THE REGULATION OF ENVIRONMENTAL STANDARDS BY INTERNATIONAL TRADE AGREEMENTS

By Steve Charnovitz*

Trade agreements do not directly regulate national environmental standards. What these agreements do is to impose discipline on the application of such standards to goods in international commerce. The purpose of this article is to explain the rules pertaining to environmental standards under the General Agreement on Tariffs and Trade (GATT) of 1947, the Canada-U.S. Free Trade Agreement (FTA) of 1988, the North American Free Agreement (NAFTA) of 1992, and the draft multilateral trade agreement now under consideration in GATT's Uruguay Round.

The interaction between trade agreements and environmental standards is complicated and often misunderstood. In characterizing the NAFTA as the "greenest" trade agreement, some government officials have made misleading statements about how the NAFTA differs from other trade regimes. In characterizing the GATT as a major danger to the global environment, some public interest groups have made misleading statements about the role of the GATT. This analysis will attempt to clarify the confusing terminology in the "trade and environment debate" and provide context for understanding how the four agreements differ from one another. Total illumination is impossible, however, because the agreements themselves are ambiguous and because many key points of GATT interpretation remain unresolved.

Before proceeding, let me offer a few definitions and caveats. The term "environmental" is used in a broad sense to include conserving natural resources and safeguarding human, animal, or plant health. The term "standards" will mean government-set regulations pertaining to product design or performance or to the processes for making products.[1] Thus, "standards" does not mean the prevailing environmental conditions arising from local production, transboundary pollution, or international competition. In other words, I do not look at how trade degrades (or improves) environmental conditions along the U.S.-Mexico border, but rather at how trade rules may affect the ability of each country to enforce its environmental laws.

One of the key distinctions in the debate is between environmental standards and import prohibitions. An environmental standard is an internal regulation on domestic production applied likewise to imports. An import prohibition is a regulation applying expressly to foreign imports. This analysis covers standards only. The regulation of environmental taxes by trade agreements is also an important issue but would require separate article-length treatment. Another excluded topic is the regulation of environmental labeling systems. The last caveat is that the article will review only the regulation of central government standards, not those of subnational governments.

[1] The use of the term "standards" differs from the use in the GATT Agreement on Technical Barriers to Trade which distinguishes between government-set "regulations" and privately-set "standards." Process standards are often referred to as "PPMs," an acronym for processes and production methods.

How Trade Agreements Regulate

Governments impose environmental standards in order to correct market failure. Trade agreements do not regulate the application of such standards to internal production or commerce. It is only when a nation wants to apply its standards to an imported product that trade agreements come into play.

Why would a nation want to apply its internal standards to imports? There are three main reasons. First, a nation might have environmental goals that could not be attained if imports were immune from regulation. For example, a government might want to assure its citizens a safe food supply. While national environmental goals will often be inward-looking, nations may sometimes have more cosmopolitan objectives. For example, a government might want to preserve planetary biodiversity.

A second reason for applying internal standards to imports is to maintain the political or economic viability of a national environmental policy. For example, the European Community Commission is banning the use of painful leghold fur traps and will apply the same process standard to fur imports. Assuming that "humane" trapping methods are more expensive, the application of the standard merely to European producers would put them at a competitive disadvantage. If the EC had not been able to employ its standard on imports, it is doubtful that this standard could have been enacted.

A third reason for applying standards to imports is to maintain the political or economic viability of an international environmental regime. For example, the Wellington Convention on Driftnets requires parties to prohibit the transshipment of driftnet-caught fish.

Trade agreements do not superintend environmental laws. Rather, they regulate the use of trade measures for environmental purposes—that is, environmental trade measures (ETMs). The term "regulation" is used in its international sense. That is, trade agreements apply obligations, yet lack the coercion that is common in national regulation. The GATT has no police to enforce its rules.

In focusing on how trade agreements regulate ETMs, one should keep in mind why trade agreements do so. There is an irresistible temptation for nations to use their health and environmental standards to make it harder for foreign producers to compete against domestic producers. The recognition of the need for international rules goes back to the early economic work of the League of Nations. Nevertheless, it has proven difficult to devise a sieve which can

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separate protectionist health measures from legitimate ones.

Conceptual Framework

Three approaches exist for disciplining ETMs. First, governments may be able to apply their own internal standards to imports. This can be called "domestic treatment." [2] Second, governments may be prohibited from applying their own standards to imports and instead be required to accept products that meet the environmental standards of the exporting country. This is called "mutual recognition." Third, governments may commit themselves to follow a common environmental standard. This is called "harmonization." These three approaches are often used in combination. For example, all three co-exist within the European Community.

Many analysts distinguish between "upward" and "downward" harmonization. Upward harmonization occurs when governments agree to achieve the strictest environmental standard among them. Downward harmonization occurs when governments agree to drop to the most lax standard among them. Neither approach is typically taken in its pure form. Still, these diametric concepts are useful in predicting the direction of change likely to result from a trade agreement.

For all three regulatory approaches, it is important to point out that trade agreements do not convey environmental "rights" to parties. What trade agreements do is to convey disciplines—for example, obligations to avoid using ETMs to assist domestic producers. Recent trade agreements have used the term "right" in a potentially confusing way. For example, the drafters of NAFTA imply that it is NAFTA itself which grants the "Right to Take Standards-Related Measures."

As noted above, environmental standards pertain to both products and processes. Although many commentators have suggested that international trade rules make a fundamental distinction between the two (i.e., disfavoring process standards), a more accurate view is that the legal status of process standards is unsettled. The uncertainty concerns whether the process standards can be applied to imports to achieve goals which transcend the jurisdiction of the importing country (e.g., sustainable forests). Few would disagree with the long-established practice of applying process standards to imports to protect food safety within the importing country.

Quite apart from the issues of legal interpretation, practical considerations are rendering the product versus process distinction useless. First, as methods of scientific analysis improve, many process standards may be rewritable as product standards. The dividing line is the verifiability of the product attribute. If the use of artificial growth hormone became testable in the product, then the EC's controversial beef hormone regulation could be converted to a product standard.

Second, many emerging standards already straddle the distinction. Consider recycled content restrictions on newsprint or bottles. It is not clear whether they are product or process standards.

Third, environmental certifications can be used to indicate the production process. Certifications have long been recognized by the international trading system to indicate the genuineness of a trademark or copyright. Certifications are also used by countries trafficking in endangered wildlife to declare that the export "will not be detrimental to the survival of that species" (Convention on International Trade in Endangered Species, Article II:2a).

Although products do not normally publicize their production process, the use of certifications allows border inspectors to apply process specifications. In summary, as the line fades between product and process standards, a regulatory regime predicated on that distinction will come under increasing fire.

GATT

How does the GATT discipline environmental standards? There are no rules in the GATT regarding trade that depletes natural resources or degrades the environment. In fact, the GATT has no rules at all regarding trade. All of GATT's rules are directed at trade restrictions or incentives—subsidies—by member governments.

The GATT recognizes that nations may specify standards that prevent certain imports. The GATT has no position on how high environmental standards should be. The discipline imposed by GATT Article III is that parties shall treat imported products no less favorably than "like" products of national origin with respect to all "regulations and requirements affecting the internal sale" of such products. For example, the U.S. Omnibus Budget Reconciliation Act of 1993 imposes a 90-day ban on the sale of bovine growth hormone. Applying this ban to imports is legal under GATT. But if imports continue to be banned after domestic sales are permitted, that would violate the GATT.

The definition of the term "like product" is not fully clarified either in the GATT or in its case law. On the one hand, autos with differing emissions profiles could be considered like products within the meaning of GATT Articles III:4 and I:1 (Most Favored Nation Treatment). If so, then Article XX would be needed to justify the application of an auto emissions standard to imports. On the other hand, low- and high-polluting autos could be considered "unlike" products. This interpretation would allow the United States to impose the same auto emission standard on domestic, German, and Japanese autos even though this may have inconsistent economic effects on automakers in each country. If Article III is viewed this broadly, then recourse to a GATT exception in Article XX will not be needed.

Although environmental product standards can meet the strictures of Article III, it is unclear whether process standards can. In a 1991 dispute between Mexico and the United States regarding the U.S. Marine Mammal Protection Act, the GATT's "Dolphin" panel declared that Article III encompassed only standards which affect the product "as such." In other words, a process standard on proper storage for tuna catch might fit Article III, but a standard on whether the tuna harvesting was dolphin-safe would not. If a process standard not justifiable under Article III is applied to an imported product, that action violates the GATT.

The report of the GATT Dolphin panel was not adopted by the GATT Council. Thus, the application of Article III to process standards remains unclear. A good case can be made that Article III allows process standards when applied equally to domestic and imported products. [3] The strongest

[2] The common term is "national treatment." But "domestic treatment" is used here, in contradistinction, because national treatment connotes an international discipline against the mistreatment of imported goods. By domestic treatment, I mean only a national practice of applying the same regulatory regime to foreign goods that applies to domestic goods.

[3] For example, see Ernst-Ulrich Petersmann, "International Trade Law and International Environmental Law," *Journal of World Trade*, February 1993, at 43, 68-69, and David Palmeter, "Environment and Trade: Much Ado About Little," *Journal of World Trade*, June 1993, at 55, 65-66. See also the FTA case,

argument would involve a "defiled item" process standard such as a requirement that all tuna be dolphin-safe. GATT Article III:1 recognizes regulations requiring the "mixture" or "processing" of goods in specified amounts or proportions if not done to protect domestic production. A law requiring cans of tuna to be composed of 99 percent dolphin-safe tuna would make an interesting test case.

A product or process standard that violates Article III may still be allowable if it meets one of the GATT's exceptions. GATT Article XX(b) provides an exception for measures "necessary" to protect human, animal, or plant life or health. GATT Article XX(g) provides an exception for measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption. When process standards are disallowed by Article III, they could be allowed by Article XX.

In a series of recent decisions on import and export restrictions, the GATT has narrowed the scope of Article XX for environmental standards. The Cigarette panel declared that Article XX(b) can only be used for a measure that "entails the least degree of inconsistency with other GATT provisions." The Herring and Salmon panel declared that Article XX(g) can only be used for a measure that is "primarily aimed at" rendering domestic conservation restrictions effective. The Dolphin panel declared that neither Article XX(b) nor (g) can be used for measures that are "extrajurisdictional." The EC Commission advocates additional tightening of Article XX(b)—namely, a new requirement that parties must use the least trade-restrictive option to pursue an environmental goal.

The Dolphin panel's objection to "extrajurisdictionality" has implications not only for national ETMs but also for international standards prescribed in treaties. The import prohibitions on chlorofluorocarbons required by the Montreal Protocol on Substances that Deplete the Ozone Layer (INER Reference File 1, 21:3151) are a clear violation of GATT Article I (Most Favored Nation Treatment) and Article XI (Quantitative Restrictions), so they can only be GATT-legal if Article XX permits discrimination based on the environmental policy of the exporting country (i.e., whether it has ratified the Montreal Protocol).

The key issue in Article XX(b) adjudication is not whether the level of environmental protection is necessary but rather whether the trade measure is necessary. For example, the U.S. corporate average fuel efficiency standards for automobiles (CAFE) applies to the fleet average for U.S. sales by an automaker, not to individual cars. When this standard is applied to European automakers, they are put at a disadvantage because their U.S. market is mainly high-end, larger cars. It could be posited that applying the CAFE standard to imports is not "necessary" because European automakers sell many small cars in Europe. Yet if the U.S. law gave credit to such sales, that would constitute extrajurisdictionality.

Despite the dividing line between the level of environmental protection and the use of a trade measure, GATT members sometimes object to the level of environmental protection sought by another country. For example, Venezuela has argued that the U.S. tuna harvesting standard is not "necessary" because dolphins are not an endangered species. Canada has argued that the U.S. Environmental Protection Agency's ban on asbestos was not supported by scientific evidence and was therefore not "necessary" within the meaning of Article XX.

"Puerto Rico Regulations on the Import, Distribution, and Sale of U.H.T. Milk From Quebec," June 3, 1993, at paras. 5.14-5.18.

If an ETM is found to violate Article III, the country defending its environmental standard under Article XX assumes the burden of proof.

One of the difficulties faced by environmental standards is that as activist GATT panels curtail Article XX, defendant countries do not know in advance what they will need to prove. A "least trade restrictive" requirement would add to the burden of defendant countries since there are a myriad of hypothetical measures that might be less trade restrictive.

When a GATT panel rules against an environmental standard, the defendant country is under no obligation to change the ETM until the panel report is adopted by the GATT Council. Since current GATT practice permits any member country to block a report, compliance is essentially voluntary. Even after a report has been adopted, a defendant country has considerable leeway as to whether it will change its law or compensate the other party. Complainant countries who do not receive satisfaction are not allowed to retaliate with economic sanctions without prior approval of the GATT Council.

Canada-U.S. FTA

GATT is the foundation for regulation of environmental standards. Other trade agreements build upon the disciplines in the GATT. The Canada-U.S. FTA, for instance, has two chapters dealing with ETMs. The Technical Standards chapter prohibits standards-related measures or procedures that create "unnecessary obstacles" to trade. But if the demonstrable purpose of such a measure is to achieve a "legitimate domestic objective," then the measure will not be considered "unnecessary." The FTA specifically includes the environment in its list of legitimate domestic objectives along with health, safety, and consumer interests. In addition, this chapter requires each party "to the greatest extent possible" to make its standards compatible with those of the other party. In other words, harmonization is the goal.

The FTA has a different, and more far-reaching, set of disciplines for agriculture, food, and beverages. The Agriculture chapter calls on the parties to "seek an open border policy" based on the principle of "harmonization." This policy must be consistent with the need to protect life and the need to facilitate commerce. Thus, the FTA dictates a mixture of mutual recognition and harmonization.

In the FTA Salmon and Herring case, the panel went even further than the GATT Herring and Salmon panel in restricting the use of GATT Article XX(g). The FTA panel declared that Article XX(g) could be invoked for an ETM only when the conservation benefits are large enough, compared to the commercial cost, to make a credible case that the government acts "primarily for" conservation reasons. In effect, the panel conducted a cost-benefit test and used that to impute a motive for the Canadian standard in dispute. This is an interesting approach given that neither Canada nor the United States regularly require national environmental standards to meet a cost-benefit test.

When a FTA panel rules against an environmental standard, there is a presumption in the agreement that the report of the panel will be adopted. The defendant country will then have an obligation to cease the ETM or to compensate the complainant country. If neither action is taken, the complainant has the right under the FTA to invoke trade retaliation.

NAFTA

Like the Canada-U.S. FTA, NAFTA builds upon the disciplines in GATT. Because of the political circumstances of

the NAFTA negotiation, the regulation of environmental standards is done with a light hand. Two chapters affect environmental standards—one of sanitary and phytosanitary (S&P) measures and the other on standards-related measures (excluding S&P measures). Both of these chapters differentiate between the "level" of protection (that is, the degree of safety sought) and the "measure" used to achieve that level of protection.

The S&P regulations in NAFTA apply only one discipline to the level of protection for human health. Each party "shall, with the objective of achieving consistency in such levels, avoid arbitrary or unjustifiable distinctions in such levels in different circumstances."

For trade measures, NAFTA imposes several disciplines. First, the measure shall be based on "scientific principles" and shall not be maintained where there is no longer "a scientific basis" for it.[4] Second, international standards shall be used as a basis for S&P measures.[5] Third, the parties shall "pursue equivalence" of their S&P measures to the greatest extent practicable. Fourth, NAFTA disallows GATT's Article XX(b) exception for S&P measures and replaces it with more stringent discipline.

NAFTA's chapter on standards applies no disciplines to the level of protection sought. For trade measures, NAFTA requires each party to use international standards as a basis "except where such standards would be an ineffective or inappropriate means to fulfill its legitimate objectives . . ." There is also a requirement to make standards-related measures "compatible" to the greatest extent practicable. Like the Canada-U.S. FTA, NAFTA blends mutual recognition with harmonization. But NAFTA eschews the terms "open border" and "harmonization" used in the FTA.

Although many environmental standards are covered by NAFTA rules, process standards unrelated to product "characteristics" are not covered. For example, a process standard on irradiation of food is covered, but a standard on turtle excluder devices for shrimp harvesting is not. Despite much commentary to the contrary, non-coverage by NAFTA does not mean that such a process standard is forbidden. Rather, it means that normal GATT disciplines apply.[6]

A recent study by the U.S. Congressional Budget Office found that NAFTA "offers new protections that would help defend tough U.S. standards against attack as barriers to trade."[7] Others have called NAFTA the "greenest" trade agreement ever. What lies behind such bold claims? It appears that some people are taking too literally the provisions in NAFTA which appear to grant various environmental "rights." These statements should be understood as affirming existing rights, not as conveying new rights. They make explicit what was already implicit. Surely no one would argue that the attainment of these "rights" is dependent on U.S. ratification of NAFTA.

Some commentators view the provisions in NAFTA that dictate certain actions "without reducing the level of protection" as prohibiting the lowering of standards and perhaps even requiring upward harmonization. Such an interpretation is unjustified for NAFTA. These provisions qualify what must be done in order to meet NAFTA's obligations on equivalence and compatibility of "measures." They do not restrain governments from lowering environmental standards for other reasons, such as regulatory reform.[8]

The new supplemental agreement may go much further, however. According to U.S. Trade Representative Mickey Kantor, the agreement "will help ensure that . . . no nation can lower labor or environmental standards, only raise them."[9] An international agreement prohibiting nations from lowering environmental standards would be a significant development in international law. It would also have major implications for the distribution of power under the U.S. Constitution between the president and Congress and between the federal government and the states.

NAFTA would have radiated greenness if it had (1) mandated minimum environmental standards for the region, (2) specifically grandfathered existing environmental standards in the three countries, or (3) lessened GATT disciplines on environmental trade measures among the three parties. NAFTA takes none of these three steps, however. It does not "permit" any standard prohibited by GATT.

Furthermore, it seems unlikely that any of the environmental cases adjudicated so far under the GATT or the FTA would have been decided differently under NAFTA rules.

The administration of U.S. President Bill Clinton has stated that "No existing federal or state regulation to protect health and safety will be jeopardized by NAFTA."[10] But no analysis has been offered to back up this prediction.

A nation whose environmental standard is found to violate NAFTA could face economic sanctions by the complainant country unless the standard is changed. There is one way, however, in which dispute settlement under NAFTA can be more favorable to the environment than dispute settlement under GATT. Under NAFTA rules, the burden of proof is borne by the complainant for standards covered by the agreement. Thus, the burden of proof does not shift for "extrajurisdictional" process standards (unless they are in environmental treaties ratified by the three countries). When such process standards engender a trade dispute, the complainant can choose to send the case to the GATT, where the burden of proof lies with the defendant country. Alternatively, the complainant could pursue the case under NAFTA to gain the benefit of its more enforceable dispute settlement.

In summary, if NAFTA is the "greenest" trade agreement ever, this superlative reflects the absence of heavy regulation of national environmental standards. It cannot reflect any specific steps in NAFTA to improve the environment, as none exist.[11]

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[4] Note that the use of science is a discipline. It is not a "defense" as some commentators suggest.

[5] NAFTA, 32 I.L.M. 605, Art. 713.1. This is to be done "without reducing the level of protection of human, animal, or plant life or health." A similar injunction appears in Arts. 714.1 and 906.2.

[6] As noted above, these disciplines are murky. Most governments, as well as the GATT Secretariat, have taken the position that both GATT doors (Article III and XX) are closed to such standards.

[7] CBO, *A Budgetary and Economic Analysis of the North American Free Trade Agreement*, July 1993, at 96.

[8] The "right" of a government to determine its own environmental standards is reiterated in NAFTA Arts. 712.2 and 904.2. But see the Investment chapter of NAFTA (Art. 1114.2) which states that parties "should" not waive or otherwise derogate from environmental standards to encourage investment.

[9] Office of the U.S. Trade Representative, Press Release, August 13, 1993. The supplemental agreement also contains provisions requiring parties to enforce their own environmental standards. This may lead to tension with the NAFTA itself which has two chapters setting limits on when parties can enforce environmental standards against imports.

[10] Executive Office of the President, "The NAFTA," July 1993, at 8. The text of the new agreement was not released.

[11] But under NAFTA Art. 906.1, the parties agree to "work jointly to enhance the level of safety and of protection of human, animal, and plant life and health, the environment, and consumers."

Uruguay Round

The latest "deadline" for the Uruguay Round is December 1993. The negotiators are working from the "Dunkel Text" of December 1991 (termed here as the draft Uruguay Round agreement). These new disciplines would supplement the obligations which now exist in GATT. In comparison to NAFTA, the draft Uruguay Round regulates ETMs with a heavier hand.

The S&P regulations require each party to avoid arbitrary or unjustifiable distinctions in the levels of health protection it considers to be appropriate in different situations. [12] For example, inconsistent risk avoidance between bacterial contamination and carcinogenicity could trigger a complaint under this provision. As for environmental trade measures, the S&P regulations apply three main disciplines. First, S&P measures shall not be maintained "against available scientific evidence." Because all available evidence is weighed, this is viewed as being tougher than NAFTA. Second, the draft directs parties to base their S&P measures on international standards, but a strict harmonization is not required. [13] Third, parties shall use the measure "least restrictive to trade, taking into account technical and economic feasibility." In addition, the draft agreement suggests that developing countries "should" be given longer timeframes to comply with new standards.

The standards chapter applies one discipline to the level of environmental protection. Parties shall use international standards as a basis except when such standards would be an "ineffective or inappropriate means" for the fulfillment of a legitimate objective, such as protecting the environment. For environmental measures, the least trade-restrictive approach must be used to achieve a party's chosen level of protection. It is unclear whether this discipline entails the "proportionality" test now used by the European Court of Justice.

As with NAFTA, the draft Uruguay Round applies no new disciplines to extrajurisdictional process standards. The inapplicability of the new disciplines to such ETMs probably reflects the view that Articles III and XX already disallow such standards. The draft Uruguay Round also has implications for GATT-questionable standards in international environmental treaties such as the Montreal Protocol. Many legal scholars have argued that most of these treaties supersede GATT because they are more recent in time. But the Uruguay Round is expected to reset GATT's clock to 1994, thereby making it the most recent treaty.

The draft Uruguay Round rules on national environmental standards have been criticized by many environmental and public interest groups. Last December, the administration of former U.S. President George Bush proposed several changes to the S&P and standards texts to reduce the burden of the new "least trade restrictive" tests and to adopt the more nuanced NAFTA language. [14] In their 1992 book *Putting People First*, U.S. President Bill Clinton and Vice President Albert Gore stated that "We will not allow the Uruguay Round to alter U.S. laws and regulations through the back door."

In summary, the draft Uruguay Round moves away from the principle of domestic treatment. Internal standards will be inapplicable to imports whenever GATT panels contemplate that a less restrictive approach (perhaps even a label) might do just as well. By emphasizing internal consistency and the use of international standards, the draft agreement moves toward harmonization. Because the Uruguay Round dispute settlement reforms would make the adoption of panel reports nearly automatic, the new disciplines could challenge national environmental sovereignty. Panel reports will be backed up by a threat of retaliation. Small countries will be the most vulnerable to such pressure.

Conclusion

Trade agreements rarely specify environmental standards. What they do is to regulate the application of such standards to imports. GATT disciplines can and do interfere with national environmental decision-making. Each of the three trade agreements discussed here adds to the existing GATT disciplines. Relative to each other, the draft Uruguay Round goes the furthest in restraining national environmental action. While no country can be forced to change its law, maintaining a law adjudged to violate trade rules could expose a nation to retaliation.

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[12] Draft Uruguay Round, GATT Doc. MTN.TNC/W/FA, Section L, part. C, para. 20. This applies only when there is discrimination—that is, when "like" products from different countries are treated differently. By contrast, the analogous discipline in the NAFTA is drawn more tightly—applying only when discrimination is arbitrary or unjustifiable. See NAFTA Art. 715.3b.

[13] Draft Uruguay Round, Section L, part. C, paras. 9 and 11. When using international standards, a party is "presumed" to comply with the underlying GATT requirements. This is the only way in which the draft agreement would lessen the current GATT discipline. Under the NAFTA, a party using international standards is presumed to be in compliance with NAFTA rules. See Arts. 713.2 and 905.2.

[14] For the specific proposals, see "U.S. GATT Proposal on SPS/TBT," *Inside U.S. Trade*, December 25, 1992, at 20.

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HIGHLIGHTS

THE ADEQUACY OF COMMITMENTS made by signatories to the United Nations Framework Convention on Climate Change is questioned during the eighth session of the preparatory committee on climate change in Geneva. A German delegate says the issue should be on the agenda of the group's next meeting in New York in February 1994 (p. 611).

EUROPEAN COMMUNITY NATIONS are criticized by non-governmental organizations because they have not yet ratified the international climate change convention. At a meeting on the treaty, a group of NGOs issues a statement accusing the EC of dragging its feet in the ratification process (p. 612).

TRADE SANCTIONS are allowed against the United States and Mexico and fines against Canada for persistent failure to enforce domestic environmental laws under a side accord to the North American Free Trade Agreement. The three countries announce the accord after months of wrangling over whether sanctions should be included in the environmental side pact to NAFTA (p. 613) ... Canadian and Mexican officials hail the side accord's environmental provisions (p. 614) while environmental groups express concern that the supplementary pact is not protective enough (p. 615).

THE EC COMMISSION issues an amended proposal on disposal of wastes in landfills. Under the proposal, operators of landfills would be able to use physical, chemical, biological, or heat processes to treat waste (p. 616).

RECORD-HIGH DIOXIN CONTAMINATION is found by Greenpeace in the Coalite Chemicals plant in Derbyshire, England. The environmental group says it broke into the plant to obtain chemical samples for analysis (p. 617).

CARBON DIOXIDE EMISSIONS in Canada rose 3.5 percent in 1992, reversing a downward trend in 1991, according to figures from the federal Environment Canada obtained by the Sierra Club (p. 617).

SIGNIFICANTLY LESS OZONE is found in Belgium and the Netherlands since winter 1991, a report issued by the meteorological institutes in Belgium and the Netherlands and the Dutch National Institute of Public Health and Environmental Protection says (p. 618).

AN ACCORD ON OIL SPILLS containing a four-part oil response plan is signed by British Columbia and the states of Alaska, Washington, Oregon, and California (p. 618).

PRIVATIZED WATER COMPANIES in the United Kingdom continue to be convicted for discharge violations. The most recent successful prosecution by the National Rivers Authority is against Yorkshire Water Services Ltd. for breaching effluent discharge permits for the River Swale in northern England (p. 618).

AUSTRIAN MINISTERS demand higher taxes on petroleum and an additional energy tax. Austria's Council of Ministers approves the demands of the interministerial committee in the group's third "climate protection report" (p. 619).

STATE-OWNED COMPANIES IN BRAZIL are the largest industrial polluters, government and industry officials say. Privatization of these firms—many of which were built in the 1940s and 1950s—is seen as a way to reduce air and water pollutants (p. 620).

AN ANALYSIS AND PERSPECTIVE by Steve Charnovitz, policy director of the Competitiveness Policy Council in Washington, D.C., examines the regulation of environmental standards by international trade agreements (p. 631).

A CHART OF COUNTRIES that have signed and/or filed instruments of ratification on the United Nations Convention on Biological Diversity is contained in the Full Text section of this issue (p. 636).

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