

COMMENT

The European Union: An Appropriate Model for a Precautionary Approach?

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I. INTRODUCTION

Traditionally, free trade, protection of human health, and protection of the environment were treated as independent policy goals.¹ More recently, however, attention has shifted toward "the linkages and potential conflicts between trade and environmental measures."² The debate regarding the North American Free Trade Agreement (NAFTA) is one such example. Opponents of the Agreement argued, among other things, that free trade between the United States and Mexico would encourage American companies to move their businesses to Mexico in order to avoid U.S. Environmental laws.³ Proponents, however, took the position that free trade would in fact "produce higher standards of living, which in turn [would] encourage higher environmental standards."⁴

A similar debate occurred during the 1994 Uruguay Round revisions to the General Agreement on Tariffs and Trade (GATT).⁵ Those in favor of the new agreement argued that disregarding environmental concerns would cause states to purposefully weaken their environmental standards in order to gain an economic advantage over states with stricter standards.⁶ On the other hand, opponents of the revisions stated that taking into account environmental factors would cause states to act in an arbitrary and discriminatory manner toward

1. Daniel M. Bodansky, *Trade and the Environment 1*, University of Washington School of Law, International Environmental Law (Feb. 1998) (course materials on file with author).

2. *Id.* at 1-2.

3. *Id.* at 2.

4. *Id.* at 3.

5. *Id.* at 3-4.

6. *Id.* at 4.

another state when making decisions on economic and trade matters with that state.⁷

At the heart of the many debates regarding the interplay between free trade and human health and environmental concerns is a concept called the "precautionary principle."⁸ Many states have adopted this principle.⁹ Specifically, the precautionary principle requires those states adhering to the principle to regulate substances or activities "that may be harmful to the environment . . . even if conclusive scientific evidence of their harmfulness is not yet available."¹⁰ Supporters of the principle have argued that all states should adopt the principle as a matter of international law in a number of environmental and public health areas, including pesticides, electro-magnetic fields, food safety, the transport of radioactive waste on the high seas, sustainable development, whaling, genetically engineered food, and the use of certain synthetic hormones in beef.¹¹ Critics, however, take the position that the precautionary principle is an environmental policy that is vague, uncertain, counterproductive, a "paradoxical peril,"¹² and used by states as a restraint on trade.¹³

Despite the controversy surrounding the precautionary principle, the idea that a precautionary approach should be taken in order to protect public health and the environment has been articulated in a growing number of international instruments.¹⁴ For example, the European Union has incorporated the precautionary principle into its regional policy.¹⁵ The European Union case law also reflects a growing number of decisions citing the precautionary principle.¹⁶ Given its widespread acceptance in Europe, advocates of the principle argue that the European Union has effectively used this principle without compromising free trade, and therefore, it can be seen as a model to the

7. *Id.* at 2 (stating that actions taken to protect "human, animal, plant life, or health" may "not be applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade").

8. Naomi Roht-Arriaza, *Precaution, Participation, and the "Greening" of International Trade Law*, 7 J. ENVTL. L. & LITIG. 57, 59-60 (1992).

9. *Id.*

10. Bernard A. Weintraub, *Science, International Environmental Regulation, and the Principle: Setting Standards and Defining Terms*, 1 N.Y.U. ENVTL. L.J. 173, 181 (1992).

11. Bodansky, *supra* note 1.

12. Frank B. Cross, *Paradoxical Perils of the Precautionary Principle*, 53 WASH. & LEE L. REV. 851, 851 (1996).

13. Myron S. Weinberg, *Technical Barriers to Trade (Non-Tariff Measures)*, Metro. Corp. Couns., Oct. 1999, at 48.

14. Bodansky, *supra* note 1, at 1.

15. Case C-393/01, *France v. European Communities* (filed Oct. 8, 2001).

16. *Id.*; see also *Castle Cement v. Environment Agency*, [2001] Env. L.R. 46 (Q.B.D. Adm. Ct. Mar. 22, 2001).

rest of the international community, including the United States.¹⁷ Specifically, some have taken the position that the precautionary principle is sound and can be precisely defined and uniformly applied in disputes between states. As discussed below, however, the term "precautionary principle" is not as easy to define and apply as proponents might argue. Instead, it appears that many of the legal instruments and cases citing to the principle have defined and applied the principle in different ways. Case law also seems to reflect uncertainty regarding its application. Finally, there has been reluctance by some states to adopt the principle when addressing international environmental and public health concerns that may have a detrimental impact on a state's national economic welfare.

This Comment will argue that the current use and application of the precautionary principle should not be abandoned. However, before adopting the principle as a rule of international law, the international community should look to the European Union as a starting point for how to uniformly define and apply the precautionary principle. Accordingly, Part II of this Comment will examine the various formulations of the precautionary principle and the widespread adoption of a precautionary approach in a number of international instruments. Part III will describe the European Union's use of the principle and its attempt to balance environmental and public health concerns against economic concerns. Specifically, this section will discuss the European Union Treaty, the European Court of Justice's interpretation of that treaty, and several recent decisions from the European Union. This section will also examine a recent European Union Communication on the Precautionary Principle. Part IV will discuss the United States' adoption of a precautionary approach nationally and its reluctance to do so internationally. Finally, Part V will argue that the international community should adopt the precautionary principle if it can ensure uniform definition and application of the principle so as to avoid arbitrary decisions that fail to adequately address potential environmental and public health risks or decisions that are motivated by economic protectionism.

II. THE PRECAUTIONARY PRINCIPLE DEFINED AND APPLIED

Many scholars have argued that states have an affirmative duty to prevent not only known environmental harms and health risks but also conduct that may be harmful, "even if conclusive scientific evidence" regarding harmfulness is not available.¹⁸ This idea is generally

17. TREATY ON EUROPEAN UNION, Feb. 7, 1992, 31 I.L.M. 247, 285-86 (1992).

18. Weintraub, *supra* note 10, at 180.

referred to as the “precautionary principle.”¹⁹ The notion that a precautionary approach should be employed when addressing environmental issues is not altogether new. For example, a number of regional agreements and international instruments expressly refer to the precautionary principle or to the need for a precautionary approach. Attempts have also been made to reach a consensus regarding a definition. The January 1998 Wingspread Statement is such an example. It states, “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.”²⁰

According to one author, the origin of the precautionary principle appears to have evolved in response to environmental issues involving the Wadden Sea, which borders the Netherlands, Germany, and Denmark.²¹ The German Council of Experts on the Environment described “a precautionary approach” as follows:

A successful environmental policy has to be guided by the principle of precautionary action, in part because the mechanisms which determine the limits of environmental capacity are still largely unknown. Environmental policy therefore has to prevent adverse ecological developments, without having the opportunity to be guided only by already measured impacts on the marine environment when specific measures have to be taken.²²

One of the earliest articulations of the precautionary principle in an international instrument occurred in the Second International Conference on the Protection of the North Sea (London Declaration).²³ Representatives of the states that border the North Sea met on several occasions to address concerns regarding the dumping of solid waste into the North Sea. A final report was issued in 1987.²⁴ In that report, the representatives determined that a precautionary approach was needed in order to protect the North Sea from dangerous substances.²⁵ Specifically, the London Declaration states that “a precautionary ap-

19. *Id.*

20. The Science and Environmental Health Network Conference, Wingspread Statement on the Precautionary Principle, Jan. 23–25, 1998, available at <http://www.sehn.org/wing.html> [hereinafter Wingspread Statement]. In the conference, various government officials, research scientists, environmentalists, and attorneys met in Racine, Wisconsin to discuss the precautionary principle.

21. Bodansky, *supra* note 1, at 1.

22. *Id.*

23. Second International Conference on the Protection of the North Sea, London, Nov. 25, 1987, 27 I.L.M. 835 (1988) [hereinafter London Declaration].

24. *Id.*

25. *Id.* at 837–38.

proach is necessary" and that states are required to take action in order "to control inputs of [dangerous substances] even before a causal link has been established by absolutely clear scientific evidence."²⁶

Another statement of the precautionary principle was made at the Third North Sea Conference (the Hague North Sea Declaration) in 1990.²⁷ Again, the participants agreed that action needed to be taken in order to "avoid potentially damaging impacts of substances that are persistent, toxic and liable to bioaccumulate even when there is no scientific evidence to prove a causal link between emissions and effects."²⁸

A precautionary approach was also incorporated in the 1987 Pollution Control Guidelines authorized by Article 4(e) of the Agreement on the Protection of Lake Constance Against Pollution (Steckborn Agreement).²⁹ These guidelines contain formal duties and obligations for Switzerland, Austria, and Germany for the purpose of protecting the drinking water and fishing supplies of Lake Constance.³⁰ The principles established in the guidelines include the "integrated protection of waters" and "precautionary measures for the protection against accidents with water-contaminating substances."³¹

In May 1990, members of the Economic Conference for Europe and the European Community Commission adopted the Ministerial Declaration on Sustainable Development in the Economic Commission for Europe (ECE) Region (Bergen Declaration).³² The purpose of the agreement was to harmonize duties and obligations regarding environmental management and to incorporate specific language concerning the precautionary principle.³³

Finally, the European Union has embodied the precautionary principle in its treaty.³⁴ The treaty states in pertinent part: "The community policy on the environment . . . shall be based on the precautionary principle and on the principles that preventive actions should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay."³⁵

26. *Id.* at 838.

27. Weintraub, *supra* note 10, at 185.

28. *Id.*

29. HARALD HOHMANN, PRECAUTIONARY LEGAL DUTIES AND PRINCIPLES OF MODERN INTERNATIONAL ENVIRONMENTAL LAW 236-38 (1994).

30. *Id.*

31. *Id.*

32. Wientraub, *supra* note 10, at 185-86.

33. *Id.*

34. TREATY ON EUROPEAN UNION, *supra* note 17, at 285-86.

35. *Id.*

The table below identifies some of the additional agreements, international instruments, and documents that specifically incorporate the precautionary principle. For clarity, the table includes the instruments discussed above.

Title	Description
Protocol on Substances that Deplete the Ozone Layer (Sep. 16, 1987) (Montreal Protocol) ³⁶	Parties to the Agreement are "[d]etermined to protect the ozone layer by taking precautionary measures to control equitably total global emissions of substances that deplete it, with the ultimate objective of their elimination on the basis of developments in scientific knowledge, taking into account technical and economic considerations." ³⁷
Second North Sea Declaration (Nov. 25, 1987) (London Declaration) ³⁸	"[I]n order to protect the North Sea from possibly damaging effects of the most dangerous substances a precautionary approach is necessary which may require action to control inputs of such substances even before a causal link has been established by absolutely clear scientific evidence." ³⁹
United Nations Environment Programme (1989) ⁴⁰	The report states that "the principle of precautionary action" should be adopted by governments as the basis for the prevention of marine pollution. ⁴¹
The Nordic Council's International Conference on the Pollution of the Seas (Oct. 18, 1989) (Nordic Council's Conference) ⁴²	"[A]nd taking into account . . . the need for an effective precautionary approach, with that important principle intended to safeguard the marine ecosystem by, among other things, eliminating and preventing pollution emissions where there is reason to believe that damage or harmful effects are likely to be caused, even where there is inadequate or inconclusive scientific evidence to prove a causal link between emissions and effects." ⁴³

36. Montreal Protocol on Substances That Deplete the Ozone Layer, Sept. 16, 1987, 26 I.L.M. 1550 (entered into force Jan. 1, 1989).

37. *Id.* at 1551.

38. London Declaration, *supra* note 23, at 835.

39. *Id.* at 838.

40. *Report of the Governing Council on the Work of its Fifteenth Session*, U.N. Environment Programme, U.N. GAOR, 44th Sess., Supp. No. 25, 12th mtg. at 153, U.N. Doc. A44/25 (1989).

41. *Id.*

42. Nordic Council's International Conference on the Pollution of the Seas: Final Document Agreed To, Oct. 18, 1989, in *Nordic Action Plan on Pollution of the Seas*, 99 app. V (1990).

43. *Id.*

Title	Description
Declaration of the Second World Climate Conference (1990) (Second World Climate Conference) ⁴⁴	"In order to achieve sustainable development in all countries and to meet the needs of present and future generations, precautionary measures to meet the climate challenge must anticipate, prevent, attack, or minimize the cause of, and mitigate the adverse consequences of, environmental degradation that might result from climate change. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent such environmental degradation. The measures adopted should take into account different socio-economic contexts." ⁴⁵
Hague-North Sea Convention (Mar. 8, 1990) ⁴⁶	"The participants . . . will continue to apply the precautionary principle, that is to take action to avoid potentially damaging impacts of substances that are persistent, toxic and liable to 'bioaccumulate' even where there is no scientific evidence to prove a causal link between emissions and effects . . ." ⁴⁷
Bergen Declaration (May 16, 1990) ⁴⁸	"In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent, and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation." ⁴⁹
Bamako Convention on Hazardous Wastes Within Africa (Jan. 30, 1991) (Bamako Convention) ⁵⁰	"Each Party shall strive to adopt and implement the preventive, precautionary approach to pollution problems which entails, inter alia, preventing the release into the environment of substances which may cause harm to humans or the environment without waiting for scientific proof regarding such harm. The Parties shall cooperate with each other in taking the appropriate measures to implement the precautionary principle to pollution prevention through the application of clean production methods, rather than the pursuit of a permissible emissions approach based on assimilative capacity assumptions." ⁵¹

44. Ministerial Declaration of the Second World Climate Conference, 1990, 1 Y.B. INT'L ENVTL. L. 473 (1990).

45. *Id.* at 475.

46. Final Declaration of the Third International Conference on the Protection of the North Sea, Mar. 7-8, 1990, 1 Y.B. INT'L ENVTL. L. 658 (1990).

47. *Id.* at 662-73.

48. Bergen Ministerial Declaration on Sustainable Development in the ECE Region, U.N. Doc. A/CONF.151/PC/10, 1 Y.B. INT'L ENVTL. L. 429 (1990).

49. *Id.* at 431-32.

50. Bamako Convention on Hazardous Wastes Within Africa, Jan. 29, 1991, 30 I.L.M. 773 (1991).

51. *Id.* at 781.

Title	Description
UNCED Text on Protection of Oceans, Preparatory Committee for the United Nations' Conference on Environmental Development, Protection of Oceans, All Kinds of Seas Including Enclosed and Semi-Enclosed Seas, Coastal Areas and the Protection, Rational Use and Development of Their Living Resources (Dec. 1, 1991) (UNCED) ⁵²	"A precautionary and anticipatory rather than a reactive approach is necessary to prevent the degradation of the marine environment. This requires, inter alia, the adoption of precautionary measures, environmental impact assessments, clean production techniques, recycling, waste audits and minimization, construction and/or improvement of sewage treatment facilities, quality management criteria for the proper handling of hazardous substances, and a comprehensive approach to damaging impacts from air, land and water. Any management framework must include the improvement of coastal human settlements and the integrated management and development of coastal areas." ⁵³
Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Mar. 17, 1992) (Transboundary Watercourse Convention) ⁵⁴	"The precautionary principle, by virtue of which action to avoid the potential transboundary impact of the release of hazardous substances shall not be postponed on the ground that scientific research has not fully proved a causal link between those substances, on the one hand, and the potential transboundary impact, on the other hand." ⁵⁵
Framework Convention on Climate Change (May 9, 1992) (Climate Change Convention) ⁵⁶	"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, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. To achieve this, such policies and measures should take into account different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors." ⁵⁷

52. UNECD Text on Protection of Oceans, U.N. GAOR, 4th Sess., U.N. Doc. A/CONF.151/PC/100/Add.21 (1991).

53. *Id.*

54. Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Mar. 17, 1992, 31 I.L.M. 1312 (1992).

55. *Id.* at 1316.

56. Framework Convention on Climate Change, May 9, 1992, 31 I.L.M. 849 (1992).

57. *Id.* at 854.

Title	Description
Treaty on European Union (Feb. 7, 1992) (European Union Treaty) ⁵⁸	"The community policy on the environment . . . shall be based on the precautionary principle and on the principles that preventive actions should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay." ⁵⁹
Rio Declaration on the Environment (June 14, 1992) (Rio Declaration) ⁶⁰	"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. 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." ⁶¹
The Cartagena Protocol on Bio-safety to the Convention on Biological Diversity (Jan. 29, 2000) (Cartagena Protocol) ⁶²	Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from taking a decision, as appropriate, with regard to the import of the living modified organism in question as referred to in paragraph 3 above, in order to avoid or minimize such potential adverse effects. ⁶³

A common theme appears to exist among all of the instruments identified above: a lack of scientific certainty is not a prerequisite for taking preventive action against environmental and public health risk. However, no uniformity exists regarding the definition of the term "precautionary principle" or regarding when and how the principle should be applied. Some of these agreements merely cite to the precautionary principle, whereas others are more specific. As indicated in Part III, European case law and policy statements have not shed any light on this issue either.

58. TREATY ON EUROPEAN UNION, *supra* note 17.

59. *Id.*

60. Rio Declaration on Environment and Development, June 14, 1992, 31 I.L.M. 874 (1992).

61. *Id.* at 879.

62. Cartagena Protocol on Biosafety to the Convention on Biological Diversity, Jan. 29, 2000, 39 I.L.M. 1027, 1031 (2000), *see also* Andrew Pollack, *130 Nations Agree on Safety Rules for Biotech. Food: An Accord in Montreal (pact allows Countries to Bar products Seen as threat—U.S. Gains Concessions)*, N.Y. TIMES, Jan. 30, 2000, § 1, at 1, 2000 WL 12395273 (abstract available on Westlaw) (stating that a country can bar the import of "a genetically modified organism . . . even if there is a lack of scientific certainty" that the organism is dangerous).

63. *Id.*

III. THE EUROPEAN UNION AS A MODEL

Through the European Union Treaty and the European Court of Justice decisions interpreting that treaty, the European Union has attempted to balance concerns of trade protectionism against those of the environment and the public's health.

A. *The Formation of the European Union*

Unlike the federal system established in the United States through the United States Constitution, the European Union was created by a number of treaties.⁶⁴ These treaties impose obligations and create rights for its member states.⁶⁵ These obligations and rights were clarified in the 1963 European Court of Justice case, *van Gend & Loos v. Nederlands administraties der Belastingen*.⁶⁶ In *van Gend & Loos*, the court, recognizing that there were weaknesses with respect to the force and effect of the European Economic Community Treaty, stated that the treaty was "more than an agreement which merely creat[ed] mutual obligations between contracting states."⁶⁷ Instead, the court said that the creation of the European Economic Community "constitut[ed] a new legal order for the benefit of which the states have limited their sovereign rights."⁶⁸ Thus, the treaties created a system of dual sovereignty between the European Economic Community and its member states.⁶⁹

Shortly thereafter, the European Court of Justice decided *Costa v. Ente Nazionale per l'Energia Electtrica*.⁷⁰ In *Costa*, the court no longer described the European Economic Community and participating countries as dual sovereigns, but instead determined that the treaties created a constitution.⁷¹ Relying on Article 5 of the European Economic Community Treaty, the court reinforced the notion that the European Economic Community was an entity with enumerated powers over its member states.⁷² These enumerated powers were best de-

64. Treaty on the European Coal and Steel Community, Apr. 18, 1951, 261 U.N.T.S. 140; TREATY ESTABLISHING THE EUROPEAN ATOMIC ENERGY COMMUNITY, Mar. 25, 1957, 297 U.N.T.S. 259; EUROPEAN ECONOMIC COMMUNITY TREATY, Mar. 25, 1957, 298 U.N.T.S. 11; TREATY ON EUROPEAN UNION, *supra* note 17.

65. *Id.*

66. Case 26/62, *van Gend & Loos v. Nederlands administraties der Belastingen*, 1963 E.C.R. 3.

67. *Id.* at 1.

68. *Id.*

69. *Id.*

70. Case 6/64, *Costa v. Ente Nazionale Energia Electtrica*, 1968 E.C.R. 585.

71. *Id.* at 593-94.

72. Case 294/83, *Parti ecologiste 'Les Verts' v. European Parliament*, 1986 E.C.R. 1339, 1364-65.

scribed in the 1987 decision, *Parti ecologiste 'Les Verts' v. European Parliament*.⁷³ In *Parti ecologiste 'Les Verts'*, the court held that certain issues regarding a particular member's conduct were subject to judicial review.⁷⁴

B. The European Union and Trade

1. Articles 30 and 34 of the European Union Treaty

Articles 30⁷⁵ and 34⁷⁶ of the European Union Treaty prohibit its member states from engaging in restrictive trade practices against other member states. Specifically, Article 30 states that "restrictions on imports and all measures having equivalent effect shall . . . be prohibited between Member States."⁷⁷ Article 30 of the European Union Treaty also sets forth specific environmental objectives that may have the effect of limiting trade.⁷⁸ These objectives include:

- The Protection of Human Health
- The Protection and Preservation of the Environment
- The Protection of the Environment at the International Level
- The Protection of the Environment based on the Precautionary Principle⁷⁹

Article 34 states that "restrictions on exports . . . shall be prohibited between member States."⁸⁰ According to one European Union decision, restrictive trading practices include "[a]ll trading rules enacted by Member States which are capable of hindering, directly or indirectly, actually or potentially, intra-community trade."⁸¹ Examples of restrictive trade practices include restricting the import or export of a product, making it "more difficult or costly to import or export goods" from one member state to another, and enacting a regulation that, although neutral on its face, is discriminatory in effect.⁸²

73. *Id.*

74. *Id.*

75. TREATY ON EUROPEAN UNION, *supra* note 17, art. 30.

76. *Id.* art. 34.

77. *Id.* art. 30.

78. *Id.*

79. *Id.*

80. *Id.* art. 34.

81. Case 8/74, *Procureur du Roi v. Dassonville*, 1974 E.C.R. 837.

82. *Id.*

2. Exceptions to Articles 30 and 34

There are exceptions to Articles 30 and 34 of the European Union Treaty. Article 36 of the treaty states in pertinent part that a state may engage in restrictive trade practices if the state can show that the restriction is necessary in order to protect the safety and health of its citizens and the environment.⁸³ In order to determine if a state's restrictive practice is permissible, the European Court of Justice applies the "principle of proportionality."⁸⁴ This test essentially says that if an action taken by a member state against another member state can be achieved through less restrictive means, then the action taken violates the European Union Treaty.⁸⁵

In addition to Article 36, the European Court of Justice articulated another principle called the "rule of reason" in the case of *Rewe-Zentral AG v. Bundesmonopolverwaltung fuer Branntwein*.⁸⁶ In *Rewe-Zentral AG*, the court expanded the "categories of purposes for which a Member State may restrict the free movement of goods" but retained the requirement that a measure taken by a member state be employed by the least restrictive means necessary to serve an important government interest.⁸⁷

Finally, a number of the European Court of Justice decisions demonstrate that the protection of health and the environment are important regional objectives. For example, the court in *Procureur de la Republique v. Association de defense des bruleurs d'huiles usagees*,⁸⁸ dealt with environmental protection measures that were trade restrictive.⁸⁹ Recognizing the importance of environmental protection in the European Community, the court allowed a regional policy that excluded the movement of waste oils within the European Union because the waste was viewed as a possible environmental hazard.⁹⁰

The European Union Treaty and the European Court of Justice decisions demonstrate that the European Union has attempted to take into account both economic and environmental and public health concerns. This has been possible because of the European Union mem-

83. TREATY ON EUROPEAN UNION, *supra* note 17, art. 36.

84. Case 124/81, *Commission v. United Kingdom*, 1983 E.C.R. 203.

85. *Id.*

86. Case 120/78, *Rewe-Zentral AG v. Bundesmonopolverwaltung fuer Branntwein*, 1979 E.C.R. 649.

87. *Id.* at 662.

88. Case 240/83, *Procureur de la Republique v. Association de defense des bruleurs d'huiles usagees*, 1985 E.C.R. 531.

89. *Id.* at 548.

90. *Id.*

bers' acceptance of the rights and obligations set forth in the European Union Treaty.

C. Recent Case Law Applying the Precautionary Principle

Recent European Union case law and other decisions rendered by European courts reflect a growing number of decisions incorporating the precautionary principle. For example, in an October 2001 action brought by France against the Commission of the European Communities, France challenged the Commission's decision allowing Portugal to export bovine products.⁹¹ France argued that such a decision infringed upon the precautionary principle because the Commission failed to take into account the "nature and seriousness of the [health] risks relating to [bovine spongiform encephalopathy]" warranting "full compliance with the precautionary principle."⁹² A final decision has not been rendered.

In another case, the Norwegian Food Control Agency refused to allow Kellogg, a company incorporated under Danish law, to sell corn flakes in Norway that were fortified with certain vitamins and minerals.⁹³ The European Free Trade Association (EFTA) Surveillance Authority sent an opinion to the Norwegian government, stating that "in order for a ban on imports to be justified under Article 13 EEA, it was necessary for the Government to demonstrate that the product in question itself constituted a health risk."⁹⁴ The Norwegian government responded, stating that the corn flakes ban was "justified under Article 13" because there was a potential risk that an over-consumption of iron could cause a health risk to the public.⁹⁵ Thus, the government asserted that a "precautionary attitude" was justified.

The court held that a state could restrict imports as long as the restriction was based on the "protection of human health" and "as long as such prohibitions did not constitute means of arbitrary discrimination or disguised restrictions on trade."⁹⁶ The court also determined that it did not appear the Norwegian government "had made [an] inappropriate use of the precautionary principle."⁹⁷ Despite this conclusion, however, the court held that Norway had violated Article

91. Case C-393/01, *France v. European Communities* (filed Oct. 8, 2001), 2001 O.J. (C 348) 17.

92. *Id.*

93. Case E3/00, *EFTA Surveillance Authority v. Norway* (Eur. Free Trade Ass'n Ct. 2001), 2001 O.J. (C 164) 7, [2001] 2 C.M.L.R. 47, 2000 WL 33281363, *1184 (2001).

94. *Id.*

95. *Id.*

96. *Id.* at *1190.

97. *Id.* at *1185.

11 of the EEA because it failed to complete the required comprehensive risk assessments demonstrating that the “fortification in question would present a danger to public health.”⁹⁸

Finally, in an action brought by Monsanto, a Delaware Corporation, against the Council of the European Union, Monsanto alleged that the Council had failed to adopt a “Maximum Residue Limit” (MRL) for a veterinary product called Sometribove.⁹⁹ Because the Council had failed to establish a MRL, the Monsanto product could not be put on the market in the European Union even though scientific information had concluded that bovine somatotrophin was safe and other countries were importing milk into the European Union from bovine somatotrophin treated cows. In its complaint, Monsanto made a number of arguments in support of its contention that the Council’s decision was improper. For example, Monsanto stated that the Council had breached the “principle of proportionality” and that it had “wrongful[ly] or disproportionate[ly] appli[ed] the precautionary principle.”¹⁰⁰

The cases cited above reflect the European Union’s adoption and use of the precautionary principle in its case law. Despite the recognition of the principle, none of these cases, or others that the author has reviewed, appear to reflect a uniform application of the policy. This is not to say, however, that the inclusion of the precautionary principle in the complaints and decisions is erroneous. Rather, the principle of proportionality, rule of reason, or some form of risk assessment seems to be required in addition to the precautionary principle. On the other hand, the *Monsanto* case is problematic especially if all of the allegations raised in the complaint are true. Particularly troubling is the charge that there was a “wrongful or disproportionate application of the precautionary principle” by the Council and that other countries were not banned from importing milk from bovine somatotrophin-treated cows. In sum, although the European Union (and individual European states) accepts the precautionary principle, there is no uniformity in its application.

D. The European Union Communication on the Precautionary Principle

Attempts have been made to clarify the definition of the precautionary principle. The European Union Communication on the Pre-

98. *Id.* at *1185–86.

99. Case T-382/00, *Monsanto Co. v. Council of the European Union* (filed Dec. 22, 2000), 2001 O.J. (C 61) 20. At the time of printing, no decision was published.

100. *Id.*

cautionary Principle is an example of one recent attempt.¹⁰¹ The Communication sets forth guidelines on the application of the precautionary principle. The following is a summary of these guidelines:

1. "Measures . . . must not be disproportionate to the desired level of protection and must not aim at zero risk."¹⁰²
2. "[C]omparable situations should not be treated differently and . . . different situations should not be treated in the same way, unless there are objective grounds for doing so."¹⁰³
3. "[M]easures . . . should be comparable in nature and scope with measures already taken in equivalent areas in which all the scientific data are available."¹⁰⁴
4. "This examination should include an economic cost/benefit analysis when this is appropriate and feasible. However, other analysis methods . . . may also be relevant."¹⁰⁵
5. "The measures must be of a provisional nature pending the availability of more reliable scientific data. . . . [S]cientific research shall be continued with a view to obtaining more complete data."¹⁰⁶

The above guidelines provide an important starting point for establishing international clarity regarding when and how the precautionary principle should be applied.

IV. THE UNITED STATES' ACCEPTANCE OF THE PRECAUTIONARY PRINCIPLE (OR AT LEAST A PRECAUTIONARY APPROACH) DOMESTICALLY AND ITS RELUCTANCE TO ADOPT THE PRINCIPLE INTERNATIONALLY

The United States is considered to have "the most highly developed rules" in the world with respect to environmental protection, and has been at the forefront of developing "that branch of international law now known as international environmental law."¹⁰⁷ Despite this reputation, the United States has been reluctant to adopt the precau-

101. Communication from the Commission on the Precautionary Principle, European Union Preparatory Acts, COM (00) 1 final.

102. *Id.* at 18.

103. *Id.* at 19.

104. *Id.*

105. *Id.* at 20.

106. *Id.* at 20-21.

107. Daniel Bodansky, *Remarks: New Developments in International Environmental Law*, 85 AM. SOC'Y INT'L L. PROC. 401, 414 (1991) (obtainable from <http://www.asil.org/Proceed.htm>).

tionary principle as a rule of international law.¹⁰⁸ Even when the United States has ratified an international instrument citing to the precautionary principle, the country has qualified its endorsement. Some argue that this attitude stems from the fact that the United States often engages in trade practices that undermine the environmental integrity of other nations.¹⁰⁹ Endorsing the precautionary principle as a matter of international law would, therefore, open the United States to heightened international scrutiny or to possible legal action from other states.

As discussed in the next section, the United States appears to endorse a precautionary approach in its domestic laws that are related to environmental and health issues of domestic concern. Despite its acceptance of a precautionary approach, U.S. statutes and regulations rarely cite to the "precautionary principle." Although this may be the case, there is a clear distinction between U.S. regulation of other countries' products and practices and U.S. unwillingness to be regulated by other states for the same reasons.

A. Domestic Endorsement of the Precautionary Principle

Very few cases, statutes, or regulations in the United States cite to the precautionary principle specifically. However, the United States routinely uses a precautionary approach when developing laws to protect the environment and the public's health. In other words, the U.S. laws restrict products and regulate practices, even without scientific certainty regarding the harmfulness of such products or practices.

One of the first cases that adopted the precautionary principle was *Ethyl Corp. v. Environmental Protection Agency*.¹¹⁰ In that case, a number of corporations challenged an Environmental Protection Agency (EPA) order requiring the annual reduction of the lead content in gasoline.¹¹¹ The D.C. Circuit held that the EPA had the authority to take action and to prevent harm when there was a significant risk that environmental harm could occur if lead emissions were not reduced.¹¹² Specifically, the court stated, "Where a statute is precautionary in nature, the evidence difficult to come by, uncertain, or conflicting because it is on the frontiers of scientific knowledge . . . rigor-

108. Gregory D. Fullem, Comment, *The Precautionary Principle: Environmental Protection in the Face of Scientific Uncertainty*, 31 WILLAMETTE L. REV. 495, 512 (1995).

109. Bodansky, *supra* note 107, at 414.

110. 541 F.2d 1 (D.C. Cir. 1976) (en banc), *cert. denied*, 426 U.S. 941 (1976).

111. *Id.* at 7.

112. *Id.* at 7-8.

ous step-by-step proof of cause and effect" will not be required.¹¹³ In addition, the court appeared to reject the use of economic or technological feasibility considerations in setting Air Quality Standards and stated that the goal of the Clean Air Act is "precautionary in nature."¹¹⁴ Although the term "precautionary principle" does not appear anywhere in the opinion, the decision reflects the court's endorsement of the principle.

The Food and Drug Administration (FDA) similarly endorses a precautionary approach by routinely applying the approach to the agency's new drug approval process.¹¹⁵ Rather than placing pharmaceuticals with uncertain health risks on the market, the FDA requires that all new drugs be subjected to numerous tests before being placed on the market in order to ensure a certain level of safety.¹¹⁶ Although some argue that the delay in this approval process contributes to the death of many people who are desperately in need of life-saving drugs,¹¹⁷ the FDA takes the position that the agency has a duty to regulate potentially harmful drugs in the face of scientific uncertainty and to prevent another thalidomide-type tragedy.¹¹⁸

The United States also applies precaution in the area of pesticide regulation.¹¹⁹ In 1977, for example, the U.S. government removed a widely used pesticide called Dibromochloropropane (DBCP) from the U.S. market even though possible health risks had not been established with scientific certainty.¹²⁰ The concern was that DBCP might cause significant health risks to the public, including sterility.¹²¹

Further, the United States exercises precaution in its food safety regulations.¹²² For example, the United States banned imports of beef from a number of European countries because of the "Mad Cow" disease outbreak in the United Kingdom and other countries.¹²³ Al-

113. *Id.* at 27.

114. *Id.* at 13-14.

115. Cross, *supra* note 12, at 883.

116. *Id.*

117. *Id.*

118. See generally HARVEY TEFT & COLIN R. MUNROE, *THALIDOMIDE: THE LEGAL AFTERMATH*, WESTMEAD, ENGLAND, SAXON HOUSE, FARNBOROUGH (1976).

119. See generally Stephen Ciesielski, *Pesticide Risk Assessment and Reduction Among Migrant Farmworkers in North Carolina*, 100 PUB. HEALTH REP. 207 (1991).

120. Winton D. Woods, *Suits by Foreign Plaintiffs: Keeping the Doors of American Courts Open*, 8 ARIZ. J. INT'L & COMP. L. 74, 77 (1991).

121. *Id.*

122. Vern R. Walker, *Some Dangers of Taking Precautions Without Adopting the Precautionary Principle: A Critique of Food Safety Regulations in the United States*, 31 ENVTL. L. REP. 10040 (2001).

123. *U.S. Bans Imports of European Meat; Agriculture Dept. to Assess Risk of Mad Cow Disease in This Country*, WASH. POST, Dec. 13, 1997, at A8.

though there was no evidence that Bovine Spongiform Encephalopathy (BSE) had spread into the United States from contaminated beef, the country made a decision to take precautionary measures and ban all imports of beef from Europe. Although the United States did not appear to cite to the precautionary principle when reaching its decision regarding the beef ban, the country took a precautionary approach in reaching the decision.

The above examples demonstrate that the precautionary principle is a concept that has engendered some degree of acceptance in the United States domestically as a means of safeguarding the American public against unknown health and environmental risks in the wake of scientific uncertainty. Despite this support, the United States is still reluctant to endorse the more "stringent requirements of the precautionary principle" domestically. As one author noted, "the more stringent requirements of the precautionary principle have not generally been welcome."¹²⁴ As discussed below, this may be in part due to the fact that if the United States strictly adheres to the principle domestically, it might be subject to criticism if the United States fails to endorse the principle internationally.

B. The United States' Reluctance to Adopt the Precautionary Principle Internationally

1. International Conduct

Despite the apparent approval of a precautionary approach in its domestic legislation, the United States has been reluctant to support the precautionary principle internationally.¹²⁵ For example, notwithstanding the ban of DBCPs in the United States for their potential health and environmental risks, Shell Oil Company and Dow Chemical Company continued to manufacture and export the pesticides to countries outside of the United States, including Costa Rica.¹²⁶ Costa Rican farm workers in a number of Standard Fruit plantations were exposed to the pesticide and sustained injuries.¹²⁷ Thus, although the United States took a precautionary approach when it banned the pesticide for use in the United States, it failed to adopt the same policy when it condoned the production and sale of pesticides by Shell Oil and Dow Chemical outside its borders.

124. David Appell, *The New Uncertainty Principle*, 284 SCI. AM. 1, 18-19 (2001).

125. Fullem, *supra* note 108, at 512.

126. Woods, *supra* note 120, at 77-78.

127. *Id.*

2. Legal Hurdles

Even if the precautionary principle is accepted as a rule of international law, American courts may still find ways to restrict access to a foreign plaintiff by imposing a number of jurisdictional hurdles or requirements. In 1983, for example, a number of Costa Rican farm workers filed a lawsuit in Florida state court against Dow and Shell (defendants), claiming that the workers were sterilized as a result of their exposure to DCBP.¹²⁸ After the case was removed to federal court, the defendants filed a motion to dismiss on forum non conveniens grounds. The defendants prevailed on the motion, and the court accordingly dismissed the case.¹²⁹

On appeal, the plaintiffs, citing the Supreme Court's decision in *Erie Railroad Co. v. Tompkins*,¹³⁰ argued that the forum non conveniens doctrine does not apply under Florida law because one of the plaintiffs is a Florida resident.¹³¹ The Eleventh Circuit disagreed with this interpretation and affirmed the district court's decision, stating that because the district court's application of forum non conveniens did not "operate as a state substantive rule of law," *Erie* could not be invoked.¹³²

In 1983, a second lawsuit was filed in Florida state court against a number of defendants who were Florida residents.¹³³ Again, the defendants successfully removed the case to federal court.¹³⁴ The judge refused to remand the case and dismissed the case on forum non conveniens grounds.¹³⁵ In 1989, the Eleventh Circuit reversed the district court's decision and remanded the case for "further factual development" on the issue of whether or not such a remand would be appropriate.¹³⁶

In mid 1983, a third lawsuit was filed against Shell and Dow, but this time in the State of Texas.¹³⁷ Because the case could not be removed to federal court, Shell and Dow attempted to dismiss the case on forum non conveniens grounds pursuant to state law.¹³⁸ The Texas

128. *Sibaja v. Dow Chemical Co.*, 757 F.2d 1215 (11th Cir.), *cert denied*, 474 U.S. 948 (1985).

129. *Id.* at 1217.

130. *Erie Railroad Co. v. Tompkins*, 304 U.S. 64 (1938).

131. *Sibaja*, 757 F.2d at 1216-17.

132. *Id.* at 1216, 1219.

133. *Barrantes Cabalceta v. Standard Fruit Co.*, 667 F. Supp. 833 (S.D. Fla. 1987), *aff'd in part and rev'd in part*, 883 F.2d 1553 (11th Cir. 1989).

134. *Id.* at 866.

135. *Id.*

136. *Barrantes Cabalceta v. Standard Fruit Co.*, 883 F.2d 1553 (11th Cir. 1989).

137. *Alfaro v. Dow Chemical Co.*, 751 S.W. 2d 208 (Tex. Ct. App. 1988).

138. *Id.*

court granted the motion.¹³⁹ The Texas Court of Appeals reversed, stating that Texas had abolished the *forum non conveniens* doctrine.¹⁴⁰ The Texas Supreme Court affirmed the decision.¹⁴¹ Thus, the plaintiffs were finally allowed to bring their lawsuit in Texas.¹⁴²

Even though the plaintiffs were ultimately successful in bringing a lawsuit in the United States, the amount of effort made to do so was overwhelming. Frequently, plaintiffs are not successful in bringing cases such as the ones described above and are required to litigate their claims in another forum—often with less than desirable results.¹⁴³

3. The United States Courts' Failure to Recognize the Precautionary Principle as a Rule of International Law

The United States courts have failed to recognize the precautionary principle as a rule of international law. For example, notwithstanding the numerous jurisdictional and standing issues, the federal court in *Beanal v. Freeport-McMoRan*¹⁴⁴ held that because the precautionary principle was not a widely accepted international rule, the plaintiffs could not rely on the principle to establish that an environmental tort had been committed against them.¹⁴⁵ In addition, the court stated that the precautionary principle only applies to members of the international community, not to "non-state corporations." Specifically, the court held that "Freeport's policies are corporate policies only and, however destructive, do not constitute torts in violation of the law of nations."¹⁴⁶

The Indonesian plaintiffs in *Freeport-McMoRan* were left with no recourse against the defendants for environmental harms, cultural genocide, and human rights violations. Had Freeport taken a precautionary approach in its corporate practices, the injuries to the Indonesian tribe may have been prevented. In addition, the courts' reluctance to recognize the precautionary principle made it impossible for the plaintiffs to have a viable cause of action even if the cause of action had been brought by Indonesia on behalf of the plaintiffs against the United States for its failure to regulate the U.S. company's practices in

139. *Id.* at 210–11.

140. *Id.* at 211.

141. *Dow Chemical Co. v. Alfaro*, 786 S.W. 2d 674, 679 (Tex. 1990), *cert denied*, 498 U.S. 1024 (1991).

142. *Id.* at 674.

143. See generally Woods, *supra* note 120; Eileen N. Wagner, *Bhopal's Legacy: Lessons for Third World Host Nations and for Multinational Corporations*, 16 N.C. J. INT'L L. & COM. REG. 541 (1991).

144. 969 F. Supp. 362, 382 (E.D. La. 1997).

145. *Id.* at 382–84.

146. *Id.* at 384.

Indonesia. Presumably, even if the court had considered the precautionary principle as a rule of law, the court would probably have entertained the option of dismissing the foreign plaintiffs' lawsuit on forum non conveniens grounds or for other reasons just as the Florida court did in the *Sabja* case.

4. The United States' Reluctance to Adopt the Precautionary Principle in International Instruments or in its Trade Practices

The United States has failed to embrace the inclusion of the precautionary principle in a number of international instruments and has failed to adopt a precautionary approach with respect to its trade policies.¹⁴⁷ This is not to say, however, that the United States has never signed and ratified a treaty containing a reference to the precautionary principle. The United States has signed and ratified several treaties citing to the precautionary principle, including the Rio Declaration. The problem is the country's failure to openly embrace the principle and the fact that the principle is far more developed in Europe than it is in the United States.

For example, in the early 1980s, the European Union began considering banning U.S. beef that was treated with certain hormones.¹⁴⁸ The concern was that certain hormones might cause birth defects.¹⁴⁹ This concern was supported by reported cases of children born with birth defects because of their exposure to diethylstilbestrol (DES) from meat products.¹⁵⁰ By the late 1980s, the European Union had formally declared a ban on certain hormone-treated beef, stating that the action was necessary in order to protect human health.¹⁵¹

The United States disagreed with the European Union's position.¹⁵² The United States argued that the ban was an illegal restraint on trade and that the evidence suggesting that certain growth hormones caused harm to humans lacked scientific certainty.¹⁵³ Subsequently, the United States imposed trade sanctions on various European countries.¹⁵⁴

147. Fullem, *supra* note 108, at 512-13.

148. WTO Appellate Body Report on EC Measures Concerning Meat and Meat Products (Hormones), WT/DS26/AB/R, WT/DS48/AB/R (January 16, 1998), 1998 WL 25520, at *2 (citing Council Directive 81/602/EEC of July 31, 1981) [hereinafter WTO Appellate Body Report].

149. *Id.*

150. *Id.*

151. *Id.* at *1-2 (citing Directive 81/602 "prohibit[ing] the administration to farm animals of substances having a hormonal action and of substances having a thyrostatic action").

152. *Id.* at *12-17.

153. *Id.*

154. *Id.*

On May 20, 1996, the United States filed a complaint against the European Union.¹⁵⁵ The complaint alleged that the European Union's ban on certain beef was in violation of the GATT and did not comport with the GATT Sanitary and Phytosanitary Standards Agreement (SPS Agreement).¹⁵⁶ The United States also claimed that the European Union's actions were not based on legitimate safety concerns but were highly protectionist.¹⁵⁷ Canada also filed a complaint against the European Union and raised similar concerns.¹⁵⁸

The European Union filed its answer on September 20, 1996.¹⁵⁹ It defended its decision to ban certain hormone meat as justifiable given the evidence that the hormones caused potential health risks.¹⁶⁰ The European Union argued that "it [was] not necessary for all scientists around the world to agree on the 'possibility and magnitude' of the risk, nor for all or most of the WTO Members to perceive or evaluate the risk in the same way."¹⁶¹ More importantly, the European Union emphasized that the SPS Agreement incorporates such a precautionary approach because it does not prescribe a particular type of risk assessment and "does not prevent Members from being cautious in their risk assessment exercise."¹⁶²

The WTO Dispute Resolution Panel, and later, the WTO Appellate Body disagreed that the precautionary principle applied.¹⁶³ Instead, the WTO body held that the European Union had failed to perform a "risk assessment" as required by Articles 5.1 and 5.2 of the SPS Agreement, and therefore the European Union's ban on American (and Canadian) beef violated the SPS Agreement.¹⁶⁴ Despite this decision, the Appellate Body indicated that the precautionary principle was not yet an accepted principle of general or customary international law and that the "precautionary principle, . . . still awaits authoritative formulation."¹⁶⁵ Thus, had the precautionary principle been an international rule, the WTO body would have taken the precautionary principle into consideration and the outcome may have been different.

155. *Id.* at *2-3.

156. *Id.* at *12-17.

157. *Id.*

158. *Id.* at *2, 17.

159. *Id.* at *4.

160. *Id.* at *2-5.

161. *Id.* at *2-12.

162. *Id.* at *5.

163. *Id.* at *31-33.

164. *Id.*

165. *Id.* at *33.

Another example illustrating the United States' failure to adopt the precautionary principle as a rule of international law is another beef dispute between the European Union and the United States.¹⁶⁶ The dispute arose over American beef that has a high risk of carrying BSE, or "Mad Cow" disease.¹⁶⁷ Specifically, the European Union objected to a common production practice used by American slaughterhouses: use of animal remains "[for] the production of tallow, or animal fat, by boiling whole animal carcasses."¹⁶⁸ Given the widespread use of tallow in a number of U.S. products, such as pharmaceuticals and cosmetics, the ban "potentially affects up to \$4.5 billion in U.S. pharmaceutical exports."¹⁶⁹

This dispute also raises questions regarding the application of the precautionary principle. While the European Union takes the position that Article 5.7 of the SPS Agreement authorizes the European Union to ban a product as long as there is a legitimate belief that the product poses a threat to health and the environment even if no concrete scientific evidence supports such a belief, the United States takes a more conservative view and rejects the application of the precautionary principle.¹⁷⁰ Given the amount of money at stake, and the potential impact on the American beef industry if the industry is forced to make changes to beef production methods, it is not surprising that the United States is challenging the European Union's position on this matter by refusing to adopt the precautionary principle (or a precautionary approach) with respect to this issue.

Finally, at least 130 states, including the United States and the European Union members, recently signed the Cartagena Protocol on Biosafety.¹⁷¹ This treaty does not address issues of risk to human health from the consumption of bioengineered food but is "mainly concerned with protecting the environment from the consequences of genetic engineering."¹⁷² It does, however, contain language that includes the precautionary principle and states that a country can bar the import of "a genetically modified organism . . . even if there is a lack of scientific certainty" that the organism is dangerous.¹⁷³ Despite this inclusion, the United States did gain a number of important conces-

166. David Thomas, *Where's the Beef? Mad Cows and the Blight of the SPS Agreement*, 32 VAND. J. TRANSNAT'L L. 487, 488 (1999).

167. *Id.*

168. *Id.*

169. *Id.*

170. *Id.* at 510.

171. Cartagena Protocol on Biosafety to the Convention on Biological Diversity, 39 I.L.M. 1027, 1031 (2000), *see also* Pollack, *supra* note 62.

172. Pollack, *supra* note 62.

173. *Id.*

sions. For example, although exporters have to get advance permission before shipping a "living modified organism" meant for release into the environment, no such advance notice and permission is required "for exports of agricultural commodities meant for eating or processing."¹⁷⁴ Thus, despite the specific reference to the precautionary principle in the treaty, it is still highly likely that there will be a dispute between the United States and the European Union, if the European community decides that a ban of genetically-modified food imports is required based on the belief that there is a possible risk to public health or to the environment.

The above discussion illustrates the reluctance on the part of the United States to adopt the precautionary principle as a rule of international law despite its apparent acceptance of a "precautionary approach" at a national level. Not only does the United States take the position that concrete scientific evidence of harm to public health or to the environment is needed before a product is banned from the open market, it also believes that the precautionary principle can and is used by states to engage in highly restrictive and discriminatory trade practices in violation of the GATT.¹⁷⁵

V. STATES SHOULD LOOK TO THE EUROPEAN UNION AS A STARTING POINT FOR THE UNIFORM APPLICATION OF THE PRECAUTIONARY PRINCIPLE

In the quest to establish uniformity with respect to the use and application of the precautionary principle in the international community, the European Union's widespread adoption of the principle in its regional policy and developing case law should be viewed as a useful starting point. As stated above, the European Union has developed a body of law regarding the precautionary principle and has attempted to balance environmental and public health concerns against free trade considerations regionally and internationally. The European Union's stance stands out against that of the United States, where a precautionary approach is usually adhered to nationally and where unrestricted trade practices appear to be the overriding policy goal internationally. This is not to say that the European Union's adoption of the precautionary principle is without flaws. Without uniformity, there is a real danger that courts could render arbitrary and discriminatory decisions motivated by economic protectionism or simply publish decisions that are inconsistent and difficult to apply.

174. *Id.*

175. WTO Appellate Body Report, *supra* note 148, at *12-17, 68.

In order to prevent the inconsistent application of the precautionary principle, states must:

- Standardize the definition of the term “precautionary principle”;
- Set forth uniform guidelines for how the precautionary principle will be applied if a product or practice is regulated;
- Determine what remedies will be available if the precautionary principle is violated; and
- Set forth the means for enforcement if it is determined that a violation of the precautionary principle has occurred.

Much progress has been made in this regard. The 1998 Wingspread Statement is probably one of the better articulations of the precautionary principle. It states:

When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause-and-effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof. The process of applying the Precautionary Principle must be open, informed, and democratic and must include potentially affected parties. It must also involve an examination of the full range of alternatives, including no action.¹⁷⁶

Here, rather than simply citing the term “precautionary principle” or articulating a general definition, the statement provides guidance regarding its application so as to avoid arbitrary decisions.

Yet another example is the Communication published by the European Union. The Communication provides a starting point for setting forth uniform standards for applying the precautionary principle.¹⁷⁷

Although neither the Wingspread Statement nor the European Union Communication addresses enforcement and remedies for a violation, the statement and the communication reflect the realization that if the precautionary principle is going to be effective at all, the international community should reach a consensus regarding the principle’s meaning and application. Such a uniformly applied rule will allow states to effectively balance free trade against environmental and public health concerns.

176. Wingspread Statement, *supra* note 20.

177. See *supra* notes 101–06 and accompanying text.

VI. CONCLUSION

Many in the international community, especially the European Union, have accepted the idea that a precautionary approach should be taken with respect to environmental and public health issues. The European Union has demonstrated that although free trade is an important policy objective, protecting public health and the environment should also be taken into consideration. As one author aptly noted, "The free movement of goods and capital is only a means, not an end in itself. Environmental protection, on the other hand, is intrinsic to the continuance of life. It must take precedence if humans, and the species we share the planet with, are to survive."¹⁷⁸ States must therefore look to the European Union for guidance regarding how to uniformly define and apply the precautionary principle if it is ever to become a rule of international law. States, including the United States, must recognize that economic goals and environmental and public health protection can no longer be treated as independent policy goals¹⁷⁹ and that a resolution to the debate regarding the precautionary principle must be resolved.

178. Roht-Arriaza, *supra* note 8, at 98.

179. *Id.*