally* NAAEC, *supra* note 30. Some of these articles have been expanded upon or explained in greater detail in annexes specific to the articles. *Id.* Article 9 of the NAAEC addresses the structure and procedures of the council and specifically provides that "[t]he Council may . . . (a) establish, and assign responsibilities to, *ad hoc* or standing committees, working groups or expert groups . . ." *Id.* art. 9(5)(a). The proposed Annex 9 will expand upon article 9(5)(a) by outlining in specific detail the creation and function of an *ad hoc* committee responsible for protecting the environment. This annex will also outline the committee's creation and establishment of an environmental standard to carry out its duty of alleviating transboundary effects of maquiladora pollution.

437. This committee will be the *ad hoc* committee created by the Council pursuant to Article 9. *Id.* art. 9(5)(a).

438. By requiring equal representation among the parties, this provision remains consistent with the composition of the other legislative components of the NAAEC. *Id.* art. 9(1), art. 11(2)(c).

439. The language in subcategories (a) and (b) is taken directly from the current NAAEC. *Id.* art. 10(4). Preserving this language is important because it directly relates to the issue of sovereignty and each party's right to create and enforce its own domestic laws. *Id.* art. 3.

440. This language is taken in part from Annex 34 and Article 23. Annex 34 requires that consideration be given to the level of enforcement that could reasonably be expected of a party given its resource constraints. NAAEC, *supra* note 30, at annex 34. Article 23 provides that parties be given 60 days to consult with each other regarding a matter. *Id.* art. 23.

polluting facilities that wish to engage in international trade under NAFTA.

3. If the Parties fail to mutually agree upon an N.E.S., the Committee shall establish such a standard within sixty days of ratification of this amendment, taking into consideration differences in ecosystems.⁴⁴¹ Once established, this standard shall apply to all polluting facilities that wish to engage in international trade under NAFTA.

C. The NAFTA Environmental Standard

1. The N.E.S. shall provide for a specific maximum percentage of pollution emissions and discharge that a polluting facility may emit in the process of goods for trade between the NAFTA Parties. This percentage shall apply equally to each Party's facilities in a similar manner.

2. This specific maximum percentage shall be no less than the highest emission standard of each Party.

3. A polluting facility which meets the N.E.S. determined under Section B(2) or B(3) will receive the trade benefits provided for in NAFTA. If a polluting facility chooses not to adopt the N.E.S., then the facility exporting the noncomplying good shall be subject to a duty on the good equivalent to the Most Favored Nation rate.⁴⁴²

4. The purpose of the N.E.S. is to provide an economic incentive to the polluting facilities within each Party's territory to comply with the environmental laws and regulations enacted by the respective governments of each.

441. This language is taken from Article 10(5)(a) of the NAAEC. Specifically, this provision requests the Council to give *recommendations* for the limitation of pollutants while taking into account the differences of the parties' ecosystems. *Id.* art. 10(5)(a). The difference between this language and the language found in the proposed amendment is that, in the proposed amendment, while the Council will initially recommend to the parties the adoption of a N.E.S. to limit pollutants, if the parties do not create and adopt a N.E.S., the Council *shall* thereby establish a N.E.S.

442. This tariff rate provision is taken from Annex 36B of the NAAEC. The Most Favored Nation Rate refers to the rate of duty that a country grants to other countries in the course of trade. BLACK'S LAW DICTIONARY 1013 (6th. ed. 1990). The purpose of this rate is to establish the principle of equality of international treatment. *Id.* Thus, by requiring a duty to be assessed against a violating facility in an amount equivalent to the Most Favored Nation rate, the proposed amendment respects the principle of equal treatment in the international arena.

5. This standard will apply only to those facilities operating within the territory of a NAFTA Party.

6. The facilities within the territory of each Party may consider the adoption of this standard. As such, compliance with this standard will be on a voluntary basis.⁴⁴³

D. Certifying Compliance

1. Each facility that claims free trade benefits under the N.E.S. must certify that the goods to be exported are in compliance with the standard determined under Section B(2) or B(3).

2. To certify such compliance, each facility shall request from the Committee a license to label the goods processed in accordance with the standard determined in B(2) or B(3) as such: "This product promotes N.E.S. awareness."

3. Each Party shall provide that false labelling by a facility outside the Party's territory indicating that a product to be exported into the Party's territory qualifies as an N.E.S. good shall result in the termination to that facility of the free trade benefits provided for in the NAFTA. In such an event, consistent with Section C(3), the facility falsifying the labelling shall be treated as not having adopted the N.E.S. determined in Section B(2) or B(3) and shall be subject to a duty on the exported good.

4. A party who has a *bona fide* reason to believe that a facility outside its territory is falsely labelling a good as conforming with the N.E.S. may request the Committee to investigate and perform an environmental audit of the company.

B. Application of the Amendment

The parties to the NAAEC should amend this environmental side agreement

443. Under the NAAEC, each party is given the sovereign right to determine its own levels of domestic enforcement and environmental protection. NAAEC, *supra* note 30, art. 3. See also Ved P. Nanda, *Global Warming and International Environmental Law - A Preliminary Inquiry*, 30 HARV. INT'L L.J. 375, 382 (1989) (noting that a state has a right to create and enforce its own domestic laws). Respecting this sovereign right is very important to the success of this amendment. By providing that compliance with the standard be voluntary, the proposed amendment recognizes that the issue of sovereignty prevents it from forcing parties' facilities to comply with an international standard. This poses an inherent tension between the theory of sovereign equality of states and the need for effective international environmental law. Gallob, *supra* note 214, at 88.

to protect the border from future transboundary effects of maquiladora pollution.⁴⁴⁴ The proposed amendment will provide for this protection by creating a committee whose primary responsibility will be ensuring environmental safety at the border.⁴⁴⁵ To ensure this safety, the committee will allow the creation of a NAFTA environmental standard which will resolve the problems of insufficient funding, weak enforcement, lack of public participation, and the absence of process standard harmonization which threaten the success of the current NAAEC. A closer look at this proposed amendment and its impact on the current deficiencies of the NAAEC will illustrate the importance of such an amendment.

1. Annex 9 and the Problem of Funding

One of the greatest weaknesses of both the La Paz Agreement and the Border Plan is their lack of funding to support pollution control initiatives.⁴⁴⁶ This same lack of funding currently threatens the NAAEC.⁴⁴⁷ During the negotiations of NAFTA, many free trade advocates argued that a party will be able to ensure the protection of its environment by using the increased economic resources it will derive from free trade.⁴⁴⁸ As a safeguard, however, the NAAEC allows for the imposition of sanctions against a party or the suspension of the NAFTA tariff for failure to ensure environmental protection through the enforcement of its laws. Yet, by paying these sanctions or temporarily losing out on NAFTA tariff benefits, the violating party will be losing the funding it needs to enhance the protection of its environment.

The proposed amendment recognizes this situation and therefore aims to secure environmental protection in a new manner. Under both Articles 2 and 3 of Section B, the proposed amendment specifically provides that the N.E.S. will apply to *facilities* within the territory of a NAFTA party, not to the party itself.⁴⁴⁹ The purpose behind this provision is to make the facilities, and not

444. The proposed amendment can be adopted by the parties pursuant to Article 48 of the NAAEC which specifically allows for any modification of or addition to the Agreement. NAAEC, *supra* note 30, art. 48.

445. See Annex 9, *supra* section VII.A, at A(1).

446. See *supra* notes 169-74, 199-210 and accompanying text.

447. See *supra* notes 343-70 and accompanying text.

448. *The Year in Trade: Operation of the Trade Agreements Program*, 43d Rep., 1991, USITC Pub. 2554, 22 (Aug. 1992) (noting that although free trade under NAFTA may lead to certain adverse environmental impacts, any negative consequences will be offset by the advantages that stimulation of economic growth will have on improving environmental protection).

449. See Annex 9, *supra* section VII.A, at B(2)-(3) (stating that the N.E.S. shall apply to all polluting facilities that wish to engage in international trade).

the parties, pay for the pollution the facilities create.⁴⁵⁰ By making the individual polluters pay, the proposed amendment will eliminate the need for funding to support pollution control initiatives.

Funding for pollution control initiatives is needed to implement programs to control pollution once it has occurred. However, the proposed amendment will eliminate this funding need because it will prevent pollution from ever occurring.⁴⁵¹ By granting a financial benefit to those facilities which comply with the N.E.S., it is likely that the existing facilities will stop their polluting behavior and new facilities will not begin polluting, since the cost of noncompliance will exceed the benefit derived from noncompliance.⁴⁵²

In essence, the proposed amendment will incorporate the "polluter pay" theory.⁴⁵³ Under the "polluter pay" theory, the cost of noncompliance is the internalization of pollution costs generally reflected in the price of a good.⁴⁵⁴ Thus, the more a facility engages in polluting activities, the higher the price of the good.⁴⁵⁵ A facility will try to avoid a high internalization of costs because

450. In effect, by providing for this approach, B(2) and B(3) of Annex 9 incorporate the "polluter pay" theory. Under this theory, the polluter himself should be charged with the cost of any pollution prevention and control measures. Rubin, *supra* note 8, at 15. See also DAVIES, *supra* note 151, at 177.

451. The "polluter pay" theory is effective in eliminating pollutive behavior because it incorporates the cost of the polluting behavior into the cost of the good. Rubin, *supra* note 8, at 26. The costs associated with the polluting behavior will generally be passed forward into product prices, thus discouraging the purchase of more pollution-intensive products and encouraging the purchase of less pollution-intensive products. *Id.* Through such cost allocation, a facility will have an incentive to stop its polluting behavior so as to remain competitive with other industries in the same business. *Id.*

452. Under the current NAAEC, the benefits derived from noncompliance exceed the cost of compliance. For example, if a maquiladora does not comply with Mexico's environmental laws, there is a slim possibility that a penalty will be assessed against its pollutive behavior. Mexican enforcement personnel are lacking to ensure such an assessment, and the NAAEC only allows sanctions to be imposed against a party's government, not a party's polluting facilities. NAAEC, *supra* note 30, art. 34.

The proposed amendment will allow for a more traditional approach to environmental law enforcement. See Bailey, *supra* note 29, at 871 (noting that the polluter pay theory is a more traditional approach of ensuring environmental protection). By incorporating the polluter pay theory, the proposed amendment will encourage better environmental decisions, thus resulting in a decrease of pollution. James E. Krier, *The Pollution Problem and Legal Institutions: A Conceptual Overview*, 18 UCLA L. REV. 429, 449 (1971). If rules of liability are clear and an enterprise can anticipate that it will be liable for damages done to the environment by its activities, the enterprise will have an incentive to avoid environmental damage. *Id.*

453. See *supra* note 207:

454. Rubin, *supra* note 8, at 27.

455. UNITED STATES ECONOMIC POLICY IN AN INTERDEPENDENT WORLD 134-35 (1971) (stating that under the polluter pay theory, the costs of pollution control are reflected in the prices of the goods produced) [hereinafter ECONOMIC POLICY].

these costs will impact the relative competitive position of that firm.⁴⁵⁶ From an economic standpoint, compliance with the established N.E.S. will be a more cost effective approach for a facility than will be noncompliance. If a facility complies with the N.E.S., internalization of pollution costs could be zero.⁴⁵⁷ Thus, such compliance will result in a long run higher profit margin⁴⁵⁸ and will allow a facility to keep its competitive status in the international trade arena.⁴⁵⁹

Under the proposed amendment, it is possible to argue that with the incorporation of the "polluter pay" theory, a facility may find it more cost effective to pay the tariff imposed upon the exported goods rather than incur the costs associated with complying with the N.E.S.⁴⁶⁰ Thus, instead of incurring the exorbitant expense of rebuilding its entire plant to incorporate the necessary pollution control mechanisms, a facility will prefer to incur the lesser cost of having to pay for its polluting activity. Although this risk is present within any pollution control mechanism geared toward reducing industry pollution, with respect to the maquiladoras, it is likely that more industries will choose to comply with the N.E.S. than incur the cost of pollution.⁴⁶¹ Maquiladora compliance with the N.E.S. will require industries to do no more than adhere to Mexico's environmental laws.⁴⁶²

456. STUDIES IN PUBLIC REGULATION 239 (G. Fromm ed., 1981).

457. If the internalization of pollution costs is equivalent to the cost of pollution control, where a facility has no pollution to control it will not have any cost to pay. ECONOMIC POLICY, *supra* note 455, at 134-35. Under the proposed amendment, if a facility conforms with the N.E.S., it will not incur the cost of a tariff. See Annex 9, *supra* section VII.A, at C(3). In this manner, imposing a tariff acts as a pollution control cost.

458. This higher profit margin will result from the money saved by not having to pay a tariff for the conforming good.

459. Under free trade, a facility will not only be competing against industries with its own country, but with industries in the territory of the other parties. Because free trade requires the nondiscriminatory treatment of goods between parties, the only way that a good produced by a facility in one party will cost more than a similar good produced by a facility in another party is if the first facility has a high internalization of pollution control costs. Thus, a facility will have more of an incentive to produce its product in an environmentally efficient manner to remain competitive with other facilities by keeping consumer costs low.

460. A facility will expend resources on pollution controls up to the point at which it will be cheaper to pay for the cost of pollution. McGarity, *supra* note 298, at 168.

461. Kenneth N. Frankel, *Environmental Law: Mexico and Beyond*, 7 FLA. J. INT'L L. 79, 81-82 (1992).

462. *Id.* at 83-84. To establish or operate a business in Mexico, a facility must file an Environmental Impact Statement with SEDUE and must obtain an operating license by SEDUE before it can begin operations. Thus, it is unlikely that in order to comply with the N.E.S., maquiladoras operating in Mexico will have to rebuild their facilities because structurally, these facilities will already have met environmental prerequisites. Because of the prerequisites required by SEDUE, the maquiladora facility's structure will be environmentally sound. *Id.* at 82. The existence of maquiladora pollution, therefore, is not due to the environmental structure of a facility, but rather the management and operation of these facilities, and SEDUE's limited resource capacity

In sum, by establishing an economic incentive, the proposed amendment will effectively solve the problem of funding which frustrates the current NAAEC's ability to protect the border from the transboundary effects of maquiladora pollution. By finding compliance with the N.E.S. more cost effective, the maquiladoras will eliminate their polluting behavior, thus preventing the creation of pollution. Without the creation of pollution, there is no need for funding to support pollution control initiatives.

2. Annex 9 and the Problem of Enforcement

Another major weakness in the La Paz Agreement and the Border Plan is the lack of enforcement mechanisms.⁴⁶³ Due to this absence and the resulting varying levels of enforcement between the United States and Mexico, these two attempts do very little to secure environmental protection at the border.⁴⁶⁴ The NAAEC attempts to remedy this defect by providing for a legislative body to ensure environmental safety. However, this mechanism is ineffective because it lacks minimal binding power. Recognizing this limitation, the proposed amendment offers an economic incentive to the facilities to comply with their parties' environmental laws, thus reducing the already strained enforcement personnel of the parties.⁴⁶⁵

The current environmental conditions at the border are due to Mexico's weak enforcement of its environmental laws. This weak enforcement can be explained by Mexico's lack of resources necessary for more stringent enforcement.⁴⁶⁶ Without this stringent enforcement, maquiladora facilities violate Mexico's environmental laws knowing that there is a slim possibility of repercussion. Under the proposed amendment, the direct application of the N.E.S. to the facilities will provide the facilities with an incentive to voluntarily

of continually regulating managerial behavior.

463. Montez, *supra* note 17, at 424, 426.

464. Mexico is notorious for its lax enforcement of its environmental laws and regulations. Tolan, *supra* note 61, at 20 (noting Mexico's absence of effective environmental regulation). This is one reason many American investors were eager to partake in the maquiladora program initiated under Mexico's Border Industrialization Program. See *supra* text accompanying notes 63-64. The United States, on the other hand, is very stringent in the application and enforcement of its environmental laws, and will not tolerate activity deviating from these laws. See *supra* note 65 and accompanying text. If a party is lax in enforcing its environmental laws against a polluting facility, then that facility has no incentive to voluntarily comply with the regulations.

465. As it does in its approach to reduce funding needs, the proposed amendment will establish this incentive by incorporating the "polluter pay" theory. See Annex 9, *supra* section VII.A, at B(2)-(3).

466. Mexico faces both funding and personnel constraints, which preclude any comprehensive program effective enough to monitor and enforce industries' compliance with legal requirements. *Overview, supra* note 15, at 3.

comply with Mexico's laws.⁴⁶⁷ Again, as under the funding approach, this incentive will be created through the internalization of pollution control costs.⁴⁶⁸ Unless the facilities that wish to engage in international trade meet the N.E.S., those facilities will incur the cost of the tariff applicable before NAFTA was implemented.⁴⁶⁹

Prior to NAFTA, maquiladoras did not have any tariff applicable to the exportation of their goods. The only duty they had to pay was the value added by Mexican labor. Thus, the imposition of a pre-NAFTA tariff will not provide an effective deterrence to a maquiladora that does not adhere to the N.E.S. while engaging in international trade.⁴⁷⁰

The proposed amendment purports to create a deterrent effect by providing that the Most Favored Nation tariff rate, rather than the pre-NAFTA tariff rate, will apply for nonadherence to the N.E.S. under international trade.⁴⁷¹ Under this scheme, a maquiladora will have to pay a tariff in the amount that the parties apply to producers from other countries. The imposition of this tariff rate will remove the preferential tariff treatment that the maquiladoras received prior to NAFTA.⁴⁷²

The proposed amendment will provide a strong incentive for maquiladora compliance with the N.E.S. Considering that all, if not most, of the goods produced by maquiladoras are exported to the United States, maquiladoras will therefore choose to comply with the N.E.S. rather than face the imposition of

467. Annex 9, *supra* section VII.A, at C(6) (noting the voluntary compliance of a facility to the N.E.S.). Promoting voluntary compliance is important in environmental treaty-making. SUSSKIND, *supra* note 151, at 120. If a treaty includes indirect measures that will encourage voluntary compliance, then the chances of successfully implementing the treaty will be much greater. *Id.* To the extent that compliance generates financial benefits, a party will make more of an effort to voluntarily comply with the treaty requirements. *Id.*

468. See *supra* text accompanying notes 454-59.

469. This penalty is derived from the current NAAEC which states that a complaining party can suspend NAFTA tariff benefits by imposing tariff rates in an amount applicable to those prior to the implementation of NAFTA. NAAEC, *supra* note 30, at annex 36B.

470. With the threat for noncompliance to the N.E.S. being the imposition of a pre-NAFTA tariff, the maquiladora will have very little incentive to invest in new pollution control technologies since its pre-NAFTA tariff is essentially \$0. McGarity, *supra* note 298, at 223.

471. See Annex 9, *supra* section VII.A, at C(3).

472. The imposition of the Most Favored Nation tariff rate on goods which are not produced in conformity with the N.E.S. comes from the NAAEC's recognition that sometimes the suspension of free trade benefits against a facility may not be practical or effective. NAAEC, *supra* note 30, at annex 36B. To solve this problem, the NAAEC allows a party to suspend these benefits in another business sector of a violating party. *Id.* This demonstrates the NAAEC's failure to specifically hold the polluter responsible. On the other hand, the proposed amendment intentionally incorporates the Most Favored Nation rate to hold the polluter liable for its pollution cost rather than passing this cost onto other sectors within a party's territory.

a tariff against their goods.⁴⁷³ Using the same economic argument as discussed in the analysis of the funding problem, the N.E.S. and the potential imposition of a Most Favored Nation tariff provide the maquiladora facilities with an incentive to engage in environmentally sound practices. The maquiladoras will want to refrain from incurring higher costs due to the internalization of its negative externalities and thus will likely voluntarily comply with the N.E.S.⁴⁷⁴

In addition to providing for voluntary compliance, this incentive will also provide for the uniform enforcement of environmental laws. The current NAAEC allows each party to determine its own levels of environmental protection, however such a provision results in varying interpretations and security of such protection. The N.E.S., however, provides the international interpretation of what is necessary to secure environmental protection. Every facility that wishes to engage in free trade must meet the same environmental standard, the N.E.S. Thus, through the establishment of an economic incentive, the proposed amendment will successfully encourage voluntary compliance and achieve the uniform enforcement of environmental laws, thereby eliminating the problem of enforcement facing the current NAAEC.

3. Annex 9 and the Problem of Public Participation

The current NAAEC attempts to ensure environmental protection by promoting public participation in governmental regulation of its environmental law.⁴⁷⁵ However, because of the manner in which the NAAEC seeks to provide this participation, the effectiveness of this approach is limited in scope.⁴⁷⁶ An individual may be aware of a party's failure to enforce its environmental laws, but unless this individual is allowed to actively partake in pursuing a remedy, the correction of this failure is doubtful.⁴⁷⁷

473. Under the proposed amendment, maquiladoras have every incentive to comply with the N.E.S. since it is subject to a tariff for noncompliance. The potential of paying a Most Favored Nation tariff would effectively bring about environmental compliance since the tariff is a sufficiently stringent charge which the maquiladoras currently do not pay under the NAAEC. McGarity, *supra* note 298, at 224 (noting that the charge must be sufficiently high to provide a facility with a realistic incentive to innovate).

474. A maquiladora will likely voluntarily comply with the N.E.S. because such compliance will ultimately pay for itself in reduced costs on the exportation of the goods it produces in accordance with the N.E.S. *Id.*

475. NAAEC, *supra* note 30, art. 1(h).

476. See *supra* text accompanying notes 290-317.

477. Fisher, *supra* note 291, at 50 (noting that strong social participation is required to effectively solve environmental problems).

The proposed amendment seeks to ensure the active participation of individuals in protecting the environment despite a party's failure to enforce its laws. Obviously, the easiest way to ensure this involvement would be to draft a provision stating that any individual could bring suit against an agency for failure to enforce its environmental laws.⁴⁷⁸ However, the principles of sovereignty prevent the drafting of such a provision.⁴⁷⁹

Considering the legal limitations of an individual's ability to make a party's agency enforce its environmental laws, the proposed amendment incorporates the requirement of eco-labelling.⁴⁸⁰ By incorporating this requirement, the proposed amendment recognizes that although an individual may not be able to force a governmental agency to enforce its laws, that individual can greatly influence facilities' voluntary compliance with those laws. To promote this influential behavior, the proposed amendment requires each facility that wishes to engage in free trade under NAFTA to certify its goods as being produced in a manner consistent with the N.E.S.⁴⁸¹ To certify its goods as N.E.S. goods, a facility shall request from the Committee a license for the label.⁴⁸² By requiring the Committee to grant a license for the use of the labels, the proposed amendment seeks to prevent false labelling.⁴⁸³

Eco-labelling is an effective way to provide individuals with the opportunity to actively partake in ensuring environmental safety. Under the proposed amendment, the presence of an N.E.S. label on a good will create public awareness of environmental safety by putting the consumer on notice of what products are manufactured in an environmentally safe manner.⁴⁸⁴ Without the

478. Housman et al., *supra* note 15, at 608 (recognizing the role of citizen suits in ensuring effective enforcement of United States' environmental laws).

479. States currently have the last word on the laws that will govern their citizens. Hofgard, *supra* note 88, at 669. Mexico has decided not to grant its citizens standing to sue for governmental failure to effectively enforce its environmental laws. See generally General Law, *supra* note 15. Because of this sovereign right, Mexico cannot be forced, through a provision to the NAAEC, to grant citizen standing for government failure to enforce its environmental laws.

480. Eco-labelling is a common incentive for producers to manufacture their goods using an environmentally sound process. Kriangsak Kittichaisaree, *Using Trade Sanctions and Subsidies to Achieve Environmental Objectives in the Pacific Rim*, 4 COLO. J. INT'L ENVTL. L. & POL'Y 296, 315 (1993).

481. See Annex 9, *supra* section VII.A, at D(1).

482. *Id.* at D(2).

483. *Id.* The proposed amendment also seeks to prevent false labelling by making the repercussion of such labelling the loss of NAFTA benefits on future exports of that facility's goods. *Id.* at D(3).

484. A recent example of the impact of eco-labelling on consumer awareness is the case of tuna products labelled as "Dolphin Safe." Kittichaisaree, *supra* note 480, at 316. With the use of such labelling, it was found that the tuna cans with the label were likely to sell better than those without the label. *Id.*

ability to label its goods as conforming to the N.E.S., a noncomplying facility will not only lose potential consumers by having to charge a higher price for the same goods,⁴⁸⁵ it will lose consumers by not having the N.E.S. awareness label on its goods.⁴⁸⁶ In light of this awareness, a facility will be more environmentally conscious in its management and production of goods.⁴⁸⁷

4. Annex 9 and the Problem of Harmonization

A significant weakness of the current NAAEC is its failure to provide for the harmonization of process standards.⁴⁸⁸ The NAAEC's absence of process standard harmonization is readily explainable given that the NAAEC is to respect the rights and obligations of the parties as granted under GATT.⁴⁸⁹ Under GATT, each party has the right to manufacture its goods without another nation's regulation of the manner in which the party processes its goods.⁴⁹⁰ Thus, with two exceptions, a party cannot discriminate against another party's goods based solely upon the manner in which these goods are processed.⁴⁹¹ This right is reaffirmed in the *Tuna-Dolphin Dispute*.⁴⁹²

However, if environmental protection is to occur at the border, then process standard harmonization must occur. To achieve this harmonization, the

485. If a facility has to pay a tariff because it chooses not to comply with the N.E.S., it will likely pass this cost on to the consumer. This cost will thus reflect a higher price for the same good as that charged by complying facilities. Therefore, from an economic perspective, a consumer will choose the less expensive of the two identical goods.

486. Products with environmental labels are likely to sell better than those without such labels. Kittichaisaree, *supra* note 480, at 316. Because eco-labelling creates a positive image for goods, denying the right to use the labelling may undermine the goods' previous reputation. *Id.*

487. Curtis Moore, *Green Revolution in the Making*, SIERRA, Jan./Feb. 1995, at 128. An example is the effect of the Blue Angel environmental labelling program in Germany. *Id.* Introduced in 1977, Blue Angel is a symbol owned by Germany's environment ministry. *Id.* The ministry licenses the label's use for about 3,500 products selected on a case-by-case basis. *Id.* Public recognition of and enthusiasm for the Blue Angel program has boosted the market share of many products. *Id.* Recognizing this impact, the prospect of the financial awards accompanying the use of the Blue Angel has motivated environmentally conscious thinking and acting among manufacturers and consumers alike. *Id.*

488. A process standard is a standard that regulates the manner in which a product is processed. An example would be a standard limiting the amount of pollution created by the processing of a good. *See supra* note 321. Under the current NAAEC, the only harmonization that is encouraged is the harmonization of product standards. *See supra* text accompanying notes 318-24.

489. *See supra* note 329.

490. *See supra* text accompanying notes 329-31.

491. *See supra* text accompanying notes 337-38.

492. The *Tuna-Dolphin Dispute* involved the United States' imposition of an embargo against Mexico's tuna imports which were processed in a manner inconsistent with United States' environmental laws. *Tuna-Dolphin Dispute*, *supra* note 334, at 1599.

proposed amendment creates an international environmental standard, the N.E.S.⁴⁹³ By creating the N.E.S., the proposed amendment provides facilities with an international guideline which will dictate the manner in which facilities, if they desire the benefits of free trade, must process their goods.⁴⁹⁴

To achieve this standardization, the N.E.S. creates a maximum percentage of pollution emissions which cannot be exceeded when a facility creates goods.⁴⁹⁵ This emission limitation will be helpful in reducing the transboundary effects of maquiladora pollution since the majority of this pollution is created by maquiladoras exceeding Mexico's emission standards. Again, by providing the maquiladoras with an economic incentive, the proposed amendment will be effective in harmonizing facilities' production of their goods since all facilities will be adhering to the same standard.

Considering the GATT panel's decision in the *Tuna-Dolphin Dispute*, it would appear that the proposed amendment's approach would not be allowed because essentially it is a regulation of a product based on its process method.⁴⁹⁶ However, this amendment can be adopted without violating GATT for two reasons. First, NAFTA specifically provides that in the event its provisions conflict with those of GATT, NAFTA prevails unless otherwise provided.⁴⁹⁷ Thus, considering such language, the adoption of the N.E.S. will be acceptable even though it regulates a product based on its process method because Article 724 of the NAFTA specifically allows for such regulation.⁴⁹⁸ Under Article 724 of the NAFTA, a party may take a measure against another party if it is necessary to protect the life or health of humans, animals or plants

493. See Annex 9, *supra* section VII.A, at B.

494. *Id.* at C.

495. *Id.* at C(1).

496. See *supra* note 330 and accompanying text. It would also appear that the *Tuna-Dolphin Dispute II* decision would prohibit the adoption of the proposed amendment's approach. In holding that portions of the United States' Marine Mammal Protection Act violated the GATT, the panel reasoned that trade measures cannot be used "to force other countries to change their policies." *Tuna-Dolphin Dispute II*, *supra* note 338, at 897 para. 5.38. Given this reasoning, the panel would most likely disallow the adoption of the proposed amendment. In essence, the N.E.S. is a trade measure which requires facilities within the territory of a NAFTA party to process their goods within the limits of the specified emission standard prior to receiving the trade benefits under NAFTA. Currently, considering the divergence between the United States and Mexico with regards to ensuring environmental protection, see *supra* note 228, the creation of the N.E.S. will undoubtedly "force" a change in practices and policies. Although the N.E.S. applies to the facilities within the territory of a NAFTA party and not to the party itself, see *supra* text accompanying note 449, it is possible that the panel may reason that although the N.E.S. does not force another country to change its policies, the pressure on a country's facilities to change their policies and practices in the processing of goods is enough to find a GATT violation.

497. See *supra* note 342.

498. *Id.*

in its territory.⁴⁹⁹ The conditions at the border demonstrate an obvious need for the United States to protect its citizens from the border pollution's debilitating and deadly effect.⁵⁰⁰

Second, even if it is provided that, in the event of inconsistency, GATT will prevail over the NAFTA, the N.E.S. established under the proposed amendment will survive the GATT product/process distinction by falling under an Article XX(b) defense.⁵⁰¹ Under this defense, a party may impose a tariff on another party's good solely on the basis of the other party's production process if preceded by a timely effort to establish an international cooperative agreement to create the needed environmental protection.⁵⁰² This proposed amendment is preceded by the La Paz Agreement, the Border Plan and the current NAAEC, all of which are international cooperative agreements that have unsuccessfully created the needed environmental protection at the border.⁵⁰³

The Article XX(b) defense also requires that if a party discriminates against another party's goods solely on the basis of the other party's production processes, such behavior must be for the purpose of protecting life or health within the jurisdiction of the discriminating party.⁵⁰⁴ Thus, under the proposed amendment, and in accordance with GATT, the United States can impose a duty on the goods produced by the maquiladoras which do not comply with the N.E.S. The evidence of poor living conditions at the southern border of the United States will justify such action, since the reason for such conditions is the transboundary effects of maquiladora pollution.

5. Other Considerations

The main purpose of the NAAEC is to ensure environmental protection while respecting the goals of NAFTA. The manner in which the NAAEC achieves this balance is by preventing the creation of pollution havens and the

499. *Id.*

500. *See supra* notes 68-84.

501. *See supra* notes 332, 337-38 and accompanying text.

502. *See supra* text accompanying note 337.

503. *See supra* note 337. In the *Tuna-Dolphin Dispute*, the GATT panel also stated that its decision would not affect the right of contracting parties, acting jointly, to address international environmental problems which can only be resolved through measures in conflict with the present rules in GATT. *Tuna-Dolphin Dispute*, *supra* note 334, at 1623. Therefore, under this language, the creation of an N.E.S. by which to regulate the process standards of a facility should not be violative of GATT. Its creation emerges from an agreement between the United States and Mexico to address the international environmental problem of the transboundary effects of maquiladora pollution at the border.

504. *See supra* note 338 and accompanying text.

discriminatory treatment of parties' goods.⁵⁰⁵ The proposed amendment respects this balance and will not pose a threat to its achievement.

Under the amendment, the N.E.S. provides that the emission percentage created is not to be any less than a party's highest emission standard.⁵⁰⁶ With the inclusion of this provision, the proposed amendment respects the NAAEC's desire to prevent the creation of pollution havens. If a facility has to adhere to a party's highest emission standard to benefit under free trade, that facility will have no incentive to relocate to another party. No matter how weak a party's enforcement mechanisms may be, the only way a facility can benefit under free trade is if it voluntarily complies with that party's environmental laws.

The N.E.S. also creates a specific maximum percentage of pollution emissions that is to apply equally to each party's facilities.⁵⁰⁷ With such a provision, each party will be held to the same standard as every other party, thus preventing discriminatory treatment. Such treatment will only be exercised if a party's facility chooses to engage in international trade without adhering to the standard. Thus, in effect, the discriminatory treatment that a facility receives will be by choice.

The proposed amendment will also make the NAAEC a more effective environmental regulatory instrument because it will codify international law as it relates to state responsibility and the environment.⁵⁰⁸ It has already been established that when a state engages in territorial activity, it must do so in a manner consistent with the rights of other states.⁵⁰⁹ The effects of maquiladora pollution on the United States border, however, clearly demonstrates the failure of this obligation. The maquiladora pollution infringes upon the United States' right to be free from such pollution.

Under the current NAAEC, the parties are guided by the general principles of international law regarding state responsibility for the protection of the environment.⁵¹⁰ The agreement does not specifically outline the environmental obligations that each party owes to the other. Rather, the agreement only provides that a party can be held liable for its actions upon a showing of a persistent pattern of failure to enforce its environmental laws.

To remedy this problem, the proposed amendment offers a specific and

505. See *supra* notes 264-85 and accompanying text.

506. See Annex 9, *supra* section VII.A, at C(2).

507. *Id.* at C(1).

508. See *supra* notes 121-23 and accompanying text.

509. See *supra* note 101.

510. See *supra* notes 116-18 and accompanying text.

definite guideline applicable to the legal problem at hand. By incorporating an N.E.S. into the NAAEC, the parties essentially will provide a benchmark by which the facilities within each party's territory can measure their behavior. This international standard will then eliminate the facilities' varying interpretations as to what may be necessary to protect the border environment. If a facility has a framework within which to work, and knows specifically what it must do to achieve a financial benefit, it is more likely that the goal of compliance will be reached.

VIII. CONCLUSION

For the past twelve years, the United States and Mexican governments have struggled to protect the border from the transboundary environmental effects of the maquiladoras. Despite their efforts, the depressing environmental condition of the region remains unchanged. Just recently, these two governments drafted the NAAEC with hopes that, as a third attempt, this agreement will provide the needed protection and ensure environmental safety in the future. However, faced with the obstacles of insufficient funding, a weak enforcement mechanism, limited public participation, and minimal harmonization, it is doubtful that the NAAEC will live up to its expectations.

The proposed amendment to the NAAEC offers a solution to these problems. By incorporating this amendment, not only will the NAAEC respect the goals of free trade and the sovereign rights of each party, but it will remove the aforementioned obstacles, thereby allowing for a more effective approach in remedying border conditions. Now is the time to allow for such an approach. Environmental safety has been sidestepped by concerns for unrestricted trade far too often. If such behavior is allowed to continue, it will no longer be just the environment that is being sacrificed. Maria del Socorro's story is evidence of that.

Elizabeth A. Ellis

