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INTERNATIONAL INVESTMENT, EXPROPRIATION AND ENVIRONMENTAL PROTECTION

BY J. MARTIN WAGNER*

Government could hardly go on if to some extent values incident to property could not be diminished without paying for every ... change in the general law .... Some values are enjoyed under an implied limitation and must yield to the police power.

—Oliver Wendell Holmes

I. INTRODUCTION

International law has long protected foreign property from expropriation—confiscation by the host-country government—by giving the owner of the property a right to compensation for the value of the lost property. In recent decades, foreign property owners have made claims for compensation based on governmental regulations, such as placing restrictions on the legal use of property, that do not actually remove the owner’s title to the property, but nevertheless substantially affect its value. As this doctrine of “indirect expropriation” has developed, international tribunals and legal scholars have cautioned that the obligation to compensate does not extend to regulations imposed pursuant to the exer-

* J. Martin Wagner is the Director of International Legal Programs for Earthjustice Legal Defense Fund and an Adjunct Professor at Golden Gate University School of Law. The author gratefully acknowledges the helpful comments and assistance provided by David Wirth, Linda Nowlan and Carlos Baumgarten, and the research assistance of Stephanie Tai and Scott Smithline.

cise of legitimate government police powers, such as taxation and protection of human health and welfare. To require otherwise would, as Oliver Wendell Holmes noted, severely limit the ability of governments to promote the general welfare.

In recent decades, the harmful effect of human activities on the environment and the connection between environmental health and human well-being have become obvious. Recognizing these relationships makes clear the need for governmental restrictions on environmentally harmful activities. In addition, a key tenet of environmental protection is that those responsible for harming the environment should bear the cost of protecting it. In this light, one might imagine that environmental regulations would be safe from claims that their economic impact on private property constitutes indirect expropriation and thus gives property owners a right to compensation. In the past few years, however, several cases have challenged that assumption.

Like many other international agreements, the North American Free Trade Agreement (NAFTA) requires compensation for direct or indirect expropriation of foreign investment. In an unprecedented move, companies have begun to use this protection to challenge measures promoted by governments as necessary to protect the environment and human health. A U.S. company running a hazardous waste disposal facility in Mexico is seeking $90 million in compensation from Mexico for losses incurred when the local government refused to permit operation of the plant because of its discovery that the local geology made it likely that the waste treated at the plant would contaminate local water supplies. Another U.S. toxic waste disposal company has claimed that Canada should pay it at least $10 million for losses arising out of a 15-month Canadian ban on the export of a particularly volatile hazardous waste. Canada asserted that the ban was necessary to ensure that the waste would be treated safely, preventing contamination in Canada and the United States that might arise if treatment was inadequate. In the most publicized case, a U.S. manufacturer of a gasoline additive settled a compensation claim against Canada, obtaining a payment of $19 million (it had sought $250 million) and convincing Canada to rescind a ban on the importation of the additive. Although Canada had initially promoted the ban as necessary to avoid risks that the additive posed to the environment and human health, part of the settlement included a statement by the Canadian government that it did not have “sufficient evidence” on which to base a “clear case” that the additive was causing the asserted harm.
As these NAFTA cases make clear, giving companies the right to base compensation claims on the economic impact of environmental regulations has a serious chilling effect on the ability and willingness of governments to implement such regulations. Governments that do so risk being penalized by having to divert precious governmental resources to defend the regulations against expropriation claims and to pay compensation payments if the defense is unsuccessful. Moreover, as the Canadian gasoline additive case suggests, such penalties may be great enough that a government may not be able to maintain a regulation it has deemed necessary. To make matters worse, the provisions on which these claims have been based are the model for efforts to expand investment protection regionally, in the Free Trade Agreement of the Americas (FTAA), and globally, in the Multilateral Agreement on Investment (MAI) or an equivalent global agreement.

Despite the claims that have been brought under NAFTA, and the one settlement reached, none of the cases has yet been resolved by a tribunal. Moreover, the companies making the claims have objected that the regulations have not really been environmentally motivated. It thus remains uncertain the extent to which the NAFTA investment protections apply to environmental regulations.

The Canadian government has expressed the desire to draft an interpretive “rider” to Chapter 11 to clarify and limit the investor-state provisions. The Canadian trade minister has suggested that the United States and Mexico support this effort and the ministers have apparently agreed to “focus attention” on the issue at an April 1999 meeting in Ottawa. Canada has proposed making nations’ domestic laws on expropriation the standard for international panels to use in investor-state challenges. An attorney who has represented U.S. companies in three NAFTA investment challenges against Canada has objected that Canada’s position would result in “a definition of expropriation that’s less than the internationally accepted definition of expropriation.” However, as this Article demonstrates, international law does not require governments to provide

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3. See AMERICASTRADE, Dec. 24, 1998, at 22-23. According to the Canadian trade minister, both the United States and Mexico supported Canada’s efforts to narrow the interpretation of expropriation in the Multilateral Agreement on Investment (MAI) at an Organization for Economic Cooperation and Development (OECD) meeting. Id.
5. See AMERICASTRADE, Mar. 11, 1999, at 1. Such a clarification would “state that no party may directly or indirectly nationalize or expropriate an investment in a manner that would be inconsistent with its own principles of domestic law.” Id. at 11.
6. Barry Appleton, quoted in id. at 12.
compensation for the economic impact of most legitimate environmental laws or regulations. Such freedom to regulate is necessary if governments are to be able to protect the environment.

NAFTA does not clearly define the actions covered by its expropriation provisions. Interpretation of the provisions will thus depend in part on international law and the domestic traditions of the negotiating parties. This Article argues that both international and U.S. law preserve the right of governments to regulate to protect the environment without having to compensate for the impact of such regulations on investment. After a brief description of the relationship between foreign investment and the environment in Part II, the Article will describe the protection against expropriation provided by international agreements, briefly discussing bilateral investment agreements and then detailing the protection provided by NAFTA and the MAI in Part III. Part IV will then describe the challenges to environmental laws that have been brought under NAFTA’s investment chapter. Next, Part V will examine the treatment of indirect expropriation under U.S. and international law. Part VI will demonstrate that, under NAFTA and international expropriation and environmental law, environmental measures should not normally give rise to a right to compensation. Finally, the Article will conclude with some proposals for ensuring that NAFTA, and other investment agreements, do not interfere with the ability of governments to take action to protect the environment.

II. FOREIGN INVESTMENT AND THE ENVIRONMENT

The global influence of foreign private capital has increased substantially in recent years. For example, from 1990 to 1996, the amount of private capital flowing to developing countries increased over tenfold, from US $22 billion to US $244 billion.7

The increased flow of private capital directly affects environmental protection. Governments compete to attract this capital, in large part by changing regulations affecting foreign investments.8 One economist studying this phenomenon with respect to environmental regulations has concluded that

8. See id. at 2, 4 (citing 1997 UNCTAD study indicating that 90% of changes in laws governing foreign direct investment “were aimed at creating a more favourable climate for [investment]”).
a concern to be attractive to foreign investors in a highly competitive global economy has kept a lid on local/national [environmental] standards or enforcement of standards. While there has not been a universal “race to the bottom,” increased globalization [of foreign investment] … has inhibited a “race to the top” and caused environmental commitments to be “stuck in the mud.”

As a result of the conflict between the desire to attract investment and strong environmental protection, greater opening of markets to foreign direct investment “may lead to patterns of investment and production that are not desirable in that market conditions do not adequately allow for the internalization of social (including environmental) costs.”

Internalizing environmental costs — meaning shifting the cost of environmental harm from society at large to the person causing the harm — is a fundamental element of environmental protection. This principle, called the “polluter pays principle,” was recognized internationally in the Rio Declaration on Environment and Development:

National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution.


11. The polluter pays principle began as an economic principle formulated in the 1970s by the OECD. The OECD agreed that

[...]

The decision to internalize the cost of pollution or other harm to the environment, rather than requiring society in general to bear that cost, goes to the very heart of the question of indirect expropriation. The United States Supreme Court has explained that the determination that the government must pay compensation for the impact of its action on property “is, in essence, a determination that the public at large, rather than a single owner, must bear the burden of an exercise of state power in the public interest.” Thus, requiring the government to provide compensation for the impact of environmental laws or regulations on property — i.e., determining that “the public at large” must bear the burden of that regulation — is directly at odds with the polluter pays principle.

While this brief discussion clearly suggests that environmental laws and regulations should not give rise to a governmental obligation to compensate in any but the most extreme situations, some foreign investors have taken a different view. The resolution of this question is thus of great significance to both investors and governments:

[T]o the investor, the line of demarcation between measures for which no compensation is due and actions qualifying as indirect expropriations [that require compensation] may well make the difference between the burden to operate (or abandon) a non-profitable enterprise and the right to receive full compensation (either from the host State or under an insurance contract). For the host State, the definition determines the scope of the State’s power to enact legislation that regulates the rights and obligations of owners in instances where compensation may fall due. It may be argued that the State is prevented from taking any such measures where these cannot be covered by public financial resources.

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III. INTERNATIONAL INVESTMENT AGREEMENTS

Nations have codified protection against expropriation in various forms of international agreements. Although the most common source of such protection are bilateral investment agreements, nations have begun to include expropriation provisions in multilateral agreements. It is in the context of these agreements that the international community will determine whether environmental regulations may constitute a compensable expropriation.

A. BILATERAL INVESTMENT AGREEMENTS

In recent decades, nations have significantly increased their use of bilateral agreements to protect foreign investment from expropriation. In 1990, there were 435 bilateral investment agreements (BITs); by March 1998, that number had increased to 1300.15 In addition to providing protection for U.S. investments abroad, the United States sees its BITs as having a “significant impact” on the worldwide adoption of U.S. policies on the treatment of foreign investment in countries undergoing economic reform, and laying “the policy groundwork for broader multilateral initiatives in the [OECD] and eventually, the [WTO].”16

Nearly all BITs provide protection against expropriation.17 The majority also cover indirect expropriation,18 using phrases such as “having effect equivalent to … expropriation,” “any direct or indirect measure” of expropriation, “any other measure having the same nature or the same effect against investments,” or “all other measures whose effect is to dispossess, directly or indirectly, the investors.”19 BITs to which the United States is party generally provide protection against “expropriation or nationalization (directly or indirectly through measures tantamount to
According to a study by the Investment Group of the Negotiators of the Free Trade Agreement of the Americas, “[i]n all cases, the language [of BITs] is broad and allows for coverage of so-called ‘creeping’ or ‘indirect’ expropriations, that is, measures having the same effect to expropriation.”

Because BITs seldom define expropriation in any detail, the general rules of international law should inform the interpretation of this term. Considering expropriation as included in U.S. BITs, one scholar has stated: “Consistent with article X, paragraph 1 of the U.S. Model BIT, principles of international law, and law under the fifth amendment to the U.S. Constitution, measures taken by competent authorities of either party in the legitimate, nondiscriminatory exercise of its police power, which reduce an investment value, do not constitute expropriation within the meaning of article III [of the Model BIT].”

B. NAFTA

The international community has come to believe that using BITs to protect investment is “non-transparent and potentially inefficient,” leading to a shift in favor of a multilateral approach to investment protection. Consistent with this approach, Chapter 11 of the North American Free Trade Agreement (NAFTA) regulates the treatment by Parties of foreign investors and foreign investments.

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21. FTAA INVESTMENT GROUP, supra note 20, at 19.
22. The United States considers that its BITs provide protection against expropriation “in accordance with international law standards.” FACT SHEET, supra note 16. A few US BITs have elaborated on the meaning of expropriation, stating that it includes “the levying of taxation, the compulsory sale of all or part of an investment, or the impairment or deprivation of its management, control or economic value.” DOLZER & STEVENS, supra note 14, at 102 (quoting U.S.-Zaire BIT (1984), art. III). See also FTAA INVESTMENT GROUP, supra note 20, at 19 (quoting US-Haiti BIT). Professors Dolzer and Stevens have noted that such an elaboration “represents possibly the broadest scope in investment treaties with respect to indirect expropriation insofar as the inclusion of measures that cause the ‘impairment … of [the] economic value’ of an investment equates expropriation with a host of measures which might not otherwise be considered as such under general international law, let alone under liberal systems of domestic law.” DOLZER & STEVENS, supra note 14, at 102.
25. North American Free Trade Agreement, December 8 and 17, 1992, Chapter 11, 32 I.L.M. 638 (1993). The Agreement’s definition of “investment” is extremely broad, including an “enterprise”; securities, loans to, or interest in the assets or profits of an enterprise; tangible or intangible
The NAFTA investment chapter establishes two kinds of requirements with respect to foreign investment. First, each country must treat foreign investors or their investments as well as or better than it treats any other investments in that country. Thus, foreign investors and investments must receive the better of (a) the treatment provided to a country’s own investors or investments in like circumstances (national treatment) and (b) the best treatment provided to the investors or investments of any other nation, whether or not it is a party (most-favored-nation treatment). Second, the Agreement prohibits governments from imposing certain requirements on foreign investments. One such provision prohibits certain performance requirements, such as requiring foreign investors to supply products or services to a specific regional or world market, to export a specified volume of their products or services, to use a certain amount of domestic components, or to transfer technology to an entity in the country’s territory. Other provisions prohibit imposing nationality requirements on senior managers of an enterprise or placing restrictions on transfers relating to investments, including payments made pursuant to arbitration under the investment provisions.

Article 1110 protects against the “expropriation” of foreign investments:

1. No Party may directly or indirectly nationalize or expropriate an investment of an investor of another Party in its territory or take a measure tantamount to nationalization or expropriation of such an investment (“expropriation”), except:

(a) for a public purpose;

(b) on a non-discriminatory basis;
When a foreign investor believes that a government has expropriated its investment, Chapter 11 gives the investor a direct right to force the government of the country in which the investment is located into binding arbitration to resolve the claim. The investor may submit its claim under one of three sets of rules for resolving international investment disputes. Arbitration is generally conducted by a three-member tribunal. At the request, or with the approval, of the disputing parties, the arbitrators may seek expert assistance concerning environmental, health, safety or other scientific issues of fact. Under any of the applicable arbitration rules, the proceedings and findings of the tribunals are confidential and may be made public only if both parties agree. It is also

32. Article 1105(1) provides: “Each Party shall accord to investments of investors of another Party treatment in accordance with international law, including fair and equitable treatment and full protection and security.”

33. Id. art. 1110.

34. See id. arts. 1115-38.

35. See id. art. 1120(1). These rules are those established by the International Centre for the Settlement of Investment Disputes (ICSID), Convention on the Settlement of Investment Disputes between States and Nationals of Other States, Mar. 18, 1965, 575 U.N.T.S. 159 (hereinafter “ICSID Convention”), provided that the disputing Party and the Party of the investor are parties to the ICSID Convention (Canada is not); the Additional Facility Rules of ICSID, if either (but not both) the disputing Party or the Party of the investor is a Party to the ICSID Convention; or the Arbitration Rules of the UN Commission on International Trade Law, approved by the UN General Assembly on Dec. 15, 1976. Three of the first four NAFTA chapter 11 disputes were filed with the ICSID, which is apparently pushing to be the “tribunal of choice” for NAFTA challenges. See AMERICAS-TRADE, June 11, 1998, at 4.

36. See NAFTA, supra note 25, art. 1123. Each party to the arbitration appoints one arbitrator and they must agree on the third. See id. If they cannot agree within 90 days, either party may request that the Secretary-General of the ICSID appoint the remaining arbitrator. See id.

37. See id. art. 1133.

38. See e.g., Rules of Procedure for Arbitration Proceedings, ICSID, Rule 32(2) (visited April 8, 1999) <http://www.internationalaldadr.com/tc1151.htm> (on file with author) (“The tribunal shall decide, with the consent of the parties, which other persons besides the parties...may attend the hearings.”); Rules of Arbitration of the International Chamber of Commerce, art. 21.3 (visited Dec. 15, 1998) <http://www.iccwbo.org/ html/rulesenglish.htm> (on file with author) (without approval of arbitral tribunal, “persons not involved in the proceedings shall not be admitted”); id. App. I, Statutes of the International Court of Arbitration of the ICC, art. 6 (“The work of the Court is of a confidential nature and must be respected by everyone who participates in that work in whatever capacity.”); id. App. II, Internal Rules of the International Court of Arbitration of the ICC, art. 1 (sessions of Court open only to members, except upon invitation by Court; documents confidential). The attorney for one of the NAFTA chapter 11 claims brought against Canada defended the confidentiality provisions as preventing long and costly court litigation through an agreement to provide a
important to note that the arbitration rules do not permit participation by
or submissions from interested or affected non-parties.39

The tribunal must decide the claim in accordance with the NAFTA
and “applicable rules of international law.”40 If the tribunal finds that the
Party’s action was “tantamount to nationalization or expropriation,” it
may award monetary damages and interest, restitution of property and/or
costs of bringing the claim.41

Once an arbitral award is final, the investor has several options for
ensuring that it obtains payment from the country in question. First,
Chapter 11 requires each Party to “provide for the enforcement of an
award in its territory.”42 The investor may also request that its own gov-
ernment espouse its claim before the NAFTA Free Trade Commission,
which then must initiate an intergovernmental arbitration to determine
whether the failure to comply with the award is inconsistent with the
obligations of NAFTA and, if appropriate, to recommend that the Party
comply.43 Finally, the investor may seek enforcement under the interna-
tional arbitration rules recognized in Chapter 11.44 One such rule, for
example, requires each government to treat arbitration awards
as binding and enforce the pecuniary obligations imposed by that
award within its territory as if it were a final judgment of a court
in that State. A Contracting State with a federal constitution may
enforce such an award in or through its federal courts and may
provide that such courts shall treat the award as if it were a final
judgment of the courts of a constituent state.45

39. See, e.g., Rules of Arbitration of the International Chamber of Commerce, supra note 38,
art. 21.3. In US courts, individuals or organizations with an interest in a case can participate as a
“friend of the court” or, if resolution of the case will affect their rights or interests strongly enough,
40. NAFTA, supra note 25, art. 1131(1).
41. Id. art. 1135. The arbitrators may not award punitive damages. See id. at 646, art. 1135.3.
42. Id. art. 1136.4.
43. Id. art. 1136.5.
44. See NAFTA, supra note 25, art. 1136.6.
45. ICSID Convention, supra note 35, at 194, art. 54(1). This requirement is implemented in
22 U.S.C. § 1650(a), which provides that arbitral awards rendered pursuant to the ICSID Convention
shall create a right arising under a treaty of the United States. The pecuniary obligations
imposed by such an award shall be enforced and shall be given the same full faith and
credit as if the award were a final judgment of a court of general jurisdiction of one of the
several States.... The district courts of the United States ... shall have exclusive jurisdic-
tion over actions and proceedings under [these provisions].
NAFTA’s investment provisions are subject to several provisions regarding the environment. First, the investment chapter itself includes a provision on “Environmental Measures”:

1. Nothing in this Chapter shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns.

2. The Parties recognize that it is inappropriate to encourage investment by relaxing domestic health, safety or environmental measures. Accordingly, a Party should not waive or otherwise derogate from, or offer to waive or otherwise derogate from, such measures as an encouragement for the establishment, acquisition, expansion or retention in its territory of an investment of an investor.

In addition to the investment-specific environmental provisions, several other NAFTA provisions highlight environmental issues. The Preamble states the Parties’ intention to achieve NAFTA’s goals “in a manner consistent with environmental protection and conservation,” to “promote sustainable development,” and to “strengthen the development and enforcement of environmental laws and regulations.”

Additional protection for environmental measures is made through the incorporation of the general exceptions to the General Agreement on Tariffs and Trade. Those exceptions provide:

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

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

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.\(^50\)

Any consideration of the treatment of environmental measures under NAFTA must also take into account the North American Agreement on Environmental Cooperation (NAAEC), the “environmental side agreement” to NAFTA.\(^51\) In the NAAEC, the Parties to NAFTA recognized the need to conserve, protect and enhance the environment in their territories and reaffirmed the importance of “enhanced levels of environmental protection.”\(^52\) Among the environmental objectives of the NAAEC are to “foster the protection and improvement of the environment … for the well-being of present and future generations”; to cooperate to “better conserve, protect and enhance the environment,” and develop and improve environmental laws and regulations; to “enhance compliance with, and enforcement of, environmental laws and regulations”; and to “promote pollution prevention policies and practices.”\(^53\)

One of the NAAEC’s most important provisions concerning environmental laws and regulations is Article 3:

Recognizing the right of each Party to establish its own levels of domestic environmental protection and environmental development policies and priorities, and to adopt or modify accordingly

\(^{50}\) General Agreement on Tariffs and Trade, Oct. 30, 1947, art. XX, 55 U.N.T.S. 194, 262 [hereinafter GATT]. NAFTA clarifies two points regarding these exceptions that have been challenged under the GATT procedures: that Article XX(b) includes environmental measures and that both living and non-living natural resources fall within Article XX(g). NAFTA, \textit{supra} note 25, art. 2101.1.


\(^{52}\) Id. pmbl. The preamble to the NAAEC also reaffirmed the countries’ commitment to the Stockholm Declaration on the Human Environment and the Rio Declaration on Environment and Development, both of which recognize that “environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.” Rio Declaration, \textit{supra} note 12, princ. 4. \textit{See also} United Nations Conference on the Human Environment, Stockholm Declaration on the Human Environment, June 16, 1972, princ. 6, U.N. Doc. A/Conf.48/14, \textit{revised by} U.N. Doc. A/Conf.48/14/Corr.1 (1972), 11 I.L.M. 1416 (1972) (“To defend and improve the human environment for present and future generations has become an imperative goal for mankind.…”).

\(^{53}\) NAAEC, \textit{supra} note 51, art. 1.
its environmental laws and regulations, each Party shall ensure that its laws and regulations provide for high levels of environmental protections and shall strive to continue to improve those laws and regulations.\(^\text{54}\)

As these provisions demonstrate, any interpretation or application of NAFTA’s investment provisions must take into account the importance that the Parties placed on preventing the agreement from interfering with environmental protection.

C. **The Multilateral Agreement on Investment (MAI)**

Investment protections like those provided by NAFTA, including protection against expropriation, are included in regional agreements in other parts of the world\(^\text{55}\) and may soon become part of a global investment agreement. The European Union and Mexico are discussing a free trade agreement that is likely to include investment protections in some form.\(^\text{56}\) In addition, the Free Trade Agreement of the Americas (FTAA) is likely to include investment provisions.\(^\text{57}\)

The first serious proposal to apply investment protections on a global level came from the Organization for Economic Cooperation and Development (OECD), a group of 29 of the world’s richest countries.\(^\text{58}\) Since 1995, the OECD has been negotiating the Multilateral Agreement on Investment (MAI), the goal of which was to “create a comprehensive investment discipline, backed up by a dispute settlement mechanism which includes investor to state procedures.”\(^\text{59}\) In October 1998, as a

\(^{54}\) Id. art. 3 (emphasis added).


\(^{56}\) See Mexico, EU FTA Proposals Clash over Coverage of Investment, Services, AMERICAS-TRADE, Nov. 26, 1998, 1.

\(^{57}\) See AMERICASTRADE, Nov. 26, 1998 at 1; AMERICASTRADE, Sept. 17, 1998 at 5. The United States considers the NAFTA investment chapter “comparable to a BIT” and considers its BITs to “complement and support regional initiatives on investment liberalization in the Asia Pacific Economic Cooperation forum (APEC) and the [FTAA] initiative.” FACT SHEET, supra note 16.

\(^{58}\) The member countries are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States. OECD countries share “principles of the market economy, pluralist democracy and respect for human rights.” OECD, Membership, <http://www.oecd.org/about/general/member-countries.htm> (on file with author). OECD countries produce two-thirds of the world’s goods and services. See id. See also What is OECD, <http://www.oecd.org/about/general/index.htm> (on file with author).

\(^{59}\) Jan Huner, Environment Regulation and International Agreements: Lessons from the MAI (paper delivered at the Royal Institute for International Affairs Conference on Trade, Investment and
result of “significant concerns” regarding the agreement, including “issues of sovereignty, protection of labour rights and environment, culture and other important matters,” the OECD indefinitely suspended further negotiations on the agreement.60

Despite the suspension, there remains a consensus among OECD member countries on “the need for and value of a multilateral framework for investment. The goal should still be sought.”61 The OECD’s continued interest in the subject is reflected in its conference on Foreign Direct Investment and the Environment, held at The Hague, January 28-29, 1999.62 It is thus likely that efforts to develop such a global investment agreement will resume in the near future, possibly under the auspices of the WTO.63 In addition, “investment discussions in UNCTAD, the WTO, APEC and the FTAA are all looking to the MAI as a model for multilateral rules.”64

In April 1998, partly as a result of criticism that the MAI negotiations had been too secretive,65 the OECD released what it called the “MAI


60. OECD News Release, (Oct. 23, 1998) <http://www.oecd.org/news_and_events/release/nw98-101a.htm> (on file with author). The OECD had temporarily suspended MAI negotiations in April 1998, intending to resume efforts in November after a period of consultation with representatives of civil society. Environmentalists Claim Victory as Talks on Multilateral Investment Pact Founder, 21 INT’L. ENV’T REP. No. 22 at 1053 (Oct. 28, 1998). According to the Secretary of the OECD’s MAI Negotiating Group, the primary problem with the MAI was that its negotiators did not expect to have to sell it politically. Most of the MAI-negotiators are (were) investment specialists not used to viewing from a political perspective the concepts that they consider logical and essential parts of an investment discipline…. Least of all [did they expect] to see the MAI portrayed as a threat to environmental protection. Huner, supra note 59. Huner also notes that “the issue of how the MAI relates to multilateral environmental agreements (MEA’s) was not discussed” during the early years of MAI negotiations and, with the exception of Washington, was likely “not a subject for debate in [national] capitals either.” Id. The Chairman of the Negotiating Group made a last-ditch effort to salvage MAI negotiations by proposing a package of environment and labor provisions, but “the Europeans saw too many NAFTA-inspired texts, and the Americans opposed making the not lowering of standards clause binding.” Id.
61. OECD News Release, supra note 60.
63. See 21 INT’L. ENV’T REP. No. 22 at 1053, supra note 60. Opschoor, supra note 10. The April 1998 OECD ministerial declaration stated that the OECD governments “support the current work programme on investment in the WTO and once the work programme has been completed will seek support of all their partners for the next steps towards the creation of investment rules in the WTO.” OECD, Ministerial Statement on the Multilateral Agreement on Investment (MAI), Apr. 28, 1998, (visited on Oct. 26, 1998) <http://www.oecd.org/news_and_events/release/nw98-50a.htm> (on file with author).
64. Larson Testimony, supra note 15.
65. The Secretary of OECD’s MAI Negotiating Group (NG) has explained that
Negotiating Text,” which was a consolidation of “the text of the agreement considered in the course of the MAI negotiations” to that point, and an official Commentary to the draft. Although the text is far from final, and the schedule and process for further negotiations are unclear, it indicates the basic thrust of discussions to this point.

With a few exceptions, the fundamental provisions of the draft MAI are essentially the same as those of NAFTA. Thus, the Negotiating Text requires the better of national and most-favored-nation treatment, and prohibits performance requirements and limitations on transfers.

With respect to expropriation, the MAI Negotiating Text is essentially identical to the NAFTA provision. Like NAFTA, the Negotiating Text provides:

A Contracting Party shall not expropriate or nationalise directly or indirectly an investment in its territory of an investor of another Contracting Party or take any measure or measures having equivalent effect (hereinafter referred to as “expropriation”) except:

(i) for a purpose which is in the public interest,
Text does not define “expropriation,” but the Commentary notes that by extending protection to “measures having equivalent effect” to expropriation, the Text was intended to cover “creeping expropriation.”

The MAI Negotiating Text follows the NAFTA example for dispute settlement as well, providing investors the right to initiate binding arbitration concerning claims that government action has violated the Agreement and caused “loss or damage to the investor or its investment.” Although the Text establishes procedures allowing a nation to challenge another nation’s failure to abide by the provisions of the agreement, it gives priority to challenges brought against nations by investors.

Like NAFTA, if the three-member arbitral panel that finds that a country has violated the Agreement, it may award monetary compensation for injury or losses suffered by the investor and restitution in kind (meaning the return of the property in question). In a state to state arbitration, the panel may also recommend that the losing Party bring its actions into conformity with its obligations under the Agreement. The MAI Negotiating Text provides for enforcement of arbitral awards through domestic law, in the case of investor-state disputes, and through retaliatory sanctions in the case of state-state disputes.

b) on a non-discriminatory basis,

c) in accordance with due process of law, and

d) accompanied by payment of prompt, adequate and effective compensation….

MAI Negotiating Text, supra note 66, at 57, IV.2.2.1.

74. MAI Commentary, supra note 67, at 30, IV.2.5.

75. MAI Negotiating Text, supra note 66, at 63, V.D.

76. Id. at 63-69, V.A-C.

77. A Contracting Party may not initiate proceedings under this Article for a dispute which its investor has submitted, or consented to submit, to arbitration under [the MAI], unless the other Contracting Party has failed to abide by and comply with the award rendered in that dispute or those proceedings have terminated without resolution by an arbitral tribunal of the investor’s claim. Id. at 65, V.C.1.b.

78. See MAI Negotiating Text, supra note 66, at 67, V.C.6.c (state-state disputes, proceedings and awards); id. at 75, V.D.16.a (investor-state disputes, final awards). In investor-state arbitration, interest from the time of loss or damage is also available. See id.

79. In a state-state arbitration, restitution is available only with the agreement of the losing Party; in an investor-state arbitration, the losing Party need not agree, but has the right to pay monetary compensation instead, if restitution is “not practicable.” Id. at 67, V.C.6.c (state-state); id. at 75, V.D.16.a (investor-state).

80. See MAI Negotiating Text, supra note 66, at 67, V.C.6.c.

81. Id. at 76, V.D.16.c (“An arbitration award shall be final and binding between the parties to the dispute and shall be carried out without delay by the party against whom it is issued, subject to its post-award rights under the arbitral systems utilised.”), V.D.18 (“Each Contracting Party shall
At least some MAI negotiators wanted the agreement to recognize environmental concerns. This gave rise to a proposal for a “three-anchor [environmental] approach”:

The first anchor would be the preamble, which should reaffirm Parties’ commitment to the relevant principles of the Rio Declaration and to the relevant multilateral agreements. The second anchor would be a provision built on NAFTA Article 1114, stating that environmental and social standards as contained in national laws and regulations should not be lowered in order to attract an investment. The main debate here has been whether or not this should be a binding provision. NAFTA 1114 only says that such lowering of standards is “inappropriate.” The third anchor was investor performance on environmental protection.

provide for the enforcement of the pecuniary obligations imposed by an award rendered pursuant to [the investor-state arbitration provisions].

82. See MAI Negotiating Text, supra note 66 at 69, V.C.9. The Negotiating Text is not very well developed on this point. The draft proposes two alternative provisions for giving enforcement powers to states that have received a favorable award with which the challenged state has not complied. One allows the state to “take measures in response” to the noncompliance. Id., V.C.9.a. The other allows it to “suspend the application to the other Contracting party of obligations under this agreement” other than the obligations relating to general treatment and expropriation. Id., V.C.9.a-b. The Text also proposes giving all of the other parties to the MAI some role in approving such measures and suspending the non-complying party’s right to participate in decisions concerning the Agreement. Id. V.C.9.c.

83. According to the Secretary of the Negotiating Group, not all OECD members agreed that the MAI should address the environment. Until the victory of the Labour party in the United Kingdom, the UK took a contrary position. See Huner, supra note 59. Other opponents were Australia, New Zealand, Korea and Mexico (“perhaps the strongest critic”). Id. In addition, these “anchor” environmental provisions were “poorly received in business circles, particularly in the United States.” Id. Even the United States—which, in the Secretary’s opinion, was the only nation with experience (from the NAFTA debates) in the relationship between investment and the environment—did not raise environmental issues until late in the negotiations. Id.

84. One draft of the MAI’s preamble reaffirmed the parties’ commitment to sustainable development and expressed their recognition that “investment, as an engine of economic growth, can play a key role in ensuring that growth is sustainable, when accompanied by appropriate environmental policies to ensure it takes place in an environmentally sound manner.” OECD, MAI Draft, October 6, 1997, <http://www.oecd.org/daf/cmis/mai/negtext.htm> (emphasis added) (on file with author). The 1998 Negotiating Text proposed a different version:

[Recognizing that appropriate environmental policies can play a key role in ensuring that economic development, to which investment contributes, is sustainable,] and resolving to [desiring to] implement this agreement [in accordance with international environmental law and] in a manner consistent with sustainable development, as reflected in the Rio Declaration on Environment and Development and Agenda 21, [including the protection and preservation of the environment and principles of the polluter pays and the precautionary approach].

MAI Negotiating Text, supra note 66, at 7-8 (brackets in original).

85. Huner, supra note 59.
In addition, the United States proposed adding a general environmental exception, essentially identical to NAFTA Article 1114(1).\textsuperscript{86}

Finally, the Negotiating Text proposed to recognize the right of each country to establish its own levels of domestic environmental protection and environmental development policies and priorities, and to adopt or modify accordingly its environmental laws and regulations.\textsuperscript{87} The Text proposes to implement this understanding through an interpretive note to the expropriation provision clarifying that the provision does not require compensation for investment losses due to “regulation … and other normal [governmental] activity in the public interest.”\textsuperscript{88}

IV. CHALLENGES TO ENVIRONMENTAL LAWS AND REGULATIONS UNDER NAFTA

As noted above,\textsuperscript{89} international arbitration proceedings are extremely confidential. In addition to excluding those who may be directly affected by the results of the arbitration, this secrecy makes it very difficult to obtain complete and accurate factual information regarding NAFTA expropriation claims. The cases described in this section are based on information that is publicly available. With one exception (the Ethyl case), none of the parties to the arbitration has made its submissions public. It is therefore possible that these descriptions omit certain relevant factual information or legal claims. Nevertheless, the case descriptions clearly demonstrate the conflict between the NAFTA expropriation provisions and government efforts to protect the environment.\textsuperscript{90}

\begin{footnotesize}
\textsuperscript{86} See MAI Negotiating Text, supra note 66, at 123. The exception proposed by the United States would have provided: “Nothing in this Agreement shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with its Agreement that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns.” Id. In testimony before Congress, Alan Larson, Assistant U.S. Secretary of Economic, Business and Agricultural Affairs, stated that a primary US objective in the MAI is “to ensure that the MAI contributes to the achievement of our goal of fostering stronger global efforts to protect the environment … and to achieve sustainable development.” Larson Testimony, supra note 15.

\textsuperscript{87} MAI Negotiating Text, supra note 66, at 123.

\textsuperscript{88} Id. at 141. The Assistant U.S. Secretary of State for Economic and Business Affairs noted that these provisions would implement the understanding that “[n]ormal regulatory actions, even when they affect the value of an investment, should not be considered as an expropriation requiring compensation.” Quoted in Alan Larson, Environmental, Regulatory Safeguards, 15 ENVTL. FORUM 46, 51 (1998).

\textsuperscript{89} See supra note 38 and accompanying text.

\textsuperscript{90} To date, there have been eight claims brought under NAFTA’s investment provisions. The cases described in the text are those that raise the issues discussed in this article most clearly and
\end{footnotesize}
In 1995, the Mexican federal government authorized Quimica Omega de Mexico, a subsidiary of the US-based Metalclad Corporation, to take over and operate a toxic waste facility in the Mexican state of San Luis with respect to which the clearest factual information is available. A summary of the other claims follows.

**Pope & Talbot v. Canada:** Pope & Talbot, Inc., a Delaware-based wood-products company, obtains approximately 75% of its wood from British Columbia. See Pope & Talbot SEC Filing, Form 10-K, Wood Products Business, Mar. 31, 1998; see also Pope & Talbot SEC Filing, Form 10-Q, Nov. 13, 1998. The most lucrative portion of the wood products business is lumber production which accounted for $219,698,000.00 in sales for the company in 1997. See id. In 1996, pursuant to the Canada/US Softwood Lumber Agreement, the two nations agreed to establish volume quotas for each company shipping Canadian softwood lumber to the United States. See Pope & Talbot SEC Filing, Form 10-K, Wood Products Business, Mar. 31, 1998. In the second year of this regime, Pope & Talbot’s quota was decreased from what it had been the previous year. See id. Claiming that this reduction was unfair, the company filed a notice of intent to initiate arbitration under NAFTA’s chapter 11 on February 17, 1999. Pope & Talbot Press Release, Pope & Talbot Issues Challenge to Unfair Softwood Quota (Feb. 17, 1999) <http://www.poptal.com/news.htm> (on file with author). If negotiations between Pope & Talbot and Canada do not resolve the dispute, the company may initiate arbitration in May 1999.

**DESONA v. Mexico:** Desechos Solidos de Naucalpan (DESONA), a US waste management company, claims that the council of the Mexican county of Naucalpan nullified a 15-year waste management concession between the two parties. On December 9, 1996, DESONA notified the government of Mexico of its intent to file a claim through the ICSID Additional Facility Rules and in March 1997 it filed a notice of claim with the ICSID. ICSID has accepted and registered the claim, and the first session of the arbitral tribunal was to be held September 26, 1997. No further information concerning this claim is available. USTR Update on WTO, NAFTA Dispute Settlement Cases (visited on May 3, 1999) <http://www.usia.gov/topical/econ/wto/wtxt0919.htm> (on file with author). See also West, AMERICAN LAWYER, Dec. 1997, available in LEXIS, News Library, Magazine File.

**Sun Belt Water Inc. v. Canada:** In 1990, six companies, including Snowcap Water, held licenses issued by the government of British Columbia (BC) for the bulk export of what was considered “surplus” water. Public opposition to these exports on conservation grounds lead to a temporary moratorium on water exports and, eventually, the BC Water Protection Act, R.S.B.C. Chapt. 484 (1996) (Can.), banned such exports permanently. In 1996, the BC government settled with Snowcap for $335,000, the amount it had spent creating an infrastructure to export water. In December 1998, Sun Belt, a US corporation that was a partner in a joint venture with Snowcap, brought a claim under NAFTA’s Chapter 11 for as much as US$219 million for lost business opportunities resulting from the ban. Sun Belt’s claims are based on violations of the national treatment and minimum standard of treatment provisions. Sun Belt Filing, AMERICASTRADE, Dec. 24, 1998, at 13.

**Loewen Group v. United States:** The Loewen Group, a Canadian funeral services firm, brought a NAFTA investment claim against the United States after it lost a civil contract suit brought by a competing US funeral services company in Mississippi court. The court awarded the US company $500 million and Loewen, which had filed for bankruptcy, was unable to pay the requisite 125% bond to appeal the case. Loewen brought the NAFTA claim on the basis that the suit against it violated NAFTA’s national treatment, minimum treatment and expropriation provisions. AMERICASTRADE, Nov. 26, 1998, at 20.

**USA Waste v. Mexico:** A US waste management company, USA Waste, brought a NAFTA Chapter 11 claim at the ICSID against Mexico based on the city of Acapulco’s failure to pay for street sweeping services provided by USA Waste under a 15-year concession agreement signed in 1995. AMERICASTRADE, June 11, 1998, at 3-4.
Potosí. The facility had a history of contaminating local groundwater. Metalclad reportedly spent $22 million preparing the facility.

From before the outset of this project, Metalclad was aware that its “proposed business in Mexico is highly regulated and is subject to Mexican Environmental law.” This law regulates both the construction and operation of hazardous waste facilities, and requires environmental impact studies and permits from the National Institute of Ecology (INE), as well as local and state agencies. Operation of such facilities and compliance with INE regulations is subject to continual monitoring by the Federal Attorney for the Protection of the Environment.

Environmentalists and local citizens were not satisfied with the environmental impact assessment for the facility, and successfully pressed the local government not to permit its operation. In late 1996, the Governor of San Luis Potosí deemed the facility to be an environmental hazard to surrounding communities and ordered the Metalclad waste facility shut down. The Governor’s decision was supported by a geological audit performed by environmental impact analysts at the University of San Luis Potosí, who found that the facility was located on an underground alluvial stream and could therefore contaminate the local water supply. The Governor subsequently declared the site part of a 600,000 acre ecological zone.

On January 2, 1997, Metalclad filed a claim with the ICSID against the Mexican government under the NAFTA investment chapter. The complaint alleges, among other things, that “having been denied the right

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94. See id.
95. See id.
96. See Trying to Give the NACEC Teeth, in LATIN AMERICAN REGIONAL REPORTS: MEXICO AND NAFTA REPORTS 4 (May 9, 1996).
to operate its constructed and permitted facility, its property has therefore been, as a practical matter, expropriated, entitling the Company to the fair market value of the facility as damages." Metalclad asserted that the facility was worth $90 million.

In July 1997, a three member arbitration tribunal met to address the claim. On October 13, 1997, Metalclad filed a memorial that included the claim and all the evidence supporting the claim, including expert witness studies. On February 17, 1998, the Mexican government filed a response, to which Metalclad replied on August 21. Mexico responded with a number of procedural objections concerning allegations and evidence that Metalclad should be permitted to submit. On November 13, 1998, the tribunal rejected Mexico’s complaints and ordered Mexico to respond on the merits of the case by March 19, 1999.

B. The Ethyl Corporation Case

In April 1997, Canada enacted a law making it a crime to import, or trade between provinces, manganese-based substances, including methylcyclopentadienyl manganese tricarbonyl (MMT), a fuel additive designed to prevent automobile engine knocking. Automobile manufac-

101. Metalclad SEC filing, Apr. 1, 1997; Metalclad SEC filing, Nov. 20, 1998, <http://www.sec.gov/Archives/edgar/data/13547/0000013547-98-000023.txt> (on file with author) (characterizing its claim as “one likened to expropriation. The Company’s position is since it is not being allowed to operate a legally authorized project, it has in essence been taken by the Mexican government.”). Metalclad also argued that Mexico violated the national treatment and most-favored-nation treatment requirements and had imposed illegal performance requirements. See Juhasz, supra note 97. The national treatment violation is apparently based on the assertion that the refusal to permit Metalclad’s facility to operate is intended to protect a Mexican waste disposal company called Rimsa. See Fernando Cesaran, Buen Periodismo, El Destino de la Basura, EXCELSIOR: Editorial, 18 Aug. 1997 (visited on Feb. 24, 1999) <http://excelsior.com.mx/9708/970818/art07.html>.


103. Under the arbitration rules, each party has the right to select one panel member; the third is chosen jointly. Metalclad appointed former US Attorney General Benjamin R. Civiletti. See Jim Bryan, Techstocks.com discussion group, Metalclad Corp. (MTLC) (June 9, 1997) <http://www4.techstocks.com/~wsapi/investor/Subject-15440> (on file with author). The third arbitrator is from Great Britain. See Metalclad SEC Filing, Form 10-Q, Nov. 20, 1998.


105. See id.

106. Id. Metalclad “expects to request an oral hearing to be held as soon as possible after Mexico’s final filing, following which a decision is expected to be rendered by the Tribunal.” Id. 107. See Manganese-Based Fuel Additives Act (MBFAA), Ch. 11, 1997 S.C. (Can.). I am indebted to David A. Wirth, Professor of Law at Boston College Law School, for his work in uncovering and untangling many of the facts of this claim.

MBFAA gave the Minister of the Environment limited authority to waive the prohibition for uses other than as gasoline additives. Id. § 5. According to Ethyl, use as a gasoline additive is “a princi-
turers had asserted that MMT harms automobile on-board diagnostic systems, which in turn could lead to a failure to detect high levels of pollutant emissions. According to Canada’s Environmental Health Directorate, excess exposure to manganese compounds can cause adverse neurological effects, leading to symptoms similar to mild Parkinson’s disease.

On April 14, 1997, five days after the ban passed the Parliament and eleven days before it received Royal Assent, Ethyl Corporation, a U.S. corporation with a wholly-owned Canadian subsidiary that is the sole Canadian importer, processor and distributor of MMT, filed notice of arbitration pursuant to NAFTA’s investment chapter. Among other allegations, the notice claimed that the Canadian law constituted an expropriation of Ethyl’s business in Canada, subject to the compensation requirement of NAFTA’s article 1110. Ethyl sought US $250 million in compensation for the expropriation of its investment in Canada. This amount included loss of sales and profits in Canada, loss of value of Ethyl Canada, loss of “world-wide sales due to other countries relying on MMT,” although “MMT is also used by Ethyl Corporation in other fuel products.” Ethyl Corp. v. Government of Canada, Notice of Arbitration Under Arbitration Rules of the United Nations Commission on International Trade Law and the North American Free Trade Agreement 6 (Apr. 14, 1997) [hereinafter Notice of Arbitration] (on file with author).

For a summary of the scientific evidence concerning these possible effects and a discussion of the treatment of MMT by the US EPA, see Jesus Juanos I Timoneda, The Legal Dynamics of the Regulation of MMT: Air Quality Standards and the Salt Lake City Airshed, 17 J. LAND RESOURCES & ENVTL L. 283 (1997), in which the author concludes that there are “numerous, diverse, sometimes conflicting, reasons to support” all positions concerning the use of the additive, but that one variable, “the incidence of MMT’s combustion products on the amount of particulate matter in a given airshed,” “deserves considerable regulatory attention … because of its proven harmful effects on health and welfare.” Id. at 307, 312.

See ENVIRONMENTAL HEALTH DIRECTORATE, HEALTH CANADA, RISK ASSESSMENT FOR THE COMBUSTION PRODUCTS OF METHYLCYCLOPENTADIENYL MANGANESE TRICARBONYL (MMT) IN GASOLINE (Dec. 6, 1994). At least some studies suggested a health risk due to breathing exhaust from cars running on gasoline containing MMT. A University of Quebec neurophysiologist stated in April 1996 that tests on laboratory animals suggested that exposure to manganese could speed up the aging process, and that young children “may be particularly at risk” because of the potential for the deterioration of brain tissues. SOUTHWARK NEWS, Apr. 20, 1996 (visited on June 11, 1998) reprinted in <http://www.achilles.net/~jamesh/mmt.htm>

108. For a summary of the scientific evidence concerning these possible effects and a discussion of the treatment of MMT by the US EPA, see Jesus Juanos I Timoneda, The Legal Dynamics of the Regulation of MMT: Air Quality Standards and the Salt Lake City Airshed, 17 J. LAND RESOURCES & ENVTL L. 283 (1997), in which the author concludes that there are “numerous, diverse, sometimes conflicting, reasons to support” all positions concerning the use of the additive, but that one variable, “the incidence of MMT’s combustion products on the amount of particulate matter in a given airshed,” “deserves considerable regulatory attention … because of its proven harmful effects on health and welfare.” Id. at 307, 312.

109. See ENVIRONMENTAL HEALTH DIRECTORATE, HEALTH CANADA, RISK ASSESSMENT FOR THE COMBUSTION PRODUCTS OF METHYLCYCLOPENTADIENYL MANGANESE TRICARBONYL (MMT) IN GASOLINE (Dec. 6, 1994). At least some studies suggested a health risk due to breathing exhaust from cars running on gasoline containing MMT. A University of Quebec neurophysiologist stated in April 1996 that tests on laboratory animals suggested that exposure to manganese could speed up the aging process, and that young children “may be particularly at risk” because of the potential for the deterioration of brain tissues. SOUTHWARK NEWS, Apr. 20, 1996 (visited on June 11, 1998) reprinted in <http://www.achilles.net/~jamesh/mmt.htm>.


111. See id. at 3, 10-18. The notice also alleged violations of the national treatment obligations of NAFTA’s article 1102, through discriminatory treatment of a US investor. Ethyl noted that the Minister of the Environment had stated that nothing would keep Ethyl from building a MMT production plant in Canada and that “[t]here is no reasonable or plausible explanation why domestically produced MMT is permitted for sale in Canada while imported MMT is not.” Ethyl also argued that the ban imposed a performance requirement—in the form of an effective requirement that MMT sold in Canada “have 100% Canadian content”—in violation of NAFTA article 1106. Id. at 13.

112. Ethyl noted that “the sale of MMT represents some 50% of Ethyl Canada’s total sales revenue.” Id. at 11.

113. Ethyl threatened that the 50% loss of sales revenue “could cause the parent company to re-evaluate maintaining a Canadian operation.” Id. at 12.
on” the measures taken by Canada, “the cost of reducing operations in Canada,” expenses incurred in “defending itself against allegations made by Canada” and lobbying to defeat the law,114 and its “goodwill both inside and outside Canada.”115

Ethyl cited international law in support of its expropriation claim. In particular, Ethyl stated that bilateral investment treaties, “which are substantially similar to the NAFTA’s investment protection provisions” have been interpreted as requiring compensation for “indirect expropriation”: “Where the effect is similar to what might have occurred under an outright expropriation, the investor would in all likelihood be covered under most BIT provisions.”116 According to Ethyl,

An expropriation therefore exists whenever there is a substantial and unreasonable interference with the enjoyment of a property right …. Article 1110 of the NAFTA does not prevent governmental regulatory actions. It requires governments to compensate investors for interference with their property rights as set out in the NAFTA.117

Ethyl argued that the Canadian measure was a discriminatory attempt to protect domestic industry, rather than a legitimate restriction for environmental or health reasons. Ethyl asserted that the Canadian Ministry of Health “has concluded that MMT does not pose a threat to human health and no independent studies have concluded that MMT harms automobile diagnostic systems.”118 According to Ethyl, if the ban had been a health or environmental measure, Canada would have enacted it pursuant to the authority of the Canadian Environmental Protection Act (CEPA), which provides authority for the regulation of the production

114. Id. at 18.
115. Notice of Arbitration, supra note 107, at 6, 15-18. In its Notice of Arbitration, Ethyl claimed that “the Government’s statements [concerning the additive] created public distrust” and “animosity” towards MMT. Id. at 6, 15.
116. Notice of Arbitration, supra note 107, at 10 (quoting DOLZER & STEVENS, supra note 14, at 100).
117. Id. at 11. Ethyl also noted that Canada’s Minister of International Trade had pointed out, in a letter to the Minister of the Environment, “that Canada’s proposed legislation could constitute a measure tantamount to expropriation … [and] could be inconsistent with Canada’s NAFTA … investment obligations.” Id. at 12 (citing Letter of the Hon. A. Eggleton to the Hon. S. Marchi (February 23, 1996)).
118. Id. at 4. See also ENVIRONMENTAL HEALTH DIRECTORATE, supra note 109, at 69 (concluding on the basis of exposure assessment that “all analyses indicate that the combustion products of MMT in gasoline do not represent an added health risk to the Canadian population”).
and manufacture of toxic substances. Ethyl claimed that there had not been sufficient scientific support for the government of Canada to prohibit MMT under CEPA or Canadian health laws. Ethyl supported its discrimination claim by noting that MMT was only one of a number of fuel additives that Canada could have regulated; that Ethyl, a foreign corporation, was the sole manufacturer of MMT; and that the law “will not ban MMT completely, but will make foreign-made MMT inaccessible to consumers in Canada.” For its part, the Government of Canada claimed that it had restricted trade in MMT, as opposed to its production, sale or use, because the Canadian constitution, which shares environmental authority between federal and provincial governments, places production and intraprovincial use of a product beyond the legislative authority of the Canadian parliament.

With respect to the alleged lack of scientific support for the Canadian law, Ethyl characterized the law as a “performance requirement,” with respect to which measures to protect life or health or to conserve exhaustible natural resources are permitted only if they are “necessary.” Ethyl stated that “[t]he lack of any clear scientific evidence throws into
doubt whether [the Canadian MMT measure] is necessary to protect human life or health.”125

Ethyl also cited jurisprudence interpreting GATT’s Article XX(b), which permits restrictions on trade where they are “necessary to protect human, animal or plant life or health.”126 Ethyl noted that GATT panels have interpreted “necessary” to mean that the measure in question must be “the least trade restrictive measure possible.”127 Ethyl argued that an outright ban on MMT, as opposed to a trade restriction giving domestic producers an advantage over foreign producers, would be less trade restrictive.128 For that reason, according to Ethyl, the Canadian law could not be considered “necessary.”129

In July 1998, after a Canadian domestic trade panel ruled in favor of several provincial governments that had brought a claim that the ban violated Canada’s Agreement on Internal Trade,130 the government of Canada announced that it had settled Ethyl’s NAFTA challenge. The settlement provided for a payment of approximately US $13 million, including roughly $4.5 million for legal fees.131 In addition, the Minister of the Environment, Christine Stewart, issued a letter to Ethyl stating: “Current scientific information fails to demonstrate that MMT impairs the proper functioning of automotive on-board diagnostic systems. Furthermore, there is no new scientific evidence to modify conclusions

126. See GATT, supra note 50, art. XX(b).
128. See id.
129. Id.
130. Agreement on Internal Trade, R.S.C. Chapt. 17 (1996) (Can.). The Agreement on Internal Trade (AIT) applies principles of nondiscrimination and elimination of trade obstacles to trade among provincial and other governments. The dispute resolution panel established by the AIT agreed with the governments of Alberta, Québec, Saskatchewan and Nova Scotia that the ban on manganese-based substances was a restriction on the right of movement across provincial boundaries and an obstacle to internal trade, both of which are prohibited by the AIT. REPORT OF THE ARTICLE 1704 PANEL CONCERNING A DISPUTE BETWEEN ALBERTA AND CANADA REGARDING THE MANGANESE-BASED FUEL ADDITIVES ACT (Fil no. 97/98-15-MMT-Po58 June 12, 1998). The panel found that the manganese ban did not satisfy the AIT exception for otherwise legitimate governmental measures because the government had not demonstrated that there existed “such urgency or a risk so widespread as to warrant such comprehensive restriction[s] as the Act provides on internal trade.” AMERICASTRADE, July 23, 1998, at 14 (quoting decision of the AIT panel). The AIT panel considering the internal trade ramifications of the law had concluded that the automobile manufacturers’ “evidence as to the impact of MMT on the environment is, at best, inconclusive.” Id. at 15. The panel did note that it did not consider the law to be a “disguised restriction” on internal trade. Id. at 14.
drawn by Health Canada in 1994 that MMT poses no health risk.” In a subsequent news conference, Ms. Stewart said she remained concerned about allegations concerning MMT, but stated: “[W]e do not have sufficient scientific evidence at the moment on which to base a clear case that MMT in gasoline is causing severe problems to either the environment or the health of Canadians.” With respect to the effect on automobile emissions systems, Ms. Stewart stated that, in introducing the ban in 1995, the government had relied on evidence from the auto industry that had seemed “quite persuasive,” but that the industry evidence now appeared insufficient. She also stated that the Canadian government had not banned MMT directly because there was no proof that it was toxic at low levels of exposure.

C. THE SD MYERS CASE

On July 22, 1998, shortly after Canada settled the Ethyl claim, SD Myers, Inc., a U.S. corporation with a facility to dispose of PCB wastes in Ohio, filed a claim against Canada for “not less than” $10 million, plus fees, costs and interest, for losses arising out of a 15 month Canadian ban on the export of PCBs, which the company claimed to have been “tantamount to expropriation” of its contracts to treat Canadian PCBs.  

133. Id. Both the automobile industry and some environmental groups continue to express concern regarding the effects of MMT. The president of the Canadian Motor Vehicle Manufacturers Association stated that the automobile industry had submitted over 40 papers demonstrating MMT’s effect on emission controls. See id. In addition, preliminary studies by a neurotoxicologist at the University of Quebec apparently suggest that “even low levels of manganese in the blood can have health effects, particularly in children and the elderly.” Shawn McCarthy, Threat of NAFTA Case Kills Canada’s MMT Ban, THE GLOBE AND MAIL, July 20, 1998 (visited on July 21, 1998) reprinted in <http://www.theglobeandmail.com…9980720/GlobeFront/ummtn.html>. The author of the study stated: “We know that in large concentrations, airborne manganese does pose a risk to human health. What we don’t know is at what level does it not pose a risk. There remain a lot of questions about manganese and we should know a lot more about it before we use it.” Id.
134. Urquhart, supra note 121.
135. THE GLOBE AND MAIL, July 21, 1998, supra note 132. See also THE GLOBE AND MAIL, July 20, 1998, supra note 133 (“Former environment ministers Sheila Copps and Sergio Marchi both argued that they couldn’t ban MMT directly because Health Canada had found there was not sufficient evidence that it was toxic at low levels. So they resorted to the trade ban.”).
136. Reports have placed SD Myers’s estimate of its losses as high as $30 million. See Ian Jack, Fed’s Face Lawsuit over PCBs: 1995 Ban under NAFTA, FINANCIAL POST, Oct. 30, 1998 at C8; U.S. Company Seeks Compensation for Losses Due to Canadian PCB Export Ban, 21 INT’L ENV’T REP. No. 18 at 848 (company claims losses of $15 million). S.D. Myers’s claim for fees and costs apparently included expenses incurred in the company’s opposition to the Canadian ban.
137. 21 INT’L ENV’T REP. No. 18, supra note 135, at 848.
Since 1977, U.S. law has prohibited the manufacture, processing and distribution in commerce of PCBs. Pursuant to this law, EPA banned the import and export of PCBs in 1980. Although the law allowed EPA to grant individual one-year exemptions from this prohibition in certain circumstances, it rarely did so. Canada first banned the export of PCB wastes in 1990, although at that time it permitted the return of U.S. government-owned PCB wastes to the United States for disposal. In 1992, Canada ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which prohibits countries from exporting hazardous wastes, including PCBs, to non-parties like the United States without ensuring that they will be managed in an environmentally sound manner. Canada implemented these obligations in the Export and Import of Hazardous Waste Regulations. In December 1994, the United States proposed to amend its PCB regulations to allow limited transboundary trade in PCB wastes beginning in mid-1996.

139. EPA Final Rule, Disposal of Polychlorinated Biphenyls; Import for Disposal, 61 Fed. Reg. 11096 (Mar. 18, 1996). According to EPA, it had closed the border to PCB transports “primarily because of both limited disposal capacity in the United States and no appropriate disposal capacity in Canada.” Id. at 11101.
140. 15 U.S.C. §2605(e)(3)(B). The Administrator may only grant such an exemption if there will be no “unreasonable risk of injury to health or environment” and “good faith efforts have been made to develop a chemical substance which does not present an unreasonable risk of injury to health and the environment and which may be substituted for such [PCB].” 15 U.S.C. §2605(e)(3)(B)(ii).
144. The Basel Convention requires Parties to prohibit the export of hazardous wastes, including PCBs, if they have “reason to believe that the wastes in question will not be managed in an environmentally sound manner.” Id. art. 4.2(e) (prohibition), Annex I (listing PCBs). In addition, Parties may not export PCBs to non-Parties, id. art. 4.5, unless they enter into an arrangement or agreement that does not “derogate from the environmentally sound management of hazardous wastes” as required by the Convention. Id. art. 11.1. The United States has signed, but not ratified, the Basel Convention.
145. Export and Import of Hazardous Waste Regulations, SOR/92-637, P.C. 1992-2284, Nov. 12, 1992. The regulations prohibit the export of hazardous wastes to countries that are not party to the Basel Convention or the Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Waste. Id. art. 6(c).
146. See EPA Final Rule, Disposal of Polychlorinated Biphenyls; Import for Disposal, 61 Fed. Reg. 11096 (Mar. 18, 1996). In particular, instead of requiring persons wishing to import PCBs for disposal to apply for a case-by-case exemption, importers would only have been required to provide
In October 1995, the United States granted SD Myers “enforcement discretion” to begin importing Canadian PCBs the following month.\textsuperscript{147} The following month, Canada temporarily banned the export of PCBs to the United States because Canada was “uncertain about the final contents of the U.S. regulatory amendments governing PCB waste imports” and “lacked assurance that Canadian PCB wastes, if exported to the U.S., would be managed in an environmentally sound manner.”\textsuperscript{148} The ban was implemented pursuant to authority under the Canadian Environmental Protection Act to issue “interim orders,” which can be made if a substance deemed toxic under CEPA, in this case PCBs, is not adequately regulated, and immediate action is required to deal with a significant danger to the environment or to human life or health.\textsuperscript{149}

In February 1996, the Canadian Ministers of the Environment and Health announced that the ban would remain in place until Canada was assured that PCB wastes exported to the United States would be treated appropriately.\textsuperscript{150} Canada’s concern regarding PCB treatment was explained in subsequent legislation lifting the ban:

Landfilling does not destroy PCBs, consequently, the potential for future environmental contamination continues. In addition, landfilling requires maintenance and monitoring in perpetuity. If

\textsuperscript{147} ES&E, supra note 142.

\textsuperscript{148} Id. Canada’s PCB Waste Export Regulations, 1996, explain the concern regarding PCBs: Polychlorinated biphenyls (PCBs) are very stable substances; they are resistant to chemical and physical degradation. They are also persistent and bioaccumulate in living organisms and are capable of penetrating the food chain. Consequently, PCBs have been listed in Schedule I of the Canadian Environmental Protection Act (CEPA) as toxic. Furthermore, once released into the atmosphere, PCBs can travel extremely long distances. As a result, they are regularly found in the Great Lakes Region and also in remote area such as the Arctic.

\textsuperscript{149} CEPA, supra note 119, Chapt. 16, § 15.3 (1985), Interim Orders 35. Once an Interim Order is made, it can only remain in effect if the minister issuing the order “offer[s] to consult with the governments of all affected provinces within twenty-four hours after making the Order to determine whether they are prepared to deal with the significant danger” and “consult[s] with other Ministers of the Crown to determine whether any action can be taken under any other Act of Parliament to deal with the significant danger.” Id. The Interim Order banning PCB waste exports to the United States was entitled Regulations Amending the PCB Waste Export Regulations (Interim Order). See PCB Waste Export Regulations, 1996, Description, <http://www.hazmatmag.com/library/PCBRegs96/PCBRegs96e.html> (on file with author).

\textsuperscript{150} ES&E, supra note 142.
Canadian PCB wastes are allowed to be landfilled in the United States, they could escape into the environment and, because of their capacity to volatilize and to be transported over long distances, they could affect the health of Canadians and Canadian’s [sic] environment as well as that of other countries. Furthermore, as a party to the Basel Convention, Canada is required to ensure that any exports of hazardous wastes, including PCB wastes, be disposed of in an environmentally sound manner. Since guidelines adopted by Parties of the Basel Convention do not consider landfilling of PCB wastes to be environmentally sound, Canada has an obligation to ensure that Canadian PCB wastes are not exported for landfilling in the United States.151

In March 1996, the United States issued new regulations governing the import of PCB wastes.152 After reviewing the regulations, Canada rescinded its ban, allowing exports of PCB wastes “for treatment and destruction but not for landfilling,” beginning in February 1997.153 The Canadian Ministry of the Environment explained that the new regulations would allow PCB waste exports to the United States

only if the Department of the Environment has the guarantee that: these wastes will be treated and destroyed in an efficient and environmentally sound manner; and, the U.S. EPA has been informed and has accepted that these PCB wastes enter that country. Therefore, as mentioned in the news release by both Ministers, the Regulations will allow exports of Canadian PCB wastes and these wastes will be allowed only for treatment and destruction and thus ensuring that any export of Canadian PCB wastes will be managed in an environmentally sound manner.154

In addition to the direct effect of ensuring safe disposal of PCB wastes, Canada noted that lifting the export ban had significant other environmental and economic benefits. These included decreased risk of exposure to PCB wastes due to shorter transport distances for wastes located near disposal facilities in the United States; lowered cost of PCB waste disposal due to increased competitiveness among a larger number of available disposal facilities and shorter transportation distances; and

154. Id.
increased destruction of PCBs due to the lowered cost, resulting in less likelihood of exposure and less storage and cleanup expenses. In July 1997, a U.S. Court of Appeals overturned EPA’s new import regulations, ruling that EPA was bound by U.S. law to consider individual exemption applications on a case-by-case basis.

SD Myers’s NAFTA claim is apparently based on contracts that it had with a group of Canadian companies to dispose of their PCB wastes. The company alleged that the ban gave “a monopoly on PCB treatment to an Alberta company.”

V. INDIRECT EXPROPRIATION UNDER DOMESTIC AND INTERNATIONAL LAW

The question at the heart of this Article is one of international law — specifically, whether international law protects the right of governments to implement environmental measures that affect property interests without becoming obligated to compensate for those effects. Despite the international nature of the question, the Article will first briefly describe U.S., Canadian and Mexican law regarding regulatory takings. It will do so for a number of reasons.

First, whereas relatively few international tribunals have considered whether regulations affecting the value of property give rise to an obligation to compensate, U.S. courts have considered the question in some detail. Canadian courts have also addressed the issue, although less frequently. U.S. law is also likely to have a strong influence on the development of international law in this area, because, as one of the leading capital-exporting states, it “will contend for the transference of the system of property protection in [its] domestic sphere onto the international sphere.” Canada and Mexico have similar motivation, although widely differing ability, to make international law reflect their systems. In addi-

155. Id.
156. Sierra Club v. EPA, 118 F.3d 1324 (9th Cir. 1997).
159. M. SORNARAJAH, THE INTERNATIONAL LAW ON FOREIGN INVESTMENT 294 (1994). Sornarajah notes that “[t]here is evidence of such a transference in the past” and that “[t]he pervasive influence of the American jurisprudence on the taking of property is evident in modern discussions on taking in international law.” Id. The United States intends that the expropriation standards in the MAI will be “consistent with U.S. legal principles and practice.” Larson Testimony, supra note 15.
Conversely, international law concerning regulatory expropriation could have a strong effect on the ability of the United States to regulate to protect the environment or other important societal concerns. In the famous words of the U.S. Supreme Court, “[i]nternational law is part of our law.”161 More importantly, however, as a party to numerous agreements regulating expropriation, including the NAFTA, and a promoter of the globalization of these rules, the U.S. government and its citizens must be aware of the degree to which international law may support or conflict with U.S. law. If, for example, international law and agreements were to require compensation for a wide variety of environmental regulations — a position already advanced by a number of companies seeking to use the NAFTA to obtain compensation for the impact of laws on their investments — the ability of the United States to protect its environment could be profoundly limited.162 The same is true for Canada, Mexico and all other countries of the world.

A. REGULATORY TakINGS UNDER DOMESTIC LAW

The U.S., Canadian and Mexican legal systems provide varying degrees of protection to private property. Nevertheless, as the following descriptions demonstrate, they share a common understanding that the government is not obligated to compensate for the economic impact of most legitimate regulatory action.

1. Regulatory Takings Under U.S. Law

The Fifth Amendment to the U.S. Constitution guarantees that private property shall not “be taken for public use without just compensation.”163 Until 1922, the Supreme Court had considered that the Constitutional requirement of compensation applied only to direct takings — those in which the government took full title to private property.164 In Pennsylvania Coal Co. v. Mahon, the Court first recognized what have been called “regulatory takings,” stating that “while property may be regulated

160. See infra note 241.
161. The Paquete Habana, 175 U.S. 677, 700 (1900).
162. See SORNARAJAH, supra note 159, at 299 (“If, each time there is a [regulatory] measure against a foreign investor, he could allege a taking in international law which needs to be compensated, regulatory measures against foreign investors could become impossible.”).
163. US. Const. amend. V.
to a certain extent, if regulation goes too far it will be recognized as a taking.\textsuperscript{165} The Court has been less than clear, however, in defining what is “too far.” Rather than establishing a definitive test for when a regulation becomes a taking,\textsuperscript{166} the Court has determined that the analysis depends on an “ad hoc, factual inquir[y] into the circumstances of each particular case,”\textsuperscript{167} and has identified three factors that are particularly significant in undertaking this inquiry.\textsuperscript{168} Although these three factors must be applied on a case-by-case basis, one scholar has noted that “it is quite difficult to establish a [regulatory] taking under [the Court’s] ad hoc approach, in part [because of] the sensitivity of the courts to the important purposes of government regulation and the reciprocal advantages of economic regulation.”\textsuperscript{169}

The first factor in the Supreme Court’s regulatory taking analysis is “the nature of the governmental action.”\textsuperscript{170} Regulations that cause the government to “physically invade or permanently appropriate”\textsuperscript{171} the property in question automatically require compensation “no matter how minute the intrusion, and no matter how weighty the public purpose behind it.”\textsuperscript{172} Lesser interference, on the other hand, that “arises from a public program that adjusts the benefits and burdens of economic life economic life to promote the common good … does not constitute a taking requiring Government compensation.”\textsuperscript{173} As the Court has explained,

\begin{itemize}
  \item[165]260 U.S. 393, 415 (1922). The distinction between a direct taking and a regulatory taking is still relevant: “A ‘taking’ may more readily be found when the interference with property can be characterized as a physical invasion by government … than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good.” \textit{Penn Central v. New York City}, 438 U.S. 104, 124 (1978).
  \item[166]See \textit{Lucas}, 505 U.S. at 1015 (Court has “generally eschewed any set formula for determining how far is too far, preferring to engage in essentially ad hoc, factual inquiries” (quotations omitted)).
  \item[168]\textit{Id.}
  \item[170]\textit{Concrete Pipe}, 508 U.S. at 643.
  \item[171]\textit{Id.}; \textit{Connolly v. Trustees of the Operating Engineers Pension Trust}, 475 U.S. 211, at 225 (1986).
  \item[172]\textit{Lucas}, 505 U.S. at 1015.
  \item[173]\textit{Concrete Pipe}, 508 U.S. at 643. See also \textit{Lucas}, 505 U.S. at 1022 (“[G]overnment may, consistent with the Takings Clause, affect property values by regulation without incurring an obligation to compensate—a reality we nowadays acknowledge explicitly with respect to the full scope of the State’s police power”); \textit{Connolly}, 475 U.S. at 225; \textit{Penn Central}, 438 U.S. at 125 (where the State “reasonably conclude[s] that ‘the health, safety, morals, or general welfare’ would be promoted by prohibiting particular contemplated uses of land,” compensation need not accompany prohibition).
\end{itemize}
“such restrictions are the burdens we must all bear in exchange for the advantage of living and doing business in a civilized community.”

Regulations also must “substantially advance legitimate state interests.” The Supreme Court has recognized as legitimate, and thus not requiring compensation, regulations addressing a host of environmental or human health problems. These have included regulations prohibiting smoke emissions; requiring the construction of roadside flood-control devices; limiting the size of buildings to “avoid unnecessary conversion of open space land to strictly urban areas, thereby protecting against the resultant adverse impacts such as air, noise, and water pollution, ... disturbance of the ecology and the environment, ... and other demonstrated consequences of urban sprawl”; prohibiting the sale of items made from endangered species; regulating the sale and use of pesticides; banning the import of baitfish from other states to protect native fish from exogenous parasites; requiring the destruction of diseased trees to protect local orchards; banning brickyard operations in a residential area because of their adverse impacts on human health; restricting coal mining activities to protect the environment and public welfare; regulating or banning the manufacture or sale of alcoholic

175. Lucas, 505 U.S. at 1015-17 (quoting Agins, 447 U.S. at 260).
176. See Lucas, 505 U.S. at 1022 (There exists “a long line of this Court’s cases sustaining against Due Process and Takings Clause challenges the State’s use of its ‘police powers’ to enjoin a property owner from activities akin to public nuisances” (citations omitted)).
177. See Northwestern Laundry v. Des Moines, 239 U.S. 486 (1916) (no valid constitutional objection in fact that regulation “may require the discontinuance of the use of property, or subject the occupant to large expense in complying with the terms of the law”).
179. Agins, 447 U.S. at 262 (zoning regulation limiting buildings to single-family dwellings, accessory buildings, and open-spaces uses substantially advanced the cited interests).
180. See Andrus v. Allard, 444 U.S. 51, 64-68 (1979) (refusing to require compensation when a ban on the sale of eagle feathers made it impossible for the claimant to sell certain items he had intended to sell).
181. See Ruckelshaus, 467 U.S. at 1007.
185. See Hodel v. Virginia Surface Mining and Reclamation Ass’n, 452 U.S. 264, 295 (1981) (statute prohibiting mining near certain locations and regulating conditions under which any mining could be conducted did not constitute a taking because it did not prevent any non-mining uses of land); Keystone Bituminous Coal Ass’n v. De Bendictis, 480 U.S. 470, 485 (1987) (statute designed to prevent ground surface from collapsing was warranted in interest of public safety).
beverages to protect “public health, public morals, and the public safety”; and protecting visual access to the ocean.

The second factor that the Supreme Court has identified in considering whether a regulatory taking requires compensation is “the severity of the economic impact” of the governmental action. The Court has stated that a regulation will usually constitute a compensable taking if it “denies all economically beneficial or productive use” of the property in question. On the other hand, “mere diminution in the value of property, however serious, is insufficient to demonstrate a taking.”

It is important to note that the Court has repeatedly held that it must analyze the impact of a regulation on the property as a whole. “At least where an owner possesses a full ‘bundle’ of property rights, the destruction of one ‘strand’ of the bundle is not a taking, because the aggregate must be viewed in its entirety.”


187. See Nollan v. California Coastal Comm’n, 483 U.S. 825, 828 (1987). Although the Court found the interest advanced to be legitimate, it concluded that conditioning a building permit on the grant of a public easement to provide physical access to the beach did not satisfy the “essential nexus” requirement. Id. at 837. The Court has used this requirement where land development permits are conditioned on granting public easements, stating that in such cases there must be an “essential nexus” and a “rough proportionality” between the interest and the conditions imposed by the regulation. See Dolan v. City of Tigard, 512 U.S. 374, 385 (1994). When the regulation does not require a public easement on private property, the Court has not applied the essential nexus requirement. See Clajon Prod. Corp. v. Petera, 70 F.3d 1566, 1578-79 (1995) (noting that “Keystone [480 U.S. at 490]—decided in the same year as Nollan—downplayed the need for any nexus requirement in considering the constitutionality of a general regulation and focused on the need for a legitimate police power justification”).

188. Concrete Pipe, 508 U.S. at 645.

189. Lucas, 505 U.S. at 1015-19 (emphasis added).

190. Concrete Pipe, 508 U.S. at 643 (citing Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 384 (1926) (approximately 75% diminution in value); Hadacheck, 239 U.S. 394 (finding that a ban on brickyard plant operations was not a taking because it was intended to protect human health even when the ban reduced the value of plaintiff’s property from $2 million to $100,000 (92.5% diminution))). See also Lucas, 505 U.S. at 1019 n.8 (“It is true that in at least some cases the landowner with 95% loss will get nothing, while the landowner with total loss will recover in full.”); Andrus, 444 U.S. at 66 (although the regulation prevented “the most profitable use of [claimant’s] property,” it did not prevent all use); Haas v. City & County of San Francisco, 605 F.2d 1117, 1120 (9th Cir. 1979) (diminution in value from $2 million to $100,000 not a taking). Even where a regulation has removed all economically beneficial use, the Court has refused to require compensation if the owner had no reasonable investment-backed expectation of being able to make that use of the property. See infra, text accompanying notes 193-196.

191. Andrus, 444 U.S. at 65-66. In Concrete Pipe, the Court stated: “To the extent that any portion of property is taken, that portion is always taken in its entirety; the relevant question, however, is whether the property taken is all, or only a portion of, the parcel in question.” 508 U.S. at 644 (citing Penn Central, 438 U.S. at 130-32 (“[A] claimant’s parcel of property [cannot] first be divided into what was taken and what was left for the purpose of demonstrating the taking of the former to be complete and hence compensable”).
the argument that a regulation prohibiting the removal of more than 50% of the coal beneath certain structures constituted a taking of the unremoved coal.192

The final factor identified by the Supreme Court in considering whether a regulation effects a compensable taking is the degree to which the regulation interferes with the claimant’s “reasonable investment-backed expectations.”193 Thus, for example, the owner of property used in an activity already subject to extensive regulation has no reasonable expectation that new or changed regulations will not affect the value of that property.194 A property owner “necessarily expects the uses of his property to be restricted, from time to time, by various measures newly enacted by the State in legitimate exercise of its police powers.”195 Moreover, it is reasonable for an investor to expect legislation that imposes an economic burden in the form of liability for past harm caused by the investor, “whether or not the cost was foreseen at the time” the harm was caused.196

193. Concrete Pipe, 508 U.S. at 645 (quotation omitted). This factor is sometimes considered as a threshold question regarding whether the property interest at issue ever included the right to use the property in the manner prohibited by the regulation—if there is no such use interest, the regulation cannot be a taking. See, e.g., M&J Coal Co. v. United States, 47 F.3d 1148, 1153-54 (Fed. Cir. 1995). The Supreme Court applied the test in this manner in Lucas. See 505 U.S. at 1034-35 (Kennedy, J., concurring) (characterizing majority’s consideration of the “nature of the owner’s estate” as a test of “whether the deprivation is contrary to reasonable, investment-backed expectations”).
194. See, e.g., Concrete Pipe, 508 U.S. at 645 (“[L]egislation readjusting rights and burdens is not unlawful solely because it upsets otherwise settled expectations … even though the effect of the legislation is to impose a new duty or liability based on past acts”; “those who do business in the regulated field cannot object if the legislative scheme is buttressed by subsequent amendments to achieve the legislative end” (quotations omitted; citing numerous cases)); Ruckelshaus, 467 U.S. at 1007, 1009 (pesticide sale and use is an area that “has long been the source of public concern and the subject of government regulation”; no reasonable expectation of confidentiality because the chemical industry has historically been “a focus of great public concern and significant government regulation” such that there was a substantial possibility that the Federal Government “would find disclosure to be in the public interest.”).
195. Lucas, 505 U.S. at 1028. See also Goldblatt v. Town of Hempstead, 369 U.S. 590, 593 (1962) (“A prohibition simply on the use of property for purposes that are declared, by valid legislation, to be injurious to the health, morals, or safety of the community, cannot in any just sense, be deemed a taking or an appropriation of property for the public benefit.”).
196. Eastern Enterprises v. Apfel, 118 S. Ct. 2131, 2153 (1998). In Eastern Enterprises, the Court held unconstitutional a law requiring a company to pay benefits to retired coal miners and their dependents, despite the fact that the company had not been in the coal business in approximately 30 years. A plurality opinion found the law to violate the Takings Clause because it “single[d] out certain employers to bear a burden that is substantial in amount, based on the employers' conduct far in the past, and unrelated to any commitment that the employers made or to any injury they caused.” Id. at 2153. The plurality distinguished the case from other cases, however, because the coal law was “not calibrated either to [the claimant’s] past actions or to any agreement—implicit or otherwise—by the company,” id. at 2152 (citing Concrete Pipe and Connolly), and did not “merely impose liability for the effects of disabilities bred in the past [that] is justified as a rational
Even a regulation prohibiting all economically beneficial use may not require compensation if “the logically antecedent inquiry into the nature of the owner’s estate shows that the proscribed use interests were not part of his title to begin with.”\(^{197}\) In this respect, the Supreme Court has distinguished between personal and real property. Regarding personal property, the Court has stated that “by reason of the State’s traditionally high degree of control over commercial dealings, [the property owner] ought to be aware of the possibility that new regulation might even render his property economically worthless (at least if the property’s only economically productive use is sale or manufacture for sale).”\(^{198}\)

Regarding regulations affecting land, the Court would require compensation when a regulation prohibits all economically beneficial use unless the regulation simply implemented a restriction that already existed in “the background principles of the State’s law of property and nuisance.”\(^{199}\) Thus, for example, the Court stated that the owner of a lakebed could be denied a permit to engage in a landfilling operation that would cause flooding in others’ land without the denial, giving rise to a right to compensation.\(^{200}\) Nor would the corporate owner of a nuclear generating plant have a right to compensation if the state directed it to “remove all facilities from its land upon discovery that the plant sits astride an earthquake fault.”\(^{201}\) This special requirement is probably limi-
ited to land-use regulations that prohibit all economically beneficial use. In light of the Court’s consideration of the economic impact of the regulation,202 whether a regulation affecting land implements a preexisting regulation should be less important if the regulation leaves some economically beneficial use of the property.203

Applying the analysis required by the Supreme Court, lower courts of the United States have rejected compensation claims arising out of a wide range of laws protecting the environment or human health, including, among many others, laws requiring the clean-up of harmful commercial byproducts204 or other hazardous materials;205 limiting harmful air emissions;206 restricting the sale and transport of endangered species;207 restricting the right to hunt particular animals on private land;208 requiring the destruction of abandoned buildings;209 and prohibiting the exploitation of natural resources on private property for reasons of public health, safety and welfare.210

protected right to use property in a manner that is injurious to the safety of the general public.” Id. at 1576.

202. See supra notes 188-192 and accompanying text.

203. As Justice Kennedy stated in his concurring opinion in Lucas:

the State should not be prevented from enacting new regulatory initiatives in response to changing conditions, and courts must consider all reasonable expectations whatever their source .... Coastal property may present such unique concerns for a fragile land system that the State can go further in regulating its development and use than the common law of nuisance might otherwise permit.

Lucas, 505 U.S. at 1035 (Kennedy, J., concurring). Cf. Miller, 276 U.S. at 280 (in considering due process challenge to order requiring destruction of diseased trees, Court “need not weigh with nicety the question whether the infected cedars constitute a nuisance according to the common law; or whether they may be so declared by statute. For where, as here, the choice is unavoidable, we cannot say that its exercise, controlled by considerations of social policy which are not unreasonable, involves any denial of due process”).

204. See, e.g., Atlas Corp. v. United States, 895 F.2d 745 (Fed. Cir. 1990) (law requiring uranium producers to clean up hazardous mill tailings not require compensation, even though the cleanup cost will be greater than the value of the mill and the government had encouraged the companies to produce the uranium).

205. See, e.g., Kaufman v. City of New York, 717 F. Supp. 84 (S.D.N.Y. 1989) (law requiring removal of asbestos from office buildings not a taking, despite fact that city had previously approved asbestos for fireproofing); United States v. Northeastern Pharmaceutical, 810 F.2d 726 (8th Cir. 1986) (rejecting takings claim based on retroactive application of US Superfund law requiring claimant to pay cleanup costs).


207. See, e.g., United States v. Kepler, 531 F.2d 796 (6th Cir. 1976).

208. See, e.g., Clajon, 70 F.3d at 1566 (10th Cir. 1995) (limiting hunting licenses to two per landowner, regardless of size of property, not a taking).

209. See, e.g., Hoeck v. City of Portland, 57 F.3d 781 (9th Cir. 1995).

210. See, e.g., MacLeod v. County of Santa Clara, 749 F.2d 541 (9th Cir. 1984) (denial of timber harvest permit does not deny all economically viable use of property, despite claim that harvest
2. Regulatory Takings Under Canadian Law

Canadian courts have generally refused to require compensation for the loss of property value caused by a legitimate government regulation unless the regulation actually transfers a benefit from the original owner to the government. This treatment arises out of the Canadian constitutional regime, pursuant to which the provisional Legislatures ... probably have a general power to expropriate property in the province, simply by virtue of their legislative power over "property and civil rights in the province." The constitutional changes of 1982 put important restraints on the freedom of action of both the federal and provisional governments in the field of civil rights. But, they did not impose rights comparable to those of American constitutional law in favour of the owners of property. The Canadian Charter of Rights, section 7, assures that "everyone has the right to life, liberty and security of the person ...," but it does not go on, as do the Fifth and Fourteenth Amendments of the United States Constitution with respect to the powers of Congress or the States, to assure the right to "property."
Under this scheme, “an aggrieved landowner must be able to demonstrate that not only has property been taken, but that the taking has also benefited the expropriating authority.”

In a recent case applying this principle, the Ontario Court of Appeal considered a claim that a law voiding previously-issued government orders permitting landlords to increase rents constituted a taking of the landlords’ property rights. The court first noted that Canadian law applies a presumption pursuant to which “unless the words of the statute clearly so demand, a statute is not to be construed so as to take away the property of a subject without compensation.” After reviewing several cases, the court concluded that “for the presumption of compensation to apply, … the legislation must create what is in essence an expropriation of the plaintiff’s property by the state. The state must acquire the property taken from the plaintiff either for its own use or for the purpose of destruction.” Regarding the claim before it, the court denied the compensation claim, holding that,

[w]hile the property rights of the plaintiffs voided by the [law] may, in one sense, be said to have been taken from the plaintiffs, in no sense can they be said to have been acquired by the Crown….

The [law] is not an act of expropriation by the Crown. Rather, it is an exercise of its regulatory authority. There is no principle of statutory interpretation that would presume that those adversely affected by a statute regulating their affairs are entitled to compensation unless the statute says otherwise. No policy basis is readily apparent for such a rule. Indeed, such a principle would severely hamper the operation of the modern state where most regulatory legislation, however remedial, adversely affects someone. Moreover, if regulatory legislation voiding but not expropriating property rights triggered a pre-

213. Swenarchuk, supra note 211, at 208; see also id. (Under Canadian law “the term ‘expropriation’ traditionally refers to a landowner’s loss of use, title or benefit of property and a transfer of the value of use, title or benefit to a public authority.”); See also Queen in Right of British Columbia v. Tener [1985] 17 D.L.R.4th 1, 6 (“Expropriation or compulsory taking occurs if the Crown or a public authority acquires from the owner an interest in property”). See also A&L Investments, 152 D.L.R.4th 692.


215. Id. at 698-699 (quotation omitted).

sumed right to compensation from the state, the effect would be to give property rights the equivalent of the protection accorded by s. 7 of the Charter despite the clear exclusion of such rights from the Charter of Rights and Freedoms by its drafters. In other words, an individual would have the right not to be deprived of his property by regulatory legislation except with compensation or with an explicit override of that right by legislative language.\textsuperscript{217}

Canadian courts have applied these principles to uphold regulations even when the regulations have prohibited all effective use of the property in question. For example, in \textit{Hartel Holdings Co. Ltd. v. Council of the City of Calgary}, the Supreme Court of Canada refused to require compensation when a law freezing development had removed all economically viable use of the claimant’s land.\textsuperscript{218} Because the city’s actions were “taken pursuant to a legitimate and valid planning purpose, … the resulting detriment to the appellant is one that must be endured in the public interest.”\textsuperscript{219} Similarly, in \textit{La Ferme Filiber Ltee v. The Queen},\textsuperscript{220}

\begin{itemize}
\item \textsuperscript{217} \textit{Id.} at 701. The Supreme Court of Canada has suggested that the requirement of transfer to the government removes most regulatory actions from the category of expropriation requiring compensation. In \textit{Tener}, 17 D.L.R.4th at 12, described \textit{infra} text accompanying notes 222 - 226, the Court distinguished zoning regulations and the regulation of activities on lands, which “add nothing to the value of public property,” from takings that enhance the value of government assets.

On the other hand, when a regulation does transfer the property in question to the government, Canadian courts have not hesitated to require compensation. For example, in \textit{Manitoba Fisheries Ltd. v. The Queen [1975] 88 D.L.R.3d 462}, the Supreme Court of Canada upheld a compensation claim brought by the owner of a fish marketing corporation that had been put out of business when a Canadian law gave a monopoly in fish marketing to a government corporation. The Court based its conclusion on the fact that the law had transferred the claimant’s business to the government. \textit{Id.} at 469-71.

\item \textsuperscript{218} \textit{[1984] 8 D.L.R.4th 321.}

\item \textsuperscript{219} \textit{Id.} at 334. \textit{See also} Soo Mill & Lumber Co. v. City of Sault Ste-Marie [1975] 2 Can. S.C.R. 78, 83 (upholding zoning regulation that “sterilized [the claimant’s land] in respect of any effective use,” because development freezes not prohibited if enacted in accordance with the purpose of municipal plans or zoning regulations); Sanbay Developments Ltd. v. City of London [1975] 45 D.L.R.3d 403 (refusing to invalidate zoning regulation that froze development of claimant’s land). Scholars have stated that the principle underlying \textit{Soo Mill, Sanbay and Hartel Holdings} is that “planning authorities may regulate, restrict or prohibit land use or development without triggering the remedy of compensation for affected landowners, providing that such measures are undertaken in good faith for a proper planning purpose.” \textbf{Richard Lindgren & Karen Clark, Property Rights vs. Land Use Regulation: Debunking the Myth of “Expropriation Without Compensation”} 5-8 (Canadian Envtl. L. Ass’n 1994) (quoted in Swenarchuk, supra note 211, at 210-11). \textit{See also} Swenarchuk, supra note 211, at 208-09 (“Canadian courts have long recognized that land use regulation is not “expropriation,” primarily because zoning by-laws [regulations] or other planning instruments do not generally involve a taking or transfer of the full use, title or benefit of property. Therefore, if a landowner’s ability to use or develop his or her property is constrained by a properly enacted zoning by-law, the landowner is not entitled to compensation, even if the zoning by-law causes a diminution in property value.”).

\item \textsuperscript{220} \textit{[1997]1 F.C. 128.}
\end{itemize}
the court refused to require compensation to a claimant who was forced to shut down his trout-hatching enterprise, for which he had held an operating license for five years, because of a law prohibiting the operation of such hatcheries in the area.\textsuperscript{221} The court’s decision was based on the fact that, although the claimant’s rights were extinguished, the regulation had not transferred any property interest to the government.\textsuperscript{222}

Some Canadian cases have also distinguished between real and personal property, generally giving broad leeway to the government to regulate without incurring an obligation to compensate for the effects of the regulation on the value of personal property.\textsuperscript{223} This distinction is clear in two cases considering compensation claims arising out of the loss of property resulting from laws designating certain land as public parks.\textsuperscript{224} In each case, the claimant held rights related to the exploitation of subsurface minerals within the designated land and the designation prohibited mineral exploration and extraction.\textsuperscript{225} In \textit{Queen in Right of British Columbia v. Tener}, the Supreme Court of Canada held that the claimant was entitled to compensation, relying on the fact that the property taken by the regulation, which included the right of access to the claim area, was a real property interest.\textsuperscript{226} In \textit{Cream Silver Mines Ltd. v. British Columbia}, however, the court refused to follow the Tener decision and denied compensation, stating that although the claimant’s mining claim was rendered useless, it was “material” that the interest at issue was not an interest in land.\textsuperscript{227}

\textsuperscript{221} \textit{Id.} at 128-29.
\textsuperscript{222} \textit{Id.} at 130 (“An expropriation implies dispossession of the expropriated party and appropriation by the expropriating party; it necessarily requires a transfer of property or rights from one party to the other. There is nothing of that kind here. Defendant has not acquired anything belonging to plaintiff.”).
\textsuperscript{223} \textit{See} Swenarchuk, supra note 211, at 208 (“In Canada, the issue of expropriation generally arises in relation to real estate, not other forms of property”). The distinction between real and personal property has not been absolute. For example, in \textit{Manitoba Fisheries v. The Queen} \textit{[1978]} 1 S.C.R. 101, the Supreme Court of Canada held that the owner of a pre-existing private fish exporting business had a right to compensation for loss of the business’s goodwill after a federal statute put him out of business by giving a government corporation the exclusive right to export fish.
\textsuperscript{224} \textit{Tener}, 17 D.L.R.4th at 5; \textit{Cream Silver Mines Ltd. v. British Columbia} \textit{[1993]} 99 D.L.R.4th 199, 205.
\textsuperscript{225} \textit{Tener}, 17 D.L.R.4th at 3, 5; \textit{Cream Silver Mines}, 99 D.L.R.4th at 205.
\textsuperscript{226} \textit{Tener}, 17 D.L.R.4th at 3 (claimant’s grant entitled it to “all [subsurface] minerals ... and the right to the use and possession of the surface of such mineral claim ... for the purpose of winning and getting from and out of such claim the minerals contained therein”). \textit{See also id.} at 6 (grant was interest in land). The Court also noted that the denial of access to the park lands enhanced the value of the government’s asset (the park). \textit{See id.} at 12.
\textsuperscript{227} \textit{Cream Silver}, 99 D.L.R.4th at 202, 205-206 (as opposed to the Crown grant at issue in \textit{Tener}, this is simply a mineral claim; there has never been any absolute right of access to the claim
3. **Regulatory Takings Under Mexican Law**

Article 27 of the Mexican Constitution provides:

Ownership of the lands and waters within the boundaries of the national territory is vested originally in the Nation, which has had, and has, the right to transmit title thereof to private persons, thereby constituting private property.

Private property shall not be expropriated except for reasons of public use and subject to payment of indemnity.

The Nation shall at all times have the right to impose on private property rights the limitations dictated by the public interest, as well as to regulate, for the collective good, the use of natural resources susceptible to appropriation, to ensure a more equitable distribution of public wealth, to conserve them, to achieve the well-balanced development of the country and the improvement of the living conditions of the rural and urban population.228

This provision clearly distinguishes between expropriation—which, under Mexican law, consists of "legally taking a thing from its owner, for reasons of public utility, and giving the owner a fair indemnification"229—and the limitations (modalidades) referred to in the third paragraph, which do not require indemnification even though they may affect area to obtain the ore, the government has power to refuse to grant right of way, and such claims "have never been capable of registration under the … system of land regulation").

The Constitution also conditions the right of foreigners to own "lands, waters, and their appurtenances, or to obtain concessions for the exploitation of mines or waters" on the foreigners' agreement that they will "consider themselves as nationals in respect to such property and bind themselves not to invoke the protection of their governments in matters relating thereto; under penalty, in case of noncompliance with this agreement, of forfeiture of the acquired property to the Nation." Id., art. 27.I (Supp. June 1998). This provision is a codification of the "Calvo Doctrine" regarding expropriation, which is followed by most Latin American nations. See Justine Daly, Has Mexico Crossed the Border on State Responsibility for Economic Injury to Aliens? Foreign Investment and the Calvo Clause in Mexico After NAFTA, 25 ST. MARY L.J. 1147, 1150, 1163-65 (1994). The United States has consistently rejected the Calvo Doctrine as a basis for the treatment of foreign investment. See id. at 1166-71.


229. JUAN JOSÉ GONZÁLEZ MARQUEZ, NUEVO DERECHO AMBIENTAL MEXICANO (INSTRU- MENTOS DE POLÍTICA) 154 (Universidad Autónoma Metropolitana 1997) (translations by author) (quoting Monique Lions, Expropiación, in Instituto de Investigaciones Jurídicos, DICCIONARIO JURÍDICO MEXICANO 1389 (Mexico, Porrúa-UNAM 1992). See also GABINO FRAGA, DERECHO ADMINISTRATIVO 375-76 (Mexico 1984) (translations by author) ("in the case of expropriation an individual is deprived of his or her goods inasmuch as this is necessary for the state").
the value of property. The Mexican Supreme Court of Justice has explained that these latter limitations constitute “a partial extinction of the rights of the owner,” whereas expropriation amounts to the substitution of the right to use and ownership of the thing for the enjoyment of the indemnity. Regarding the former [limitations], the suppression of the partial authority of the owner occurs without any consideration; regarding the latter, the damage caused is compensated through the payment of the value of the rights lost.

Limitations that do not require indemnification must be generally applicable, rather than specifically directed at an identified piece of property, and must remove only limited attributes of the owner’s right to the property, rather than transferring to the State ownership of the property. Using these criteria, the Mexican Supreme Court has not required indemnification for the effects of regulations prohibiting a general category of activities in certain types of locations, such as regulations prohibiting the construction of ovens, chimneys or certain other potentially hazardous structures less than a prescribed distance from the property of another. Another example of property limitations that do not require indemnification are decrees, issued pursuant to the General Law of Ecological Balance, limiting the use of property within natural protected areas. Because these regulations do not remove all of the

230. See FRAGA, supra note 229, at 375-76 (“Expropriation for reasons of public value is to be distinguished from the limitations that the State may impose on private property for reasons of public interest (Art. 27, para. III, Federal Const.). In the words of one Mexican legal scholar, [t]he right to property [under the Mexican Constitution] is not an absolute right, but is a right that serves a social function, and therefore, in Article 27… the Nation is empowered to limit the exercise of that right. [Article 27] signifies that private property is of a derivative character and as a result the nation may impose limitations on it.

231. González Marquez, supra 228, at 156-58 (citing Mexican Supreme Court of Justice, Séptima Época, Primera Parte: Volumenes 133-38, 155. Amparo en revisión 6408/76. María Fortes de Lamas, 18 Mar. 1980). See also Supreme Court of Justice Report 1980, supra note 231 (limitations “suppose a general and permanent restriction on the property right; [expropriation] implies the transfer of the rights over a specific good through the intervention of the state”); FRAGA, supra note 229, at 375-76 (“[T]here are differences of form and substance between limitations and expropriation. The former is a measure of general and abstract character that is part of and shapes, but does not transform, the legal regime regarding the general ownership of property in a given time and place. Expropriation, on the other hand, constitutes a measure of individual and specific character whose effects are concentrated on a specific property.”).

232. Id. at 161-62.
owner’s rights in the property, and are of general application, they do not require compensation.

B. INDIRECT EXPROPRIATION UNDER INTERNATIONAL LAW

International law addresses the takings issue under the rubric of “expropriation” — which is “a compulsory transfer of property rights” and refers to regulatory takings as “indirect expropriation,” “disguised expropriation” or “creeping expropriation.” Although a government must generally provide compensation for expropriation, it is “an accepted principle of international law that a State is not liable for economic injury which is a consequence of bona fide ‘regulation’ within the accepted police power of states.” Thus, “anti-trust, consumer protection, securities, environmental protection, land planning and other legislation, are non-compensable takings. These regulations are regarded as essential to the efficient functioning of the state.”

Legal scholars have long affirmed this principle. The evidence supporting these scholarly pronouncements has generally consisted of the

235. Amoco Int’l Fin. v. Government of the Islamic Republic of Iran, 27 I.L.M. 1320, 1342-43 (1988). The “paradigm” of direct expropriation consists of “an involuntary transfer of ownership effected immediately by legislation in pursuance of state policy. This results in the vesting of ownership of the property in the state or a state entity created to run the industry that is taken over and the destruction of the rights of ownership of the foreign investors in the industry.” SORNARAJAH, supra note 159, at 282.

236. SORNARAJAH, supra note 159, at 282. One scholar rejects the phrase “creeping expropriation” for fear that it “suggests a deliberate strategy on the part of the state, which may imply a negative moral judgment.” Rudolf Dolzer, Indirect Expropriation of Alien Property, 1 ICSID REVIEW, FOREIGN INV. L.J. 41, 44 (1986).


238. Sornarajah, supra note 159, at 299 (1994) (“Obviously, infringements of property rights in controlling hazardous or environmentally sound use of property … are regulatory takings that require no compensation”; “It cannot be claimed by the citizens of these states that compensation is due to them when there is such regulatory intervention.”).

239. See, e.g., G.C. Christie, What Constitutes a Taking of Property Under International Law, 38 BRIT. Y.B. INT’L L. 307, 331-32 (1962) (“[T]he operation of a State’s tax laws, changes in the value of a State’s currency, actions in the interest of the public health and morality, will all serve to justify [i.e., remove from the category of expropriatory or compensable acts] actions which because of their severity would not otherwise be justifiable; subject to the proviso, of course, that the action
decisions of international courts and tribunals that have decided claims of expropriation. Although international law generally recognizes judicial decisions as a subsidiary source of international law, and the principles of *stare decisis* does not formally apply to international tribunals, the general lack of more authoritative sources addressing the limits of indirect expropriation gives such decisions a special legitimacy.

241. As with any norm of international law, principles concerning expropriation derive from three primary sources. See Statute of the International Court of Justice, June 26, 1945, art. 38, para. 1, 59 Stat. 1033, 1060. The most authoritative sources of international legal obligations for a particular nation are found in international agreements to which that nation is a party and customary international law, which reflects state practice grounded in a belief that the practice is required by law. See id.; Restatement (Third) of the Foreign Relations Law of the United States, §§ 102(1)-(4), 103(2) (1987). As noted above, note 22 and accompanying text, international agreements addressing indirect expropriation seldom define precisely what it is or when it gives rise to an obligation to provide compensation. One U.S. government official has stated that international investment agreements “do not generally call into question the sovereign right of governments to regulate as long as regulation does not single out or discriminate against investors based on their nationality.” Larson Testimony, supra note 15.

A secondary source of international law are “general principles of law common to the countries of the world.” ICJ Statute, supra, para. 1.d. In this regard, it is worth noting that the constitutions of 19 nations make clear that governmental measures that affect the value of property will not be considered compensable takings where those measures are intended to protect human, animal or plant health, or (regarding taking of land) to conserve soil or other natural resources. See CONSTITUTIONS OF THE COUNTRIES OF THE WORLD (Apr. 1997 & Supps.) (constitutions of Antigua and Barbuda, Bahamas, Barbados, Belize, Botswana, Dominica, Gambia, Grenada, Jamaica, Kenya, Malta, Mauritius, Papa New Guinea, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Tuvalu, Zambia, Zimbabwe). Such provisions, along with the consistent practice of national courts, which, with the exception of US, Canadian and Mexican practice, is beyond the scope of this Article, support the conclusion that international law does not require compensation for the economic effects of environmental regulations.

Judicial decisions and the writings of scholars serve as “subsidiary means for the determination of rules of law.” ICJ Statute, supra, para. 1.d.

242. For example, the Statute of the International Court of Justice provides: “The decision of the Court has no binding force except between the parties and in respect of that particular case.” ICJ Statute, supra note 241, art. 59.

243. Modern tribunals deciding expropriation claims have "placed their principal reliance on judicial and arbitral precedents.” Patrick M. Norton, *A Law of the Future or a Law of the Past? Modern Tribunals and the International Law of Expropriation*, 85 Am. J. Int’l L. 474, 498 (1991). Norton notes several reasons for this phenomenon, including a “natural predisposition of arbitrators toward the approach of their predecessors” and the legitimacy provided when a case is decided consistently with previous analogous cases. Id. at 498-99. Moreover, in the absence of a clear international statement or applicable treaty resolving the question, “such precedents have a tendency to coalesce into a source of legitimacy.” Id. at 500.
One of the most prolific interpreters of the international law of expropriation has been the Iran-U.S. Claims Tribunal, which was established in 1981 to adjudicate claims by nationals of each country against the government of the other.244 In reviewing the Tribunal’s decisions until 1994, one member of the Tribunal, George Aldrich, described the Tribunal’s understanding that, under international law, “[l]iability does not arise from actions that are nondiscriminatory and are within the commonly accepted taxation and police powers of states.”245 Numerous other tribunals have reached the same conclusion.246

International tribunals have seldom, if ever, addressed whether environmental regulations affecting foreign-owned property give rise to a right to compensation. However, an examination of cases addressing indirect expropriation claims arising out of regulations promoting other government interests demonstrates that international law would not sup-
port an expropriation claim arising out of legitimate environmental regulations.

International tribunals have not agreed on a definitive test establishing when indirect expropriation gives rise to a right to compensation. Although these tribunals have not agreed to a list of factors relevant to the question, they frequently refer to factors similar to those described by the U.S. Supreme Court.

For example, international tribunals have considered whether government actions leading to indirect expropriation are “reasonable.”247 In one such case, the Iran-U.S. Claims Tribunal considered an expropriation claim arising out of the refusal of a government bank to honor the claimant’s checks because of a law establishing certain authentication requirements.248 The Tribunal refused to find an expropriation because it did not find the bank’s actions to amount to “unreasonable interference” with the claimant’s property.249 Other cases have concluded that government regulations were reasonable when they imposed taxes,250 prohibited planting new grapes to regulate wine production,251 and regulated the production of alcohol through license fees.252

247. See supra notes 163-170 and accompanying text.
248. Harza Engineering Co. v. Iran, 1 Iran-U.S. Cl. Trib. Rep. 499, 504 (1981-82). Because of its finding, the Tribunal found it unnecessary to determine “how unreasonable the interference must be to constitute a taking of property.” Id.
249. Id. at 505. See also Mark Dallal v. Iran, Award No. 53-149-1 (10 June 1983), reprinted in 3 Iran-U.S. Cl. Trib. Rep. 10 (refusing compensation for bank’s refusal to honor checks because no indication that banks had acted unreasonably). These decisions follow general international legal practice, which considers financial regulation to be among the legitimate police powers of government. See Pellonpaa, supra note 244, at 253 (noting that the Iran-US Claims Tribunal’s treatment of cases involving financial regulations “has not been decisively different” from “previous international legal practice, [in which] exchange control regulations and other restrictions on the transfer of funds abroad have been accepted to a very significant degree”).
250. See Too, 23 Iran-U.S. Cl. Trib. Rep. at 387 (refusing to require compensation for government seizure of claimant’s liquor license for failure to pay taxes due because “a State is not responsible for loss of property or for other economic disadvantage resulting from bona fide general taxation or any other action that is commonly accepted as within the police power of States, provided it is not discriminatory and is not designed to cause the alien to abandon the property to the State or to sell it at a distress price.”); Brewer, Moller & Co., 10 R. Int’l Arb. Awards at 423 (taxes legally levied and without discrimination cannot be recovered).
251. Hauer, 1979 E.C.R. at 3745-49. Although the court in Hauer applied European law, the relevant protection of property rights depends on principles of international law. See id. at 3745 (applying Article I of Protocol to European Convention for the Protection of Human Rights, which protects property rights “subject to the conditions provided for … by the general principles of international law”).
252. See, e.g., Kugele, 6 Ann. Dig. at 69 (series of license fees that forced claimant to close brewery did not constitute compensable taking). In Kugele, the tribunal stated that there is an essential difference between the maintenance of a certain rate of profit in an undertaking and the legal and factual possibility of continuing the undertaking. The trader
Like the U.S. Supreme Court, international law requires something more than a simple governmental declaration that a particular interference with an alien’s enjoyment of his or her property is justified by the so-called ‘police power,’ “[b]ut, if the reasons given are valid and bear some plausible relationship to the action taken, no attempt may be made to search deeper to see whether the State was activated by some illicit motive.”253 Thus, the European Court of Justice considered “whether there exists a reasonable relationship between the measures provided for by the regulation [a prohibition on planting new grapes] and the aim pursued by the Community in this case [to regulate wine production].”254

International decisions also recognize that the severity of the economic impact caused by an indirect expropriation is relevant to determining whether compensation is required.255 International tribunals have refused to require compensation when the expropriation did not remove all economic value from the property. As explained by one scholar considering the jurisprudence of the Iran-U.S. Claims Tribunal,

before measures restricting the rights of owners to use and dispose of their property will be considered to amount to expropriation it must be apparent that the governmental actions have so completely deprived the owners of their property rights that the rights are rendered nugatory. Such findings are more readily made where the government has the avowed intention of socialising the economy and thereby depriving private owners of their property rights. * * * [T]he principal test as to whether actions falling short of a formal taking of title constitute a taking is whether or not the action fundamentally restricts the right of the owner to manage or dispose of the property, or if the property has been rendered virtually valueless. Governmental actions which limit the owner’s right in relation to his property but which do not significantly affect the aforementioned fundamen-

255. This principle may be a “general principle of law,” recognized as a source of international law. See supra note 241. One scholar reviewing “representative” legal systems concluded that a comparison of domestic law leaves no doubt that the prohibition of economically optimal use of property in itself may not be equated with an indirect expropriation.... A survey of the relevant domestic laws indicates that [the point at which the regulation of property assumes the quality of an indirect expropriation] lies where the property in question, after introduction of the measure concerned, can no longer be put to reasonable economic use.

Dolzer, supra note 236, at 62.
This principle has been applied by the Iran-U.S. Claims Tribunal to decide an expropriation claim arising out of Iranian exchange restrictions that prohibited the Iranian Central Bank from converting claimant’s money into a currency that could be transferred out of the country. When the claimant sought compensation, the Tribunal concluded that Iran had not expropriated the funds, because the “account remain[ed] in existence and available, in [Iranian currency], at [the claimant’s] disposal.” Similarly, the Tribunal refused to find an expropriation when Iranian law prohibited the exportation of certain property but the claimant maintained the option to sell the property in Iran.

Other tribunals have applied similar reasoning. The European Court of Human Rights, interpreting a claim under a European human rights instrument providing for the right of “peaceful enjoyment of … possessions,” did not find indirect expropriation to have occurred as a result of land use regulations that affected the claimant’s property because,
although the right [of peaceful enjoyment of possessions] lost some of its substance, it did not disappear …. The Court observe[s] in this connection that the [claimants] could continue to utilise their possessions and that, although it became more diffi-
cult to sell properties [as a result of the regulations], the possibil-
ity of selling subsisted.260

Likewise, the U.S. Foreign Claims Settlement Commission rejected a compensation claim based on the government’s refusal to grant an export license for the claimant’s jewelry.261

Another component in considering the severity of the impact on property is the duration of the regulation causing the impact. Thus, Iran-
U.S. Claims Tribunal decisions appear to indicate that “[o]ne or two iso-
lated instances of interference … do not suffice [for a compensable tak-
ing]; proof appears to be required that the blocking is of a more compre-
hensive nature.”262 Similarly, when the European Court of Justice denied a compensation claim arising out of the grape restriction, it did so in part because the regulatory action was to be valid for only two or three years.263

International decisions have also noted that whether the foreign prop-
erty owner could reasonably have expected the particular impact on her property is relevant to whether a government regulation gives rise to a


261. Erna Spielberg, Decision No. CZ-2 466 at 146-47 (1961), FOURTEENTH SEMIANNUAL RE-
PORT, supra note 259, at 146 (refusal to grant export license for jewelry not a taking). Using analo-
gous reasoning, the Iran-U.S. Claims Tribunal has refused to require compensation for loss of value of a minority shareholder’s interest in a company after the government expropriated the holdings of a majority shareholder because the minority shares retained value. See, e.g., Ataollah Golpira v.

262. Pellonpaa, supra note 244, at 252 (describing Harza Engineering case). One Tribunal member has concluded that

263. Hauer, 1979 E.C.R. at 3749. The US Foreign Claims Settlement Court has also rejected compensation claims when national administration of property has been only temporary. See, e.g.,
Public Law 85-604 Panel Opinion No. 6, Part I, ELEVENTH SEMIANNUAL REPORT (1959), at 28-29;
FOURTEENTH SEMIANNUAL REPORT, at 134-35.
right to compensation. For example, in *Starrett Housing v. Iran*, for example, the Iran-U.S. Claims Tribunal refused to find an indirect expropriation based on the inability of the claimant to complete a construction project due to strikes, work stoppages, the collapse of the Iranian banking system and other obstacles that were the result of the Iranian revolution.\(^{264}\) The Tribunal noted that

investors in Iran, like investors in all other countries, have to assume a risk that the country might experience strikes, lock-outs, disturbances, changes of the economic and political system and even revolution. That any of these risks materialized does not necessarily mean that property rights affected by such events can be deemed to have been taken. A revolution as such does not entitle investors to compensation under international law.\(^{265}\)

The same reasoning applies to the possibility of encountering legitimate government regulations:

\[I\]t could be argued that the foreign investor entered the state voluntarily, knowing the risk of … regulatory laws being applied against him, and that he should bear the risk of such adverse changes as any citizen of the state would. It should not be the function of the international law to insulate the foreign investor from the regulatory regime of the host state’s laws.\(^{266}\)

This discussion demonstrates that international law does not require compensation for the economic impact of regulations that are a legitimate exercise of government police power. This rule holds particularly true when the regulation leaves the affected property with some value and is one that could reasonably be expected given the nature of the

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\(^{265}\) *Id. See also Sedco, Inc.*, 9 Iran-U.S. Cl. Trib. Rep. at 275 (When property is forfeited as the result of a crime, no taking has occurred because “the person(s) affected do not rightfully possess title to the property in question.”).

\(^{266}\) SORNARAJAH, supra note 159, at 300. As evidence that this principle is generally recognized and thus supports an international norm, Professor Dolzer notes that the various domestic orders uniformly indicate, in principle, that no compensation is due when the measure is necessary in order to protect the public from a danger arising from the property; the police power in its various forms generally overrides property rights, even though certain definitional issues have plagued courts and commentators in this area. When the measure is not based on the police power and infringes upon existing use, the state normally will enter into conflict with legitimate … investment backed expectations based on property rights[, which] will typically violate the guarantee of private property in the absence of compensation.

Dolzer, supra note 236, at 62.
regulated activity. Although no international tribunal has yet applied this rule to environmental regulations, the following discussion will demonstrate that it applies with particular force in such cases.

VI. UNDER NAFTA AND INTERNATIONAL LAW, ENVIRONMENTAL MEASURES ARE A LEGITIMATE EXERCISE OF POLICE POWER THAT SHOULD NOT NORMALLY GIVE RISE TO A RIGHT TO COMPENSATION

NAFTA does not define what constitutes “expropriation” or a “measure tantamount to … expropriation.” The terms must therefore be interpreted consistently with international law and in light of their context.267 As demonstrated above, it is “an accepted principle of international law that a State is not liable for economic injury which is a consequence of bona fide ‘regulation’ within the accepted police power of states.”268 To the best of my knowledge, however, no international tribunal has yet considered whether this principle applies to environmental regulations, although scholars have assumed that it does269 and the United States claims to agree.270


268. Sedco, Inc., 9 Iran U.S. Iran Cl. Trib. At 275. See generally supra Part V.

269. See, e.g., SORNARAJAH, supra note 159.

270. Assistant U.S. Secretary of State for Economic, Business, and Agricultural Affairs Alan P. Larson noted the concern that, in its current form, the expropriation provision of the MAI, which is substantially similar to that of NAFTA, could be misinterpreted to go beyond international (and U.S. “takings”) law. There is consensus among negotiators that any ambiguity on this point must be eliminated. Normal regulatory actions, even when they affect the value of an investment, should not be considered as an expropriation requiring compensation…. There is emerging consensus that the MAI must include meaningful commitments on both labor and environment. We all agree that the MAI must not and will not undermine the ability of governments to regulate for protection of health, safety and the environment. Larson, supra note 88, at 51 (in light of the ongoing MAI negotiations, the article was not to “be construed as providing formal or final administration positions on specific outstanding issues”). In testimony before Congress, Larson reiterated that the U.S. delegation has argued that the provision of this proposed agreement simply cannot interfere with normal, non-discriminatory regulatory activities in such areas as health,
A review of the international cases described above shows that environmental regulations should be among those legitimate regulations that do not normally give rise to an obligation to compensate for devaluation of property. International tribunals have recognized a range of government regulations as legitimate exercise of the police power that do not require compensation. These include tax regulations, regulations governing the transfer and exchange of currency, licensing fees for the production of alcoholic beverages, restrictions to protect wine production, and export restrictions. Given the undeniable impact of human activities on environmental health, and the equally obvious relationship between environmental health and human welfare, it is clear that regulations to protect the environment are at least as legitimate as regulations to address any of these other governmental concerns.

Furthermore, the nature of environmental protection indicates that environmental regulations should be accorded particular protection from compensation claims. Such regulations are an important method of internalizing environmental costs, which is an essential component of environmental protection and "a general principle of international law." As the OECD has explained, internalizing environmental costs depends in large part on requiring the polluter to "bear the expenses of carrying out [pollution prevention] measures decided by public authorities to ensure that the environment is in an acceptable state." Requiring the government to provide compensation for the economic impact of environmental regulations does exactly the opposite, shifting the cost of complying with environmental measures, and thereby the cost of environmental harm, onto the general public. Such a shift constitutes a significant obstacle to environmental protection. For these reasons, the polluter pays principle and the multitude of international agreements for the protection of the environment require that governments generally be free to implement environmental regulations without having to pay to do so.

Environmental measures also have special legitimacy in the NAFTA regime. Under international law, treaty provisions are to be interpreted in light of their context. The context of the NAFTA expropriation

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safety and the environment. In particular, we want to ensure that the expropriation article of the MAI cannot be used inappropriately to challenge regulatory decisions.

Larson Testimony, supra note 15.

271. See supra notes 250-258.


273. OECD Guiding Principles, supra note 11, at par. 4.

274. According to the Vienna Convention on the Law of Treaties, supra note 267, art. 31, the terms of a treaty are to be interpreted "in their context," which includes "any agreement relating to
provisions includes the strong emphasis that both NAFTA and NAAEC give to environmental protection. Both agreements strongly promote preserving the right of each government to protect the environment, ensuring that governments maintain and enforce environmental measures, and facilitating the strengthening of laws and regulations to protect the environment.\footnote{See supra note 241–266 and accompanying text.} In the context of NAFTA, therefore, environmental measures are legitimate and the expropriation provision should not be interpreted to interfere with the ability of governments to implement such measures.

In addition, NAFTA’s investment provisions themselves specifically address environmental protection. Those provisions discourage countries from waiving or derogating from environmental measures to attract or retain foreign investment,\footnote{ NAFTA, supra note 25, art. 1114.2.} and protect the right of each government to adopt, maintain or enforce measures that it considers “appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns.”\footnote{ See supra note 47 and accompanying text.} Requiring compensation for the economic impact of environmental regulations conflicts with these provisions by making it costly for governments to enforce or strengthen existing environmental measures or to adopt new ones.

For all these reasons, there can be no doubt that environmental regulations are a legitimate exercise of governmental power that should not normally give rise to a government obligation to compensate for resulting economic losses. Moreover, to require compensation would be inconsistent with generally accepted international law concerning environmental protection, as well as with NAFTA’s particular concern that its provisions not interfere with the ability of governments to protect the environment.

Ethyl Corporation’s expropriation claim raised a different legitimacy issue. Ethyl based its claim in part on an argument that Canada’s ban was not really an environmental measure. Ethyl argued that “[t]he lack of any clear scientific evidence throws into doubt whether [the Canadian MMT measure] is necessary to protect human life or health,”\footnote{Notice of Arbitration, supra note 107, at 14. Ethyl based its claim in large part on its characterization of the Canadian ban as a performance requirement. See supra note 111 and accompanying-
claimed that the measure was unjustified “since there is no consensus of scientific opinion on the effects of MMT.”

Similar arguments may be expected in support of other NAFTA expropriation claims. Such challenges to the scientific basis for an environmental measure raise important issues that directly affect the right and ability of governments to protect against the risk of environmental harm.

When a government promotes a measure as protecting against a risk to the environment, it is reasonable to require that the risk be real, not simply a disguise for a measure intended to achieve another purpose such as expropriation or protecting domestic production. This is the scheme established by the general exceptions to NAFTA and GATT, which recognizes that certain concerns are important enough to justify interfering with the free flow of trade, as long as they are not really a disguise for measures intended to achieve illegitimate goals, such as protecting domestic industry. To distinguish between legitimate environmental measures and disguised illegitimate measures, it is reasonable to require that the existence of the risk to the environment be scientifically supported. It is essential, however, that the need for scientific support not become a requirement that the government demonstrate that its measure is supported by “most,” “best” or “most widely accepted” scientific evidence. Such a requirement is contrary to the precautionary principle and inconsistent with the nature of science. More importantly, it would seriously interfere with the ability of governments to protect against risks of environmental harm.

Any regime that truly allows for protection against the risk of environmental harm must recognize the precautionary principle, which is based on the premise that science does not always provide the information or insights necessary to take protective action effectively or in a timely manner, and that undesirable and potentially irreversible effects may result if action is not taken until science does provide such insights. Pursuant to this principle, countries have the right to regulate
activities that may be harmful to the environment even if the scientific evidence concerning the connection between the activity and the harm is inadequate or inconclusive—that is, even if scientists do not agree or cannot explain exactly whether, how or to what degree the harm is caused.\textsuperscript{282} This principle has been part of domestic and international law for several decades and has become a “broadly accepted basis for international action.”\textsuperscript{283}

Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Rio Declaration, supra note 12, princ. 15. Other agreements recognizing the principle include the Convention on Biological Diversity, June 5, 1992, pmbl., 30 I.L.M. 818; the Framework Convention on Climate Change, U.N. Doc. A/AC.237/18 (Part II)/Add.1 (1992), 31 I.L.M. 849 (“The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures”); the Ministerial Declaration of the Second World Climate Conference, Nov. 7, 1990, 1 Y.B. INT’L ENVTL. L. 473 (1990) (ministers and representatives of 137 countries agree to “protect the ozone layer by taking precautionary measures to control … emission of substances that deplete it”); the Second International Conference on the Protection of the North Sea, Ministerial Declaration 1 (1987) (ministers of the EEC and eight countries agree that the North Sea ecosystem should be protected through the reduction of pollution “even where there is no scientific evidence to prove a causal link between emissions and effects (‘the principle of precautionary action’)”); and the World Charter for Nature, G.A. Res. 37/7, U.N. GAOR, 37th Sess., Supp. No. 51, U.N. Doc. A/Res/37/7 (1982), 22 I.L.M. 455 (1983) (“Activities which are likely to pose a significant risk to nature shall be preceded by an exhaustive examination; their proponents shall demonstrate that expected benefits outweigh potential damage to nature, and where potential adverse effects are not fully understood, the activities should not proceed.”). See also E. Hey, The Precautionary Principle in Environmental Policy and Law: Institutionalizing Caution, 4 GEO. INT’L ENVTL. L. REV. 303, 308-09 (1992).

\textsuperscript{282} In understanding the importance of the precautionary principle, it is helpful to remember that the fact that scientific evidence is not conclusive does not mean that it is not probative. For example, human health regulations have long been based on studies exposing animals to high doses of potentially harmful substances, even when there was no conclusive evidence that the regulated substances cause the same harm in humans that they do in animals. These regulations are based on the reasonable assumption that effects on animals are probative evidence—not conclusive proof—of potential effects in humans. See NATIONAL CANCER INSTITUTE, EVERYTHING DOESN’T CAUSE CANCER (NIH Pub. No. 90-2039, March, 1990) (“Of the several hundred … chemicals that cause cancer in animals, however, it is not known how many are also human carcinogens. Nevertheless, materials that cause cancer in one type of animal usually are found to cause cancer in others…. For these and other reasons, we should expect animal carcinogens to be capable of causing cancer in humans.”). Likewise, studies showing harm at high doses are at least evidence of the possibility of—or potential for—harm at low doses. Although they may not prove that harm will occur, they support the conclusion that there is a risk.

\textsuperscript{283} Philippe Sands, The Greening of International Law: Emerging Principles and Rules, 1 GLOBAL LEGAL STUDIES J. 293, 301 (1994). See also PHILIPPE SANDS, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 208-12 (1995) (precautionary principle has received widespread support); a “good argument” can be made that it reflects customary international law; INTERPRETING THE PRECAUTIONARY PRINCIPLE 262 (Tim O’Riordan & James Cameron eds., 1994). In his dissenting opinion in the 1995 French nuclear testing case, Judge Weeramantry of the International Court of Justice noted the importance of the precautionary principle in light of the irreversibility of some environmental damage and stated that the precautionary principle is gaining increasing support as part of the international law of the environment. Request for an Examination of the Situation in Accordance With
The precautionary principle does not ignore science or remove scientific inquiry from the effort to identify legitimate governmental measures. However, the principle reflects a recognition that scientific certainty is rare and that advancements in scientific knowledge—including knowledge of previously unknown risks—nearly always begin as controversial theories held by a minority of the scientific community. If governments must base environmental measures on the scientific conclusions accepted as “best” by the majority of scientists or supported by the “weight” of available scientific evidence, they will be unable to take precautionary measures to protect against risks suggested by new, and frequently controversial, evidence.

The NAAEC recognizes the right of each Party “to establish its own levels of domestic [environmental] protection” and the importance of achieving “enhanced levels of environmental protection.” Determining the appropriate level of protection in the face of a given risk is a fundamentally political decision that only a government that is accountable to those affected by the decision can make legitimately. When a nation identifies a potential risk to health or the environment, it must decide whether and to what extent to take steps to protect against that risk. While science plays an important role in identifying the existence of a risk, the decision concerning the appropriate response to that risk also requires political decisions such as weighing how much the citizens of the country fear the particular risk and how much, if at all, they value the benefits that the risky activity provides. This balancing of potentially competing concerns goes to the heart of what governments do — determine appropriate actions based on the fears and values of citizens.

Similarly, the ability to enhance environmental protection is meaningless unless governments are permitted a full range of responses to legitimate environmental risks. Such responses must include the right to impose stricter standards to prevent harm that is certain to occur, as well as the right to implement measures to protect against possible risks revealed by new or controversial scientific evidence.

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284. NAAEC, supra note 51, art. 3.

285. Id. pmbl.

286. This point can be illustrated by the following example. Suppose two people are preparing to leave their homes to go to the office in the morning and each checks several weather forecasts before doing so to determine whether to take precautions against getting wet from rain. Assume further that these people are seeking to achieve different levels of protection: one is willing to suffer a little wetness but would prefer not to get extremely wet; the other considers it extremely important
For these reasons, governments implementing an environmental measure must retain the ability to make judgments concerning conflicting evidence or different scientific principles, as well as how and when to respond to a legitimate environmental risk. It is therefore inappropriate for an outside body that is not accountable to a country’s residents, such as an arbitral tribunal, to attempt to weigh competing scientific claims to determine whether there is “enough” risk to justify the measure in question, or whether the measure is supported by the “correct” or “best” or “most accepted” science.

In light of these considerations, therefore, an arbitral tribunal considering an expropriation claim arising out of a purported environmental measure should limit its inquiry to determining whether the science underlying the risk determination has the minimal attributes of scientific inquiry — that is, whether the evidence of risk has been derived through the application of legitimate scientific methods and procedures, and is probative of a potential for adverse effects.\(^{287}\) This is true even if the evidence is controversial or inconclusive. Once an arbitral tribunal has confirmed that the evidence is scientific and probative, it should accept the legitimate environmental basis for the measure. Such an analysis will ensure that environmental measures are not disguised expropriations or protectionist measures without interfering with the ability of governments to take precautionary measures or their right to apply the political judgments inherent in setting their appropriate levels of protection against risk.\(^ {288}\)

to avoid getting wet (i.e., has chosen a higher level of protection). Four out of five forecasts indicate that it is most likely not going to rain during the day, but the fifth, using a new and controversial forecasting method, indicates that it is likely to rain. The person who is willing to get a little wet is likely to take fewer precautions against rain on the chance that the new forecasting method is not as reliable as the method used by the other four forecasts. The person with the higher level of protection is more likely to consider the possibility that the new method may be accurate and take precautions against rain. Forcing the second person to act on the basis of the majority of the evidence effectively lowers the level of protection that she is permitted to choose.

That is not to say, however, that science has no role in this scenario. To be a legitimate basis for protective measures, the new forecasting method must be based on a minimally scientific inquiry concerning the weather, instead of on unscientific methods, such as astrological predictions.\(^ {287}\) This is an appropriate role for the expert assistance NAFTA makes available to arbitral tribunals. NAFTA, supra note 25, art. 1133.

\(^ {288}\) These principles would support the right of the governments of Canada and Mexico to maintain the measures at issue in the Ethyl and Metalclad cases. Scientific studies have apparently shown that airborne manganese poses a risk to human health. See supra notes 109 and 133. If these studies are the result of the application of legitimate scientific methods, they should be sufficient to support the environmental legitimacy of Canada’s ban. Likewise, the study indicating that operation of Metalclad’s waste facility poses a risk to human health and the environment (again assuming that the study is legitimately scientific) weighs against Metalclad’s compensation claim. Even the exis-
The SD Myers claim raises a different issue concerning the legitimacy of environmental measures. The Canadian PCB export ban was based on Canada’s obligations under the Basel Convention.  The Basel Convention forms part of the international law that applies in interpreting NAFTA’s expropriation provisions. Environmental measures addressing risks recognized in a widely adopted international agreement shall be presumed to be legitimate and should not normally give rise to an obligation to compensate for their economic impact on investment. Moreover, requiring governments to pay compensation to implement such measures interferes with efforts to address global environmental problems through international consensus.

International law thus recognizes the right of governments to regulate to promote legitimate governmental objectives without incurring an obligation to provide compensation for every impact of those regulations on the value of property. The discussion of international law in Section V also indicates that international tribunals have recognized additional factors that support governments’ right to regulate without having to provide compensation.

The most important such factor is the degree to which the regulation affects the value of the investment. As noted above, international law considers an indirect expropriation to require compensation if it renders property “virtually valueless.” In other words, as Ethyl explained in its NAFTA claim, international law requires compensation “where the effect [of the regulation] is similar to what might have occurred under an absence of scientific studies to the contrary should not prohibit the government from taking precautionary measures to protect these serious interests.

289. See supra notes 142-144.
290. Article 104 of NAFTA provides that the obligations of several international environmental agreements are to prevail over any inconsistent obligations in NAFTA. These agreements are the Basel Convention; the Convention on International Trade in Endangered Species (CITES); the Montreal Protocol on Substances that Deplete the Ozone Layer; the Agreement Between the Government of Canada and the Government of the United States Concerning the Transboundary Movement of Hazardous Waste; and the Agreement Between the United States and Mexico on Cooperation for the protection and Improvement of the Environment in the Border Area. NAFTA, supra note 25, art. 104.
291. See supra Part V.
292. See supra notes 255 - 263 and accompanying text.
293. See supra note 256 and accompanying text. This criterion is supported by the statement of the Iran-US Claims Tribunal quoted by Ethyl in its Notice of Arbitration: “[M]easures taken by a State can interfere with property rights to such an extent that these rights are rendered so useless that they must be deemed to have been expropriated.” Notice of Arbitrations, supra note 107, at 10 (quoting Starrett Housing Corp., 4 Iran-US Cl. Trib. Rep. at 154 (emphasis added)).
outright expropriation.” Thus, a regulation is not “tantamount to expropriation” if it leaves some value in the investment in question.

Another factor that is relevant under international law is whether regulations affecting the investment were foreseeable. This factor weighs against requiring compensation in the case of most environmental laws, including those at issue in the NAFTA cases described above. Harm to the environment is universally recognized as an extremely serious issue and, as such, is a common subject of government regulation. NAFTA’s emphasis on maintaining and strengthening environmental protection gives notice of the three governments’ intention to implement environmental measures. It can hardly be considered a surprise when they do so.

VII. CONCLUSION

The NAFTA claims described in this Article demonstrate the need for clarification of the NAFTA expropriation provision as it applies to environmental measures. International law has long supported the right of

294. See supra notes 116-117 and accompanying text.

295. This factor is relevant to the claims of both Metalclad and Ethyl. It does not appear that Metalclad is asserting that the government actually took its property, but rather that the refusal of the operating permit and the environmental zoning regulation affected the economic value of the waste treatment facility. Likewise, Ethyl admits that the sale of MMT constitutes only half the revenue of Ethyl Canada. See supra note 112. Canada’s law thus did not deprive Ethyl of all economic benefit of its investment. Therefore, even under Ethyl’s own interpretation of international law, Ethyl’s claim was unsupported.

296. See supra notes 264-266 and accompanying text.

297. When Metalclad undertook to upgrade and operate the hazardous waste facility, it was well aware that its activities were subject to regulation. In addition to being aware that its activities were subject to regulation in Mexico, see supra note 93 and accompanying text, Metalclad should have been aware that similar activities are regulated in the United States. Nor can Ethyl claim surprise that the government promulgated new regulations concerning the production and sale of gasoline additives, because these activities have long been the subject of government regulation, both in Canada and the United States. The long-standing laws regulating PCB use and disposal in both the United States and Canada, as well as the existence of the Basel Convention, gave SD Myers ample notice that its activities were subject to regulation.
governments to implement legitimate measures in the exercise of their police powers without incurring an obligation to compensate if such measures diminish the value of foreign investments. General principles of environmental law and protection, as well as the specific emphasis that NAFTA places on environmental protection, make clear that this right applies with particular force with respect to legitimate regulations protecting the environment. For these reasons, the parties to NAFTA and negotiators of other regional or global investment agreements should make explicitly clear that protection against expropriation does not include a right to compensation for diminished value resulting from the effects of legitimate environmental regulations.

To truly enable governments to protect the environment, it is essential to make explicit the following points:

- Legitimate environmental measures do not create a right to compensation for any decrease in the value of a foreign investment affected by the measures
- Legitimate environmental measures include measures implemented pursuant to the precautionary principle
- Governments must have the right to establish their own level of protection against risks of environmental harm
- Any test of the legitimacy of environmental measures must not require the government to prove that a risk of harm is supported by the “best,” “most” or “most widely accepted” science; it is sufficient if the application of legitimate scientific methods and procedures demonstrates a potential for adverse environmental effects.

Creating a right to compensation for an environmental law’s economic impacts on foreign investors would severely limit the ability of governments to protect the environment. Such a right would be akin to a legally enforced protection racket—the government would be forced to pay those who would harm the environment to stop or limit their harmful activities.

Fortunately, international law does not support such a scheme. Rather, it recognizes that legitimate governmental regulations do not normally give rise to a right to compensation, and that environmental protection is an important subject of government action, even when for-
Foreign investors are harmed economically. It is crucial that governments negotiating new trade or investment agreements recognize these principles and explicitly ensure that such agreements do not create new obstacles to the ability of governments to protect the environment through legitimate environmental laws and regulations.