An Agricultural Law Research Article

The Effect of NAFTA (and GATT) on Animal Health Laws and Regulations

by

J.W. Looney

Originally published in the OKLAHOMA LAW REVIEW

www.NationalAgLawCenter.org
THE EFFECT OF NAFTA (AND GATT) ON ANIMAL HEALTH LAWS AND REGULATIONS

J.W. LOONEY*

In the debate surrounding the North American Free Trade Agreement (NAFTA), various projections were made concerning the effect the agreement might have on the livestock industry in the United States, particularly as a result of expanded trade with Mexico. For example, the Brookings Institute released a major study in August 1992 just as negotiations on the agreement concluded. This study was actually a report of an earlier conference that critiqued several quantitative studies on the impact of NAFTA on various sectors of the economy. In the report on agriculture, the broad consensus from the studies reviewed was that U.S. producers of livestock products, along with grain producers, would benefit from the lowering of trade barriers with Mexico. Livestock producers in the northern states of Mexico would also benefit from expanded markets. In particular, feeder cattle exports to the U.S. from Mexico were projected to expand rapidly.

NAFTA went into effect on January 1, 1994. In the months since its implementation the projections of the economists seem to have been dramatically confirmed, at least as to livestock and livestock products. For example, during the first eight months of 1994 U.S. agricultural exports to Mexico were up 13% from a year earlier and those of beef were up 73% in value from the prior year. Competitive exports of cattle from Mexico to the U.S. increased 5%. These promising trends continued into 1995. In the first half of 1995, Mexican beef producers increased their sales of feeder cattle and slaughter cows in the United States significantly over prior years. This is in part due to the fall of the peso and in part due to drought conditions in Northern Mexico. NAFTA surely played a role as well. The projections for the future are even brighter. According to the USDA's Economic

---

* Visiting Professor of Law, School of Law, University of Arkansas at Little Rock; Professor of Law, University of Arkansas at Fayetteville; Member of Arkansas, Missouri and Virginia Bars. B.S.A., 1966, University of Arkansas at Fayetteville; M.S., 1968, University of Missouri-Columbia; J.D. 1971, University of Missouri-Kansas City; J.S., 1976, University of Missouri-Columbia.

2. Id. at 162.
5. Id. at 23.
Monitoring Taskforce, at the end of NAFTA's fifteen-year transition period annual exports from the United States to Mexico of agricultural products and commodities should be 35% higher than before NAFTA.7

NAFTA is only part of the picture. While NAFTA was being negotiated, over 100 countries were in the process of finalizing agreement on the General Agreement on Tariffs and Trade (GATT). The projections for increased trade from this international agreement have been optimistic. The boost in the world's economy, estimated to be as high as $5 trillion, will provide an opportunity for increased exports of United States agricultural products. Beef, in particular, is projected to benefit from the more liberalized trade agreement.8

The likelihood of increased movement of livestock and livestock products among the three North American countries is not without its concerns. A major one is the increased risk of disease.9 This concern was expected to place additional strain on the inspection programs of the USDA carried out by the Animal and Plant Health Inspection Service (APHIS). Border inspection programs into the United States will continue under NAFTA.10 NAFTA, coupled with GATT, will increase the workload of the USDA's APHIS Veterinary Service at a time when the trends are to reduce agency expenditures. However, agency personnel are confident that the U.S. can adequately protect the 200 million domestic animals potentially susceptible to infection. Bird importation and movement raises similar concerns for the poultry industry.11 In preparation, the USDA has launched a $40 million construction program at the Foreign Animal Disease Center at Plum Island, New York and expects to spend another $60 million over the next ten years.

Because the concerns relating to risk of the introduction of exotic animal diseases only heighten if world trade in livestock and livestock products increase, the provisions of NAFTA and GATT must be taken together in determining how the implementation of these agreements might effect livestock health regulations. NAFTA and GATT are interrelated. NAFTA references or incorporates some GATT provisions. More importantly, as far as animal health regulation is concerned, some language of NAFTA on Sanitary and Phytosanitary (SPS) measures came directly from the draft GATT Agreement with, in the words of the Canadian Statement on Implementation, "some improvements" and "greater precision."12

Both NAFTA and GATT contain provisions relating to Sanitary and Phytosanitary measures that could potentially affect the movement of animals from country to country. The GATT negotiations resulted in a special "Agreement on the

7. USDA, supra note 4, at 23.
Application of Sanitary and Phytosanitary Measures." Concern was expressed during the negotiations that such measures not be used to negate the benefits of trade liberalization but, at the same time, it was recognized that countries must use SPS measures to protect life and health of humans, animals and plants. These agreements do, however, permit countries to adopt measures to protect human, animal or plant life or health. The real focus in the agreements is to ensure that such measures not become disguised restrictions on trade.

Right to Adopt SPS Measures

Both GATT and NAFTA recognize that parties have the right to adopt SPS measures. Under NAFTA, recognition is specifically made of the possibility that such measures may be more stringent than international standards, guidelines or recommendations. GATT suggests that such measures should not be inconsistent with the agreement itself but does not prevent a country from adopting more stringent measures. GATT allows measures which result in a higher level of protection than that which would be achieved by international standards if there is a "scientific justification" for them or if adopted as a consequence of the level of protection the member determines to be appropriate. NAFTA also requires such measures to be based upon "scientific principles" taking into account relevant factors such as geographic conditions.

15. See Gretchen H. Stanton, GATT Pact Only Begins to Settle Safety Barriers, FEEDSTUFFS, Apr. 4, 1994, at 24-28; Statement of Administrative Action, in NAFTA MATERIALS, supra note 12, binder 1, booklet 8, at 83.
16. Under, GATT SPS measures are defined as:
Any measure applied:
- to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms;
- to protect human or animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs;
- to protect human life or health within the territory of the Member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests; or
- to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests.
GATT SPS Agreement, supra note 13, at annex A, art. 1. NAFTA contains essentially the same definition. NAFTA SPS Measures, supra note 14, at art. 724, reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 132.
17. NAFTA SPS Measures, supra note 14, at art. 712(1), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 122; GATT SPS Agreement, supra note 13, at para. 5.
18. GATT SPS Agreement, supra note 13, at para. 11.
19. NAFTA SPS Measures, supra note 14, at art. 712(3), reprinted in NAFTA MATERIALS, supra
The idea of using scientific principles to justify SPS measures is, perhaps, not as limiting as it first appears. Both GATT and NAFTA permit a country to choose its own "appropriate level of protection."20 According to the Statement of Administrative Action accompanying the NAFTA implementing legislation, this choice is not a "scientific judgment" but rather a "societal value judgment."21

All SPS measures are to be based on scientific principles but the level of protection which a country chooses is what is considered by the country to be appropriate based on a number of factors set out in each agreement. Neither agreement attempts to define "scientific principles" as such. "Scientific basis" is defined in NAFTA in a circular fashion as "a reason based on data or information derived using scientific methods."22 The Statement of Administrative Action suggests that the only question is whether the government maintaining a SPS measure has "a scientific basis" for the measure. The Statement of Administrative Action further provides that a dispute panel could not substitute its judgment for that of the government imposing the SPS measure.23

The question is also not whether the measure was based on the "best" science or the "preponderance" of science or whether there was conflicting science. The question is only whether the government maintaining the measure has a scientific basis for it.24

Appropriate Level of Protection/Risk Assessment

Both GATT and NAFTA permit countries to establish their own appropriate level of protection for human, animal or plant life or health.25 However, both require that the establishment of levels of protection be based on "risk assessment."26 The definition is essentially the same in both agreements:

The evaluation of the likelihood of entry, establishment or spread of a pest or disease within the territory of an importing Member according to the sanitary or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences; or the evaluation of the potential for adverse effects on human or animal

---

note 12, binder 1, booklet 3, at 122.
20. NAFTA SPS Measures, supra note 14, at art. 712(2), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 122; GATT SPS Agreement, supra note 13, at paras. 11, 18.
22. NAFTA SPS Measures, supra note 14, at art. 724, reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 132.
24. Id.
25. GATT SPS Agreement, supra note 13, at paras. 11, 18; NAFTA SPS Measures, supra note 14, at art. 715(2), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 125.
health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, feedstuffs and beverages.\textsuperscript{27}

Under both NAFTA and GATT risk assessment is to take into account relevant risk assessment techniques and methodologies developed by international (or North American) standardizing organizations, scientific evidence, processes and production methods, inspection, sampling and testing methods, prevalence of relevant diseases or pests, including the existence of pest free or disease-free areas or areas of low pest or disease prevalence, ecological and other environmental conditions and treatments such as quarantines.\textsuperscript{28} In addition, risk assessment should take into account relevant economic factors such as: (1) loss of production or sales; (2) costs of control or eradication of the pest or disease in the territory of the importing country; and (3) the relative cost-effectiveness of alternative approaches to limiting risks are all to be considered.\textsuperscript{29} Countries are to take into account the objective of minimizing negative trade effects.

One of the goals expressed in NAFTA is internal consistency. It requires the parties to avoid arbitrary and unjustifiable distinctions in the levels of protection in different circumstances where discrimination against the goods of another party results. In the GATT SPS Agreement the suggestion is merely that if "discrimination" results, the distinction is to be avoided. However, article 20 of GATT, General Exceptions, allows measures if they are not applied in such a way as to constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail. NAFTA adds that each party should ensure that any SPS measure adopted or maintained or applied does not arbitrarily or unjustifiably discriminate between that country's goods and those of another party and like goods of any other country where identical or similar conditions prevail.\textsuperscript{30}

Both agreements also refer to distinctions that constitute disguised restrictions on trade.\textsuperscript{31} In establishing or maintaining SPS measures each party is to ensure that any measure is applied "only to the extent necessary to achieve its appropriate level of protection taking into account technical and economic feasibility."\textsuperscript{32} GATT uses slightly different language and suggests that such measures should not be "more trade restrictive than required."\textsuperscript{33} This raises a question with regard to the use of the term "necessary" in NAFTA. The Statement of Administrative Action addressed this question and says that "necessary" does not mean "least trade restrictive." The

---

\textsuperscript{27} GATT SPS Agreement, supra note 13, at annex A, para. 4.

\textsuperscript{28} NAFTA SPS Measures, supra note 14, at art. 715(1), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 124-25; GATT SPS Agreement, supra note 13, at para. 17.

\textsuperscript{29} NAFTA SPS Measures, supra note 14, at art. 715(2), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 125; GATT SPS Agreement, supra note 13, at para. 18.

\textsuperscript{30} NAFTA SPS Measures, supra note 14, at art. 712(4), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 123.

\textsuperscript{31} NAFTA SPS Measures, supra note 14, at art. 712(2), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 122; GATT SPS Agreement, supra note 13, at para. 18.

\textsuperscript{32} NAFTA SPS Measures, supra note 14, at art. 712(5), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 123.

\textsuperscript{33} GATT SPS Agreement, supra note 13, at para. 21.
Statement indicates that this matter was discussed during the negotiations on NAFTA and an obligation to use measures that were "least trade restrictive" was specifically not included. On the other hand, GATT use of the terms "not more trade restrictive than required" is footnoted as follows:

For purposes of paragraph 21, a measure is not more trade restrictive than required unless there is another measure, reasonably available taking into account technical and economic feasibility, that achieves the appropriate level of protection and is significantly less restrictive to trade.

The Statement of Administrative Action indicates that under NAFTA, at least, "necessary" is meant to ensure that health laws and regulations are not applied in such a way as to provide special trade advantage to domestic producers. The "least trade restrictive" requirement of GATT was rejected in NAFTA and the Statement makes it clear that the use of the term "necessary" was not to be interpreted as meaning "least trade restrictive." Article 20(b) of GATT has been interpreted by some as carrying with it a "least trade restrictive" test but no GATT panel has found this to be an explicit requirement. GATT's present inclusion of the test outlined above suggests something close to a "least trade restrictive" requirement.

Harmonization

Harmonization of conflicting SPS measures is a goal of GATT. If international standards exist, SPS measures are to be harmonized on the basis of the international standard. While NAFTA does not refer to "harmonization," as such, it does call for "equivalence" with other parties "where appropriate." NAFTA suggests the use of international standards in reaching equivalence if this can be done without reducing the level of protection. This can be characterized as "upward harmonization" since NAFTA encourages the parties to enhance their levels of environmental and safety protection.

A committee on SPS is established under GATT to implement guidelines for international standards. NAFTA also establishes a Committee on Sanitary and Phytosanitary Measures which is to facilitate "technical cooperation" between the parties and is to seek the assistance of relevant international and North American

34. Statement of Administrative Action, supra note 14, at 88.
35. GATT SPS Agreement, supra note 13, note 3.
37. Charnovitz, supra note 3, at 15.
38. GATT SPS Agreement, supra note 13, at para. 9; NAFTA SPS Measures, supra note 14, at art. 713(1), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 123.
40. GATT SPS Agreement, supra note 13, at paras. 38-44.
"standardizing organizations." No specific mention is made of guidelines for international standards.\textsuperscript{41}

It can be argued that some "downward harmonization" under NAFTA was provided in the implementation legislation. The Secretary of Agriculture is authorized to allow previously prohibited imports if "judged to be safe."\textsuperscript{42} The provision allows, but does not require, the Secretary to permit imports from Mexico and Canada that might otherwise have been prohibited. For example, cattle may be imported for slaughter from Mexico and Canada that have been infested or exposed to ticks "upon being freed from the ticks." Likewise, the implementation legislation amended the provisions related to disease-free areas and specifically authorized the Secretary to permit importation of cattle, sheep, other ruminants, or swine (including embryos of the animals) and meat from a region that is and is likely to remain free from foot-and-mouth disease and rinderpest. Previously, such imports generally would have been prohibited.\textsuperscript{43}

The concern with downward harmonization has been expressed by one commentator (in reference to GATT) as follows:

Although the Uruguay Round cannot directly overturn national laws, the coercive pressure it creates, through threatened dispute resolution and international harmonization, will undoubtedly add political pressure to lower existing regulations and will build a bulwark against the drafters of more stringent standards in the future.\textsuperscript{44}

\textit{Regional Conditions}

One matter addressed in both GATT and NAFTA is that areas or regions within a country might be pest or disease-free or areas of low pest or disease prevalence. To apply a SPS standard to all goods from such a country would seem unnecessary. GATT and NAFTA require members to recognize these regional conditions and to consider the prevalence of specific diseases or pests, the existence of eradication and control programs and any relevant international standards, guidelines or recommendations in adapting SPS measures to such areas.\textsuperscript{45} This is a departure from the previous approach of the United States to use borders to exclude products.\textsuperscript{46} This

\begin{footnotesize}
\begin{enumerate}
\item NAFTA SPS Measures, supra note 14, at art. 722, reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 130-31.
\item Miller, supra note 41, at 218.
\item NAFTA SPS Measures, supra note 14, at art. 716(1), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 125-26; GATT SPS Agreement, supra note 13, at para. 24.
\item See Vogt, supra note 10. Even prior to the adoption of NAFTA, Mexico had proposed that the northwestern state of Sonora be recognized as a disease-free zone which would increase access of Mexican pork and poultry products to the U.S. markets and to U.S. seaports. Kenneth Forsythe & Lori
\end{enumerate}
\end{footnotesize}
approach, and the need for the United States to revise it, explains the changes made by the NAFTA Implementation Act with regard to the import of animals and animal products from areas where rinderpest and foot-and-mouth disease are present. The legislation does not require the Secretary of Agriculture to allow such imports but, rather, authorizes the Secretary to allow imports from such regions if the determination is made that the region is and is likely to remain free from these diseases.47

Both agreements call for consideration of geography, ecosystems, epidemiological surveillance and effectiveness of sanitary and phytosanitary controls in the area in determining whether an area is pest free or disease-free or an area of low pest or disease prevalence.48 If the exporting country provides evidence or other information that an area is and is likely to remain free of pests and disease or is an area of low pest or disease prevalence, the importing country is to recognize such areas. NAFTA mentions the requirement of "scientific evidence" sufficient to demonstrate to the satisfaction of the importing party that the area meets these conditions. GATT refers simply to "the necessary evidence" to "objectively demonstrate" the conditions.49 Both call for reasonable access for inspection, testing and other relevant procedures.50

NAFTA adds provisions relating to the use of different risk assessment procedures for goods from areas that are pest and disease free and for those from areas that are of low pest or disease prevalence. Conditions such as handling and transportation may be taken into account in making these distinctions.51 NAFTA also adds detail related to consistency in application of measures to NAFTA countries and non-NAFTA countries with pest free or disease free areas, requiring equivalent risk assessment techniques to evaluate relevant conditions and controls.52 Furthermore, NAFTA requires parties to pursue agreements on what specific requirements would be necessary to allow import from areas of low pest or disease prevalence.53
Transparency

Both accords provide for a process of notice and publication of proposed SPS regulations (not laws). Under GATT the purpose is to allow sufficient time for producers in exporting countries to adapt their production and methods to the new requirements. The GATT calls for a "reasonable interval" between publication and entry into force. If the regulation is not substantially the same as the content of an international standard, guideline or recommendation and if it would have a significant effect on trade of other members, early notice and the opportunity for comment is required before final adoption.

Under NAFTA, notice at least sixty days prior to the adoption or modification of any measure (other than a law) is required. An opportunity to comment must be provided. A reasonable period between publication and general application is also expected. In both cases urgent problems may be addressed without the formal notice and comment procedure.

This is one area where the implementation of NAFTA has required Mexico to adopt new procedures for the adoption of promulgation of SPS standards. Changes were necessary in Mexican law to provide adequate notice and comment on such measures.

Disputes and Consultations

Both agreements call for the establishment of committees on SPS measures. These committees provide a forum for consultations and, particularly under GATT, may play a role in furthering harmonization. These committees are to encourage technical cooperation and facilitate ad hoc consultations or negotiations on specific SPS issues. Technical consultations (as a means of dispute resolution) may be requested regarding SPS measures and the SPS committee is to facilitate the consultation. Such requests are considered "consultations" for purposes of appropriate dispute settlement procedures under both accords if the parties agree.
If a government under NAFTA asserts that a SPS measure is inconsistent with NAFTA, the burden of proof is on the party making the assertion.\textsuperscript{63} This is to make NAFTA consistent with what is apparently the current GATT practice.\textsuperscript{64} However, in one situation under GATT a party who believes a SPS measure is constraining or has the potential to constrain its exports and believes the measure is not based on international standards (or none exist), the party maintaining the measure must provide an explanation.\textsuperscript{65} The member is to provide an indication of the reason why the international standard is not stringent enough to provide the appropriate level of protection.\textsuperscript{66} While this procedure is not in the context of dispute settlement as such, it does effectively place the burden of proof on a country not following an international standard to justify a more stringent standard.

One commentator has provided a good summary of what is necessary to test a measure under NAFTA:

The NAFTA begins with international treatment. If a measure meets this, it is over. If a measure does not then a successful NAFTA prosecution requires that the measure be:

1) unnecessary to achieve a party's appropriate level of protection,
2) arbitrarily discriminatory,
3) unjustifiably discriminatory,
4) a disguised restriction on trade,
5) not based on a level of protection which is internally consistent,
6) not based on scientific principles, or maintained without a scientific basis for it, or
7) not based on a risk assessment.\textsuperscript{67}

A similar list could be developed for challenges under GATT. It would not focus on the question of internal consistency. It would, however, examine the question of "least trade restrictiveness."

\textit{Importation of Livestock and Livestock Products into the United States: An Example of NAFTA and GATT Effects}

\textbf{Importation of Animals}

In the United States the Secretary of Agriculture is given broad authority to adopt measures to prevent the introduction and dissemination of contagious, infectious or communicable disease affecting livestock or poultry.\textsuperscript{68} This authority extends to

\textsuperscript{63} NAFTA SPS Measures, supra note 14, at art. 723(6), reprinted in NAFTA MATERIALS, supra note 12, binder 1, booklet 3, at 132.
\textsuperscript{64} Statement of Administrative Action, supra note 14, at 94.
\textsuperscript{65} GATT SPS Agreement, supra note 13, at para. 23.
\textsuperscript{66} Id. at para. 41.
\textsuperscript{67} Chamovitz, supra note 3, at 50 (footnotes omitted).
regulation of the importation of live animals and poultry and to animal products including embryos and semen.

The implementation of NAFTA and the adoption of GATT have resulted in only minor changes in these regulatory programs. The changes that have been made relate to attempts to develop appropriate control of disease risks from animals coming from Canada and Mexico.

The regulations developed under this broad authority are species specific. That is, separate provisions are set out for birds, poultry, horses, ruminants, swine and dogs. These regulations generally require an import permit. The permit may be denied if communicable disease conditions in the country of origin or in a country where the shipment has been or will be held or transported are such that dissemination or transmission of any communicable disease into the United States is likely. The permit may also be denied if deficiencies in regulatory programs for control or eradication of animal diseases exist in such countries or because of the unavailability of veterinary services. Also, if the importer fails to provide satisfactory evidence or information concerning the origin, history and health status of the animals necessary to determine that the importation will not be likely to transmit disease or "any other circumstances which the administrator believes requires such denial to prevent the dissemination of any communicable disease to livestock or poultry in the United States" the permit will not be issued. "Importation from some countries has traditionally been denied if the country is one in which specific diseases, such as rinderpest or foot-and-mouth disease (for ruminants and swine), exist. The countries declared to be free of these diseases are set out in 9 C.F.R. pt. 94.1(a). The revisions brought about by the NAFTA Implementation Act allow importation from these countries under certain circumstances.

Importation of animals from Canada and Mexico generally do not require the import permit if coming through a land port. However, they are subject to special provisions which require health certificates, inspections and some testing but are often less restrictive than for imports from other countries. For example, poultry from Canada are not subject to quarantine requirements. Ruminants from Canada entering at a land port do not require an import permit if they were: (1) born in Canada or the U.S. and have been in no other country, or (2) legally imported into Canada and unconditionally released without restriction on movement and have been in Canada for 60 days or longer. Similarly, ruminants from Mexico do not require a permit if coming through a land port and if they: (1) were born in Mexico or the U.S. and have been in no other country, (2) have not within the preceding 60


70. Id. pt. 92. Mention is also made in the regulations of hedgehogs and possums and an entire part is devoted to the importation of elephants, hippopotami, rhinoceroses and tapirs. See 7 C.F.R. pt. 93 (1994).

71. 9 C.F.R. § 92.404(3) (1994); see id. § 92.103 (birds); id. § 92.204 (poultry); id. § 92.304 (horses); id. § 92.404 (ruminants); id. § 92.504 (swine).

72. Id. § 92.209.

73. Id. § 92.417.
days been corralled, pastured or held with or bred by, or inseminated with the semen from a ruminant from a country designated as infected with foot-and-mouth disease or rinderpest and, (3) are not pregnant as the result of having been bred by or inseminated with semen from an animal from a country designated as infected with foot-and-mouth disease or rinderpest.\textsuperscript{74} Similar provisions apply to swine from both Canada and Mexico.\textsuperscript{75}

As indicated above, the animal import regulations have undergone some revision after the implementation of NAFTA. For example, since January 1, 1995 the USDA has removed an absolute 7-day quarantine requirement for horses from Mexico. Now they are only held until blood tests for specific diseases are complete and negative results obtained.\textsuperscript{76} On the other hand, an import permit requirement was adopted for certain sheep and goats from Canada and Mexico to aid in the control of scrapie.\textsuperscript{77}

A proposed rule to quarantine Mexican steers and spayed heifers for 60 days to test for tuberculosis and one requiring a certificate of origin for individual cows moved in interstate commerce were withdrawn.\textsuperscript{78} Also, the USDA ended a program which allowed in-bond cattle to be imported from Mexico for feeding and then returned to Mexico for slaughter without meeting herd testing and other requirements. This was found to be necessary because bonds could not be required under NAFTA and without the bonds there was no way to enforce the provision and require the return of the cattle to Mexico.\textsuperscript{79}

\textit{Importation of Embryos and Semen}

A less direct way of acquiring the same genetic material has been through the importation of embryos and animal semen. The importation of animal embryos and animal semen is an economical way to acquire new genetic resources for livestock improvement. These products are relatively easy to transport, are subject to few risks of transport damage and are unlikely to transmit disease if collected and handled properly and if the donor animals are disease free. However, there is risk of disease if the products are contaminated during the collection procedures or during storage or transport and, of course, if the animals from which collection occurs are not disease-free. It is this risk of the introduction of exotic animal diseases that has led to the strict regulation of the importation of animal embryos from cattle, sheep, goats, other ruminants, swine, horses or asses and on the importation of semen from these animals as well as from mules, zebras, dogs and poultry. These regulations, found in 9 C.F.R. pt. 98, have been selectively revised over the past ten years as the importation of these products has increased and as new risks are anticipated. The implementation of NAFTA and GATT suggests the

\begin{itemize}
\item \textsuperscript{74} \textit{Id.} § 92.424
\item \textsuperscript{75} \textit{Id.} § 92.516-519 (Canada); \textit{Id.} § 92.521 (Mexico).
\item \textsuperscript{78} 60 Fed. Reg. 9,631 and 9,632 (1995).
\end{itemize}
possibility of more trade in such products in the future as the search for new genetic material continues. The rules regarding importation of these products must be considered in light of these agreements.

Importation of Embryos

If the importation of embryos of certain animals (ruminants, horses and asses and swine) is from one of the rinderpest and foot-and-mouth disease free countries the process is relatively simple. The embryo may only be imported from the country in which it was conceived.80 If the result of natural breeding it must have been conceived at an approved embryo transfer station. If conceived as a result of artificial insemination the semen must have been collected at an approved artificial insemination center.81 These centers must be approved or licensed by the government of the country in which the facility is located.82 The donor sire and dam must both meet requirements for import into the United States. That is, these animals must meet requirements for a health certificate which would be required as a condition of entry into the United States.83 The embryo must be collected and maintained under conditions to protect it against contamination with infectious disease organisms and must be contained in a shipping container which is sealed with an official seal of a veterinarian, one who is either salaried by the country of origin or authorized to act by the animal health service of that country. The embryo must have an intact zona pellucida when placed in the shipping straw or ampule.84

The embryo must be accompanied by both an import permit and a health certificate when offered for entry. The import permit must be dated within 14 days of the date of import and the health certificate must have been completed by a full-time salaried veterinarian of the national animal health organization of the country of origin or a veterinarian authorized to do so by the organization. The permit application provides details about the planned collection of the embryos and the importer. The health certification provides information on the actual collection location and the examinations of the animals involved.85

Specific ports of entry are identified for embryos and they may be imported only at these ports. These are the same ports of entry allowed for live animals.86 The embryos are subject to inspection upon arrival at the port of entry.87

While not prohibited, the procedure is considerably more complicated if cattle embryos are to be imported from one of the countries where rinderpest or foot-and-mouth disease exists. Requirements regarding the health of the dam, for the embryo collection unit and the procedures for collection and maintenance of the embryos

80. 9 C.F.R. § 98.3(a) (1994).
81. Id. § 98.3(b).
82. Id. § 98.2.
83. Id. § 98.3(d), (e).
84. Id. § 98.3(g), (h), (i).
85. Id. § 98.4 (permit); id. § 98.5 (certificate).
86. These ports are listed in id. § 92.303 (horses), id. § 92.403 (ruminants), and id. § 92.503 (swine).
87. Id. § 98.8.
are detailed. In addition, sampling of serum from the donor dam as well as test samples of nontransferable embryos and unfertilized eggs must be sent for testing at the Foreign Animal Disease Diagnostic Laboratory in the United States.\(^8\) To comply with the health requirements, no case of rinderpest, foot-and-mouth disease or other specified diseases may have occurred in the year prior to collection of the embryo in the embryo collection unit, or in any herd in which the donor dam was present, or within five kilometers of the embryo collection unit or any herd in which the donor dam was present. During the sixty days prior to collection the dam cannot have been vaccinated for these diseases, must remain in the same herd and no other animals may have been added to that herd. The dam and the herd must remain free from these diseases along with any other communicable diseases between the time of collection and the time all examinations and tests have been concluded. The dam must remain at the collection center until all examinations and tests have been completed.\(^9\)

Embryos may not be removed from the collection unit until all tests have been completed except that they may be removed to one of the ports of entry and kept in quarantine.\(^10\) Ports of entry are restricted to those at Los Angeles, Honolulu, Miami and Newburgh, New York.\(^11\)

Importation of Certain Animal Semen

The rules regarding the importation of animal semen are likewise detailed and in many ways are more restrictive than for embryos. "Animal" is more broadly defined to include the same animals covered by the embryo import regulations, that is, cattle, sheep, goats, other ruminants, swine, horses, and asses but also specifically includes zebras, dogs and poultry.\(^12\)

The general requirements are similar to those for embryos in that semen may not be imported from any country other than the country in which it was collected.\(^13\) Import permits are required and health certificates must accompany the semen offered for import.\(^14\) An import permit may be denied for a variety of reasons, including communicable disease conditions in the country of origin or in a country through which shipment is made or for deficiencies in the regulatory programs in the country of origin and the unavailability of veterinary services in that country.\(^15\)

Special provisions apply to the importation of semen from countries in which rinderpest or foot-and-mouth disease exist (for ruminants and swine). Semen from these countries may be offered for entry only at the port of New York. In addition, the donor animal must have been inspected by a veterinarian of the USDA and must never have been infected with these diseases or been on a farm or other premises

---

88. *Id.* §§ 98.15(a), 98.17(b).
89. *Id.* §§ 98.1, 98.17.
90. *Id.* §§ 98.18(a), 98.17(h)(1).
91. *Id.* § 98.18(c) (referring to *id.* § 92.203(a)).
92. *Id.* § 98.30.
93. *Id.* § 98.31(b).
94. *Id.* § 98.34 (permits); *id.* § 98.35 (certificates).
95. *Id.* § 98.34(a)(3).
where these diseases exist or been with an animal which had been exposed in the past twelve months. Blood samples are also required and testing for a variety of diseases must be completed at the Foreign Animal Disease Diagnostic Laboratory in Greensport, New York. Semen samples must also be tested. Semen must remain in custody of a veterinarian of the USDA and held under quarantine at the collection isolation facility or in New York in liquid nitrogen containers until all tests and examinations have been completed. The donor animal must remain at the approved isolation facility in the country of origin during that same period.  

Even more restrictive requirements are imposed for the import of swine semen from the People's Republic of China. Not only do all the above requirements apply but the donor boars must pass a sixty-day isolation/collection period in a facility approved to prevent exposure to infectious diseases. During this period the boar semen is subjected to a variety of tests for specified diseases. More restrictively, the boar must be selected from facilities which are solely swine breeding operations located in an area which is at the center of a sixteen-kilometer radius that was free of foot-and-mouth disease, swine vesicular disease, and hog cholera for three years prior to collection. In no cases may these diseases have been present on the premises for five years and no animals may have been introduced into the premises from farms affected by the disease in the past three years. No evidence of brucellosis, tuberculosis or pseudorabies on these premises or on surrounding premises must have existed in the past year. Finally, the official veterinarian organization of the PRC must certify that the PRC is free of African swine fever, rinderpest and Teschen's disease before any import may occur.  

More relaxed rules apply to the import of semen from Canada. Even an import permit is not required if the semen is brought in at one of the designated Canadian land border ports and if the donor animal was born in Canada or the U.S. and has been in no country other than the U.S. or Canada. If the animal was imported into Canada from some other country but unconditionally released in Canada for sixty days or longer the semen may also be brought into the U.S. without the import permit. However, a health certificate is required in all cases.  

**Conclusion**

The presence of the GATT and the NAFTA has resulted in some revision of the regulations related to the importation of live animals in the United States. Regulations related to the import of animal embryos and animal semen have seen little revision due to the agreements themselves. It is not anticipated that major changes will be necessary in similar laws and regulations in Canada and Mexico in order to accommodate GATT and NAFTA. However, the restrictions in place may be challenged in the future as being in violation of the appropriate agreements if they cannot be justified on the basis of "scientific evidence" or if analysis of "risk
assessments” has not been conducted. Of course, much of the effect will await the development of international standards and guidelines. It will be through the comparison of the regulations in place with such international standards that questions of validity will likely arise. The current approach in the United States seems consistent with the intent of both GATT and NAFTA but the effect of new requirements imposed on SPS regulations is yet to be determined.