June 2012

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COMPENSATING PRIVATE PARTIES FOR TRANSNATIONAL POLLUTION INJURY

Pollution has been accepted as an unavoidable price of material advancement and an inevitable result of an expanding industrial base. Acceptable levels of pollution are determined by political processes that either expressly or implicitly balance social costs against economic benefits. Consequently, less developed nations are prepared to accept relatively high levels of pollution in return for economic growth, while more advanced nations can afford the luxury of emphasizing the "quality of life." Pollution, however, re-

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1 See J. Davies, The Politics of Pollution 22 (1970). The level of pollution in the United States has increased in direct proportion to the increase in industrial production that occurred during and after World War II. See id. at 21-22. Pollution levels also are affected by the higher standard of living associated with an affluent industrial society. See Air Conservation Commission of the American Association for the Advancement of Sciences, Pub. No. 80, Summary of the Facts (1965), reprinted in Pollution and Public Policy 126, 128 (1973); see also A. Knesse & C. Schultze, Pollution, Prices, and Public Policy 16 (1975) (motor vehicle emissions account for approximately one-half of the air pollution in the United States). Environmental deterioration, however, is not wholly attributable to industrialization. See Fischer, Acid Rain: Deploying Private Damage Actions Against Transboundary Polluters, Trial, Apr. 1983, at 56, 57. Large populations produce a concomitant growth in the size and number of urban communities. See J. Davies, supra, at 22. Urbanization, in turn, interacts synergistically with pollutants and weather conditions to increase ecological instability. Fischer, supra, at 57-58; see Note, Restoring the Water Quality of the Great Lakes: The Joint Commitment of Canada and the United States, 4 Can.-U.S.L.J. 208, 209 (1981).


3 See J. Davies, supra note 1, at 22; J. Davies & B. Davies, The Politics of Pollution 7-8 (1975). It has been noted that:

   If the United States were not an advanced industrial nation with a booming economy, it is doubtful that either the public or the government could be induced to pay much attention to pollution. Concern with pollution is a luxury in the sense that a nation . . . preoccupied with obtaining sufficient food, clothing, and shelter will not have the time or inclination to worry about [it]. . . . Important as the pollution problem may be, it is less important than the more obvious prerequisites for survival.
pects neither political nor natural boundaries. Indeed, international trade considerations and disparate environmental regulations are incentives to develop industries near a national border, thus increasing the likelihood of transnational environmental repercussions. Despite a heightened degree of public awareness and involvement in ecological rehabilitation, regulation of transnational pollution has been hampered by conflicting priorities and the lack of tangible incentives to mitigate injuries occurring in other nations. While some progress has been made through trea-

J. Davies & B. Davies, supra, at 7-8.


Transnational pollution may be defined as a substance that "originates in one nation, moves through a natural medium such as air or water, and imposes harmful effects in another nation." Comment, Liability for Transnational Pollution Arising from Offshore Oil Development: A Methodological Approach, 10 Ecology L.Q. 641, 641 (1983). One commentator asserts that pollution should be defined, not to denote any change in an environment, but to denote "a threshold level of damage or interference which is legally significant." Springer, Towards A Meaningful Concept of Pollution in International Law, 26 Int'l & Comp. L.Q. 531, 532 (1977). Therefore, any international definition of pollution must include criteria with which to identify polluting activities, their by-products, and unacceptable levels of environment alteration. Id. at 556.

5 See Tolivia, Problemas y Perspectivas de la Calidad del Aire en la Frontera, 22 Nat. Resources J. 1141, 1145 (1982) (trans.). In a competitive marketplace, industry tends to locate in "the most hospitable regulatory surroundings." Note, Economic Implications of European Transfrontier Pollution—National Prerogative and Attribution of Responsibility, 11 Ga. J. Int'l & Comp. L. 519, 525-26 (1981) [hereinafter cited as Economic Implications]. For example, in an effort to reduce high unemployment, the Mexican Government implemented a comprehensive development plan for maquiladoras, or border industries. See J. Herget & J. Camil, An Introduction to the Mexican Legal System 67 (1978). Mexico encourages foreign investment in maquiladoras by offering tax exemptions and long-term leases, on the condition that Mexican labor is employed and all products are exported. Id. at 67-88; see Note, International Legal Implications of Industrial Development Along the Mexican-U.S. Border, 12 Nat. Resources J. 567, 570-72 (1972) [hereinafter cited as Legal Implications].

ties and international conventions, environmental legislation, and the institution of civil and criminal proceedings against polluting entities, such solutions have not provided reasonable and practical

nations will concede that international environmental standards are essential to protect the global ecosystem, see Kindt, The Effect of Claims by Developing Countries on LOS International Marine Pollution Negotiations, 20 Va. J. Int'l L. 313, 326 (1980), they are threatened more by economic disaster than by environmental deterioration, see id. at 318. Because pollution abatement is not a primary goal of Third World nations, they are unlikely to accede to international environmental regulations that restrict their development. See id. at 318-19. Indeed, developing countries often maintain lenient pollution abatement requirements to encourage pollution intensive industries to locate in their countries. See Economic Implications, supra note 5, at 526. Even developed nations cannot afford the economic or political costs of abating pollution that impacts upon their neighbors. See R. Sansom, The New American Dream Machine 61-62 (1976). The economic and political power of large industries is substantial and often is used to circumscribe both the regulatory power of legislatures and the scope of environmental regulation. See, e.g., id. at 59-61 (regulatory potential of Federal Insecticide, Fungicide, and Rodenticide Act of 1947 never realized because administration was committed to the goals of large agribusinesses); see J. Davies & B. Davies, supra note 3, at 221.


See, e.g., Federal Water Pollution Control Act, 33 U.S.C. §§ 1251-1376 (1982); Clean Air Act Amendments of 1977, 42 U.S.C. §§ 7401-7642 (1982); Arctic Waters Pollution Prevention Act, June 26, 1970, 28th Parliament, 2d Sess., 18-19 Elizabeth II (Canada), reprinted in 3 International Protection of the Environment 988 (1975); Federal Law for the Prevention and Control of Contamination of the Environment, Mexican Anti-Contamination Law, D.O., Mar. 23, 1971 (Mexico). Section 7415 of the Clean Air Act Amendments of 1977 provide for abatement of transnational pollution if three conditions are present: (1) the pollution is reasonably anticipated to endanger interests in a foreign country, (2) the Secretary of State of the United States receives notification and a request for abatement from a foreign government agency, and (3) the victim nation affords the United States essentially the same rights. 42 U.S.C. § 7415 (1982). The Arctic Waters Pollution Prevention Act, which enabled Canada to exercise jurisdiction well into the Arctic Ocean, was opposed by the United States on the ground that the legislation was a unilateral act and, thus, insufficient to deal with an essentially international problem. See Neuman, Oil on Troubled Waters: The International Control of Marine Pollution, 2 J. Mar. L. & Com. 349, 355-56 (1971). Although the exercise of sovereignty over such a large portion of the ocean apparently was in violation of international law, public opinion in both countries seemed to favor the measure as a means of preserving the "fragile Arctic environment." Id.

means of compensating private parties injured by transnational pollution.

When transnational pollution injures a foreign nation, the sovereign may follow several diplomatic and international channels to obtain compensatory damages. Existing remedies for private plaintiffs injured by transnational pollution, however, are protracted and expensive endeavors that are ultimately dependent on sovereign cooperation. Often, the affirmative defense of sovereign immunity precludes the exercise of jurisdiction over non-resident polluters. Even when jurisdiction is acquired, neither domestic nor international forums possess sufficient mechanisms by which to enforce judicial and arbitral decisions extranationally, absent consonant rules of comity and good-faith cooperation between

Pollution Control Act provides for criminal penalties for certain polluting activities. 33 U.S.C. § 1319(c)(1) (1982). The penalties are relatively severe: for first offenders, a fine of not less than $2,500 per day of violation or more than $25,000 per day and/or imprisonment for not more than 1 year; for second offenders, a fine of not more than $50,000 per day of violation, and/or imprisonment for not more than 2 years. Id. The statute also provides for the issuance of an abatement order by the EPA Administrator. See United States v. Phelps Dodge Corp., 391 F. Supp. 1181, 1183 (D. Ariz. 1975). Despite its purpose as a deterrent, the penalty is a civil one and is collected through traditional civil procedures. See Ward v. Coleman, 423 F. Supp. 1352, 1356 (W.D. Okla. 1976).

10 See Teclaff, supra note 4, at 542. A claim is considered an international one if activity attributable to one sovereign causes cognizable damage to another. See Hoffman, supra note 6, at 516. The dispute may be resolved by either arbitration or negotiation, see Billingsley, supra note 4, at 347-49, or the injured sovereign may attempt to litigate the claim in the International Court of Justice (ICJ), see Note, Ixtoc I: International and Domestic Remedies for Transboundary Pollution Injury, 49 FORDHAM L. REV. 404, 413-19 (1980); infra notes 35-53 and accompanying text.

11 See Billingsley, supra note 4, at 345. Unfamiliarity with foreign law and legal practice increases the cost of foreign litigation. See id. In addition to the costs of discovery, service of process, transportation, and lodging, a plaintiff in an alien forum may be forced to hire foreign counsel, interpreters, and translators. See id. at 344-46. For a discussion of the problems involved in suing in a foreign jurisdiction, see F. Dawson & I. Head, INTERNATIONAL LAW, NATIONAL TRIBUNALS AND THE RIGHTS OF ALIENS 35-47 (1971).

12 See Boczek, International Protection of the Baltic Sea Environment Against Pollution: A Study in Marine Regionalism, 72 AM. J. INT'L L. 782, 810 (1978); Rosencrans, The International Law and Politics of Acid Rain, 10 DEN. J. INT'L L. & POL. 511, 517 (1981). Unless domestic law incorporates the substance of an international rule of law, there is no mechanism by which to enforce the international rule. Id.; see infra note 89 and accompanying text.

13 See The Antelope, 23 U.S. (10 Wheat.) 66, 122 (1825); Schooner Exchange v. M'Faddon, 11 U.S. (7 Cranch) 116, 147 (1812) (adopting doctrine of absolute sovereign immunity). Recently, a United States district court dismissed a suit for damages caused by transnational pollution brought by American citizens against a corporate agency of the Mexican Government on the ground that sovereign immunity was a complete defense. See In re Sedco, Inc., 543 F. Supp. 561, 566 (S.D. Tex. 1982); infra notes 82-83 and accompanying text.
Moreover, although mere pecuniary compensation is manifestly inadequate to redress every injury caused by polluters, the procedural complexities of international law virtually preclude an alien from obtaining enforceable injunctive relief from activity that takes place wholly within the jurisdiction of a foreign nation.

Since virtually all major transnational pollution disputes involving the United States also involve its two contiguous neighbors, Mexico and Canada, this Note will focus on the legal relationship of the United States with these two states.

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14 See, e.g., Brownlie, A Survey of International Customary Rules of Environmental Protection, 13 Nat. Resources J. 179, 188 (1973) (enforcement provision of international environmental convention has limited capacity to affect loss distribution and prevention policies); Rosencranz, supra note 12, at 512. Rosencranz asserts that "[n]ations control pollution only if and when it is in their . . . interest to do so, and not because of any obligation under international law to do so." Id. Another commentator states:

[even where relief is possible under the conflicts law of the forum in which the suit is brought, that may not be enough where attempted enforcement of a judgment by a court in the victim State 'could amount to an invasion of the sovereignty of a foreign State and which, in any case, a judge of a national supreme court or an international court would not be compelled to heed."

Hoffman, supra note 6, at 512-13 n.19 (quoting Rest, Transfrontier Environmental Damages: Judicial Competence and the Forum Delicti Commissi, 1 Env't Pol'y & L. 127, 127 (1975)).

In order to enforce a judgment rendered in a foreign court, there must be a basis for the judgment in the law of the enforcing state. Billingsley, supra note 4, at 344. A nation may be induced, however, to enforce foreign judgments because of self interest. See Comment, supra note 4, at 567 n.96. Indeed, a nation that refuses to enforce a duly rendered foreign judgment risks both similar treatment of its own judgments, and the imposition of economic or diplomatic sanctions. Id.

15 See, e.g., Trail Smelter Arbitration, 3 R. Int'l Arb. Awards 1905 (1938), reprinted in 35 Am. J. Int'l L. 684, 694 (1941) (air pollutants destroyed the quality of soil in agricultural area to such an extent that farming was no longer possible); see also Applegate, Transboundary Air Quality: Problems and Prospects from El Paso to Brownsville, 22 Nat. Resources J. 1133, 1135 (1982). The levels of lead in the blood of children who reside along the Mexico-United States border are unacceptable by federal standards, and safe drinking water is scarce as a result of pollution from border industries. Applegate, supra, at 1135. The situation in the Great Lakes is nearly as grim. See McCaffrey, Trans-Boundary Pollution Injuries: Jurisdictional Considerations in Private Litigation Between Canada and the United States, 3 Cal. W. Int'l L.J. 191, 197 (1973).

16 See Hoffman, supra note 6, at 512 n.19; McCaffrey, supra note 15, at 195. Relief for victims of transnational pollution is circumscribed by international respect for sovereign rights. McCaffrey, supra note 15, at 195. Even when there is proper jurisdiction to grant equitable relief, courts have declined to issue an injunction if the possibility of "discord and conflict" with another nation exists. See, e.g., Vanity Fair Mills, Inc. v. T. Eaton Co., 294 F.2d 633, 647 (2d Cir.), cert. denied, 352 U.S. 871 (1956).

17 Although the relationship between the United States and Canada traditionally has been cooperative and friendly, see Holsti & Levi, Bilateral Institutions and Transgovernmental Relations Between Canada and the United States, in Canada and the United
discussing the merits of existing remedies for transnational pollution injury, this Note will propose a solution that provides for increased availability of private redress irrespective of the nationality of the victim or the country from which the pollutants emanate. The Note will conclude that bilateral pollution treaties, with comprehensive provisions for the creation of private avenues of redress, are essential to the establishment of and implementation of private remedies for transnational pollution.

**EXISTING REMEDIES**

**Private Civil Claims**

Section 1350 of title 28 of the United States Code permits non-resident aliens to sue within the United States for extraneously effective torts committed within American boundaries. Foreign nationals injured by pollution also may bring an action based on state tort law in federal court pursuant to the court's diversity jurisdiction. The courts of Canada and Mexico, however, are not as accessible to United States nationals seeking compensation for the same type of injury.

**STATES: TRANSNATIONAL AND TRANSGOVERNMENTAL RELATIONS** 283, 306 (1976), relations recently have been strained by a growing sentiment in Canada that the United States refuses to accept its deserved responsibility for acid rain, see Comment, supra note 4, at 655-56. Presently, the United States is denying, or at least postponing, liability for acid rain damage to Canadian property and industries. See Otten, Can EPA Be Made Rational?, Wall St. J., Oct. 19, 1983, at 30, col. 4; see also Note, International-United States Air Pollution Control and the Acid Rain Phenomenon, 21 Nat. Resources J. 631, 631-32, 636 (1981) (discussion of international controversy caused by acid rain and its possible connection with sulfur emissions). On the southern border of the United States, different legal and social traditions, and scarce resources have resulted in a long history of ambivalent relations between the two adjacent sovereigns. See, e.g., 3 M. WHITEMAN, DIGEST OF INTERNATIONAL LAW 962-64 (1964); Brownell & Eaton, The Colorado River Salinity Problem with Mexico, 69 Am. J. Int'l L. 255, 256 (1975). Indeed, the Harmon Doctrine—a sovereign has an absolute right to take action within its borders—was first asserted in a controversy between the United States and Mexico. See McCaffrey, supra note 15, at 206.

18 28 U.S.C. § 1350 (1982). To be actionable under § 1350, tortious activity must violate either "the law of nations" or "a treaty of the United States." Id; see Abdul-Rahman Omar Adra v. Clift, 195 F. Supp. 857, 855 (D. Md. 1961). Section 1350, however, is narrowly construed and "rarely used." See ITT v. Vencap, Ltd., 519 F.2d 1001, 1015 (2d Cir. 1975) (only two cases have sustained jurisdiction under § 1350).

19 See Michie v. Great Lakes Steel Div. Nat'l Steel Corp., 495 F.2d 213, 215 (6th Cir. 1974), cert. denied, 419 U.S. 997 (1975). In Michie, Canadian domiciliaries sought compensatory and punitive damages for personal injuries and injuries to property caused by water pollution originating at the defendant's American factories. Id. at 215. The Sixth Circuit Court of Appeals affirmed the district court's holding that the defendants could be held jointly and severally liable in a transnational pollution suit. Id.
Canadian courts are bound by the “rule of local action,” which forces provincial courts to decline to exercise jurisdiction over controversies involving injury to real property outside the boundaries of a forum province. Therefore, an action initiated in Canada for damage to real property situated in the United States and caused by pollution generated within Canada is likely to be dismissed on the ground that such cases must be tried in a forum in which the land is located. An action filed in a United States district court by an American national against a Canadian polluter may be similarly handicapped, since a United States court cannot exercise jurisdiction over a defendant that does not have minimum contacts within the forum state. Even if a federal court decides to exercise long-arm jurisdiction over a foreign polluter, the enforceability of a

20 Albert v. Fraser Cos., [1937] 1 D.L.R. 39; Boslund v. Abbotsford Lumber Co., [1925] 1 D.L.R. 978. The court in Fraser derived the modern “local action rule” from the English common-law rule espoused in British South Africa Co. v. Compania de Mocambique, 1893 A.C. 602, reprinted in [1891-1894] All E.R. 640. In British South Africa, the court held that English courts may not exercise jurisdiction over a dispute concerning title to foreign real property or in an action alleging trespass on foreign land. British South Africa, 1893 A.C. at 609, reprinted in [1891-1894] All E.R. at 647-48. At the time British South Africa was decided, jurors were required to have personal knowledge of the facts. See RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 87 comment a (1971). Therefore, all cases had to be litigated in the forum in which the event in question took place. See id. Although jurors are forbidden to have personal knowledge of the facts, the rule is still applied to bar suits. See id.

Although no Canadian province is bound by the case law of another, see McWhinney, Legal Theory and Philosophy of Law in Canada, in CANADIAN JURISPRUDENCE: THE CIVIL LAW AND COMMON LAW IN CANADA 19 (E. McWhinney ed. 1958), the rule of local action is followed uniformly throughout Canada, see J. CASTEL, CANADIAN CONFLICT OF LAWS 345 (1975); McCaffrey, supra note 15, at 227.

21 See International Shoe Co. v. Washington, 326 U.S. 310, 316 (1945). The specific requirements that must be met before long-arm jurisdiction can be acquired over a foreign party in a diversity action are determined by the law of the state in which the action is instituted. Arrowsmith v. United Press Int'l, 320 F.2d 219, 229 (2d Cir. 1963); see Gray v. American Radiator & Standard Sanitary Corp., 22 Ill. 2d 432, 176 N.E.2d 761 (1961). The Gray court stated that the minimum contacts requirement of International Shoe may be satisfied by establishing the foreseeability of a given effect in the forum state. See 22 Ill. 2d at 437, 176 N.E.2d at 766; Fischer, supra note 1, at 59. One commentator has remarked: “The interstate polluter who places pollutants in the jetstream, so to speak, should be treated no different than the manufacturer who places a product in the stream of commerce.” Fischer, supra note 1, at 59. Since the effects of pollution are foreseeable, the Gray decision supports the exercise of jurisdiction over a foreign polluter engaging in activity that is reasonably likely to affect the victim state. See Arribhlit, The Plight of American Citizens Injured by Transboundary River Pollution, 8 ECOLOGY L.Q. 339, 346 (1979).

22 See Ohio v. Wyandotte Chems. Corp., 401 U.S. 493, 495 (1971). In Wyandotte, the State of Ohio sought to invoke the Supreme Court's original jurisdiction in an action for abatement of a nuisance against two Michigan corporations and a Canadian corporation doing business in Ontario. Id. at 494. Ohio alleged that the corporations contaminated Lake Erie by dumping mercury into tributaries of the lake. Id. Although the majority declined to
United States judgment against a Canadian domiciliary in a transnational pollution action is questionable. Under the Canadian principle of reciprocity, foreign judgments are enforced only if Canadian courts would have exercised jurisdiction over a foreign defendant in a parallel situation. In tort actions based on negligence, however, Canadian courts will exercise jurisdiction over non-resident defendants only if the tortious act took place within the court's jurisdiction. Thus, the "local action rule" and the principle of reciprocity present serious impediments to private redress for victims of transboundary pollution.

23 See Arbitblit, supra note 21, at 347; McCaffrey, supra note 15, at 252-57. Canadian provinces require that the validity of a foreign judgment be established by the standards of the enforcing court. See McCaffrey, supra note 15, at 257 n.342. Ontario, for example, refuses to enforce a foreign judgment issued by a court in a forum with which an Ontario resident has no commercial nexus. See McIntyre Porcupine Mines, Ltd. v. Hammond, 119 D.L.R.3d 139, 146-47 (1975). Two Canadian provinces do not acknowledge personal jurisdiction established by extraterritorial service of process, see McCaffrey, supra note 15, at 256, and others allow any foreign judgment to be reopened on the merits, see id.

24 See Arbitblit, supra note 21, at 345-46. The enforcing court evaluates the propriety of the original court's jurisdiction in terms of its own conflict of laws rules. J. Castel, Introduction to Conflict of Laws 80 (1978). Therefore, a foreign court's exercise of jurisdiction does not bind the enforcing court. See Frederick A. Jones, Inc. v. Toronto General Ins. Co., [1933] D.L.R. 660, 663-64; see J. Castel, supra, at 80. The Canadian court examines whether the foreign judgment was issued by a court exercising valid in personam international jurisdiction. The determination is based on the following factors:

(1) Where the defendant is a subject of the foreign country in which the judgment was obtained;
(2) Where the defendant at the time of the commencement of the proceedings was physically present in or a resident of or domiciled in, the foreign country in which the judgment was obtained;
(3) Where the litigant voluntarily had submitted himself to the jurisdiction of the court of the foreign country in which the judgment was obtained:
   (a) Where the defendant as a plaintiff or counterclaimant had selected the foreign court,
   (b) Where the defendant voluntarily had appeared,
   (c) Where the defendant had contracted to submit himself to the forum in which the judgment was obtained.

J. Castel, supra note 20, at 426.

Judgments of United States courts rendered against Canadian polluters who do not meet these criteria will not be enforced even though the exercise of jurisdiction was proper under the laws of the original court. See J. Castel, supra, at 80.

25 See Arbitblit, supra note 21, at 346. The phrase "tort committed within the jurisdiction" is construed narrowly by Canadian courts to exclude the place of the injury as a basis for jurisdiction if it differs from the place in which the tortious act was committed. See id.; J. Castel, supra note 20, at 253. One Canadian jurist, however, has expressed the view that a rule of foreseeable impact should govern in an action for tort damages. Moran v. Pyle Nat'l, Ltd., 43 D.L.R.3d 239, 290 (1974); see J. Castel, supra note 20, at 258-59.
American plaintiffs attempting to obtain redress in Mexican courts for injuries caused by transnational pollution originating in Mexico are likely to encounter similar obstacles. Under Mexican law, the only court that can exercise jurisdiction over claims involving real estate is a court sitting in the state in which the land is located. In addition, Mexico's relationship with the United States reflects a politically charged environment that could affect the course of transnational pollution litigation. If an action is brought by an American national in a United States court, it is questionable whether the resulting judgment will be enforceable in Mexico. Moreover, since many of Mexico's major industries are nationalized, the defense of sovereign immunity often will prove to be an absolute bar to suits against such industries.

In an attempt to facilitate private actions against certain foreign entities, Congress enacted the Foreign Sovereign Immunities Act (FSIA) in 1976. Pursuant to the FSIA, the federal district
courts are empowered to exercise personal jurisdiction over a foreign sovereign that has caused a direct injury in the United States as a result of commercial activity.\textsuperscript{32} Long-arm jurisdiction will attach only if the injury is proximately caused by an agency of a foreign government acting in a non-governmental capacity.\textsuperscript{33} The narrow interpretation that the FSIA has received, however, severely limits its utility in transnational pollution suits.\textsuperscript{34} Thus, jurisdictional hurdles, difficulties with extranational enforcement of judgments, and the problem of sovereign immunity make private actions in the domestic courts of the three countries too uncertain a means of compensation for victims of transnational pollution injury.

\textit{State-to-State Claims}

Any nation may bring suit in the International Court of Justice (ICJ) for injuries caused by pollution generated in a foreign nation;\textsuperscript{35} however, no claims have yet been initiated. Because rights

\textsuperscript{32} See 28 U.S.C. § 1605(a)(2) (1982). Section 1605 of the United States Code qualifies the doctrine of absolute sovereign immunity by allowing federal courts to exercise jurisdiction over claims against a sovereign involving a waiver of immunity, commercial activity carried on within the United States, or outside the United States if the activity causes a direct effect within the United States, expropriation, rights in gifts or bequests of immovable property, non-commercial torts, and specific maritime liens. \textit{Id.} § 1605. For an extensive discussion of the gradual circumscription of absolute sovereign immunity and its present application to transnational pollution disputes, see Note, supra note 10, at 419-30; Note, supra note 31, at 440-43.

\textsuperscript{33} See 28 U.S.C. § 1605(a)(2) (1982); see also H.R. REP. No. 1487, 94th Cong., 2d Sess., reprinted in 1976 U.S. CODE CONG. & AD. NEWS 6604, 6615. The legislative history of the FSIA indicates that "a commercial activity carried on in the United States by a foreign state would include not only a commercial transaction performed and executed in its entirety in the United States, but also a commercial transaction or act having a 'substantial contact' with the United States." \textit{Id.}

\textsuperscript{34} See \textit{In re} Sedco, Inc., 543 F. Supp. 561, 566 (S.D. Tex. 1982) (foreign oil drilling activities of government agency held protected by sovereign immunity).

\textsuperscript{35} See L.C.J. CHARTER art. 36; Note, supra note 10, at 413-15. The subject matter jurisdiction of the ICJ over pollution claims has never been tested, and there is some indication that it never will be. See Hoffman, supra note 6, at 531, 536. For example, when Mexico and the United States were unable to reach agreement on sovereign responsibility for high saline levels in the Colorado River, the nations refrained from submitting the dispute to the ICJ for fear of unpredictable results. See Note, \textit{The International Joint Commission (U.S.-Can.) and the International Boundary and Water Commission (U.S.-Mex.): Potential for Environmental Control Along the Boundaries}, 6 N.Y.U. J. INT’L L. & POL. 499, 516 (1973).
and duties arising under accepted principles of international law inure only to nations, suits in the ICJ must be commenced by a sovereign on behalf of itself or its nationals, and the activity of a tortfeasor must be imputable to the nation in which the tortfeasor is domiciled. Thus, for an international action to lie, any wrongful act that impacts extranationally on a non-resident alien must be elevated to the status of an international tort. A nation must consider other national interests such as the encouragement of industry and trade, the threat of reciprocal suits, and the maintenance of cordial diplomatic relations before appealing to the ICJ. Such considerations often outweigh the nation's interest in compensating its citizens.

One commentator, however, suggests that a transboundary pollution suit in the ICJ would fail for lack of substantial state interest in the claim. See Billingsley, supra note 4, at 346-47.


See I.C.J. Charter art. 34, para. 1; Note, supra note 10, at 414. It has been suggested that acceptance of “environmental protection as a human right compels acknowledgement of the individual as a procedural subject of international law.” Mingst, Evaluating Public and Private Approaches to International Solutions to Acid Rain Pollution, 22 Nat. Resources J. 5, 14 (1982).


See generally M. Whiteman, supra note 17, at 1216; see supra note 37.

See, e.g., Inman, A View of Mexican-U.S. Trade, 6 Int'l Trade L.J. 190, 192-94 (1981) (Mexico-United States interdependence on trade of oil and manufactured goods). Because the vast majority of maquiladoras are located on the United States border, see supra note 5, it is unlikely that Mexico would seek to litigate an injured national's transboundary pollution claim in an international forum against the United States. See Legal Implications, supra note 5, at 576.

The United States has been reluctant to accept financial responsibility for extranational effects of domestic pollution. See, e.g., Martin, Ottawa Scorns U.S. Policy on Acid Rain, N.Y. Times, Feb. 16, 1984, at A3, col. 3; Note, supra note 35, at 516 (refusal of United States to compensate Mexico for damages caused by saline water). Of course, a sovereign's recognition that the roles of tortfeasor and victim may be reversed could encourage it to press for a pattern of reciprocal remedies with its neighbors. See Comment, supra note 4, at 654-55.

See Mingst, supra note 37, at 20. Treating the causes of private injuries as international tortious acts may not be in the best interests of diplomacy and may even retard the progress of international environmental cooperation. See id.; McCaffrey, supra note 15, at 191. For example, Canadian-American relations traditionally have been friendly. See supra note 17. To submit a transnational pollution dispute to an unrepresentative international court or tribunal would be an unfriendly act and would make little sense in light of past diplomatic relations. See, e.g., Holsti & Levy, supra note 17, at 306; Comment, supra note 4, at 665; Comment, Pollution of the Great Lakes: A Joint Approach by Canada and the United States, 2 Cal. W. Int'l L.J. 109, 113 (1971).

See Koessler, supra note 38, at 192; cf. Chester, Remedies in Canadian Courts, 5 Can.-U.S.L.J. 85, 87 (1982) (private litigation advocated as means to avoid unenthusiastic
In order to initiate a transnational pollution action in the ICJ, a nation must prove that the local remedies of the offending nation have been exhausted by the aggrieved party or parties. If a foreign court declines jurisdiction over a suit filed by a non-resident alien, the claim must be pursued to that nation's highest court before the government of the victim may invoke the adjudicative powers of the ICJ. Appealing the dismissal of a claim from the trial court to the highest court of any nation requires a substantial expenditure of time and money, which may render pursuit of a claim impractical. The difficulty of litigating transnational pollution claims in the ICJ is compounded further by jurisdictional prerequisites which mandate that, absent a treaty provision, a defendant sovereign must consent to the exercise of personal jurisdiction by the court.

Although the United States, Canada, and Mexico have submitted jurisdictional declarations, each has included reservations that limit the actual exercise of jurisdiction. Each reservation is

government response to a potential claim); Mingst, supra note 37, at 16 (advantage of private litigation is absence of interjection of national interests that often prevents espousal of a claim).

44 See Bleicher, An Overview of International Regulation, 2 ECOLOGY L.Q. 1, 25 (1972); Mummery, The Content of the Duty to Exhaust Local Judicial Remedies, 58 AM. J. INT'L L. 389, 398 (1964); Note, supra note 10, at 414 n.55. The United Nations Charter has been construed to mandate that disputants pursue other methods of settlement, such as domestic administrative remedies, before filing suit in the International Court of Justice. See U.N. CHARTER art. 33, para. 1; Note, supra note 10, at 413, n.52.

45 See Note, supra note 10, at 414 & n.55.

46 The Impact of the Blowout of the Mexican Oil Well Ixtoc I and the Resultant Oil Pollution in Texas and the Gulf of Mexico: Hearings Before the House Comm. on Merchant Marine and Fisheries and the Subcomm. on Water Resources of the House Comm. on Public Works and Transportation, 96th Cong., 1st Sess. 263 (1979) (statement of Gunther Handl); see also Billingsley, supra note 4, at 347 (ICJ claims can take many years to litigate).

47 See LC.J. CHARTER art. 36; Owen, Compulsory Jurisdiction of the International Court of Justice: A Study of its Acceptance by Nations, 3 GA. L. REV. 704, 705 (1969); Note, supra note 10, at 416-17. Nations may consent to the jurisdiction of the ICJ by negotiating a treaty in which the parties agree to submit to the court any disputes arising under the terms of the treaty. See id.


49 See Basic Documents of International Relations 221 (F. Hartmann ed. 1951); Note, supra note 10, at 417-18. Contentious jurisdiction is the term used to denote the jurisdiction obtained by the ICJ when a plaintiff nation submits a claim under a jurisdictional declaration and a defendant nation consents to ICJ adjudication of the dispute. See Owen, supra note 47, at 709-10; Note, supra note 10, at 415 & n.56. Reservations are clauses inserted in jurisdictional declarations of submission under article 36, paragraph 2 of the ICJ Charter, that create exceptions to blanket jurisdictional acquiescence. See Owen, supra note 47, at 710; Note, supra note 10, at 418 & n.67. Reservations on file include, but are not
operative reciprocally and, therefore, can be used by a defendant
country exclusive of its own reservations as a complete defense to
alleged jurisdiction. Because the American reservation essentially
allows the United States to consent to jurisdiction on a case-by-
case basis, any nation it wishes to bring before the ICJ may do the
same. Even if the ICJ obtains jurisdiction over the parties and
renders a decision, no effective mechanism exists by which to en-
force the judgment. Thus, a successful suit in the ICJ may
amount to little more than a moral victory absent good-faith com-
pliance by the defendant.

International Agreements

International agreements, it is suggested, are the most effec-
tive and efficient means of regulating, the environment and re-
dressing environmental injury. Existing international agreements,
limited to: disputes for which the parties have provided other means of resolution, disputes
that arise after the declarations' expiration date (when an expiration date is included), and
disputes arising before the declaration becomes effective. Owen, supra note 47, at 710; Note, supra note 10, at 418 n.67.

See, e.g., Norwegian Loans, 1957 I.C.J. 6, 23; Note, supra note 10, at 418. Because
reservations are reciprocally effective, "the defendant nation need defend only to the extent
that its declaration overlaps or coincides with the plaintiff nation." Note, supra note 10, at
418 (footnote omitted).

See Note, supra note 10, at 418-19. The American reservation, known as the Connolly Amendment, provides that the consent to jurisdiction:
shall not apply to (a) disputes the solution of which the parties shall entrust to
other tribunals by virtue of agreements already in existence or which may be con-
cluded in the future; or (b) disputes with regard to matters which are essentially
within the domestic jurisdiction of the United States of America as determined
by the United States of America; or (c) disputes arising under a multilateral treaty,
unless (1) all parties to the treaty affected
by the decision are also parties to the
case before the Court, or (2) the United States of America specially agrees to
jurisdiction.


Only 60 cases have been decided by the ICJ since its inception in 1945. See Note, supra note 10, at 417 n.64; 1946-1947 I.C.J.Y.B. 15 (1947). Although 59 decisions did not involve any enforcement problems, see Note, supra note 10, at 416 & n.59, the court is powerless to implement its decisions forcibly, see, e.g., Corfu Channel Case (Gr. Brit. v. Alb.), 1949 I.C.J. 26; S. ROSENNE, THE WORLD COURT 40 (3d ed. 1973).

See Note, supra note 10, at 416 n.59.

There is little question that the degeneration of the environment poses problems
port]). However, while public awareness of the odious economic and social impact of envi-
however, impose broad and ill-defined duties on party nations, and do not contain adequate sanctions for their violation.\textsuperscript{55} Further, global conventions under the auspices of the United Nations fail to incorporate affirmative obligations to prevent pollution or to recompense those injured transnationally.\textsuperscript{56}


\textsuperscript{55} See Teclaff & Teclaff, \textit{Transboundary Ground Water Pollution: Survey and Trends in Treaty Law}, 19 Nat. Resources J. 629, 660 (1979). Although it has been suggested that international environmental law may be evolving to a point where responsibility may attach to nations for “failure to control a source of harm to the nationals of other States,” see Brownlie, supra note 14, at 180, existing agreements do not provide for the distribution of losses caused by the failure of a nation responsibly to control the polluting activities of its nationals, see \textit{Id.} at 188. Instead, the drafters of international agreements include expansive suggestions rather than specific duties. \textit{See Comment, supra note 4, at 662-63. The resultant ambiguities inevitably lead to disputes. Charney, \textit{United States Interests in a Convention on the Law of the Sea: The Case for Continued Efforts}, 11 Vand. J. Transnat'l L. 39, 43 (1978). The dispute settlement mechanisms in international agreements often are criticized for the absence of measures with which to effect compliance. See Teclaff, supra note 4, at 561; \textit{Comment, Dispute Settlement Mechanisms in the Draft Convention on the Law of the Sea}, 10 Den. J. Int'l L. & Pol. 331, 352 (1981). Clearly, even if an obligation existed and was submitted for adjudication, many situations can arise in which nations “would disregard the final judgment if it were sufficiently contrary to their national interests.” \textit{Id.} at 353; see \textit{infra} notes 89-90 and accompanying text.

Most regional treaties that directly address the international ramifications of pollution are limited, by their terms or in practice, to agreements concerning the exchange of information and research activities. For example, in 1909, the United States and Great Britain entered into a treaty relating to boundary waters between the United States and Canada. The treaty, still in force today, established the International Joint Commission (the Joint Commission or the Commission) which was endowed with advisory, investigative, and arbitral authority. Either the United States or Canada may invoke such authority by referring a question to the Joint Commission. Commentators regard the treaty and the Joint Commission as capable of embracing all manner of issues involving the shared boundaries of the two nations; indeed,

States have . . . the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. Id. principle 21. However, the corresponding implementing principle mandates only that nations cooperate to develop laws regarding liability and compensation. Id. principle 22. The foregoing is just one illustration of the disparity between the imposition of responsibility and effective enforcement mechanisms. See Tedd, supra note 4, at 561.


Id. arts. VIII-X; see Note, supra note 1, at 229; Note, supra note 35, at 503, 523.

See 1909 Treaty, supra note 54, art 9. Typically, references of questions to the Joint Commission for factual investigation have been made jointly under article 9, see Roberts, Introductory Remarks, 5 CAN.-U.S.L.J. 2, 4 (1982), although the terms of that article require that only one nation make the request, see 1909 Treaty, supra note 54, art 9. Article 10 of the treaty, which empowers the Joint Commission to arbitrate jointly referred disputes, has never been invoked. See Bilder, supra note 54, at 555. Counsel for the United States Section of the International Boundary and Water Commission (IBWC) asserts that neither the Joint Commission nor the IBWC has the power to settle disputes. See Comment, Effluent Neighbors: The Mexico-United States Water Quality Dilemma, 3 CAL. INT'L L.J. 152, 165 n.79 (1972) [hereinafter cited as Effluent Neighbors]. Even if Article 10 were invoked, the Commission's dispute settlement authority depends on the good faith of the parties for enforcement of its decisions. See Comment, supra note 42, at 124.

See, e.g., Trail Smelter Arbitration, 3 R. Int'l Arb. Awards 1905 (1938), reprinted in 35 AM. J. INT'L L. 684 (1941); Hoffman, supra note 6, at 521. Although the terms of the treaty provide for expansive powers, the Joint Commission's role in pollution disputes has been limited to "developing government and public awareness . . . providing scientific and technical information . . . suggesting the nature of the remedies required, and furnishing a means through which national programs can be better coordinated." Bilder, supra note 54, at 555.
the treaty is considered the forerunner of international pollution control agreements.\(^6\) Although the treaty imposes on the parties a duty to prevent pollution of boundary waters,\(^3\) the resolution of disputes between private parties resulting from breaches of this duty is not its primary objective.\(^4\) While the agreement has been used to create advisory boards that monitor pollution levels and polluting activity,\(^5\) it establishes no mechanism for the satisfaction of private claims.\(^6\)

The inadequacy of the Joint Commission's dispute settlement capacity was demonstrated in the controversy surrounding a large copper smelter in Trail, British Columbia.\(^7\) The smelter, over a period of more than 30 years, emitted massive amounts of sulfur into the atmosphere, substantially damaging agricultural property in the State of Washington.\(^8\) After private efforts to settle the controversy failed, the two nations submitted the matter to the Joint Commission for a factual investigation.\(^9\) When the investigation

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\(^3\) See 1909 Treaty, supra note 54, art. IV. Article 4 provides, in part: "the waters herein defined as boundary waters and waters flowing across the boundary shall not be pol- luted on either side to the injury of health or property of the other." Id.

\(^4\) The purpose of the 1909 Treaty is to "prevent disputes regarding the use of bound- ary waters and to settle all questions . . . between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier." 1909 Treaty, supra note 54, preamble. The first study of pollution conducted by the Joint Commission resulted in a recommendation that the Commission's powers be expanded to include regulatory authority to prohibit pollution in boundary waters. Bilder, supra note 54, at 489-90. The recommenda- tions were never implemented. See Note, supra note 1, at 217.

\(^5\) See Agreement on Great Lakes Water Quality, Apr. 15, 1972, United States-Canada, 23 U.S.T. 301, T.I.A.S. No. 7312. Article 7 of the 1972 Great Lakes Agreement allowed the Joint Commission to create and supervise the Great Lakes Water Quality Board and the Research Advisory Board. See id. art. VII. The objective of the boards is to monitor compli- ance with the 1972 Great Lakes Agreement. See id. The duties of the boards have been expanded to include the investigation of basin-wide pollution regardless of the source or the medium by which it is transported. See Agreement on Great Lakes Water Quality, Nov. 22, 1978, United States-Canada, art. VII, 30 U.S.T. 1383, T.I.A.S. No. 9257.

\(^6\) See Comment, supra note 42, at 117. One commentator notes: "With all of its useful- ness, the IJC [Joint Commission], as it stands today, can neither codify nor enforce pollu- tion control regulations in the Great Lakes." Id. Indeed, neither the United States nor Ca- nada has sought to invoke the article 4 prohibition against the other. See Bilder, supra note 54, at 555.


\(^9\) See Arbitblit, supra note 21, at 361.
was completed, the United States refused to adopt the report issued by the Commission. Additional negotiations were initiated and an ad hoc tribunal was established to mediate the dispute. Thirteen years passed, however, before the victims received any compensation for their injuries.

Mexico and the United States established a bilateral commission with original jurisdiction over certain boundary disputes by convention in 1889. The responsibilities of the International Boundary and Water Commission (IBWC) were later expanded to include "the regulation and exercise of the rights and obligations" and "the settlement of all disputes" arising under the treaty. Traditionally, IBWC activity had been limited to the delineation of boundaries and the management of scarce water resources in the boundary area. In recent years, the IBWC has expanded its role

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10 See Trail Smelter Arbitration, 3 R. Int'l Arb. Awards at 1914, 35 Am. J. Int'l L. at 694. Canada eventually paid the United States $350,000 as compensation for the injuries caused by the smelter from 1925 "up to and including the first day of January, 1932"—the amount of damages determined by the Joint Commission. See id.

11 See id. at 1907, 35 Am J. Int'l L. at 684. A state-to-state claim was created from the private dispute between the farmers in Washington and the smelter owners in British Columbia by "transmuting" both the injury and the offending behavior of the private parties to their respective governments. See Hoffman, supra note 6, at 512. The term implies a waiver "by Canada of some of the procedural rules of State responsibility." Id. The effect of transmuting the claim in Trail Smelter was to avoid testing the true scope of state responsibility. Id. The outcome of the dispute may have been quite different if Canada had not conceded the issue of liability and had defended against the claim, see id., since the government of Canada was not a tortfeasor with respect to the Washington farmers, see Read, supra note 67, at 227. Therefore, if Canada refused to acquiesce in the United States' claim, the former nation could be held liable only if the tribunal determined that an international tort had been committed. See id. However, Canada agreed to submit the dispute to the tribunal solely for determination of damages. See Arbitral, supra note 21, at 362. Thus, the arbitration was not a true test of intergovernmental responsibility for transnational pollution injury. See Hoffman, supra note 6, at 512.

12 See Trail Smelter Arbitration, 3 R. Int'l Arb. Awards at 1907, 35 Am J. Int'l L. at 694; Read, supra note 67, at 213. Trail Smelter typifies the "circuitous and burdensome" nature of state-to-state claims. See Hoffman, supra note 6, at 512.

13 Convention to Facilitate the Carrying Out of Treaty of 1884, Mar. 1, 1889, United States-Mexico, art. 1, 26 Stat. 1512, 1513, T.S. No. 232, at 14. The treaty established the International Boundary Commission, which was authorized to investigate the causes and character of changes in the Rio Grande and Colorado River. Id. arts. 4-8, 26 Stat. at 1514-16, T.S. No. 232 at 15. The Commission was empowered to render binding decisions as to the locations of new boundaries, subject to the disapproval by either government within a month of the decision. Id. art. 8, 26 Stat. at 1516, T.S. No. 232 at 18. The name of the Commission subsequently was changed by treaty to the International Boundary and Water Commission. 1944 Treaty, supra note 54, art. 2.


15 Although article 2 states that the settlement of disputes arising under the treaty is entrusted to the IBWC, id., a Texas court has held that the IBWC has only fact-finding
and become instrumental in promoting bilateral cooperation in the amelioration of environmental crises.\textsuperscript{7} Despite the ratification of a comprehensive joint contingency plan for oil pollution accidents,\textsuperscript{77} and the reciprocal adoption of IBWC recommendations relating to border sanitation problems,\textsuperscript{78} the responsibility for resolving pollution disputes remains with the respective governments.\textsuperscript{79} Indeed, the IBWC requires the permission of both governments to take action, even in the most severe environmental crises.\textsuperscript{80} The IBWC, therefore, cannot provide redress for a person injured by transboundary pollution. When, for example, an oil rig controlled by a wholly owned subsidiary of the Mexican Government exploded and released 3,000,000 barrels of oil into the Bay of Campeche,\textsuperscript{81} the

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\textsuperscript{7} See infra notes 77-78 and accompanying text; Note, supra note 35, at 506.

\textsuperscript{77} See Agreement of Cooperation Regarding Pollution of the Marine Environment by Discharges of Hydrocarbons and Other Hazardous Substances, March 30, 1981, United States-Mexico, art. 8, --- U.S.T. ---, T.I.A.S. No. 10021 [hereinafter cited as Joint Contingency Plan].


\textsuperscript{79} See, e.g., Minute 264, supra note 78, recommendation 1 (recommending that the countries prepare plans to eliminate domestic and industrial waste discharge in the New River); Joint Contingency Plan, supra note 77, art. 6 (authorities must recommend to respective governments measures necessary to control pollution accidents); Minute 261, supra note 78, recommendations 3-7 (governmental approval and action required on each subsequent proposal); Minute 242, supra note 78 (implementing measures to enforce maximum permissible levels of saline in Colorado River relegated to future agreement between the two countries).

\textsuperscript{80} See, e.g., Joint Contingency Plan, supra note 77, art. 8 (joint response to pollution accident “can only be applied when the Parties agree”); supra note 79.

\textsuperscript{81} N.Y. Times, June 9, 1979, at 1, col. 1. The Ixtoc disaster is considered the largest oil spill in history. See Transnational Pollution Agreement Regarding Marine Pollution Incidents, 23 Harv. Int'l L. J. 177, 177-78 (1982) [hereinafter cited as \textit{Marine Pollution}].
Mexican Government was able to evade responsibility by asserting the defense of sovereign immunity in subsequent litigation initiated by American citizens. The United States was later unable to obtain reparation from the Government of Mexico for the injuries suffered by American nationals on the Texas Gulf Coast.

Thus, notwithstanding increased international cooperation in protecting the environment, few effective measures have been taken to provide remedies for those injured by transnational pollution. Citizens of all three countries are beset by a host of pollutants that range from minor nuisances to fatal toxins. Foreign jurisdictional rules and conflicts of law principles, coupled with excessive costs, make litigation in Mexican or Canadian domestic courts a risky endeavor for plaintiffs injured in the United States. The vagaries of internal politics and international relations, the necessity of sovereign intervention, and the delay involved in transnational litigation render state-to-state claims and incident-by-incident diplomatic negotiation and settlement cumbersome and impractical procedures. In addition, difficulties in assessing injury to the state, as distinguished from injury to an individual, decrease the effectiveness of diplomatic negotiation. Therefore, it
is argued that there is a need for a comprehensive plan for accessible and equitable settlement of transnational pollution disputes.88

Binational Agreements

Nations generally abide by the rules of international law and the terms of international agreements only to the extent that their interests are served by doing so.89 Global agreements cannot satisfy the diverse political and economic interests of party nations to a degree that will ensure compliance with their terms.90 In the context of North America, therefore, it is argued that a bilateral treaty between contiguous nations is the best possible mechanism with which to provide redress for transnational pollution injury. By incorporating their mutual interests in a treaty, adjacent North American nations can protect their citizens and resources without unduly inhibiting industrial and economic development.91 A work-

of International Arbitration, 24 ARD. J. 68, 83 (1969)). Transmuting private claims to a national government requires that a private claimant “presettle” with the claimant government by reducing multiple claims to one lump sum. See Billingsley, supra note 4, at 348. Not only does presettlement usually involve a reduction in the amount paid to an individual claimant, but also the action is removed from the control of the actual victims. See id. For example, in 1955, the United States paid $2 million to the Government of Japan for injuries to Japanese fishermen caused by nuclear tests in the Marshall Islands. Japan—Personal and Property Damage Claims, Jan. 4, 1955, United States-Japan, 6 U.S.T. 1, T.I.A.S. No. 3160; see Billingsley, supra note 4, at 348; Nanda, The Establishment of International Standards for Transnational Environmental Injury, 60 Iowa L. Rev. 1089, 1098 (1975). It has been asserted that the awards that were distributed to individual claimants were well below the amounts that could have been recovered in individual domestic tort actions. See Billingsley, supra note 4, at 348.

88 See Margain, supra note 28, at 465. In response to the Ixtoc oil disaster, one Mexican official acknowledged: “[T]here was no bilateral agreement on which to base a claim for Mexican responsibility. Consequently, there was a need to devise a legal instrument, bilateral in character, establishing a procedure for compensation of damages caused to either one of our countries by the other.” Id.

89 See Comment, supra note 42, at 122. As a general proposition, nations are reluctant to enter international agreements and will do so only when the agreements offer “substantial practical benefits unobtainable by national action alone” or when they “involve only minimal obligations.” Bilder, supra note 54, at 554. An international agreement between parties usually is only as effective as the least interested party desires it to be. Id.

90 Global agreements cannot simultaneously regulate the environment, provide for transnational pollution injury, and embrace the disparate economic needs of developed and developing countries. See J. Davies & B. Davies, supra note 3, at 7-8. Criticism of global approaches to pollution problems is widespread. See, e.g., Hoffman, supra note 6, at 509 (societies that possess disparate shares of the earth’s resources are not likely to cooperate in formulating cohesive environmental policies under present rules of international law); Economic Implications, supra note 5, at 535 (industrialized nations that cause pollution should bear the costs of abating it).

91 See Bilder, supra note 54, at 554; McCaffrey, supra note 15, at 191. Although pollu-
able binational agreement thus would create substantial incentives for compliance.

First, a bilateral treaty could include an express waiver of the defense of sovereign immunity for pollution caused by the acts of a government agency. Second, a treaty could override local jurisdictional rules limiting access to foreign forums, thus enabling private plaintiffs to bring actions in foreign courts for injuries caused by activity in the foreign country. Third, permanent arbitral tribunals could be established and endowed with the means by which to enforce their decisions. The tribunals then could resolve large-scale disputes in which responsibility must be allocated among large numbers of polluting entities. As the Canadian-American experience with acid rain illustrates, a polluting nation has a substantial incentive to delay any comprehensive resolution of an environmental problem, the major impact of which occurs in another country. The advantage of establishing a permanent tribunal,

See supra notes 13 & 30-34 and accompanying text. The importance of circumventing the defense of sovereign immunity is particularly apparent in controversies between the United States and Mexico, since Mexican industries usually are federally owned. See J. Hergert & J. Camil, supra note 5, at 72. It is suggested that absolute sovereign immunity must be circumvented to avoid the extension of sovereign immunity to protect a governmental or quasi-governmental corporation, as was the result in the Ixtoc litigation. See In re Sedco, Inc., 543 F. Supp. 561, 567 (S.D. Tex. 1982).

See supra notes 20-25 and accompanying text.

See Hoffman, supra note 6, at 513. A binational tribunal is advantageous to private parties seeking redress for transnational pollution injury because jurisdictional barriers do not preclude recovery. See id.; cf. Teclaff, supra note 4, at 563 (special international tribunal should be established in which to press claims against states responsible for pollution).

See Dispute Settlement supra note 86, at 18. It has been suggested that "obligatory arbitration may be the most efficient and equitable means of settlement" of legal disputes. Id. An international "body with a fairly constant membership may, over time, begin to function as an organic unit, without regular adherence to divisions by country. Such a body can thus become a very useful means of fact finding." Id. at 26. Indeed, the American and Canadian Bar Associations have noted with approval the fact-finding abilities of commissions comprised of a fixed number of representatives from each government. See id. "Mixed commissions" are especially useful "where a problem is recurrent or where a situation . . . requires continuous oversight." Id. The Bar Associations also note that mixed commissions normally lack authority to settle disputes definitively. See id. An international arbitral tribunal can develop fact-finding abilities equivalent to those of a mixed commission and can apply the findings directly to the settlement proceedings.

See, e.g., Martin, supra note 41, at col. 3. The action that a government takes in response to ecological problems depends on the "outcome of the clash of complex competing political and economic forces." Boczk, supra note 12, at 793. The President of the United States recently decided to limit American involvement in acid rain reduction to research
rather than a traditional ad hoc system, is the efficiency with which pollution claims can be dealt if an arbitral mechanism is already in place.\textsuperscript{97} Settlements could then be effectively implemented to curtail any ongoing pollution damage.\textsuperscript{98}

A fourth advantage of a treaty is the avoidance of spontaneous debates concerning the degree to which one country may affect the internal policies of another. Voluntary agreement between nations on a preexisting dispute settlement mechanism reduces the necessity of protecting against the appearance of external interference with sovereign autonomy.\textsuperscript{99} Parties would risk neither their sovereignty nor their international reputations by permitting suits by foreign nationals for injury to foreign land, and by agreeing to give effect to foreign judgments—both equitable and legal.\textsuperscript{100}

The focus of a binational treaty on pollution remedies should be twofold: First, it should provide foreign nationals with access to the domestic courts of the polluting nation; second, it should establish a permanent arbitral body to settle large claims for which responsibility is divided among a large number of polluters.\textsuperscript{101}

\textit{The ABA/CBA Draft Treaty}

The American and Canadian Bar Associations have adopted a joint resolution for the negotiation of draft treaties between Ca-
The treaties, if ratified, would represent a considerable step forward in the resolution of transnational pollution problems. The first treaty—Draft Treaty on a Regime of Equal Access and Remedy in Cases of Transfrontier Pollution (Treaty I)—focuses on the equalization of transnational access to domestic courts. The clear purpose of the treaty is to open the domestic courts of the polluting nation to foreign victims. No additional substantive rights, however, are granted to foreign nationals under the treaty; they are still restricted to the remedies and theories of liability of a domestic plaintiff.

The Draft Treaty on a Third-Party Settlement of Disputes (Treaty II), adopted concurrently with Treaty I, proposes the establishment of ad hoc tribunals to settle disputes concerning treaty obligations. Treaty II empowers the tribunals to render binding arbitral decisions or non-binding advisory opinions upon mutual

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102 See American Bar Association-Canadian Bar Association, Settlement of Disputes Between Canada and the USA at vii-ix (1979) [hereinafter cited as Settlement of Disputes].

103 Sept. 29, 1979, reprinted in Settlement of Disputes, supra note 102, at xii-xix [hereinafter cited as Treaty I].

104 See Introduction, in Settlement of Disputes, supra note 102, at ix. Article 2(a) of Treaty I provides in part:

The Country of origin shall ensure that any natural or legal person resident in the exposed Country, who has suffered transfrontier pollution, shall at least receive equivalent treatment to that afforded in the Country of origin . . . .

Treaty I, supra note 103, art. 2(a).

105 See Treaty I, supra note 103, art. 5. The drafter of the treaty designed article 5 to prevent foreign residents from being placed in a situation in which they are better able to enforce pollution laws than the citizens of the polluting country. Recommended Procedures, supra note 101, at 55. However, the proposed regime is “not in any way addressed to the substantive law to be applied in transfrontier cases.” Id.

106 Sept. 29, 1979, reprinted in Settlement of Disputes, supra note 102, at xxi-xxv [hereinafter cited as Treaty II].

107 See id. art. 2. The proposed treaty provides for compulsory jurisdiction of a third-party settlement authority over “any question of interpretation, application or operation of a treaty in force” between the two countries. Id. art. 1. Article 2 provides that the parties, by agreement, can submit disputes over other matters to third-party settlement. Id. art. 2. The Bar Associations’ list of subjects appropriate for arbitration includes:

a. pecuniary claims in respect of losses or damage sustained by one of the Parties or its nationals as a result of acts or omissions of, or attributable to, the other Party; b. immunities of States and of their agencies and subdivisions; c. privileges and immunities of Heads of States, Foreign Ministers, and other high officials; d. consular privileges and immunities; e. treatment of the other Party’s nationals; f. environmental issues; g. the management of natural resources of common interest; and h. transnational application of civil and criminal laws.

Id. art. 2(1).
request of the parties.\textsuperscript{108} The appointment of the ad hoc tribunal, however, requires the involvement of both governments in each claim.\textsuperscript{109} Perhaps more significantly, no enforcement provisions are provided in the treaty.\textsuperscript{110} Although the treaties represent substantial progress in the direction of private redress for pollution injury, it is suggested that the proposals do not extend far enough in delineating the rights and responsibilities on either side of the border.

By analogy, the proposed treaties could be applied to pollution that crosses the United States-Mexico border.\textsuperscript{111} However, the economic utility of local polluting industries differs both among the border regions on the North American continent, and between the areas on each side of the border.\textsuperscript{112} Acceptable levels of pollution, and the degree and nature of pollution injury, therefore, should be defined in each respective bilateral pollution agreement both by analyzing the amount and character of industrial activity within a given area, and by evaluating the area's potential for industrial development.\textsuperscript{113}

\textbf{A Strict Liability Alternative}

It is submitted that industrial diversity on North American
borders can be addressed adequately by imposing a standard of strict liability on polluting industries.\textsuperscript{114} A strict liability standard will allow industries and nations to weigh the benefit of a polluting activity against the injury caused by pollution.\textsuperscript{115} No longer will a nation be permitted to transfer the damage of pollution across a border without bearing the cost of doing so.\textsuperscript{116} A negligence theory of liability would prove insufficient in an international arena because an industry need only prove compliance with applicable government regulations to avoid liability for pollution injury.\textsuperscript{117} Envi-

\textsuperscript{114} See Note, International Liability and Primary Rules of Obligation: An Application to Acid Rain in the United States and Canada, 13 GA. J. INT'L & Comp. L. 111, 116-17 (1983); cf. Teclaff, \textit{supra} note 4, at 564 (state should be held liable for polluting activities of its residents despite absence of fault on the part of the sovereign).

\textsuperscript{115} See Comment, \textit{Uniformity is the Solution to Water Pollution}, 23 S. Tex. L.J. 417, 442 (1982). One commentator posits that pollution is an economic phenomenon—it is less costly for an industry to pollute the environment than to preserve it for future generations. \textit{Id}. Although an argument can be made that the costs of defending against transnational pollution injury actions or paying “industry-wide” damages may be as prohibitive as the costs of complying with legislative mandates, several alternatives are available to polluting industries to help mitigate the economic implications of strict liability. \textit{See generally} Milhollin, \textit{Long-Term Liability for Environmental Harm}, 41 U. Pitt. L. Rev. 1, 12-25 (1979) (evaluating surety bonding, insurance, and liability funds). Professor Milhollin asserts that because surety bonds are, without exception, “set for fixed amounts and fixed periods of time,” surety bonding is not a feasible solution to long-term environmental damage. \textit{See id.} at 13. Traditional commercial methods of insuring against potential liability are not likely to be implemented because of the “lack of actuarial experience upon which to base premiums, as well as the fact that the harm involved is a type of incremental degradation and therefore not classifiable as an ‘accident.’” \textit{Id.} at 15 (footnote omitted). However, if the insurance program were underwritten by the several states, pollution injury insurance could be a device adaptable to potential environmental damage. \textit{Id}. Professor Milhollin expressed that “insurance might also cause the industry to regard the premium as a substitute for careful operations.” \textit{See id.} at 16. It is submitted that such an outcome can be avoided by providing penalty clauses for negligence in the plan.

Professor Milhollin maintains that “a state-administered [liability] fund could . . . impose strict liability and adopt rules of causation favorable to victims.” \textit{Id}. The liability fund would become a condition precedent to the acquisition of a license to operate. \textit{Id}. at 22. The amount of contribution would be determined by “the degree of risk which the activity poses, and the feasibility of apportioning contributions equitably among the enterprises which engage in it.” \textit{Id}. The amount of the fund itself would be determined by the legislature as a function of the “magnitude of the risk and the ability of those engaging in the activity to pay.” \textit{Id}. at 23. For a detailed discussion of the liability fund proposal, see \textit{id.} at 16-25.

\textsuperscript{116} See \textit{supra} note 5 and accompanying text.

\textsuperscript{117} See Goldie, \textit{Liability for Damage and the Progressive Development of International Law}, 14 INT'L & Comp. L.Q. 1189, 1197 (1965). Although Professor Goldie’s disapproval of fault liability is within the context of a discussion of space activity, \textit{see id.}, he notes that much of his article is applicable to transnational problems, \textit{see id.} at 1189-90. Even assuming that equivalent legislation can be enacted in adjacent nations, \textit{see Legal Implications, supra} note 5, at 557, proving negligence is likely to be difficult, \textit{see, e.g.}, Fischer, \textit{supra} note 1, at 57-58 (debate on cause and effect relationship between sulfur dioxy-
nvironmental regulations could, and probably would, differ among the party nations. Therefore, industries in a country with more lenient regulations would be able to shift the burden of pollution to a contiguous neighbor. Similarly, a public nuisance theory of liability would not further the interests of pollution victims since few, if any, plaintiffs could meet the burden of proving injury distinct from that suffered by the general public.

Imposing strict liability on polluters in a party nation would not result in unlimited damage awards or a flood of spurious suits, since a plaintiff would still have the burden of proving that the defendant's polluting activity is the proximate cause of the plaintiff's injury. Even traditional concepts of strict liability, however, might not be adequate to protect the victims of pollution caused by a large number of polluters. Thus, it has been suggested that a regime of strict enterprise liability be implemented to redress injuries caused by geographically diffuse pollution, such as acid rain and ocean dumping. By employing enterprise liability, a court...
can impose liability on a class of polluters in relation to the respective amounts of pollutants emitted by each member of the class.\textsuperscript{124}

The best mechanism to implement this system is a permanent arbitral tribunal. With its subject matter jurisdiction limited to cross-border pollution disputes, it is submitted that the tribunal would function more efficiently than the federal courts, and would remain more adaptable to the use of technical experts and scientific data.\textsuperscript{125} The efficiency of the tribunal could be preserved by imposing a threshold dollar amount on the claims that may be brought before it.\textsuperscript{126} This, of course, would not bar actions for small claims, but rather, would require that they be consolidated.\textsuperscript{127} Given its capacity to rely extensively on technical evidence, the tribunal should be particularly well suited to evaluate claims based on enterprise liability and to apportion liability for damages in accordance with the pro rata culpability of the

\textsuperscript{124} See Fischer, \textit{supra} note 122, at 456. It is submitted that a binational treaty could stipulate that, upon proof of harm proximately caused by an environmental condition to which many industries have contributed, a plaintiff from either nation is entitled to compensation from the contributing industries within the foreign nation equal to the percentage of which the tortfeasors, as a national entity, contribute to the total pollution in the region. Cf. W. Prosser \& W. Keeton, \textit{supra} note 120, § 52, at 345-46 (when two defendants are liable for polluting a stream, it is possible to apportion damages between them); Preliminary Report, \textit{supra} note 54, ¶ 28 (innocent victims should not bear the cost of damage caused extraterritorially even if caused by faultless parties).

\textsuperscript{125} The American and Canadian Bar Associations have noted that an arbitral dispute settlement mechanism that is “maintained for use as and when required . . . has the simplicity and flexibility of arbitration and the permanence and consistency of judicial settlement.” \textit{Report to the House of Delegates of the American Bar Association by the Section of International Law, in Settlement of Disputes, supra} note 102, at xlvii.

\textsuperscript{126} Cf. 28 U.S.C. § 1332(b) (1982) ($10,000 jurisdictional amount imposed on diversity suits). The original purpose of imposing threshold jurisdictional amounts in federal cases was to “prevent defendants from being summoned long distances to defend small claims.” J. Moore, \textit{Moore's Federal Practice} ¶ 0.90[4], at 834 (1983) (quoting H. Hart \& H. Wechsler, \textit{The Federal Courts and the Federal System} 39 (1953)). This purpose should apply equally to transnational pollution arbitrations.

\textsuperscript{127} Accord \textit{Fed. R. Civ. P. 42(a)} (actions involving common questions of law or fact may be consolidated and tried jointly); \textit{cf. Fed. R. Civ. P. 23} (class action suits). The jurisdictional amount requirement that attaches to diversity class actions must be satisfied by each member of the class in some suits. \textit{See J. Moore, Moore's Federal Practice} 1984 Rules Pamphlet ¶ 23.15, at 221 (1984). However, because the jurisdiction of the tribunal will be based on a federal question arising under a treaty, \textit{see City of New Orleans v. De Armas}, 34 U.S. (9 Pet.) 224, 234 (1835), no jurisdictional amount attaches, \textit{see 28 U.S.C. § 1331(a)} (1982).
defendants.\textsuperscript{128}

\textit{Equitable Relief}

One of the most notable deficiencies in existing agreements is the absence of effective mechanisms for dispensing injunctive relief against foreign polluting entities.\textsuperscript{129} Pecuniary damages typically will suffice to redress injuries caused by accidental pollution. Ongoing industrial activity, however, causes a continual emission of pollutants which results in ongoing injury.\textsuperscript{130} If the economic or social utility of a polluting activity does not offset the damage caused, injured parties should be entitled to injunctive relief as a matter of right.\textsuperscript{131} However, individual rights in international law are subjugated to principles of national sovereignty. Thus, the issuance of an injunction against a foreign national in a foreign nation could conflict with a sovereign's autonomy.\textsuperscript{132} Such prohibitive jurisdictional problems may be circumvented only by agreement.\textsuperscript{133}

The establishment of a permanent arbitral tribunal through a

\textsuperscript{128} See Fischer, supra note 122, at 430. It is suggested that only the amount of pollutants emitted by a defendant should be used to determine the percentage of damages for which he is liable.

\textsuperscript{129} See Billingsley, supra note 4, at 342; see also Hoffman, supra note 6, at 511.


\textsuperscript{131} See Comment, supra note 42, at 121. Pollution emitted into the environment incidental to, or as a function of, the operation of an industry should be subject to some kind of abatement procedure. See Billingsley, supra note 4, at 354. The principle of equitable utilization restricts harmful use of a resource only if another's need to use the resource in a legitimate manner outweighs the need for the harmful use. See Effluent Neighbors, supra note 60, at 158. The principle not only allows for maximally efficient use of resources, see id. at 157-58, but also suggests a framework within which to create an international mechanism for injunctive relief, see Carson, The American Legislative Position, 5 Can.-U.S.L.J. 72, 73 (1982). However, enforcement of an injunctive order issued by an adjudicative or arbitral body outside the jurisdiction in which the enjoined activity takes place is, at best, difficult under existing North American agreements and recognized principles of international law. See McCaffrey, supra note 15, at 241. For example, in the Canadian province of New Brunswick, the permission of the Attorney General is required before a claimant may seek an injunction which, if granted, would "delay or prevent construction or operation of any manufacturing or industrial plant on the ground that discharge from such plant injures some other interest." Judicature Act, c.J-2, N.B. Rev. Stat. § 33 (1973).

\textsuperscript{132} See McCaffrey, supra note 15, at 195. Basic principles of international law may preclude successful actions to abate polluting activities. Id. A foreign court that issues injunctive relief from activity in a foreign nation risks the appearance of improperly interfering in the economic policy of the foreign state. Id. (footnote omitted).

\textsuperscript{133} Id.
bilateral treaty, it is urged, is the best possible mechanism to transcend jurisdictional problems in the development of equitable remedies. However, given the reluctance of the North American nations to delegate sovereign authority to a "supranational organization," accession to a treaty that provides for automatic access to binding arbitration is unlikely. It is suggested, therefore, that the tribunal be provided with the authority to petition the courts of either signatory for original jurisdiction over such a claim. The decisions of the tribunal should then be enforceable by the courts of each signatory as if the judgment were rendered by a domestic court of the polluter’s domicile. Because the countries

134 See Hoffman, supra note 6, at 513. One commentator has stated: "International borders present no problems of competence to a duly constituted international tribunal." Id.; see Treaty II, supra note 106, art. 5.

135 See Teclaff, supra note 4, at 563; cf. Hoffman, supra note 6, at 510. The trend toward the establishment of administrative agencies on the domestic level is well recognized. See Hoffman, supra note 6, at 541-42. There also has been a recent tendency toward utilization of administrative methods for resolving complex environmental issues in non-adjudicatory settings. See J. Davies & B. Davies, supra note 3, at 169. But cf. Teclaff, supra note 4, at 564 (present world legal order reduces the possibility that an international tribunal would be empowered to mediate private pollution claims). Because the littoral states and provinces of the United States and Canada, and not the federal governments, hold title to the respective portions of the Great Lakes, see Comment, supra note 42, at 117-18, representation on a permanent arbitral tribunal established pursuant to a transnational pollution treaty might resemble that of the Great Lakes Water Quality Board, which includes representations from each littoral sovereign, state and province, see Agreement on Great Lakes Water Quality, Nov. 22, 1978, United States-Canada, art. 8, 30 U.S.T. 1383, 1394 T.I.A.S. No. 9257.

136 See Bilder, supra note 54, at 549. Supranational organizations are a hybrid of federal and international structure. See Kunz, supra note 36, at 697. The organization’s power is derived from limited transfers of sovereignty by the party nations. Id. Ideally, transnational pollution claims should be either arbitrated or adjudicated by a supranational structure with original and independent jurisdiction over such claims. Cf. Bilder, supra note 54, at 547 (comprehensive, supranational Great Lakes authority needed for purposes of regulation). However, not only are the North American nations indisposed toward relinquishment of sovereign authority, see Comment, supra note 42, at 125, but also membership by the United States in a supranational organization would require a constitutional amendment to remove “treaties from the purview of judicial review,” P. Hay, Federalism and Supranational Organizations 268 n.236 (1966) (citing Deener, Treaties, Constitutions and Judicial Review, 4 Va. J. Int’l L. 7, 12 (1964)).

137 Cf. Bilder, supra note 54, at 551 (authority of International Joint Commission may be expanded to include the authority to petition the party nations for references of investigation); Comment, supra note 42, at 122 (compulsory arbitration promotes reasonable settlement of co-riparian pollution disputes). It is suggested that the fact-finding abilities of the Joint Commission and the IBWC will minimize the likelihood of frivolous suits. Cf. Marine Pollution, supra note 81, at 184 n.66 (discussion of the advantage of information gathering provisions incorporated into Mexican-American Joint Contingency Plan for oil pollution accidents). While neither government would be required to abdicate traditional judicial power, nor be required to modify jurisdictional rules, private parties would be pro-
have demonstrated a reluctance to accept responsibility for transnational pollution generated within their borders.\textsuperscript{138} traditional “enforcement” methods such as diplomatic and political pressure may be insufficient to ensure compliance with the proposed treaty.\textsuperscript{139} Therefore, economic sanctions for refusal to enforce the decisions of the tribunal should be incorporated expressly into the treaty as an incentive to comply with its terms.\textsuperscript{140} Unless the terms of the treaty are fortified with the threat of well-defined and proportionately severe sanctions for noncompliance, the proposed treaties may be as ineffectual as existing remedies.\textsuperscript{141}

\textbf{CONCLUSION}

Until basic tenets of sovereign immunity are qualified universally, transnational pollution treaties with express provisions for the implementation and enforcement of private remedies for pollution injury are perhaps the only means to settle private claims equitably and consistently. Although steps have been taken to ame-


\textsuperscript{139} See Fischer, \textit{supra} note 1, at 58; Note, \textit{supra} note 35, at 514; see also Bath, \textit{supra} note 26, at 1150 (refusal of both Mexico and the United States to acknowledge their responsibility for air pollution in the Ciudad Juarez-El Paso area). Bilder observes: “Enthusiasm for stringent pollution controls has lessened as it has become increasingly evident to both the public and the politicians that effective pollution control will be inconvenient, costly, slow to produce results, and detrimental to particular industries and communities.” Bilder, \textit{supra} note 54, at 552.

\textsuperscript{140} See Doud, \textit{International Environmental Developments: Perceptions of Developing and Developed Countries}, 12 \textit{Nat. Resources J.} 520, 521, 524 (1972). Notwithstanding consent to a third party dispute settlement procedure, it is conceivable that a nation might refuse to implement the decision of an international tribunal if that decision effectively qualified the right of a nation or its nationals to exploit natural resources. See Comment, \textit{supra} note 55, at 353.

\textsuperscript{141} Accord Doud, \textit{supra} note 140, at 524. It has been stated that “the important question is not whether there will be an agreement, but whether it will be a thorough and effective one . . . .” See Note, \textit{supra} note 114, at 126 n.100 (quoting \textit{The Crisis of Acid Rain}, \textit{International Perspectives}, Jan.-Feb. 1981, at 9).
liorate specific problems resulting from domestic and transnational pollution, remedies that are reasonably accessible to private parties have not been established. The result is a continuing deterioration of the environment and an inequitable shift in the cost of pollution from the polluter to the victim. Basic principles of sovereignty, coupled with obsolete jurisdictional obstacles, impede the just resolution of transnational pollution disputes. Existing international agreements are unlikely to change significantly the flaws in the existing remedial structure. Rather, the situation demands the development of new international agreements that eliminate jurisdictional barriers in the domestic courts of polluting nations. Moreover, nations must establish an alternative avenue of redress in the form of an arbitral tribunal with binding authority to impose strict liability, to satisfy damage awards, and to enforce injunctive relief.

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