

ARTICLES

THE ENVIRONMENT AND FREE TRADE: MEETING HALFWAY AT THE MEXICAN BORDER

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I. INTRODUCTION

Environmental consequences from largely unchecked industrialization and population growth¹ at the United States-Mexico border have become a major impediment to passage of a Mexico-U.S.-Canada Free Trade Agreement (FTA). Documented reports of illegal hazardous waste disposal into rivers and drinking water supplies have fueled debate on the effectiveness of existing regulations and the need for greater enforcement.² Moreover, should the FTA be ratified,³ industrialization will increase, heightening the probability

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1. Mexican and U.S. population census figures estimate that the population in Tijuana will increase to 1,444,724 by the year 2,000 compared with 461,257 in 1980. Estimates put the population of Ciudad Juarez, on the Texas-Mexico border, at 1,432,406 people by the turn of the century, compared with 567,365 in 1980. Mexicali is estimated to have 1,034,910 by 2000 compared with 510,664 in 1980. See generally, R. SANCHEZ, *Environment: Mexican Perspective*, in U.S.-MEXICAN INDUSTRIAL INTEGRATION: THE ROAD TO FREE TRADE (forthcoming in 1991) [hereinafter SANCHEZ].

2. NATIONAL SAFE WORKPLACE INSTITUTE (NSWI), CRISIS AT OUR DOORSTEP 19 (1991) (on file at the author's office). Citing a recent report from the American Medical Association, the NSWI described the border as "a virtual cesspool and breeding ground for infectious disease" largely attributable to "water and air pollution." *Id.* See also Benant, *Border Called 'Cesspool'*, Tucson Citizen, June 23, 1990.

3. In June 1990, President Bush and Mexican President Salinas endorsed the objective of a binational free trade agreement. On August 21, 1990, President Salinas formally proposed initiation of negotiations for a free trade agreement between the United States and Mexico. On September 25, 1990 President Bush notified the House Committee on Ways and Means and the Senate Committee on Finance of his intention to negotiate with Mexico, and of the Government of Canada's desire to participate in

of greater environmental impacts.⁴

Solutions to environmental problems were being debated long before FTA discussions commenced. Pending FTA negotiations have focused and intensified that debate, with environmentalists demanding that the Bush Administration give priority to ecological concerns. The White House has adopted the position that environmental considerations should not be included in FTA discussions and instead should be resolved through strengthening already existing agreements.⁵

This article evaluates the need for additional resources, regulatory coordination and commitment in solving U.S.-Mexico border environmental problems. Section II describes the maquiladora industry presently existing at the Mexico-U.S. border. This industry's rapid growth and the environmental effects resulting therefrom are the historical bases from which this article draws its conclusions concerning the effectiveness of current regulations. Section III offers a critical analysis of current Mexican and U.S. laws governing or potentially governing environmental compliance at the border. Section IV summarizes and evaluates a variety of proposals for strengthening environmental compliance both within the current regulatory structure and within the context of the FTA.⁶

the negotiations. See Press Release No. 1, HOUSE COMM. ON TRADE, COMM. ON WAYS AND MEANS, 102d CONG., 1ST SESS., PRESS RELEASE NO. 1 (Jan. 30, 1991) [hereinafter PRESS RELEASE].

4. According to one area industry group: "It is reasonable to expect that trade will increase between the United States and Mexico as a result of a free trade agreement and that most of the environmental impact of that increased trade will fall upon the U.S.-Mexico border." Report to the Border Trade Alliance's Coordinating Council from its Environmental Committee 1 (Dec. 1, 1990) (on file at author's office).

5. In testimony before the Senate Committee on Environment and Public Works, U.S. Environmental Protection Agency (EPA) Administrator William Reilly stated: "We are in the process now of considering specifically how to ensure that the moment we confront a free trade agreement between our countries, which promises as much economically, it can also be one that improves and elevates the environmental standards, particularly affecting the 80 million people in Mexico who deal in many cases with a very degraded environment. . . . We are in almost daily conversation with the Mexicans about their environmental performance. I think we have gone into those discussions with the sense that we do not want to encumber the free trade agreement itself if we can avoid that, if we can find an alternate means of insuring environmental commitments that are satisfactory on these questions." *Hearings on the Fiscal 1992 Budget Request for the EPA Before the Senate Committee on the Environment and Public Works*, 104th Cong., 1st Sess. 56, 58 (Mar. 7, 1991) (statement of William K. Reilly, EPA Administrator). Mr. Reilly also predicted that the FTA will have a positive impact on environmental problems along the border because it will raise the standard of living and will attract business to the interior of Mexico and away from the already overcrowded border zone. *Id.*

6. This article does not address issues concerning pesticide use in Mexico, potential depletion of Mexico's natural resources by U.S. entities if deregulation is allowed, or the particularly sensitive issue of occupational health and safety problems associated with worker exposure to toxic substances. For a general discussion of these issues, see M. Kelly, D. Kamp & M. Gregory, *Mexico-U.S. Free Trade Negotiations and the Envi-*

II. BALANCING THE ENVIRONMENT AND ECONOMICS: INDUSTRY'S IMPACT AT THE BORDER

The maquiladora⁷ program, also known as the Mexican In-Bond or Twin Plant Industrial Program, permits foreigners to set up a 100% foreign-owned and foreign-managed company that may import, under bond and free of Mexican import duties, all machinery, equipment, tools and spare parts required for its production and export its end goods from Mexico to any country in the world.⁸ This industry represents Mexico's second largest source of foreign exchange, or approximately \$2.3 billion in 1988.⁹ Only value-added taxes are assessed on maquiladora products upon re-entry into the U.S.¹⁰

In 1988, the *Instituto Nacional de Estadísticas, Geografía e Informática* (INEGI) reported a total of 1,396 plants and 369,000 workers in the maquiladora industry. Nineteen ninety estimates are 1,857 plants and 449,587 workers.¹¹ The maquiladora industry has also accelerated technology transfer to Mexico and indirectly added to transborder economic development.¹²

Such economic growth, however, carries a price. Hazardous substance use and generation has increased as maquiladoras have diversified from simple assembly plants into heavier industry.¹³

ronment: Exploring the Issues (discussion paper written for the Texas Center for Policy Studies) (Jan. 1991) [hereinafter *Exploring the Issues*] (on file at author's office).

7. The term maquiladora derives from *maquila*, the Spanish word for "handwork."

8. J. CHRISTMAN, *The Maquiladora Industry and the Mexican Economy*, in IN-BOND INDUSTRY (1989). See also *Industrial Strength Border Towns*, Hispanic Business, Mar. 1990, at 14. Non-U.S. foreign companies are taking advantage of the maquiladora program through their U.S. subsidiaries. These include Japanese companies such as Nissan, Toyota, Sony, Hitachi, Mitsubishi and Sanyo, and such European-owned companies such as North American Phillips and Siemens Electronics.

9. Weintraub, *The Maquiladora Industry in Mexico: Its Transitional Role*, in 39 COMMISSION FOR THE STUDY OF INTERNATIONAL MIGRATION AND COOPERATIVE ECONOMIC DEVELOPMENT 3 (1990) [hereinafter Weintraub]. Dr. Weintraub reports that "[p]ersonnel employed in Mexican maquiladoras at the end of 1989 came to about 450,000. Total maquiladora exports in 1988 were \$10.1 billion, [with] imported inputs [at] \$7.8 billion, for a value added figure in Mexico that year of \$2.3 billion." *Id.*

10. The Tariff Act of 1930 governs the regulation of imports and exports. Items 806.3 and 907.0 of the U.S. Tariff Schedules allow for the duty-free re-entry of goods assembled abroad from materials and components of U.S. origin. See Tariff Act of 1930, 19 U.S.C. §§ 1200-1677(k) (1988).

11. See D. Perry, *The Maquiladora Industry: Generation, Transportation and Disposal of Hazardous Waste at the California-Baja California, U.S.-Mexico Border 1-2* (1990) (unpublished paper submitted to the California Department of Health Services Toxic Substance Control Program; on file at author's office) [hereinafter Perry].

12. Weintraub, *supra* note 9, at 5.

13. For example, according to INEGI, the furniture-related sector has increased 547%, and electronic equipment and parts manufacturing has increased 271%. See Kraul, *A Warmer Climate For Furniture Makers*, L.A. Times, May 14, 1990 at D1.

Under Mexican law provisions discussed in Section III, *infra*, maquiladoras are required to export waste to the country of origin, subject to certain limited exceptions. According to Dr. Diane Perry of the University of California at Los Angeles School of Public Health's Environmental Science and Engineering Program, however, understanding of how maquiladora-produced waste is dealt with is uncertain at best: "Currently, it is not known whether the majority of the hazardous waste generated by the maquiladora industry is receiving proper treatment and/or disposal."¹⁴ By comparing customs records reflecting the quantity of hazardous substances imported to Mexico, Dr. Perry estimates that approximately 100,000 tons of hazardous waste are generated annually in Baja, Mexico, alone.¹⁵ The nature and extent of waste treatment is unclear since records from U.S. Customs and the EPA reflecting transfer of waste to the United States are incomplete. The EPA's Mexican regulatory counterpart, the *Secretaria Desarrollo Urbano y Ecología* (SEDUE) unfortunately also lacks specific information.¹⁶

Other environmental threats include critical water shortages and potential groundwater contamination. For example, water experts estimate that the aquifer beneath El Paso-Ciudad Juarez, which provides 90% of the drinking water to the area, may be pumped dry within the next 10 years.¹⁷ Moreover, in February 1990, the U.S.-Mexico Nogales Water Project announced findings of solvent contamination in groundwater in both Nogales, Arizona and Nogales, Sonora.¹⁸ Although solvent contamination was only slightly above the maximum contamination level established under the U.S. Safe Drinking Water Act,¹⁹ these findings suggest that some illegal solvent disposal by either Mexican-owned companies or maquiladoras has occurred. Press reports have documented numerous other incidents of alleged environmental wrongdoing at the

The flight of furniture manufacturers from southern California is due largely to stricter regulation by the South Coast Air Quality Management Control District against volatile organic compound emissions. *Id.* at D4.

14. Perry, *supra* note 11, at 1-10.

15. *Id.* at 1-8.

16. See Sanchez, *Contaminación Industrial en la Frontera Norte: Perspectivas para la Década de los Años 1990*, ESTUDIOS SOCIOLÓGICOS (1990) cited in SANCHEZ, *supra* note 1, at 14. According to Dr. Sanchez: "SEDUE itself is severely understaffed and underbudgeted. SEDUE, for example, lacks national, regional, or local inventories of hazardous waste emissions from the maquiladoras or the domestic industry, and it lacks control over the final destination of the waste. Thus, hazardous wastes are sometimes dumped illegally into municipal sewage systems or landfills." *Id.*

17. See Neal, *Anticipating Transboundary Water Needs and Issues in the Mexico-U.S. Border Region in the Rio Grande Basin*, in ANTICIPATING RESOURCE NEEDS AND ISSUES OF THE YEAR 2000, (C. Sepulveda & A. Utton eds. 1982).

18. Letter from Dick Kamp, Border Ecology Project, to William Reilly, EPA Administrator at 5 (Mar. 28, 1991) (describing findings of groundwater sampling) (on file at author's office) [hereinafter Kamp Letter].

19. Codified at 42 U.S.C. § 300g-1 (Supp. 1991).

U.S.-Mexico border.²⁰

Mexico's proximity to the U.S. can facilitate solutions to certain environmental problems. The high percentage of American companies doing business in Mexico arguably creates an obligation by the U.S. government to offer resources and facilitate compliance with environmental laws. Some initial steps toward this end have already been taken. The EPA provides training and resources to its Mexican counterpart SEDUE.²¹ Second, the high risk of cross-boundary pollution has mobilized U.S. environmental groups to demand change and to assist Mexican ecological groups in organizing against greater unplanned industrialization.²² Third, recognizing the economic advantages of promoting a stable operating environment, corporate representatives and maquiladora trade organizations are donating resources and encouraging compliance by members.²³ Industry itself is also a potential source of revenues to improve border community infrastructures.

Despite the absence of empirical data documenting the maquiladoras' full impact thus far on Mexico, certain themes are evident.

20. McDonnell, *Border Boom Feeding Hazardous Waste Ills; U.S., Mexican Environmental Agencies Rush to Quantify Problems and Identify Polluters*, L.A. Times, Sept. 10, 1989, at B1, col. 4; Wright, *Border Industry Provides Jobs, Faces Criticism on Environmental Issues*, Assoc'd Press Wire, May 14, 1989 (NEXIS, omni file) [hereinafter NEXIS]; *Do Border Plants Skirt Law?*, Engineering News-Record, Mar. 9, 1989; *Ecology Agency Shuts Down 130 Companies for Dumping Waste*, El Paso Times, Feb. 21, 1990; *Intoxicating "Green Rocks" Part of Juarez's Plague of Waste*, Assoc'd Press Wire, June 24, 1989 (NEXIS); Gamboa, *Officials Fear Spread of Health Problems From Border*, Assoc'd Press Wire, Oct. 22, 1989 (NEXIS); Wallace, *State Loses Track of Toxic Waste Shipments*, L.A. Times, Dec. 5, 1989, at B1, col. 2; Kennedy, *Teeming "Colonias"*; *Border Has Worst of Both Worlds*, L.A. Times, Oct. 2, 1989, at A1, col. 1 [hereinafter Press Reports].

21. See generally, U.S.-MEXICO HAZARDOUS WASTE WORK GROUP, HAZARDOUS WASTE MANAGEMENT AND THE MAQUILADORAS MANUAL (Nov. 1989) [hereinafter MANUAL]. The joint Work Group was established by Annex III to the U.S.-Mexico Binational Agreement. See Section III.B of this article, *infra*. The manual provides a detailed description of U.S. and Mexico laws governing maquiladoras.

22. Such groups include, inter alia, the Border Ecology Project, Justice for the Maquiladoras, the Texas Center for Policy Studies, Friends of the Earth, the National Wildlife Federation, and the National Toxics Campaign.

23. In its statement concerning the FTA, the Border Trade Alliance acknowledged: "It is anticipated that the negotiations for a free trade agreement between the U.S. and Mexico will heighten scrutiny of environmental issues along the border. Any maquiladora industry compliance shortcomings may be used to oppose a free trade agreement or to limit it in some negative fashion. Local maquiladora environmental committees along the border have a strong interest in a clean industrial environment in Mexico and are concerned about this issue. These committees are working closely with their membership and the maquiladora industry generally at the local level and are keeping in close contact with local SEDUE officials. These committees are also taking a firm stand on compliance and have organized both seminars and special programs at regular meetings for dialogue, input and education." See Border Trade Alliance, Environmental Committee Position on U.S.-Mexico Free Trade Agreement 1 (Dec.3, 1990) (on file at the author's office).

First, industrial development brings needed jobs and hard currency to Mexico and is desired by the Mexican and U.S. governments, as demonstrated by the movement toward an FTA. Second, industrial growth is likely to continue with or without an FTA. Third, immediate resources and planning are needed to ensure that an infrastructure is in place to accommodate proposed growth. Fourth, although the exact level of compliance by U.S. corporations is unclear, educational efforts and greater enforcement over the past three years have resulted in increased compliance.

III. MAINTAINING THE STATUS QUO: A CRITICAL ANALYSIS OF CURRENT ENVIRONMENTAL REGULATIONS

Mexico's recent experience with increased industrialization illustrates the difficulty of defining an appropriate level of environmental compliance and enforcement in developing nations. Like many developing countries, Mexico encourages industry to service its debt and to attract needed technology. With limited resources, however, Mexico cannot effectively sustain rapid growth due to inadequate sewage treatment, water supply and housing for workers attracted to border jobs. This inadequate infrastructure creates serious health and environmental risks.²⁴

Mexico's environmental laws are relatively stringent but only sporadically enforced. This relaxed enforcement is attributable to: (1) the absence of clear policy direction from the current administration; (2) inadequate resources to provide necessary staff, training, and other technical needs;²⁵ (3) the absence of accountability and public participation in the development and implementation of environmental laws; and (4) the reluctance by Mexico to rely on U.S. agency intervention.²⁶

The following section reviews Mexican environmental law, the

24. See Tolan, *From Tijuana to Matamoros, U.S. factories have brought jobs — and social chaos — to Mexico*, N.Y. Times Magazine, July 1, 1990, at 16. According to Mr. Tolan: "The growth of the maquiladora industry is a direct result of economic decline in Mexico. Since world oil prices dropped in 1982, Mexico has accumulated nearly \$100 billion in debt and sharply devalued the Peso; its standard of living has declined drastically." *Id.*

25. Necessary environmental technology includes protective gear for inspectors, laboratories to perform chemical analysis on hazardous waste samples, computers to track imports and exports of hazardous waste into Mexico, and advanced telecommunications systems to quickly relay information.

26. Mexico's desire for national sovereignty and historical suspicion of the U.S. has impeded some joint efforts between the two countries. See Leonard, *Confronting Industrial Pollution in Rapidly Industrializing Countries: Myths, Pitfalls and Opportunities*, 12 *ECOLOGY L.Q.* 779 (1985). See also, Leonard & Morell, *Emergence of Environmental Concern in Developing Countries: A Political Perspective*, 17 *STAN. J. INT'L L.* 281, 302-03 (1981).

U.S.-Mexico agreement specifically addressing environmental matters, and U.S. laws which have the potential to regulate environmental compliance by maquiladoras.

A. Mexican Law: The Law of Ecological Equilibrium

A comprehensive environmental legal and regulatory structure has been in place in Mexico only since 1988. Efforts by the EPA and SEDUE since that time have improved border environmental conditions. However, much coordination remains to be accomplished before the current joint process runs smoothly. Accommodating additional growth spawned by the FTA under the current process would be difficult without additional resources and enforcement powers.

Mexico's comprehensive environmental statute, the *Ley General del Equilibrio Ecológico y Protección del Ambiente* (Law of Ecological Equilibrium and Environmental Protection) (EEPA)²⁷ regulates air, water, soil and natural resources.²⁸ SEDUE enforces this law through a series of specific *Normas Técnicas Ecológicas* (Technical Ecological Norms) (NTE) dealing with (a) criteria or hazardous waste characterization and listing;²⁹ (b) extraction tests to determine hazardous waste toxicity;³⁰ (c) procedures to evaluate incompatibility of hazardous waste;³¹ (d) hazardous waste storage facility requirements; (e) facility design and construction requirements; and (f) operation of hazardous waste storage facilities.³² While a number of technical norms are pending, the date of publication is presently unknown.³³

Under Mexican law, each facility must comply with the following requirements:

27. 1 GACETA ECOLÓGICA 2-60 (June 1989) [hereinafter EEPA].

28. Consisting of six titles, with jurisdiction divided among federal, state and local regulators, the law governs matters concerning water pollution, soil erosion and land use, hazardous materials and waste, noise, vibration, and air pollution. See generally, EEPA, *supra* note 27.

29. NTE-CRP-001/88, D.O. (June 6, 1988).

30. NTE-CRP-002/88, D.O. (Dec. 14, 1988).

31. NTE-CRP-003/88, D.O. (Dec. 14, 1988).

32. NTE-CRP-011/89, D.O. (Dec. 13, 1989).

33. Proposed technical norms include: Sampling and Sample Handling Methods; Pesticide Treatment and Methods; Hazardous Waste Incineration; Chemical Treatment of Hazardous Waste; Physical Treatment of Hazardous Waste; PCB Incineration; Solvent Treatment and Recovery; Hazardous Waste Packing and Labeling; Storage of Hazardous Wastes; Hazardous Waste Transportation; Hospital, Laboratory and Research Facilities Waste Incineration; Lining of Controlled Disposal Facilities Cells; Leaching Characterization and Treatment; Design and Construction of Surface Impoundment; Stable Geological Formation Selection for Controlled Disposal Facilities; and Construction and Operation of Agrochemical Receptors. See Perry, *supra* note 11, at 4-12.

(a) Obtain an Environmental Operating License

In order to operate legally, all manufacturing plants must obtain this license from SEDUE. The application for operating licenses requires (1) a site map; (2) a process description tracing chemical use, production or waste, and ultimate disposal and treatment thereof; (3) identification of equipment and machinery utilized in the process, including safety equipment; (4) a chemical inventory which includes a list of all raw materials utilized at the plant, the quantity utilized monthly, the storage arrangements for the material, the safety measures instituted to prevent spillage or exposures, and safety precautions taken with respect to personnel; (5) a list of all waste generated; (6) identification of air pollution emission, if any; (7) identification of pollution control equipment, including waste water treatment equipment; and (8) description of an emergency response plan.³⁴

(b) Environmental Impact Statement (EIS)

Along with the application for the Environmental Operating License, a statement must be filed describing the potential impact of the company's operations on the environment. This statement can lead to a requirement for a full EIS. The EIS must be completed by a SEDUE-registered environmental consultant.

(c) Residual Water Discharge Registration

This registration includes all waste water discharges and surface water runoff.³⁵

(d) Hazardous Waste Generator Registration

Plants that generate any waste considered to be hazardous under the applicable technical standards must register and obtain a generator's number from SEDUE.

(e) Ecological Manifests

The importation, exportation, transporting and handling of any hazardous raw materials, hazardous products or hazardous waste must be carried out in accordance with Ecological Manifests (tracking forms) which must be obtained for every shipment.³⁶

34. *Reglamento de la Ley General del Equilibrio Ecológico y la Protección al Ambiente en Materia de Impacto Ambiental* [EPA Regulation on Atmospheric Pollution Control and Prevention] art. 18, EEPA, *supra* note 27, at 46.

35. The Federal Water Commission within Mexico's Ministry of Agricultural and Hydraulic Resources shares responsibility with SEDUE for overseeing wastewater, discharge sources and other sewer systems.

36. *Reglamento de la Ley General del Equilibrio Ecológico y la Protección al*

(f) Storage of Hazardous Materials

Hazardous raw materials or waste materials must be stored in facilities which comply with specifications set forth in the technical norms.³⁷

(g) Reporting and Record-Keeping Requirements

Any changes in the information provided to SEDUE under the applications for any of the licenses or registrations listed above must be reported to SEDUE. A permanent physical inventory or log of all hazardous materials in the possession of the company at any given time must be kept, and it must be available for inspection by SEDUE. Companies that generate hazardous waste must file biannual reports with SEDUE.

SEDUE estimates that 52% of the nation's 1,963 maquiladoras have generated hazardous waste, only 307 generators have obtained basic operating licenses and only 19% reportedly are returning waste to the country of origin.³⁸

Like those in the U.S., Mexico's hazardous waste laws are premised upon a "cradle to grave" tracking concept. Consistent use or enforcement of manifests (the tracking mechanisms), however, has yet to occur. Waste generators must submit reports on all hazardous waste movement to SEDUE every six months and must advise SEDUE when a signed copy of a manifest is not received from a treatment, storage or disposal facility. Unlike the U.S., however, Mexico does not prohibit on-site storage beyond 90 days. As a result, some companies may be stockpiling their waste.

Mexican law prohibits the importation of hazardous waste unless it can be recycled or reused.³⁹ Tests to characterize hazardous wastes in Mexico vary only slightly from tests employed in the United States,⁴⁰ with Mexico utilizing a slightly more liberal extraction test.⁴¹ Mexico's list of hazardous wastes is virtually identical to that of the United States.⁴² Because of limited recycling, the majority of maquiladoras are faced with the task of transporting waste

Ambiente en Materia de Residuos Peligrosos [EEPA Regulation on Hazardous Materials] ch. 4, art. 43, EEPA, *supra* note 27, at 56.

37. *Id.* ch. 3, art. 15, EEPA, *supra* note 27, at 53.

38. *See Exploring the Issues, supra* note 6, at 23.

39. *Reglamento de la Ley General del Equilibrio Ecológico y la Protección al Ambiente en Materia de Residuos Peligrosos* [EEPA Regulation on Hazardous Materials] ch. 4, art. 57, EEPA, *supra* note 27, at 58.

40. The Toxicity Characterization Leaching procedure employed in the United States is set forth at 55 Fed. Reg. 26,986 (1990) (to be codified at 40 C.F.R. §§ 261, 264, 265, 268, 271, and 302).

41. Perry, *supra* note 11, at 4-16.

42. Compare Identification and Listing of Hazardous Waste, 40 C.F.R. § 261 (1990), with NTE-CRP-001/88 D.O. (June 6, 1988).

back to the U.S. The process for shipping waste north is both costly and cumbersome, creating a significant disincentive to comply.⁴³

Mexico's environmental laws have no equivalent to the U.S.' so-called "Community Right-To-Know" laws which require yearly disclosure by industry of its hazardous substance inventories and toxic emissions.⁴⁴ In addition, Mexico has no law expressly requiring adoption of source reduction or waste minimization programs aimed at minimizing contamination in the first instance.⁴⁵

Mexican law prohibits the manufacture, preparation, transportation, distribution, sale, storage, possession, usage, reuse, recycling, collection, treatment, discarding, discharge, disposal or activities undertaken with hazardous waste materials or residues without SEDUE authorization. The penalty to the responsible party can be imprisonment of three months to six years or a fine for the equivalent of 1,000 to 20,000 days of the general minimum wage in the relevant Mexican federal district. Similar fines and penalties may be assessed for discharges into waters. Technically, a generator may face imprisonment of three months to five years, and a fine for the equivalent of 100 to 10,000 days of general minimum wage in the relevant federal district. If the discharges into federal waters involve waste to be delivered to a pollution center, the jail sentence may be increased by three years.

Administrative penalties range from fines of 20 to 20,000 times the daily general minimum wage for the relevant federal district, temporary or permanent closure of the facility, or administrative arrest for up to 36 hours.⁴⁶

43. Before waste can be transported from Mexico to California, the maquiladora must: (1) send a letter notifying the EPA of its intention to import and indicating SEDUE has been copied; (2) provide a letter to SEDUE from the consignee accepting the waste and stating that the consignee is authorized to do so; (3) provide a copy of the completed State of California certified laboratory analysis, including chain of custody reports; (4) provide a letter to SEDUE advising it of the maquiladora's intent to export waste and stating that the EPA has been notified; (6) obtain a SEDUE Ecological Waybill which remains in effect for only 45 days; (7) complete a hazardous waste manifest; (8) complete a Toxic Substance Control Act Certificate of Compliance.

A further complication is the requirement that a licensed Mexican hauler be utilized on the Mexican side of the border. Upon its entry into the U.S., the waste must be transferred to a U.S. hauler approved by the Department of Transportation. See generally, MANUAL, *supra* note 21.

44. See Emergency Planning and Community Right to Know Act (EPCRA), 42 U.S.C. §§ 11,001-11,050 (1988). For an analysis of EPCRA, see Comment, *California's Community Right-to-Know*, 16 *ECOLOGY L.Q.* 1021 (1989).

45. The California legislature has recently enacted legislation mandating a hazardous waste reduction program. See Hazardous Waste Reduction & Management Review Act of 1989, CAL. HEALTH & SAFETY CODE §§ 25244.12-25244.25 (West Supp. 1991).

46. EEP, *supra* note 27, ch. III, art. 15, at 92.

B. Treaties with the United States

In 1983, the United States and Mexico signed a Binational Agreement protecting 100 kilometers on either side of the border. Under the Agreement:

The United States of America and the United Mexican States, . . . agree to cooperate in the field of environmental protection in the border area on the basis of equality, reciprocity and mutual benefit. The objectives of the present Agreement are to establish the basis for cooperation between the Parties for the protection, improvement and conservation of the environment and the problems which affect it, as well as all necessary measures to prevent and control pollution in the border area, and to provide the framework for development of a system of notification for emergency situations.⁴⁷

Four binational work groups were formed pursuant to the Agreement: the Air, Water, Hazardous Waste and Emergency Response Work Groups. Each Work Group is co-chaired by representatives from SEDUE and the EPA, and meets annually.⁴⁸ The chairs of each Work Group report annually to the Mexican and U.S. National Coordinators. The National Coordinators report, in turn, to Mexico's Secretariat of External Relations and the U.S. State Department, respectively.

Annex I to the Agreement, enacted July 1985, mandated U.S.-Mexico cooperation under the auspices of the International Boundary and Water Commission (IBWC) to find a solution to sanitation problems at the San Diego, California and Tijuana, Baja California border area.⁴⁹

Annex II, enacted July 1985, created a Joint Contingency Response Plan to detect the existence or imminent possibility of the occurrence of polluting incidents and to develop adequate response measures.

Annex III, enacted November 1986, set forth specific regula-

47. 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, art. 1, 29 I.L.M. 1 (1983).

48. Work groups are staffed by invitation of the National Coordinators. Despite the fact that Article 9 of the Binational Agreement explicitly permits non-governmental organizations to be represented in the work groups, the current makeup of the groups, according to Mr. Manzanilla, is almost exclusively that of state and local government representatives. Interview with Enrique Manzanilla, U.S.-Mexico Border Coordinator, Water Management Division, EPA Region IX (Mar. 27, 1991) [hereinafter Manzanilla Interview].

49. Subsequently, the IBWC recommended to both governments the construction of an international sewage treatment facility. IBWC Minute No. 283, Conceptual Plan for the International Solution to the Border Sanitation Problem in San Diego, California/Tijuana, Baja, California (on file at author's office). The IBWC also has produced similar recommendations for Nogales, Arizona-Nogales, Sonora and Nuevo Laredo-Laredo, Texas border areas. Manzanilla Interview, *supra* note 48.

tions governing transboundary shipments of hazardous waste and substances, including notifications regarding the shipment and notifications of any regulatory actions that restrict particular substances.

Annex IV, enacted January 1987, specifically limited sulfur dioxide emissions by the Phelps Dodge copper smelter in Douglas, Arizona and the Mexicana de Cobre la Caridad copper smelter in Nacozari, Sonora. Annex IV also established a coordinated emissions monitoring, recordkeeping and reporting system for the smelters.

Despite these accomplishments, the Binational Agreement has no procedure for enforcement and for this reason has been criticized as lacking any practical deterrent effect.⁵⁰ In response to questions on deterrence, Enrique Manzanilla, U.S.-Mexico Border Coordinator, Water Management Division, EPA Region IX, stated in an interview with the author that the formation of the binational Work Groups provides a strong foundation for effectuating the Agreement's ultimate objectives.⁵¹ If sufficient funds are allocated to strengthen the Binational Agreement through the proposed Comprehensive Border Environmental Program discussed in Section IV, *infra*, Mr. Manzanilla believes that the goals of the Binational Agreements can be accomplished.

C. Reliance on U.S. Laws: A Potentially Greater Threat to Recalcitrant Industry

Although arguably not the predominant factor, local environmental laxity does lead some businesses to relocate in Mexico and thus avoid strict U.S. environmental laws.⁵² Until recently, maquiladora regulation was minimal and problems could be solved by casual negotiations with local officials. This scenario may be chang-

50. In a recent letter to William Reilly of the EPA, the Border Ecology Project (BEP) also questioned the effectiveness of the Agreement's Annexes in practice. The BEP described a July 14, 1990 incident at the *Química Orgánica* chemical manufacturing plant in Mexicali where a ruptured hydrosulfuric acid tank resulted in the evacuation of "thousands." The BEP strongly urged that non-government agencies be entitled to participate in the development and implementation of any new binational agreement. See Kamp Letter, *supra* note 18 at 4.

51. Interview with Enrique Manzanilla, Mar. 25, 1991.

52. Although some reports indicate that U.S. firms invest in foreign countries to minimize environmental costs, the prevailing view is that low wages, available resources and access to markets remain the driving force. See INT'L TRADE ADMIN., U.S. DEP'T OF COMMERCE, INT'L DIRECT INVESTMENT: GLOBAL TRENDS AND THE U.S. ROLE 2-3 (1988). Nevertheless, environmental compliance in developing countries, including Mexico, is behind that in the United States in part because corporations elect to apply the lower standards. Castleman, *The Double Standard in Industrial Hazards*, in THE EXPORT OF HAZARD 82-85 (J. Ives ed. 1985) (describing the failure of a U.S. company manufacturing asbestos in Agua Prieta and Juarez to warn the surrounding community and workers of health risks).

ing, however, as more and more environmentalists turn to U.S. laws as vehicles for enforcing responsible environmental conduct.

Opening U.S. courts to foreigners employed by maquiladoras is a controversial proposition. On the one hand, the already overcrowded courts could be further burdened with plaintiffs hoping to reap the benefits of a litigious, plaintiff-oriented system. On the other hand, environmentalists claim that some multinationals merely calculate the potential for fines or penalties into the cost of doing business abroad, recognizing the limited recovery available to Mexicans in their own courts.

To date, no lawsuit has been filed under U.S. laws for environmental violations in Mexico.⁵³ Longstanding extraterritoriality principles provide that "rules of the United States statutory law, whether prescribed by federal or state authority, apply only to conduct occurring within, or having effect within, the territory of the United States."⁵⁴ Three exceptions to this rule are recognized: (1) where Congress clearly intended the statute to apply outside the boundaries of the U.S.; (2) where non-applicability of a statute in a foreign country will result in adverse effects within the U.S.; and (3) where the conduct regulated by the government occurs within the U.S.⁵⁵

1. Comprehensive Environmental Response, Compensation, and Liability Act

Given the increased evidence of surface and groundwater contamination potentially migrating from unlawful discharges of maquiladoras, the EPA may have authority to issue an order or injunction pursuant to Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).⁵⁶ Section 106 provides:

In addition to any other action taken by a state or local government, when the President determines that there may be an imminent and substantial endangerment to the public health or

53. Criminal actions have been filed in California against companies that illegally haul hazardous waste to Mexico. Dolan & Stammer, *2 Indicted in Hauling of Toxic Waste in Mexico*, L.A. Times, May 11, 1990, at A1, col. 3. This activity is distinguishable from situations where a corporation is located in Mexico and illegally disposes of hazardous waste generated from processes occurring outside the United States.

54. RESTATEMENT (SECOND) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 38 (1965) [hereinafter RESTATEMENT].

55. Section 18 of the Restatement provides that "[a] state has jurisdiction to prescribe rules of law attaching legal consequences to conduct that occurs outside its territory and cause an effect within its territory, if . . . the effect within the territory is substantial [and] . . . occurs as a direct and foreseeable result of conduct outside the territory. . . ." RESTATEMENT, *supra* note 54, at § 18.

56. Comprehensive Response, Compensation & Liability Act, 42 U.S.C. §§ 9601-9675 (1988).

welfare of the environment because of an actual or threatened release of a hazardous substance from a facility, he may require the Attorney General of the United States to secure such relief as may be necessary to abate such danger or threat⁵⁷

Under CERCLA, the term "environment" includes: "[a]ny . . . surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States."⁵⁸ The extent of U.S. jurisdiction is not defined directly in the statute; however, CERCLA defines the term "otherwise subject to the jurisdiction of the United States" as including jurisdiction granted by virtue of an "international agreement to which the United States is a party."⁵⁹ This definition arguably could confer jurisdiction over conduct by maquiladoras occurring within the 100 kilometers of the border subject to the Binational Agreement discussed above.

Recent case law interpreting CERCLA has also expanded a parent company's obligations for the acts of its subsidiary. Traditionally, a parent corporation is not liable for the acts of its subsidiary except when the parent is effectively the alter ego of the subsidiary.⁶⁰ In CERCLA cases, however, some federal courts have departed from tradition, imposing liability directly on the parent corporation if it is found to be involved in the day-to-day operations of a subsidiary.⁶¹ Although such cases involve subsidiaries located within U.S. territory, this theory could be expanded to implicate a maquiladora. Typically, the U.S. parent company owns 100% of the maquiladora. If the parent also maintains direct control over the maquiladora's activities, including hazardous waste practices, the EPA might be able to fashion a remedy.

2. Resource Conservation and Recovery Act

Notwithstanding provisions in Annex III of the Binational Agreement discussed in Section III.B, *supra*, governing the shipment of hazardous waste or hazardous substances across the U.S.-Mexico border, U.S. federal statutes also may govern trans-bound-

57. *Id.* at § 9606.

58. *Id.* at § 9601(8)(B).

59. *Id.* at 9601(19).

60. *Lakota Girl Scout Council Inc. v. Havey Fund Raising Mgmt. Inc.*, 519 F.2d 634, 637-38 (8th Cir. 1975). In most instances, courts pierce the corporate veil only upon evidence of inadequate capitalization, extensive or pervasive control by the shareholders, intermingling of the parent properties or accounts with those of the subsidiary, failure to observe corporate formalities and separateness, siphoning of funds from the subsidiaries, or absence of corporate records. See *In re Acushnet River & New Bedford Harbor Proceedings re: Alleged PCB Pollution*, 675 F. Supp. 22 (D. Mass. 1987) (no one of listed factors necessary or sufficient; equitable decision to pierce the corporate veil depends on facts peculiar to each case).

61. *United States v. Kayser-Roth Corp.*, 724 F. Supp. 15 (D.R.I. 1989), *aff'd* 910 F.2d 24 (1st Cir. 1990).

ary shipments. Section 3017 of the Resource Conservation and Recovery Act of 1976 (RCRA) requires a U.S. exporter of hazardous waste to follow a series of steps including notification of the EPA, consent by the government of the receiving country, and shipment in conformance with any terms of consent set forth by the receiving government.⁶²

Unlike the Binational Agreement, RCRA contains enforcement provisions. RCRA § 7002 creates a private right of action under which any individual may file a civil lawsuit on his own behalf:

(1)(A) against any person (including (a) the United States, and (b) any other governmental instrumentality or agency, to the extent permitted by the Eleventh Amendment to the Constitution) who is alleged to be in violation of any permit, standard, regulation, condition, requirement, or order which has become effective pursuant to this chapter; or

(B) against any person, including any other governmental instrumentality or agency, to the extent permitted by the Eleventh Amendment to the Constitution, and including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage or disposal facility who has contributed or who is contributing to the past or present handling, storage, treatment, transportation or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment; or

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator⁶³

Section 3017 of RCRA provides that international agreements take precedence over § 7002. Thus the unenforceable Binational Agreement would appear currently to govern U.S. exports of hazardous waste to Mexico. RCRA § 3017, however, requires that the supervening international agreement be enforceable by its terms:

Where there exists an international agreement between the United States and the government of the receiving country establishing notice, export, and *enforcement procedures* for the transportation, treatment, storage, and disposal of hazardous wastes, only the [reporting requirements of this Act] shall apply [emphasis added].⁶⁴

Lacking enforcement procedures, the U.S.-Mexico Binational Agreement thus may not necessarily take precedence over RCRA § 3017, with the result that a violation of § 3017's hazardous waste export notification procedures (more comprehensive than those set forth in the Binational Agreement) may be actionable despite the

62. Resource Conservation & Recovery Act of 1976 (RCRA) § 3017, 42 U.S.C. § 6938(a) (1988).

63. RCRA § 7002, 42 U.S.C. § 6972(a) (1988).

64. RCRA § 3017, 42 U.S.C. § 6938(f) (1988) (emphasis added).

Agreement's applicability. In the absence of a bilateral agreement governing the international transport of hazardous waste, the RCRA enforcement provisions will clearly apply.

3. Clean Air Act

In the 1990 amendments to the Clean Air Act, Congress allocated resources and expressly recognized the need for air monitoring and remediation along the border.⁶⁵ Under § 815 of the amendments:

The Administrator is authorized, in cooperation with the Department of State and the affected states, to negotiate with representatives of Mexico to authorize a program to monitor and improve air quality in regions along the border between the United States and Mexico.⁶⁶

As part of the Clean Air Act, funds were allocated to monitor emissions along the border to determine whether the region is in compliance with U.S. National Ambient Air Quality Standards (NAAQS). NAAQS classify air emissions that may endanger the public health and welfare.⁶⁷ To date, the EPA has identified ozone, oxides of nitrogen, carbon monoxide, sulfur dioxide, particulate matter less than ten microns in diameter, and lead as criteria pollutants.⁶⁸

The Act also authorizes the administrator to negotiate with Mexican officials to develop joint remediation measures to reduce the level of airborne pollutants. "Any such remediation program shall also identify those control measures, implementation of which in Mexico would be expedited by the use of material and financial assistance of the United States."⁶⁹ In sum, Congress has provided, subject to appropriations, a statutory framework for funding personnel and equipment for purposes of monitoring and remediation projects in Mexico.⁷⁰

Section 815 does not contain a specific enforcement mechanism. However, other provisions of the Clean Air Act permit any person to commence a civil action:

(1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the Eleventh Amendment to the Constitution) who is alleged to be in violation of (A) an emission standard or limitation under this chapter or (B) an order issued by the Administrator or a state with respect to such a standard or limitation,

65. See Clean Air Act Amendments of 1990, Pub. L. No. 101-549, § 815, 104 Stat. 2694-95 (1990).

66. *Id.*

67. 42 U.S.C. 7408(a) (1988).

68. See Nat'l Primary & Secondary Ambient Air Quality Standards, 40 C.F.R. §§ 50.1-50.12.

69. Pub. L. No. 101-549, § 815(b)(2), 104 Stat. 2694 (1990).

70. *Id.* at § 815(d), 104 Stat. 2694 (1990).

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator,⁷¹

While subsection (1) does not appear applicable to § 815 in that § 815 merely requires the EPA to begin monitoring at the border to improve air quality, subsection (2) would allow environmentalists to sue the EPA if the Administration fails to proceed in a timely fashion.

4. Common Law

A recent Texas Supreme Court decision may provide tort relief to Mexican workers exposed to toxic chemicals. In *Dow Chemical Company and Shell Oil Company v. Domingo Castro Alfaro*,⁷² the Texas Supreme Court allowed foreign nationals to sue Dow and Shell in Texas for toxic exposures occurring in Costa Rica. Provisions in the Texas Civil Practice and Remedies Code allow a foreign citizen to bring an action for damages for the death or personal injury of a citizen of a foreign country, "although the wrongful act, neglect, or default causing the death or injury takes place in a foreign state or country. . . ."⁷³ *Dow Chemical* arose in the context of a motion to dismiss and focused primarily on the Texas legislature's abolishment of the doctrine of forum non conveniens. The Court did not indicate whether Costa Rican or U.S. law would apply when the merits of the case are reached, although some of the dicta indicate a strong preference for U.S. law.

Dow Chemical provides an in-depth analysis of several jurisdictional doctrines and, although its discussion is somewhat unique to the Texas legislative process, the decision raises policy considerations which lie at the heart of opening U.S. courts to Mexican citizens.⁷⁴

71. 42 U.S.C. § 7604(a) (1988).

72. 786 S.W.2d 674 (1990), *cert. denied*, 112 L. Ed.2d 663 (1991).

73. Tex. Civ. Prac. & Rem. Code § 71.031 (Vernon 1986). The statute restricts the right of a foreign citizen to sue only if:

(1) a law of the foreign state or country or of this state gives a right to maintain an action for damages for the death or injury; (2) the action is begun in this state within the time provided by the laws of this state for beginning the action; and (3) in the case of a citizen of a foreign country, the country has equal treaty rights with the United States on behalf of its citizens. . . . *Id.*

At the time of press the Texas legislature, in response to *Dow Chemical*, was considering an amendment to § 71.031 that would permit a court to decline jurisdiction in whole or in part under the doctrine of forum non conveniens if the state forum is inconvenient or inappropriate (SB 790).

74. In virtually all U.S. states, the doctrine of forum non conveniens is recognized by statute or in the common law. Exceptions are Montana, Idaho, Georgia, West Virginia, Connecticut, Alaska, Virginia, Rhode Island and South Dakota. Given their proximity to Mexico, Texas and California are the states in which a personal injury plaintiff is most like to file suit.

In his concurring opinion, Justice Doggett discussed in detail various factors which justified jurisdiction over the corporate defendants, including: (1) Shell Oil was a multinational corporation with its headquarters in Texas and Dow Chemical Company had offices in Fremont, Texas; (2) the majority of documents and witnesses were located in Texas; (3) plaintiffs' exposure occurred while working for an American company on American-owned land in the course of spraying food products slated to be exported for American tables; and (4) the chemical allegedly rendering the workers sterile was researched, formulated, tested, manufactured, labeled and shipped by an American company. According to Justice Doggett:

Both as a matter of law and of public policy, the doctrine of forum non conveniens is without justification. The proffered foundations for it are "considerations of fundamental fairness and sensible and effective judicial administration." . . . In fact, the doctrine is favored by multinational defendants because a forum non conveniens dismissal is often outcome-determinative, effectively defeating the claim and denying the plaintiff recovery. The contorted result of the doctrine of forum non conveniens is to force foreign plaintiffs "to convince the court that it is more convenient to sue in the United States, while the American defendant argues that . . . [the foreign court] is the more convenient forum." . . . A forum non conveniens dismissal is often, in reality, a complete victory for the defendant.⁷⁵

Acknowledging that the *Dow Chemical* decision "extends to the citizens of every nation," one of the dissenting Justices observed that "[n]o state has ever given aliens such unlimited admission to its courts."⁷⁶ Apart from questioning the majority's analysis, another dissenting opinion raised such practical concerns such as overcrowded courts, the absence of a state interest in protecting foreign citizens, and the potential impact of "extending our laws beyond the shores of the United States"⁷⁷

Prediction as to whether *Dow Chemical* will have the far-ranging implications feared by the dissent is premature; the United States Supreme Court has denied certiorari only recently.⁷⁸

IV. AN ENVIRONMENT FOR CHANGE: EVALUATING SOLUTIONS TO ACCOMMODATE BALANCED GROWTH AT THE BORDER

The border areas discussed above have seen the advent of considerable environmental problems. Solving those problems requires resources and a coordinated effort between government, industry

75. *Dow Chemical Co. v. Alfaro*, 786 S.W.2d 674, 682-83 (1990).

76. *Id.* at 702-3 (Hecht, J., dissenting).

77. *Id.* at 701 (Cook, J. dissenting).

78. *Cert. denied*, 112 L. Ed. 663 (1991).

and environmentalists in both countries. The FTA could provide the vehicle for developing and implementing such long-term solutions. At a minimum, FTA debate has heightened awareness of border issues and has promoted a candid evaluation of existing programs.

After Presidents Salinas and Bush announced their intent to begin FTA negotiations in June 1991, environmentalists initiated a campaign to include environmental considerations on the FTA agenda.⁷⁹ Environmental organizations are concerned that provisions of the FTA will take precedence over current laws in both countries but will not adequately address environmental problems. The environmentalists further argue that the FTA should not be adopted before the environmental consequences have been thoroughly assessed. Finally, they assert that neither the negotiations leading to enactment of the FTA nor the development of implementing regulations include sufficient democratic safeguards to ensure input from the public.

Whether the FTA ultimately will include environmental provisions remains to be seen. Several prominent Congressional leaders, however, have stated that the FTA's passage is contingent upon the Administration addressing environmental concerns. In a letter to President Bush, Senator Bentsen and Congressman Rostenkowski conveyed Congress' concerns about the FTA including "the disparity between the two countries in the adequacy and enforcement of environmental standards, health and safety standards and worker rights."⁸⁰ President Bush was requested to submit an action plan to Congress by May 7, 1991 which was to reflect the President's "thoughts on how the Administration intends to address these and other relevant issues."⁸¹

79. According to information from the Border Ecology Project and Arizona Toxics, another border area environmental group, an FTA and negotiations leading to it must include: (1) principles, goals definitions and conditions to be agreed upon and be applicable whenever an action will impact the environment; (2) environmental protection standards; and (3) an implementation program including procedural, institutional, legal and financial mechanisms. BEP and Arizona Toxics believe that each of these areas is equally important. See BORDER ECOLOGY PROJECT, STRUCTURING ENVIRONMENTAL PROTECTION INTO A U.S.-MEXICO FREE TRADE AGREEMENT (Mar. 27, 1991) (on file at author's office).

80. See letter from Lloyd Bentsen, Chairman, Committee on Finance, United States Senate, and Dan Rostenkowski, Chairman, Committee on Ways and Means, U.S. House of Representatives, to The President of the United States (Mar. 7, 1991).

81. *Id.* President Bush responded to this request with an eighty-page letter to lawmakers discussing a variety of FTA concerns including environmental issues. The President promised to give environmentalists a voice in trade policy by appointing their representatives to a number of advisory committees. The President also pointed to ongoing programs in which the Mexican and U.S. governments are attempting to tackle such problems as pollution along the border. Both Mr. Bentsen and Mr. Rostenkowski expressed approval of the President's letter. L.A. Times, May 2, 1991, at A1, col. 6.

This section reviews concerns which lend substance to the phrase "these and other relevant [border environmental] issues." These considerations fall into two main types: those arising in the context of the United States-Mexico FTA and those which have been raised independent of the negotiations.

A. Environmental Considerations in the Context of the U.S.-
Mexico Free Trade Agreement

Within the context of the FTA, three major considerations arise. Environmentalists are concerned with the FTA fast track process itself. Further, the environmentalists claim that, prior to implementation, an EIS is not only appropriate but required. Finally, they are apprehensive that, once approved by Congress, the FTA will undermine existing environmental regulations.⁸²

1. The FTA's Implementation Procedures: Can
Environmentalists Influence the Outcome?

President Bush's authority to enter into negotiations with Mexico is established by The Omnibus Trade and Competitiveness Act of 1988. The Act allows the President to enter into bilateral trade agreements with foreign governments for the purpose of eliminating or reducing the United States' duties or eliminating or reducing non-tariff barriers to trade.⁸³

Section 1103 of the Act sets forth the *general* procedures whereby an agreement becomes United States law:

- (a) the President notifies the House and Senate of his intention to enter into the agreement at least 90 days before it happens and publishes notice of his intent in the Federal Register;
- (b) after entering into the agreement, the President submits the agreement, a draft of an implementing bill and other supporting statements to the House and Senate; and
- (c) the implementing bill is enacted into law.⁸⁴

Section 1103 of the Act allows these negotiations to proceed on a so-called fast track.⁸⁵ The fast track procedure is automatically applicable to implementing bills for trade agreements entered into before June 1, 1991. Fast track treatment would be extended to implementing bills for all trade agreements entered into after May

82. Article II, § 2 of the Constitution authorizes the President, with the advice and consent of two thirds of the Senators present, to negotiate treaties. Treaties enjoy Art. VI supremacy over contrary state law. *United States v. Pink*, 315 U.S. 203 (1942). If acts of Congress conflict with treaty provisions, the later in time will be given effect domestically. *Whitney v. Robertson*, 124 U.S. 190 (1888).

83. Omnibus Trade & Competitiveness Act of 1988 [1988 Trade Act], 19 U.S.C.A. § 2902(c) (West Supp. 1991). The President's negotiating authority under the Act expires on June 1, 1993. *Id.*

84. *Id.* at § 2903(a)(1).

85. *Id.* at § 2903(b).

31, 1991 and before June 1, 1993 if and only if: (a) the President requested the extension by March 1, 1991; and (b) neither House of Congress adopted an "extension disapproval" resolution before June 1, 1991. President Bush requested fast track procedures for the proposed U.S.-Mexico FTA⁸⁶ and Congress subsequently approved, though after some debate.

Environmentalists are wary of the fast track procedure⁸⁷ because it compels Congress to approve the FTA, once it has been negotiated, in its entirety without amendment.⁸⁸ Fast track procedures do not interfere with public participation, however, since other federal statutory provisions provide for avenues through which the public may present its views on impending trade agreements.⁸⁹ For example, § 1111(a) of the 1988 Trade Act states that the U.S. International Trade Commission (ITC), in preparing advisory reports to the President, shall hold public hearings on tariff or non-tariff matters.⁹⁰ On October 18, 1989, the House Committee on Ways and Means requested that the ITC conduct a two-part study to provide (1) a comprehensive review of Mexico's recent trade and investment reforms, and (2) a summary of experts' views on prospects for future United States-Mexican trade relations.⁹¹ The report outlined several comments by government officials and environmentalists concerned with increased industrialization.⁹²

Section 1631 of the Act more generally provides for information and advice from the public. Subsection (a)(1) requires that "to the maximum extent feasible" the President shall seek information on "matters arising in connection with the development, implementation and administration of the trade policy of the United States" from "representative elements of the private sector and the non-federal governmental sector."⁹³ Section 1631 provides that public

86. See PRESS RELEASE, *supra* note 3.

87. Fast Track procedures are set forth at 19 U.S.C.A. § 2191 (West 1980 & Supp. 1991).

88. 19 U.S.C.A. § 2191(d) (1980).

89. 19 U.S.C.A. at §§ 2151-2155 (Hearings and Advice Concerning Negotiations) (West Supp. 1991) sets forth procedures by which the public may provide input into FTA negotiations.

90. 19 U.S.C.A. §§ 2151(c), (e) and 2153 (West Supp. 1991).

91. See INT'L TRADE COMM'N, REVIEW OF TRADE AND INVESTMENT LIBERALIZATION MEASURES BY MEXICO AND PROSPECTS FOR FUTURE U.S.-MEXICAN RELATIONS (Pub. No. 2275) (1990) [hereinafter TRADE & INVESTMENT].

92. According to the ITC report, "Several U.S. Government officials and environmental protection advocates [have] stated that while there have been recent improvements in the environment, significant problems remain, including air pollution from Juarez, Mexico spilling over to El Paso, Texas, and water pollution caused by untreated sewage from Mexico in many locations along the border." See TRADE & INVESTMENT, *supra* note 91, at 1-11.

93. 1988 Trade Act, 19 U.S.C.A. § 2155(a) (West Supp. 1991). Consultation between the President and "representative elements" can include the specific objectives of the negotiations or (of more help to environmentalists) "important developments in

participation is to be accomplished through a network of committees including:

- (1) *an Advisory Committee for Trade Policy and Negotiations* (not more than 45 members who are "broadly representative of the key sectors and groups of the economy, particularly with respect to those sectors and groups which are affected by trade," appointed by the President for two-year terms);
- (2) *individual general policy advisory committees* (for industry, labor, agriculture, service, investment, defense, and other interests, appointed by the United States Trade Representative in consultation with the Secretary of the appropriate executive department); and
- (3) *sectoral or functional advisory committees* (representative of all industry, labor, agricultural, or service interests . . . in the sector or functional areas concerned, appointed by the United States Trade Representative and appropriate cabinet Secretary).⁹⁴

The opportunity for interested persons to appear at committee hearings is guaranteed by the Federal Advisory Committee Act. Section 10(a) of this Act provides that each advisory committee meeting shall be open to the public, that timely notice of each meeting is to be published in the Federal Register and elsewhere, and that interested persons shall be permitted to attend and appear before or file statements with the Committee.⁹⁵

Finally, § 1631 of the 1988 Trade Act provides that "the President shall provide adequate, timely and continuing opportunity for the submission on an informal basis . . . by private organizations or groups . . . of statistics, data and other trade information, as well as policy recommendations . . ." ⁹⁶ According to Victoria Clark, Assistant U.S. Trade Representative for Public Affairs and the Private Sector, Office of the Trade Representative, substantial dialogue takes place between the Administration, Congressional representatives, and the advisory committees discussed above. Throughout March, 1991, for example, Carla Hills and William Reilly had extensive discussions with such leading environmental groups as the World Wildlife Fund, Natural Resources Defense Fund, and the

other areas of trade for which there must be developed a proper policy response." *Id.* at (2)(D).

94. *Id.* at §§ 2155(b) and (c). These committees meet at the conclusion of the trade agreement negotiations to provide reports to the President, Congress and the Trade Representative. If the trade agreement has been entered into pursuant to 19 U.S.C. § 2902, reports must be presented to the President no later than the date on which the President notifies Congress under § 2903(a)(1)(A) of his intention to enter into that agreement. The current advisory committees have no environmental group representation. Interview with Mr. Chip Ruh, Assistant U.S. Trade Representative (Mar. 28, 1991).

95. Federal Advisory Committee Act, 5 U.S.C. app. §§ 1-15 (1988).

96. 1988 Trade Act § 1631, 19 U.S.C.A. § 2155(j) (West Supp. 1991).

Audubon Society.⁹⁷

2. Passage of the FTA: Is an Environmental Impact Statement Required?

Several environmental groups have submitted statements to Congress arguing that the United States Trade Representative must prepare an EIS under the National Environmental Policy Act of 1969 (NEPA).⁹⁸ NEPA requires that the initiation of all major federal actions significantly affecting the quality of the human environment be preceded by the preparation of an EIS. NEPA requires that all agencies of the federal government shall:

include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between the local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.⁹⁹

NEPA was enacted "to ensure that decisions about federal actions would be made only after responsible decision makers had fully adverted to the environmental consequences of the actions, and had decided that the public benefits flowing from th[ose] actions outweighed their environmental costs."¹⁰⁰ NEPA itself requires that agencies "recognize the worldwide and long-range character of environmental problems and, where consistent with . . . foreign policy . . . lend appropriate support to . . . programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment."¹⁰¹

Several courts have held that NEPA applies to federal activities in foreign countries. In *Nat'l Organization for Reform of Marijuana Laws (NORML) v. United States Dep't of State*,¹⁰² the plaintiffs challenged State Department funding of Mexico's spray-

97. Interview with Victoria Clark, Assistant U.S. Trade Representative for Public Affairs and the Private Sector (Mar. 26, 1991).

98. NEPA, 42 U.S.C. section 4321-4370a (1988).

99. NEPA, 42 U.S.C. § 4332(2)(C) (1988).

100. *Jones v. District of Columbia Redevelopment Land Agency*, 499 F.2d 502, 512 (D.C. Cir. 1974).

101. NEPA, 42 U.S.C. § 4332(2)(F) (1988).

102. 452 F. Supp 1226 (D.D.C. 1978).

ing of marijuana with the herbicide paraquat absent compliance with NEPA. Based in part upon the State Department's voluntary willingness to comply with NEPA after being sued, the Court held, without analysis, that "NEPA is fully applicable to the Mexican herbicide spraying program."¹⁰³

Further, former President Carter issued an Executive Order mandating that an EIS be conducted on all major federal actions outside the United States "which significantly affect natural or ecological resources of global importance."¹⁰⁴

According to Dinah Bear, General Counsel for the White House Council on Environmental Quality, however, no EIS has been conducted in connection with trade negotiations, and no decision has been made to perform one in connection with the Mexico-United States FTA. Informal "embryonic" discussions have occurred, though, between the U.S. Trade Representative, the EPA, the Council on Environmental Quality, the State Department and the Congressional Staff on the need for an EIS.¹⁰⁵

One practical difficulty in conducting an EIS prior to passage of the FTA is the predictable delay it will cause. Despite this very real consideration, courts traditionally reject arguments that project delay resulting from compliance with NEPA's procedural requirements excuses such compliance.¹⁰⁶ Another objection to extending the EIS requirement to foreign projects is the potential perception that U.S. governmental activity impinges upon the sovereignty of the other nation involved. One response is that since an EIS pro-

103. *Id.* at 1233, citing *Sierra Club v. Adams*, 578 F.2d 389, 392 (D.C. Cir. 1978) (NEPA applicable to U.S. construction of road in Panama). See also Robinson, *Extra-territorial Environmental Protection Obligations of Foreign Affairs Agencies: The Unfulfilled Mandate of NEPA*, INT'L L. & POL. 257, 262-63 (1974); Comment, *NEPA's Overseas Myopia: Real or Imagined?*, 71 GEO. L.J. 1201 1208 (1983); Comment, *NEPA's Role in Protecting the World Environment*, 131 U. PA. L. REV. 353, 354 (1982). See also, *Enetawak v. Laird*, 353 F. Supp. 811 (D. Haw. 1973). In holding that NEPA applies to U.S. territorial lands, the court in *Enetawak* stated: "the sweep of NEPA is extraordinarily broad, compelling consideration of any and all types of environmental impact of federal action." *Id.* at 817. *But cf.* *Wilderness Soc'y v. Morton*, 463 F.2d 1261 (D.C. Cir. 1972) (*per curiam*) (Canadian resident has standing to intervene in NEPA action challenging trans-Alaska pipeline); *Natural Resources Def. Council, Inc. v. Nuclear Regulatory Comm'n*, 647 F.2d 1345 (D.C. Cir. 1981) (defendant was not required to perform EIS in permitting export of nuclear reactor to the Philippines). For a critical evaluation of the NRDC case, see Comment *NEPA's Overseas Myopia: Real or Imagined?*, 71 GEO. L.J. 1201 (1983).

104. Exec. Order No. 12,114 (Environmental Effects Abroad of Major Federal Actions) § 2-3(d)(ii) (BNA) (1979).

105. Interview with Dinah Bear, General Counsel, White House Council on Env't Quality (Mar. 19, 1991).

106. See, e.g., *Natural Resources Def. Council, Inc. v. Nuclear Regulatory Comm'n*, 539 F.2d 824, 843 (2d Cir. 1976) (delay not justification for noncompliance with mandate of NEPA); *Calvert Cliffs' Coordinating Comm., Inc. v. Atomic Energy Comm'n*, 449 F.2d 1109, 1127-28 (D.C. Cir. 1971) (consideration of delay by approving agency inappropriate in context of compliance with NEPA).

vides decision makers in the U.S. and Mexico with information that can be rejected, sovereign nations are not bound by the recommendations.

3. The Agreement's Effect: Will the FTA Undermine Existing Environmental Regulations?

On January 1, 1989, Canada and the United States implemented an FTA which did not include a specific environmental component. According to the Canadian Environmental Law Association, the omission carries serious consequences: "By limiting the right of governments to regulate the development of natural resources, or to control that development to accomplish environmental objectives, the trade deal has undermined critical opportunities to accomplish goals that are necessary to confront ecological crises so severe as to put at risk the very prospects of human society."¹⁰⁷

The first trade dispute to be adjudicated under the Canadian FTA involved a United States challenge to regulations in Canada's Fisheries Act that required landing of fish in Canada for biological sampling prior to export.¹⁰⁸ The Canadian regulations were found to be "incompatible with the requirements of Article 407 of the FTA," since the primary goal of the regulations was not aimed strictly at conservation but rather to avoid false reporting. In dicta, however, the trade panel stated that any regulation restricting free trade would be upheld only if its *sole* purpose was conservation and no lesser restrictive alternative was available.

The Canadian government has challenged new asbestos regulations promulgated by the EPA, claiming that the regulations are unfair business practices under the FTA.¹⁰⁹ As a matter of administrative practice, reliance on international treaties to defeat the regulations of a particular country is not uncommon. Canada and the European Community (EC) successfully relied on the General Agreement on Tariffs and Trade (GATT) to challenge United States Superfund Taxes on petroleum.¹¹⁰ The EC has invalidated a Danish regulation requiring that beer and soft drink containers be recyclable.¹¹¹

107. CANADIAN ENV'T'L L. ASSOC., *SELLING THE ENVIRONMENT SHORT: AN ENV'T'L ASSESSMENT OF THE FIRST TWO YEARS OF TRADE BETWEEN CANADA AND THE UNITED STATES* 6 (1990) (on file at author's office).

108. In the Matter of Canada's Landing Requirement for Pacific Coast Salmon and Herring, Canada-U.S. Trade Comm'n Panel (Oct. 16, 1989) (on file at author's office).

109. See *Corrosion Proof Fittings v. Env't'l Protection Agency*, Case No. 89-4596 (5th Cir. 1990) (LEXIS, genfed library, omni file).

110. ORGANIZATION FOR ECON. COOPERATION & DEV., *TRADE & THE ENVIRONMENT: ISSUES ARISING WITH RESPECT TO THE INT'L TRADING SYSTEM* [Note by the Secretariat] (June 29, 1990) (on file at author's office).

111. In *Re Disposable Beer Cans* (EC Comm'n v. Denmark), reported in 1 Comm. Mkt. L.R. 619 (1989).

B. Environmental Considerations Outside of the Context of the U.S.-Mexico FTA: The 'Parallel Track' and Other Options

In 1990, two proposals regarding the relationship of the United States to foreign environmental practices emerged, neither of which is directly connected to the U.S.-Mexico FTA.

1. The EPA-SEDUE Proposal for a Comprehensive Border Environmental Program

On November 27, 1990, Presidents Bush and Salinas de Gortari met in Monterrey, Mexico. Following discussions, the two leaders directed the environmental agencies in both countries to develop an integrated, comprehensive plan to deal with continuing border environmental problems through the existing 1983 Binational Cooperation Agreement.

After several meetings, the EPA and SEDUE have tentatively acknowledged that an integrated plan will:

- (a) examine the history of the United States-Mexico environmental cooperation along the 2,000-mile border;
- (b) evaluate the history of the 1983 Binational Agreement and the Work Groups and annexes thereunder;
- (c) examine the case, location, type and severity of environmental problems at the border;
- (d) develop new commitments by both Mexico and the United States adequate to enforce, administer, mobilize and monitor environmental laws and issues; and
- (e) institute an integrated, comprehensive, continuing border area environmental planning process.

Drafts of the integrated plan were to be distributed to government agencies, industry and non-government organizations for comment in June, 1991.¹¹² According to Mr. Manzanilla of the EPA, the same government officials involved with the Binational Agreement Work Groups by and large comprise the binational group developing the Comprehensive Border Plan.¹¹³

The EPA officially supports resolving environmental issues outside of FTA discussions. According to the EPA, "U.S. and Mexican governments, working through EPA and SEDUE, have been greatly strengthening the joint programs addressed to border environmental problems."¹¹⁴ Examples of successful joint projects

112. See EPA OFFICE OF INT'L AFF., FACT SHEET, INTEGRATED PLAN ON BORDER ENV'TL COOPERATION (Mar. 1991) (on file at author's office).

113. According to Mr. Manzanilla, the binational group is building upon work already accomplished while attempting to integrate new ideas. For example, the group is seeking to integrate the traditional U.S. approach of separate and distinct medium categories (air, water, hazardous waste) with Mexico's less discreet "multi media" approach toward regulation. See Manzanilla Interview, *supra* note 48.

114. *Hearings on the U.S.-Mexico FTA Before the Subcommittee on the Western*

include: construction of a joint sewage treatment plant in Nuevo Laredo, Texas; major expansion of a wastewater treatment plant at Nogales, Arizona; a new agreement to build a joint United States-Mexico sewage treatment plant at the California border; planning a long-term project to clean up the New River; beginning a series of cooperative air quality studies, the first focusing on the El Paso-Juarez border area; helping the 14 pairs of cities along the border to plan for emergency situations; and sharing inspection techniques in training sessions.¹¹⁵ Additionally, SEDUE has stated that it has increased the number of inspectors at the border by 50 and that it has petitioned the World Bank for \$80 million to strengthen SEDUE itself.¹¹⁶

On the issue of enforcement, Mr. Sergio Reyes-Lujan, Mexico's Undersecretary for Ecology, recently testified before Congress that:

Mexico is committed to enforcing the laws and regulations we have established. Each ministry in the federal government has a line item in its 1991 budget for environmental protection programs, with a total government-wide budget of \$500 million. This amount does not include the money that will be invested for environmental protection just in Mexico City. From 1989 to 1991, the budget for the Deputy Ministry of Ecology of the Secretariat of Urban Development and Ecology [SEDUE] increased 613%. This significant increase will permit SEDUE to monitor industry and environmental quality, establish additional standards, increase the number of technical personnel and to more vigorously enforce our laws and regulations.¹¹⁷

Mr. Reyes-Lujan further testified that, in the last two years, SEDUE has made 5,405 nationwide inspection visits, resulting in 980 temporary shutdowns.¹¹⁸ Mr. Reyes-Lujan did not indicate how much of Mexico's current environmental protection budget is allocated specifically to border areas.

2. Adoption of a Foreign Environmental Practices Act

Quite apart from the FTA or an integrated border environmental plan, the enactment of a Foreign Environmental Practices Act (FEPA) applicable to U.S. multinational corporations in Mexico

Hemisphere of the Senate Committee on Foreign Relations, 102d Cong., 1st Sess. 3 (Mar. 14, 1991) (statement of Timothy Atkeson, EPA Ass't Administrator for Int'l Activities).

115. *U.S. Official Defends Joint Efforts with Mexico in Addressing Border Pollution*, INT'L ENV'TL REP., Mar. 13, 1991, at 143.

116. Atkeson Statement, *supra* note 114, at 2.

117. *Congressional Briefing on the North America Free Trade Agreement*, 102d Cong., 1st Sess. 4 (Mar. 21, 1991) (testimony of Sergio Reyes-Lujan, Undersecretary for Ecology, Secretariat of Urban Development and Ecology (SEDUE), Mexico).

118. *Id.*

and other countries has been proposed.¹¹⁹ Such legislation would hold U.S. multinationals responsible under U.S. laws and in U.S. courts for environmental violations occurring abroad. Support for a FEPA stems from the recognition that binational treaties are difficult to negotiate and frequently unenforceable.¹²⁰ Two examples are the Montreal Protocol, which limits use of chlorofluorocarbon production and use,¹²¹ and the Basel Convention, which regulates international trade of hazardous wastes, both of which took years to draft and mandate largely self-policing compliance.¹²²

Patterned on the Foreign Corrupt Practices Act, the FEPA would deter environmentally unsound activities and potentially bolster the public image of U.S. companies. The FEPA's stated purpose is to (1) protect the environment of other nations; (2) promote conservation and improved resource management in other nations; (3) promote compliance with international environmental law by U.S. firms and citizens; and (4) facilitate environmentally sound U.S. business investments in foreign countries.¹²³

Under the proposed statute, U.S. companies would be prohibited from designing, constructing, operating, maintaining or abandoning a facility in violation of applicable U.S. environmental protection and resource conservation statutes, rules and orders. Further, § 5 of the proposed legislation would make it a criminal offense to induce or coerce violations of the Act by promising or giving benefits or by threatening or using violence or economic reprisals. Criminal sanctions of up to \$1,000,000 per violation would be imposed for knowing and negligent conduct, *i.e.*, where the company should have known of the violation.¹²⁴ The statute also contemplates corresponding civil suits.¹²⁵

FEPA supporters propose that it include the right to citizen suits by U.S. and foreign nationals, and by non-government agencies.¹²⁶ Additionally, the administrator of the EPA would be required to promulgate regulations establishing how regulated entities must conform their foreign practices to the requirements of the Act,

119. See Neff, *Not in Their Backyards, Either: A Proposal for a Foreign Environmental Practices Act*, 17 *ECOLOGY L.Q.* 477 (1990) [hereinafter Neff].

120. On the difficulty of obtaining a consensus of U.N. member nations to take responsibility for environmental conduct, see generally Smith, *The United Nations and the Environment: Sometimes a Great Notion?*, 19 *TEX. INT'L L.J.* 335 (1984).

121. Montreal Protocol on Substances That Deplete the Ozone Layer, Sept. 16, 1987, 26 *I.L.M.* 1550 (1987).

122. Final Act of the Basel Convention on the Control of Transboundary Movement of Hazardous wastes and Their Disposal, *opened for signature* Mar.22, 1989, 28 *I.L.M.* 857 (1989).

123. See Neff, *supra* note 119, at 512.

124. *Id.* at 520.

125. *Id.* at 521-22.

126. *Id.* at 510-11.

what records foreign companies must retain, what notices must be submitted to the EPA Administrator, and what procedures the Administrator will follow to resolve choices of law.¹²⁷ Finally, the Administrator is subject to review under the Administrative Procedures Act, thereby ensuring substantive and procedural due process.¹²⁸

V. CONCLUSION

Environmental problems at the Mexico-U.S. border require serious consideration whether or not the Free Trade Agreement is enacted. Although implementation and enforcement under existing regulations has improved over the past three years, much progress is needed, particularly if the FTA is passed. Greater resources and a true commitment to coordinated efforts between the U.S. and Mexican governments is essential.

In the absence of such efforts, environmental quality will deteriorate and such deterioration will lead to adverse health effects for border residents and adverse publicity and litigation for industry. The current debate triggered by the FTA can facilitate the changes necessary to achieve balanced growth at the border either within the current regulatory scheme or as part of the FTA.

127. *Id.* at 522.

128. *See* Administrative Procedures Act, 5 U.S.C. §§ 551-559 (1988).