The National Agricultural Law Center



University of Arkansas System Division of Agriculture NatAgLaw@uark.edu | (479) 575-7646

An Agricultural Law Research Article

Trade Epidemic: The Impact of the Mad Cow Crisis on EU-U.S. Relations

by

Heather Berit Freeman

Originally published in Boston College International and Comparative Law Review 25 B.C. INT'L & COMP. L. REV. 343 (2002)

www.NationalAgLawCenter.org

TRADE EPIDEMIC: THE IMPACT OF THE MAD COW CRISIS ON EU-U.S. RELATIONS

HEATHER BERIT FREEMAN*

Abstract: When a new illness in cattle appeared in the United Kingdom twenty years ago, its ensuing nationwide and global repercussions could not have been envisioned. Not only did mad cow disease destroy the British cattle industry, it raised the fears of leaders and citizens around the world. Wary of tainted British beef, the European Union stepped in to attempt to curb the crisis while it was in its infancy. Soon the United States, in an effort to protect its own citizens and cattle industry, enacted measures banning European cattle products. The effects of the peculiar cattle disease reverberated through the global economy, heightening trade disputes between the United States and the European Union that have yet to achieve resolution.

Introduction

The appearance of mad cow disease in the United Kingdom in the 1980s has forever destroyed the image of "the roast beef of Old England" throughout Europe and the world.¹ Magnifying the gravity of this crisis is the "extreme sensitivity of Europeans about the food they eat."² Most European Union (EU) Member States lay claim to great culinary traditions.³ The importance of such traditions means that food is taken seriously in the European culture.⁴ Food scandals, thus, are disturbing news, and it comes as no surprise that concern over the spread of mad cow disease has had a dramatic effect on beef demand in the EU.⁵

^{*} Heather Berit Freeman is an Executive Editor for the Boston College International & Comparative Law Review.

¹ Graham R. Chambers, *The BSE Crisis and the European Parliament, in EU COMMITTEES:* SOCIAL REGULATION, LAW AND POLITICS 95, 96 (Christian Joerges & Ellen Vos eds., 1999).

² John B. Richardson, Agriculture in the EU and the United States: Common Values and Converging Policies, Address Before the National Association of State Departments of Agriculture (Mar. 3, 2000), at http://www.eurunion.org/news/speeches/2000 (last visited Feb. 2, 2001).

³ Id.

⁴ Id.

⁵ Id.; Charles E. Hanrahan, The European Union's Ban on Hormone-Treated Meat 1 (Cong. Research Servs. Short Rep. for Cong. RS20142, 2000).

The interdependent relationship between the EU and the United States rendered an impact on this country inevitable.⁶ Together, the EU and the United States produce over 50% of global gross domestic product (GDP).⁷ Twenty-four percent of EU exports travel to the United States, and 23% of U.S. exports reach the EU.⁸ Two-way trade between the EU and the United States currently grows at a rate of 10% per year, and the job-creating investment of each government in the other's economy sets the relationship apart from all other global trade affiliations.⁹ As of June, 2000, European investment in the United States had reached over a half trillion dollars, supporting seven million "well-paid" jobs.¹⁰ In the past, Europeans worried about American takeovers of European business, but recent European takeovers have reversed that trend.¹¹

The outbreak of mad cow disease has prompted the EU to take measures in response to the crisis, which include surveillance and withdrawal from the food chain of specified risk material (SRM).¹² The panic over mad cow disease in western Europe led U.S. health officials to take stringent steps to prevent the disease from taking hold on this side of the Atlantic.¹³ Furthermore, mad cow disease is credited with creating an environment unfavorable to resolving an ongoing EU-U.S. dispute over the use of genetically modified organisms (GMOs) in food production.¹⁴ The EU's ban on GMOs is governed by the World Trade Organization (WTO) Agreement on Sanitary and

⁶ See generally Fraser Cameron, The EU and US: Good Friends—Tough Negotiators, Presentation at the European Chamber of Commerce Lunch (June 12, 2000), at http://www.eurunion.org/news/speeches/2000.

⁷ Id.

⁸ Id.

⁹ Id.

¹⁰ Id

¹¹ Cameron, supra note 6.

¹² Press Release, Council of Ministers, 2309th Council Meeting—AGRICULTURE—Brussels, (Nov. 20, 2000), available at LEXIS, European Union Library, News File [hereinafter Council Meeting]. SRM include sheep and goat heads, spleens from animals of any age, spinal cords from animals greater than a year old, and the following bovine materials: the entire head—including the eyes but excluding the tongue, spinal cord, thymus, tonsils, spleen, and intestines from cattle greater than six months old. Paul Brown et al., Bovine Spongiform Encephalopathy and Variant Creutzfeldt-Jakob Disease: Background, Evolution, and Current Concerns, in Emerging Infectious Diseases (2001), available at http://www.cdc.gov/ncidod/eid/vol7no1/v7n1.pdf (as of Dec. 22, 2001).

¹³ Sandra Blakeslee, Stringent Steps Taken by U.S. on Cow Illness, N.Y. TIMES, Jan. 14, 2001, at A1

¹⁴ CHARLES E. HANRAHAN, U.S. EUROPEAN AGRICULTURAL TRADE: FOOD SAFETY AND BIOTECHNOLOGY ISSUES 2 (Cong. Research Servs. Rep. for Cong. 98-861, 2001) [hereinafter AGRICULTURAL TRADE].

Phytosanitary Measures (SPS Agreement).¹⁵ The SPS Agreement forbids the implementation of measures that are not based on scientific principles and assessment of risk.¹⁶ Thus, the disagreement over the EU's GMO prohibition is a critical irritant in the EU-U.S. trade relationship.¹⁷

This Note examines the trade hindrances between the EU and the United States resulting from the mad cow epidemic in Europe. Further, it considers proposals for repairing the trade relationship. Part I provides a background on the disease itself and the ensuing European crisis. Part II focuses on measures enacted by the EU to control the outbreak. Part III examines the U.S. response to the EU actions. Part IV considers the WTO measures and the ensuing GMO dispute between the EU and the United States. Part V explores recent developments and the possibility for resolution of EU-U.S. differences.

I. BACKGROUND

A. Bovine Spongiform Encephalopathy

Bovine Spongiform Encephalopathy (BSE), commonly known as mad cow disease, is a chronic degenerative disease affecting the central nervous system of cattle.¹⁸ First diagnosed in Great Britain in 1986, BSE derives its name from the sponge-like appearance of infected cattle's brain tissue when sections are examined under a microscope.¹⁹ Animals affected by the epidemic may display changes in temperament, such as nervousness or aggression, abnormal posture, incoordination and difficulty in rising, decreased milk production, or loss of body weight despite continued appetite.²⁰ Most cases of mad cow disease in the United Kingdom have occurred in dairy cows ranging in age from three to six years.²¹ The causative agent of BSE has

¹⁵ Id. at 1.

¹⁶ Id.

¹⁷ Id. at 3.

¹⁸ U.S. Dep't of Agric. Animal and Plant Health Inspection Serv., *Bovine Spongiform Encephalopathy* (Jan., 2001), *at* http://www.aphis.usda.gov:80/oa/pubs/fsbse.html (last visited Dec. 22, 2001) [hereinafter *BSE* (Jan., 2001)].

¹⁹ Id.

²⁰ Id.

²¹ Id.

not been characterized completely, and currently there is no treatment to prevent the disease.²² All infected cattle die.²³

A time period of two to eight years ensues from the point at which an animal becomes infected until it first shows signs of BSE.²⁴ Following the onset of clinical signs, the condition deteriorates until the cow dies or is destroyed; this process takes between two weeks and six months.²⁵ Because at this time there is no process by which to detect the disease in a live animal, veterinary pathologists must confirm BSE by postmortem microscopic examination of an animal's brain tissue.²⁶ The only method available to study the possible presence of BSE in live cattle is to inoculate other animals (usually mice) with material that may be infected with the disease.²⁷ Detecting the agent through mouse inoculation studies, however, may take a long time (up to 700 days), "and failure to identify it in tissues may indicate either true absence of the agent or simply the limited sensitivity of current diagnostic methods."²⁸

Data suggests that mad cow disease is an extended common source epidemic involving animal feed containing contaminated meat and bone meal as a protein meat source.²⁹ No evidence exists indicating that BSE spreads horizontally—between unrelated adult cattle or from cattle to other species.³⁰ Limited research shows that vertical or maternal transmission may occur at a negligible level.³¹ Results of research conducted in the United Kingdom indicate that there is roughly a nine percent increase in the occurrence of BSE in offspring of BSE-affected cattle.³² This research suggests that the BSE epidemic cannot be attributed to maternal transmission alone.³³ BSE in the United Kingdom may be attributed to feeding cattle protein produced from carcasses of other cattle or sheep infected with a related

²² T.A

²³ BSE (Jan., 2001), supra note 18.

²⁴ Id.

²⁵ Id.

²⁶ Id.

²⁷ Id.

²⁸ BSE (Jan., 2001), supra note 18.

²⁹ Id.

³⁰ Id.

³¹ I.A

³² U.S. Dep't of Agric. Animal and Plant Health Inspection Serv., *Bovine Spongiform Encephalopathy (BSE), at* http://www.aphis.usda.gov:80/oa/bse/index.htm (last visited Feb. 2, 2001) [hereinafter *BSE* factsheet].

³³ Id.

disease.³⁴ Scientists believe that changes in the animal feed production process in the early 1980s allowed the sickening agent in infected carcasses to survive, thereby contaminating the protein supplement and infecting live cattle.³⁵ BSE is classified as a transmissible spongiform encephalopathy (TSE), forms of which affect sheep and goats (scrapie), deer and elk (chronic wasting disease), domestic and wild cats (feline spongiform encephalopathy), and humans (Creutzfeldt-Jakob Disease, hereinafter CJD).³⁶

B. New Variant Creutzfeldt-Jakob Disease

Shortly after the 1986 identification of the first case of BSE in the United Kingdom, people expressed concern about the possibility that humans might become infected with the disease.³⁷ The United Kingdom established the CJD Surveillance Unit, although concerns about human infection were muted by the presumptions that BSE originated from scrapie and that it was not a human pathogen.³⁸ Alternatively, if BSE originated from a spontaneous mutation, early studies of the new TSE were unable to predict whether or not humans might be infected.³⁹ Regardless of scientists' ability to foresee transmission of BSE to humans, reported cases of CJD in high risk groups did not increase in the ten years after the first case of BSE was identified. 40 Instead, CJD continued to occur in the general population at the same rate as before BSE appeared.⁴¹ Then, between May and October, 1995, the CJD Surveillance Unit received notification that CJD had been identified in three patients, aged sixteen, nineteen, and twentynine.42 What was particularly unusual about these diagnoses was the comparative youth of the three victims.⁴³ By March, 1996, a total of ten cases of CJD in young people had been reported in the United Kingdom, and scientists had confirmed that no "young CJD patients in other European countries had the clinical and neuropathologic features of the UK cases."44 A report of the ten cases concluded that a

³⁴ BSE (Jan., 2001), supra note 18.

³⁵ Brown, supra note 12.

³⁶ BSE (Jan., 2001), supra note 18.

³⁷ Brown, supra note 12.

³⁸ Id.

³⁹ Id.

⁴⁰ Id.

⁴¹ *Id*.

⁴² Brown, supra note 12.

⁴³ See id.

⁴⁴ Id.

previously unrecognized form of CJD occurs in persons forty-five years of age and younger.⁴⁵

New variant Creutzfeldt-Jakob Disease (nvCJD) affects humans and has been linked to consumption of BSE-infected beef, augmenting global fears about the spread of mad cow disease.⁴⁶ The identification of nvCJD came nearly a decade after the earliest reports of BSE.⁴⁷ Thus, assuming that the first case of nvCJD echoes the earliest exposure to BSE, the incubation period for the human illness could be ten to fifteen years.⁴⁸ If this is true, the rapid increase of cattle infected with BSE in the late 1980s could lead to a parallel increase of nvCJD in the next few years.⁴⁹

C. Crisis in Europe

Since November, 1986, 183,215 head of cattle have been diagnosed with BSE.50 The mad cow epidemic peaked in January, 1993, when roughly 1000 new cases were reported each week.⁵¹ As a result of the disease, the British livestock industry has suffered a substantial blow-179,804 cases of BSE have been confirmed in the United Kingdom alone.⁵² Agriculture officials in the UK have taken a series of actions to eradicate BSE.58 These actions include making BSE a notifiable disease, prohibiting the inclusion of mammalian meat and bone meal in feed for all food-producing animals, barring the inclusion of animals more than thirty months of age in the animal and human food chains, and destroying all cattle showing signs of BSE and other cattle at high risk of developing the disease.54 UK veterinary officials, however, made no attempt to conceal their hostility to EU inspectors looking at BSE issues and expressed resentment at EU implications that BSE is a "political issue."55 The result of the UK hostility meant that there were no inspections by the EU between 1990 and

⁴⁵ Id.

⁴⁶ See BSE (Jan., 2001), supra note 18.

⁴⁷ Brown, supra note 12.

⁴⁸ Id.

¹⁹ Id

⁵⁰ Court of Auditors, Follow up to Special Report No. 19/98 on BSE, together with the Commission's Replies, 2001 O.J. (C 324) 1, 7 [hereinafter Follow up]. Statistics current as of May 31, 2001. *Id.*

⁵¹ BSE (Jan., 2001), supra note 18.

⁵² Id.; Follow up, supra note 50, at 7.

⁵³ BSE (Jan., 2001), supra note 18.

⁵⁴ Id.

⁵⁵ Chambers, supra note 1, at 99.

1994—crucial years in the development of the UK epidemic.⁵⁶ The EU inspections could have discovered that a cattle identification scheme employed by the United Kingdom worked better in theory than in practice, that production of the meat and bone meal causing the problem continued, and that it was cross-contaminating ruminant feed in the United Kingdom and being exported to the rest of Europe without adequate labels and without being traced to end-use.⁵⁷ Officials now attribute the primary emergence of BSE in the United Kingdom to the proportion of sheep carcasses in protein supplements, noting that scrapie infections in British sheep most likely were higher in the United Kingdom than elsewhere.⁵⁸

In addition to the epidemic in the United Kingdom, mad cow disease also has been confirmed in native-born animals in Belgium, Denmark, France, Germany, Ireland, Liechtenstein, Luxembourg, the Netherlands, Northern Ireland, Portugal, Spain, and Switzerland.⁵⁹ Germany is the most recent victim of the crisis in Europe.⁶⁰ After persistently denying that the problem concerned the nation, Germany admitted the presence of BSE-affected cattle on their soil, and in early 2001, announced their plan to slaughter 400,000 animals.⁶¹
In September, 2001, a mad cow was discovered in Japan, and a

In September, 2001, a mad cow was discovered in Japan, and a second case of the disease was confirmed two months later.⁶² Although the risk of BSE emerging had been apparent since the 1990s because of Japan's past imports of livestock as well as meat from the United Kingdom and other EU countries, the Japanese government appears to have ignored the warnings.⁶³ Officials have not detected any cases of BSE in the United States, and the one case of BSE in Canada was found in a single cow imported from the United Kingdom.⁶⁴ Animal health officials in Canada destroyed the affected cow and all of its herd-mates, as well as other cattle determined to be at risk.⁶⁵

⁵⁶ Id.

⁵⁷ Id.

⁵⁸ Brown, supra note 12.

⁵⁹ BSE (Jan., 2001), supra note 18.

⁶⁰ See Tony Judt, Europe Is One—Until Disaster Strikes, N.Y. TIMES, Feb. 6, 2001, at A19.

⁶¹ Id.

⁶² Bethan Hutton, It Took Just One Dairy Cow to Change the Lives of Millions, Fin. Times (London), Nov. 22, 2001, at 14.

⁶³ Id

⁶⁴ BSE factsheet, supra note 32.

⁶⁵ Id.

On March 20, 1996, the UK's Spongiform Encephalopathy Advisory Committee (SEAC) announced the identification of ten cases of nvCJD.⁶⁶ The probable explanation for the incidents was linkage to BSE exposure before a 1989 measure banning human consumption of brain, spinal cord, and other organs with potential BSE infectivity.⁶⁷ As of September 22, 2001, there had been 110 cases of nvCJD worldwide: 106 in the UK, three in France, and one in Ireland.⁶⁸ The reports of nvCJD have turned what was initially a veterinary problem into a public health problem.⁶⁹ Young people are falling victim to a disease that historically has affected only people over fifty.⁷⁰

For many European consumers, their rejection of beef was not necessarily the apprehension of developing nvCJD, but the revelation that "the agro-industry was producing beef by feeding ground-up dead cattle to live ones (turning herbivores into carnivores and carnivores into cannibals, as some observers put it)."

The depicted industry which, from one point of view, is an effective method for "recycling protein and dealing in Europe with twelve million tons a year of animal waste which otherwise has to be disposed of, is an industry which operates in the shadows of public knowledge. Very few people want to know what happens there."

BSE illuminated this operation, "and the public, for the most part, did not like what was revealed."

As a result, the outbreak of mad cow disease in Europe has highlighted the issue of hygiene in slaughterhouses, factories, and butcher shops.

The revelation of the revelation of the revelation of the public of the most part, did not like what was revealed."

II. EU Action

As a result of the mad cow crisis, public health and food safety, which gradually were entering the political agenda of both the EU and its Member States, have been forced into the foreground.⁷⁵ In response to early reports of a crisis in the United Kingdom, the EU took preventative measures by adopting a directive on livestock pro-

⁶⁶ BSE (Jan., 2001), supra note 18.

⁶⁷ Id.

⁶⁸ Kevin Toolis, *Epidemic in Waiting*, The Guardian (London), Sept. 22, 2001, at 20.

⁶⁹ Chambers, supra note 1, at 96.

⁷⁰ See id.

⁷¹ Id. at 97.

⁷² *Id*.

⁷³ Id.

⁷⁴ Chambers, *supra* note 1, at 97.

⁷⁵ Id. at 96-97.

duction.⁷⁶ Effective January 1, 1989, the directive banned the use of growth-promoting hormones in livestock production.⁷⁷ Although there is no link between GMOs and the BSE crisis, consumers often make one, and the EU has been pressured to act accordingly.⁷⁸ The 1989 directive also banned the use of hormones in meats and meat products imported into the EU on or after January 1, 1989.⁷⁹ Thus, the ban effectively eliminated most U.S. red meat and meat product exports to the EU, costing the U.S. beef industry an estimated \$97 million per year.⁸⁰

On July 28, 1989, the EU placed restrictions on the dispatch of certain live cattle from the United Kingdom, as a result of the BSE outbreak.⁸¹ The following year, the EU limited the dispatch of calves under six months old, restricted the dispatch of certain bovine tissues and organs from the United Kingdom, and mandated notification of confirmed cases of BSE.⁸² The dispatch of live cattle and all cattle products from the United Kingdom was banned completely in March, 1996.⁸³ From 1996 on, as officials diagnosed BSE in cattle in individual Member States, eradication programs were put into place and revised, as needed.⁸⁴ To date, EU eradication programs for BSE govern in Portugal, the United Kingdom, France, and Ireland.⁸⁵

In a November, 2000 European Council (EC) meeting on agriculture, EU officials confirmed the need to guarantee the highest level possible of consumer protection and to win back consumer confidence.⁸⁶ The EC also reiterated the importance of measures taken with regard to traceability, including labeling of processed products and the withdrawal of SRM.⁸⁷ Recapping EU measures already in place, the EC listed surveillance measures for the detection,

⁷⁶ Terrence P. Stewart et al., *Trade and Cattle: How the System Is Failing An Industry in Crisis*, 9 MINN. J. GLOBAL TRADE 449, 500 (2000).

⁷⁷ Id.

 $^{^{78}}$ See Marjorie Miller, Europe Has New Beef with Biotech Foods, L.A. Times, Jan. 7, 2001, at C1.

⁷⁹ Stewart et al., supra note 76, at 500.

⁸⁰ Id.

⁸¹ For a description of such restrictions, see generally European Comm'n, Community Legislation on BSE, at http://www.europa.eu.int/comm/food/fs/bse/bse15_en.pdf (last visited Mar. 4, 2001) [hereinafter Community Legislation].

⁸² See id.

⁸³ Id.

⁸⁴ See id.

⁸⁵ I.I

⁸⁶ Council Meeting, supra note 12.

⁸⁷ Id.

control, and eradication of BSE, a ban on feeding mammalian meat and bone meal to ruminants, policies on the treatment of animal waste, withdrawal from the food chain of SRM from the bovine species, and the implementation of a monitoring program. The EC further noted that the Member States bear the responsibility of ensuring that all EU measures are implemented strictly and emphasized EC harmonization of the approach to combating BSE. Furthermore, officials at the EC meeting on agriculture took note of France's actions, which have included destruction of SRM and a ban on the export of products that have been banned or suspended in France—such as T-bone steaks, meat and bone meal, and fats from bones—until the situation has been assessed fully at the EC level. Finally, the EC announced that Member States of destination may apply precautionary measures to the exportation of whole carcasses and living cattle. Finally, the exportation of whole carcasses and living cattle.

On December 4, 2000, the EC announced a decision concerning certain protection measures with regard to TSEs and the feeding of animal protein. Phis decision was enacted to prevent cases of BSE from entering into the feed chain and was passed pursuant to an opinion of the EU's Scientific Steering Committee, which was adopted in November, 2000. Titled as a precautionary measure, the decision temporarily bans the use of animal proteins in animal feed, effective January 1, 2001. To accomplish this objective, the ban prohibits feeding processed animal proteins to farmed animals that are kept, fattened, or bred for production of food. Moreover, it prohibits placing on the market processed animal proteins intended for feeding farmed animals which are kept, fattened, or bred for the production of food. Another Council decision, also effective January 1, 2001, requires testing for all slaughtered cattle over the age of thirty months. The Council believes that testing all slaughtered animals over thirty months will provide a fuller picture of the true extent and

⁸⁸ Id.

⁸⁹ Id.

⁹⁰ Id.

⁹¹ Council Meeting, supra note 12.

⁹² Council Directive 2000/766/EC, 2000 O.J. (L 306) 32.

⁹³ Id.

⁹⁴ Id.

⁹⁵ Id.

⁹⁶ *Id*

⁹⁷ Council Decision 2001/8/EC, 2001 O.J. (L 2) 28.

distribution of mad cow disease.⁹⁸ In addition to mandatory testing, the European Commission (Commission) developed a purchase for destruction scheme in December, 2000.⁹⁹ Under this plan, bovine animals over thirty months of age can be purchased for destruction instead of being slaughtered for human consumption.¹⁰⁰ The mandatory testing provisions for slaughtered cattle over thirty months apply to animals that are purchased for destruction.¹⁰¹

European Commissioner for Health and Consumer Protection David Byrne stated that the decisions effective January 1, 2001 are the minimum measures necessary to begin the process of rebuilding consumer confidence in the safety of European beef.¹⁰² The discovery of BSE in animals under thirty months, however, raises the question of whether the age limit for testing for mad cow disease should be reduced from the current requirement of thirty months.¹⁰³ Furthermore, the case for further EU measures in relation to mechanically recovered meat is very strong.¹⁰⁴ While the EU has taken significant measures to combat the BSE epidemic, individual Member States, especially those with the highest occurrence of the disease, continue to implement their own measures.¹⁰⁵

A follow up report released by the Court of Auditors on November 20, 2001 found that the EU action plan that has been developed to deal with the BSE crisis is adequate, but implementation by Member States remains problematic. Poor surveillance and poor implementation of the ban on mammalian meat and bone meal in ruminant feed have been cited as potential explanations as to why BSE has not been eradicated. According to the Court of Auditors' report, there is evidence that the agro-feed industry has not been rigorous in

⁹⁸ For a greater description, see David Byrne, Latest Developments in Relation to BSE, Address to Agricultural Committee of the European Parliament (Jan. 23, 2001), *at* http://europa.eu.int/comm/dgs/health_consumer/library/speeches/speech78_en.htm [hereinafter Latest Developments].

⁹⁹ Commission Regulation 2777/2000, 2000 O.J. (L 321) 47; see Council Decision 2001/8/EC, 2001 O.J. (L 2) 28.

¹⁰⁰ See Council Decision 2001/8/EC, 2001 O.J. (L 2) 28.

¹⁰¹ See id.

¹⁰² Latest Developments, supra note 98.

¹⁰³ Id.

¹⁰⁴ Id.

¹⁰⁵ Comm'n of the European Communities, Frequently Asked Questions about BSE, RAPID, Nov. 29, 2000, available at LEXIS, European Union Library, News File.

¹⁰⁶ Follow up, *supra* note 50, ¶ 47.

¹⁰⁷ Id. ¶ 48.

its implementation of the EU's BSE legislation.¹⁰⁸ In consideration of these shortcomings, the report recommends consideration of whether the Commission should be given temporary emergency powers when Member States disagree with proposals related to protection of animal or human health.¹⁰⁹ The report further suggests the possibility of excluding funding from market measures where inspections reveal significant non-compliance with EU measures.¹¹⁰

III. U.S. ACTION

In the United States, the Animal and Plant Health Inspection Service (APHIS) and the Food Safety and Inspection Service (FSIS), divisions of the U.S. Department of Agriculture (USDA), joined together to lead the USDA's actions in the prevention, monitoring, and control of BSE in U.S. livestock and food supply.¹¹¹ In 1988, the USDA established a BSE working group to review available science and recommend appropriate regulatory controls.¹¹² The next year, a ban was enacted on the importation of live ruminants, including cattle, sheep, and goats, and most ruminant products from the United Kingdom and other countries reporting cases of BSE.¹¹³ The USDA began educational outreach and initiated active surveillance of brains of U.S. cattle in 1990.¹¹⁴ Surveillance measures expanded throughout the 1990s; notably, in 1993 the USDA increased to include examination of brain tissue from "downer cows," and in 1994, new technology of testing brains was incorporated.¹¹⁵

In 1997, the U.S. Food and Drug Administration (FDA) issued regulations to prohibit feeding most mammalian proteins to animals at risk of developing TSEs. 116 The FDA regulation took effect on June 5, 1997 and was designed as a preventive measure to protect animals

¹⁰⁸ Id. ¶ 52.

¹⁰⁹ Id. ¶ 55.

¹¹⁰ Id

¹¹¹ For the text of the USDA's efforts, see U.S. Dep't of Agric., Animal and Plant Health Inspection Serv., Bovine Spongiform Encephalopathy (BSE) Response Plan Summary (Oct., 1998), available at http://www.aphis.usda.gov/oa/bse/bseum.pdf [hereinafter Response Plan].

¹¹² U.S. Dep't of Agric., Animal and Plant Health Inspection Serv., USDA Actions to Prevent Bovine Spongiform Encephalopathy (BSE), available at http://www.aphis.usda.gov (last visited Feb. 2, 2001) [hereinafter USDA Actions].

¹¹³ Id.

¹¹⁴ Id.

¹¹⁵ Id.

¹¹⁶ Id.

from BSE and related diseases as well as to "minimize any potential risk to humans." Also in 1997, the USDA prohibited importation of live ruminants and most ruminant products from all of Europe. Its Finding that BSE could become established in the United States if certain meat and other animal products and byproducts from BSE affected cattle were imported and fed to animals in the United States, APHIS stated that the ban on products from all of Europe was based on evidence that the BSE agent might be present throughout Europe. Its Surveillance of fallen stock increased even further in 2000, and the USDA regionalized states in order to increase coverage. As of December 7, 2000, the USDA prohibited all imports of rendered animal protein products, regardless of species, from Europe. Its The USDA cited a recent determination by the EU that feed of nonruminant origin was potentially cross-contaminated with the BSE agent.

On January 17, 2001, a standard check at a Purina Mills plant in Gonzales, Texas revealed that ruminant material accidentally had been mixed with cattle feed, in violation of the 1997 FDA regulation banning mammalian protein in sheep and cattle feed. The company immediately notified federal officials and reclaimed all of the feed, although 1222 animals consumed the feed before any action was taken. The discovery of ruminant material in the feed rose speculation that potential problems in U.S. defenses against mad cow disease might exist. After testing the feed, however, the FDA "determined that each animal could have consumed, at most and in total, five-and-one-half grams—approximately a quarter ounce—of prohibited material." The FDA also noted that the prohibited material was of U.S.

¹¹⁷ U.S. Food and Drug Admin., FDA Talk Paper, FDA Prohibits Mammalian Protein in Sheep and Cattle Feed, (June 3, 1997), at http://vm.cfsan.fda.gov/~lrd/tpprotei.htm.

¹¹⁸ USDA Actions, supra note 112.

¹¹⁹ Restrictions on the Importation of Ruminants, Meat and Meat Products from Ruminants, and Certain Other Ruminant Products, Fed. Reg. 406, 407 (Jan. 6, 1998) (to be codified at 9 C.F.R. pts. 94, 96).

¹²⁰ USDA Actions, supra note 112.

¹²¹ Id.

^{199 7.1}

¹²⁵ The FDA announced the finding in Press Release, U.S. Food and Drug Admin., FDA Announces Test Results from Texas Feed Lot (Jan. 30, 2001), available at http://www.fda.gov/bbs/topics/news/2001/new00752.htm [hereinafter Test Results]; Tina Hesman, Purina Mills Recalls Feed after Some Is Found to Contain Banned Material, St. Louis Post-Dispatch, Jan. 27, 2001, at 6.

¹²⁴ Id.

¹²⁵ Hesman, supra note 123, at 6.

¹²⁶ Test Results, supra note 123.

origin and, therefore, not likely to contain BSE-infected ruminants.¹²⁷ Despite the negligible risk that the feed was contaminated, Purina Mills voluntarily purchased all 1222 of the animals that mistakenly were fed the material.¹²⁸ Therefore, meat from those cattle will not enter the human food supply.¹²⁹ According to the FDA, "[t]his episode indicates that the multi-layered safeguard system put into place is essential for protecting the food supply."¹³⁰

On March 23, 2001, the USDA removed a flock of roughly 126 quarantined sheep in Vermont; this action followed the removal of 234 sheep from another Vermont farm a few days earlier.¹³¹ When the sheep were imported from Belgium and the Netherlands in 1996, they were placed under federal restrictions as a part of the USDA's scrapie control efforts.¹³² In 1998, the State of Vermont imposed a quarantine on the flocks after the USDA learned that sheep from Europe probably had been exposed to BSE-contaminated feed.¹³³ In July, 2000, several sheep from the flocks tested positive for a TSE, leading the USDA to issue a declaration of extraordinary emergency to acquire the sheep.¹³⁴ The owners of the flocks contested the USDA action, but a U.S. District Court ordered the removal of the sheep.¹³⁵ The USDA planned to euthanize the sheep humanely and collect tissue samples for diagnostic testing.¹³⁶

On November 30, 2001, the USDA released a study conducted by the Harvard Center for Risk Analysis showing that the danger of BSE occurring in the United States was "extremely low."¹³⁷ The report indicated that early protection systems implemented by the USDA and the U.S. Department of Health and Human Services (HHS) in large part have been "responsible for keeping BSE out of the U.S. and

¹²⁷ Id.

¹²⁸ Id.

¹²⁹ Id.

¹³⁰ Id.

¹³¹ See generally Press Release, U.S. Dep't of Agric., USDA Removes Quarantined Sheep from Second Vermont Farm (Mar. 23, 2001), available at http://www.usda.tgov/news/releases/2001/03/0053.htm [hereinafter Quarantined Sheep].

¹³² Id.

¹³³ Id.

¹³⁴ Id.

¹³⁵ Id.

¹³⁶ Quarantined Sheep, supra note 131.

¹⁸⁷ See generally Press Release, U.S. Dep't of Agric., Harvard Study Shows Very Low Risk of BSE in the United States (Nov. 30, 2001), available at http://www.usda.gov/news/releases/2001/11/0241.htm.

would prevent it from spreading if it ever did enter the country."¹³⁸ Despite identifying the low risk of BSE, the Harvard report outlined actions that would continue strengthening U.S. programs to reduce that threat.¹³⁹ Actions the USDA and HHS plan to take in response to the report include increasing the number of BSE tests conducted in fiscal year 2002, outlining additional regulatory actions that may be taken to reduce the potential risk of exposure and ensure potential infectious materials do not enter the U.S. food supply, and publishing an Advance Notice of Rulemaking to consider additional regulatory options for disposal of dead stock on farms and ranches.¹⁴⁰

IV. EU-U.S. TRADE

A. BSE and the Meat Market

In January, 2001, European Commissioner for Agriculture and Rural Development Franz Fischler announced that BSE has had a significant impact on the EU's beef market.¹⁴¹ Specifically, Mr. Fischler declared that, because of other countries' bans on EU beef, "a considerable backlog of production that should normally have taken place in 2000 [was] carried over into 2001."¹⁴² Globally, the reduction in beef consumption in 2000 may have been more than 10%.¹⁴³ In the EU, beef consumption in 2000 had plunged by 27%.¹⁴⁴ The rejection of EU beef by countries, including the United States, meant that the EU could expect a surplus of 795 metric tons in 2001, assuming a 10% drop in consumption and full use of the EU's purchase for destruction scheme.¹⁴⁵ If used by qualifying EU Member States, the purchase for destruction scheme alone could comprise 500 metric tons of the EU's 2001 beef surplus.¹⁴⁶ Roughly 57,000 animals had been slaugh-

¹³⁸ Id.

¹³⁹ Id.

¹⁴⁰ Id.

¹⁴¹ See generally Press Release, European Commission, Outcome of the Agriculture Council, 29 January 2001, BSE and the Beef Market (Jan. 30, 2001), available at http://europa.eu.int/comm/dgs/health_consumer/library/press/press105/en.htm [hereinafter BSE and the Beef Market].

¹⁴² *Id*.

¹⁴³ Id.

¹⁴⁴ *Id*.

¹⁴⁵ Id.

¹⁴⁶ See BSE and the Beef Market, supra note 141. As of January 30, 2001, the purchase for destruction scheme had begun in France, Ireland, and to a lesser extent, in Spain and Luxembourg; Germany, Italy, Portugal, and Greece had not started implementing the plan. Finland, Sweden, the Netherlands, and Denmark are exempt from the plan, and

tered under the purchase for destruction scheme, as of January 30, 2001.¹⁴⁷ According to the U.S. Meat Export Federation, the full or partial bans that more than forty countries have placed on imports of EU beef affected about 240,000 metric tons of beef during the first half of 2001.¹⁴⁸

While the EU beef market has suffered as a result of the BSE crisis, the USDA announced in December, 2000 that U.S. exporters may benefit from the EU's ban on the use of meat and bone meal in livestock feed rations.¹⁴⁹ For the United States, the more important repercussions of the meat and bone meal ban would be the prohibition of trade of this product into and from the EU and the arising U.S. export opportunities.¹⁵⁰ As of December 1, 2000, the EU was the world's largest exporter of meat and bone meal.¹⁵¹ In 1999, the EU exported 561,241 metric tons of meat and bone meal, while U.S. exports of the product totaled 381,493 metric tons in the same year.¹⁵² Because of the EU's recent restrictions, countries that import meat and bone meal from the EU "may be forced to seek alternate suppliers of animal protein meals."153 The possible increase in U.S. exports as a result of the BSE crisis in the EU will depend "upon [U.S.] supply availability, prices, and whether . . . potential export markets are aware of the quality of [U.S. meat and bone meal]."154

In March, 2001, the Wall Street Journal reported that, after years of dwindling sales, "the horse-meat business is booming," largely because horses do not carry BSE. ¹⁵⁵ A good deal of the horse meat comes from the United States and Canada, where "the dogs of the horse world are selling at wildly high prices thanks to a sudden increase in demand

Austria and Belgium have asked for exemptions. *Id.* Before the passage of the EU legislation, the United Kingdom already had its own purchase for destruction scheme in place for animals over thirty months. *Id.*

¹⁴⁷ Id. France and Ireland accounted for 60% and 28%, respectively. Id.

¹⁴⁸ Holly Hubbard Preston, Cattle Crises Reverberate Through the World Economy, INT'L HERALD TRIB., Aug. 18, 2001 at 13.

¹⁴⁹ U.S. Dep't of Agric., Foreign Agric. Serv., Does the EU's BSE Crisis Present Opportunities for U.S. Exporters?, WKLY. MKT. REP.: DAIRY, LIVESTOCK, & POULTRY, Dec. 1, 2001, available at http://www.fas.usda.gov/dlp/highlights/00-12/wmr_1201.pdf [hereinafter Opportunities for U.S. Exporters].

¹⁵⁰ Id.

¹⁵¹ Id.

¹⁵² *Id*.

¹⁵³ Id.

¹⁵⁴ Opportunities for U.S. Exporters, supra note 149.

¹⁵⁵ Jonathan Eig, Horse d'Oeuvres? Mister Ed Becomes the Other Red Meat, WALL St. J., Mar. 30, 2001, at A1.

for horse meat in Europe."¹⁵⁶ At a recent horse auction in Indiana, the biggest horses sold for around \$900, "up more than [50%] from what they would have fetched [in September, 2000] and nearly as much as a full-grown cow might sell for."¹⁵⁷ In 1996, the United States exported roughly 17,000 tons of horse meat to Europe, but the numbers fell to less than 10,000 tons in 2000.¹⁵⁸ Exports rose in January, 2001, however, and "meat companies [said] slaughter rates [were] climbing."¹⁵⁹ Although demand has risen for horse meat, supply has remained nearly constant, so "U.S. exporters may not profit much from the upswing" in demand.¹⁶⁰ The price of horse meat in Europe rose about 20% in the first three months of 2001, and producers have expressed concerns that if the prices continue to increase, demand might stop.¹⁶¹

C. The Hormone-Treated Meat Dispute

1. The EU Hormone Ban

The Commission enacted its ban on production and importation of meat derived from animals treated with growth-promoting hormones in 1985, and the ban took effect on January 1, 1989.¹⁶² The Commission's justification for the ban was that it was necessary to protect the health and safety of European consumers from the illegal and unregulated use of hormones in livestock production in several countries.¹⁶³ Political and economic considerations reinforced consumer concerns about the use of hormones; these concerns may have played a role in the Commission's prohibition of their use.¹⁶⁴ Under the EU's Common Agricultural Policy (CAP), beef benefited from high domestic subsidies in the form of price supports and high tariffs to protect it from import competition.¹⁶⁵ By 1985, beef surpluses were so immense, the EU policy-makers were willing to support any measure that would limit beef imports that might compete with domestic production and

¹⁵⁶ Id.

¹⁵⁷ Id.

¹⁵⁸ *Id*.

¹⁵⁹ Id.

¹⁶⁰ Eig, supra note 155, at A1.

¹⁶¹ *Id*.

¹⁶² HANRAHAN, supra note 5.

¹⁶³ Id.

¹⁶⁴ Id.

¹⁶⁵ Id.

interfere with the operation of the CAP.¹⁶⁶ Even though the BSE epidemic bears no relation to hormone use, concern about mad cow disease in Europe has created a climate adverse to resolution of the meat hormone issue.¹⁶⁷

2. World Trade Organization Agreement on Sanitary and Phytosanitary Measures

The WTO's SPS Agreement entered into force on January 1, 1995. As defined in the SPS Agreement, an SPS measure is any parameter applied:

1) 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; 2) 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 foodstuffs; 3) 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 4) to prevent or limit other damage within the territory of the member from the entry, establishment, or spread of pests.¹⁶⁹

Under the SPS Agreement, each country may set its own food safety and animal and plant health standards based on risk assessment and a determination of an acceptable level of risk.¹⁷⁰ A member's right to take measures necessary for the protection of human, animal, or plant life or health is qualified, however, by three limitations.¹⁷¹ SPS measures "must be applied only to the extent necessary, must be based on scientific principles, and must not be maintained without sufficient scientific evidence."¹⁷² While the SPS Agreement does recognize the right of individual countries to maintain standards that are

¹⁶⁶ Id.

¹⁶⁷ AGRICULTURAL TRADE, supra note 14, at 2.

¹⁶⁸ Stewart et al., supra note 76, at 500.

¹⁶⁹ Kevin C. Kennedy, Resolving International Sanitary and Phytosanitary Disputes in the WTO: Lessons and Future Directions, 55 FOOD DRUG L.J. 81, 83-84 (2000).

¹⁷⁰ HANRAHAN, supra note 5.

¹⁷¹ Kennedy, supra note 169, at 84.

¹⁷² Id.

stricter than international standards, it requires nations to justify those stricter standards by science or a nondiscriminatory lower level of acceptable risk that does not target imports selectively.¹⁷³

Regarding human and animal life or health, the SPS Agreement defines risk assessment as: "[t]he evaluation of the potential for adverse effects on human or animal health arising from the presence of additives, toxins, or disease-causing organisms in food, beverages, or foodstuffs."¹⁷⁴ Article 5 of the SPS Agreement specifies that a nation must have scientific evidence to justify levels of protection higher than the international standards or must show that it is "the appropriate level of ... protection."¹⁷⁵ As long as it demonstrates a scientific justification for a particular SPS standard, a member is free to choose its own level of protection once it determines that a bona fide health or safety risk exists.¹⁷⁶

3. The EU's Interpretation of the Precautionary Principle

The debate surrounding food safety and animal health issues, including the controversy surrounding the use of hormones in beef production, "raises the question of whether the SPS Agreement's preference for scientific evidence goes far enough in dealing with possible risks for consumers and producers."¹⁷⁷ The EU has sought to clarify some of the issues surrounding the application of the Precautionary Principle as it applies to the SPS Agreement.¹⁷⁸

On February 2, 2000, the Commission submitted a document to the WTO articulating its interpretation of the Precautionary Principle.¹⁷⁹ In this communication, the Commission stated that a "decision to take measures without waiting until all the necessary scientific knowledge is available is clearly a precaution-based approach."¹⁸⁰ Because "any assessment of risk that is made should be based on the existing body of scientific and statistical data," and "[m]ost decisions are

¹⁷⁵ Hanrahan, supra note 5.

¹⁷⁴ Kennedy, supra note 169, at 86.

¹⁷⁵ Id.

¹⁷⁶ Id

¹⁷⁷ SPS Committee Completes Draft on Risk "Consistency," NOTICIAS, Mar. 15–16, 2000, available at http://www.wto.org/spanish/news_s/news00_s/sps_s.htm [hereinafter SPS Committee Completes Draft].

¹⁷⁸ Id.

¹⁷⁹ WTO Committee on Trade and Environment, Communication from the European Commission on the Precautionary Principle, WTO Doc. WT/CTE/W/147 (June 27, 2000), available at http://docsonline.wto.org [hereinafter Precautionary Principle].

¹⁸⁰ Id. ¶ 4.

taken where there is sufficient information available," the decision of whether to invoke the Precautionary Principle is one that is exercised where scientific data is insufficient, inconclusive, or uncertain. Furthermore, the Precautionary Principle, under the Commission's interpretation, is applied "where there are indications that the possible effects on the environment, or human, animal or plant health may be potentially dangerous and inconsistent with the chosen level of protection." ¹⁸²

The Precautionary Principle was recognized in international law in the World Charter for Nature, adopted by the United Nations (U.N.) General Assembly in 1982. 183 At the 1992 U.N. Conference on Environment and Development in Rio de Janeiro, a declaration was adopted which stated, "[w]here 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." 184 The Commission asserts that the Precautionary Principle "has been progressively consolidated in international environmental law and so it has since become a full-fledged and general principle of international law." 185 While the term is never used explicitly, according to the Commission, the Precautionary Principle is reflected in Article 5.7 of the SPS Agreement. 186 Article 5.7 states:

[I]n cases where relevant scientific evidence is insufficient, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available scientific information, including that from the relevant international organizations as well as from sanitary and phytosanitary measures applied by other Members. In such circumstances, Members shall seek to obtain the additional information necessary for a more objective assessment of risk and review the sanitary or phytosanitary measure accordingly within a reasonable period of time.¹⁸⁷

The Commission notes that the WTO Appellate Body on Hormones has recognized "that there is no need to assume that Article 5.7 ex-

¹⁸¹ Id. ¶¶ 7, 8.

¹⁸² Id. ¶ 8.

¹⁸³ Id. ¶ 24.

¹⁸⁴ Precautionary Principle, *supra* note 179, ¶ 25.

¹⁸⁵ Id. ¶ 26.

¹⁸⁶ Id. ¶ 29.

¹⁸⁷ Id.

hausts the relevance of a Precautionary Principle."¹⁸⁸ The Commission further contends that the Precautionary Principle is reflected in the Members' "right to establish their own level of sanitary protection, which level may be higher . . . than that implied in existing international standards, guidelines and recommendations."¹⁸⁹ In accordance with this interpretation of the Precautionary Principle, the Commission adopted its 1989 ban on GMOs.¹⁹⁰

4. The Dispute

After the SPS Agreement took effect, the United States requested a panel on April 25, 1996 and instituted formal dispute settlement proceedings under the WTO's Dispute Settlement Understanding (DSU) in May, 1996.¹⁹¹ Thereafter, a panel was established on May 20, 1996.¹⁹² The legal issue in the dispute was the scientific validity of the rationale for the EU's hormone ban, specifically, whether the use of GMOs in cattle could harm humans who consume the beef produced therefrom.¹⁹³ If the EU's objective for the ban was found to be no more than political concern about the unpopularity of GMOs among European consumers and farmers, the ban would violate the EU's obligations under the SPS Agreement.¹⁹⁴

In August, 1997, the WTO panel issued its report, finding that the hormone ban was not based on scientific evidence, risk assessment, or relevant international standards. The panel found the Commission's "ban on imports of meat and meat products from cattle treated with any of six specific hormones for growth promotion purposes" inconsistent with three articles of the SPS Agreement. Looking to evidence presented during the dispute process, the panel found that beef growth hormones do not present any proven risk to human health. 197

The EU submitted notice of its intention to appeal certain issues of law and some of the WTO panel's legal interpretations on Septem-

¹⁸⁸ Id. Annex II.

¹⁸⁹ Precautionary Principle, supra note 179, Annex II.

¹⁹⁰ See HANRAHAN, supra note 5.

¹⁹¹ Stewart et al., *supra* note 76, at 496, 500.

¹⁹² Id. at 496.

¹⁹³ Id. at 500.

¹⁹⁴ Id.

¹⁹⁵ *Id*.

¹⁹⁶ Stewart et al., *supra* note 76, at 496. The Commission's ban on GMOs was found inconsistent with Articles 3.1, 5.1, and 5.5 of the SPS Agreement. *Id.*

¹⁹⁷ Id. at 500.

ber 24, 1997.¹⁹⁸ On appeal, the Commission defended its measures on the ground that they were based on the Precautionary Principle, which states that as long as there is some scientific basis for adopting a particular SPS measure, the measure complies with the SPS Agreement.¹⁹⁹ The Appellate Body agreed that the Precautionary Principle is reflected in Articles 5.7 and 3.3 of the SPS Agreement but declined to state whether the Principle was part of established international law.²⁰⁰ Agreeing with the panel, the Appellate Body found that, whatever its status in international law, the Precautionary Principle did not override the risk assessment provisions of the SPS Agreement; thus, the panel's finding was affirmed on January 16, 1998.²⁰¹

The Appellate Body found that the Commission's GMO measures:

[F]ailed to satisfy the SPS Agreement on two counts: 1) all available scientific evidence, as well as the experts consulted by the panel, stated that the hormones in question [were] safe when used in accordance with good practice; and 2) the [Commission] had failed to conduct a risk assessment that satisfied the provisions of the SPS Agreement.²⁰²

The Appellate Body report and the panel report, as modified, were adopted on February 13, 1998.²⁰³

Once the reports were approved, the EU requested four years to implement the recommendations of the Dispute Settlement Body (DSB) and to bring itself into compliance with the SPS Agreement.²⁰⁴ The United States, however, objected that it could not agree to such a prolonged implementation period.²⁰⁵ Hence, the matter was referred to a WTO arbitrator, who determined that the reasonable amount of time for implementation was fifteen months; this period would expire on May 13, 1999.²⁰⁶ At a meeting on April 28, 1999, the EU informed the DSB that it might not be able to comply with the recommendations by the May 13th deadline and stated that it would consider offer-

¹⁹⁸ Id. at 496.

¹⁹⁹ Kennedy, supra note 169, at 95.

²⁰⁰ Id.

²⁰¹ Id.; Stewart et al., supra note 76, at 501.

²⁰² Kennedy, *supra* note 169, at 96.

²⁰³ Stewart et al., supra note 76, at 496.

²⁰⁴ Id. at 501.

²⁰⁵ Id.

²⁰⁶ Id.

ing compensation to the United States as an alternative.²⁰⁷ The United States subsequently requested authorization from the DSB to retaliate against the EU and its members "by suspending tariff concession on imports totaling \$202 million."²⁰⁸ The DSB referred the issue back to the original arbitration panel, and the arbitrators issued a report on July 12, 1999, concluding the damages suffered by the United States as a result of the EU's failure to conform to SPS Agreement provisions would equal \$116.8 million.²⁰⁹ Effective July 29, 1999, the United States imposed 100% ad valorem tariffs on selected import products from fourteen of the EU members.²¹⁰ "The level of trade affected by the action equaled \$116.8 million."²¹¹ The increased tariffs remain in place as the EU has, in effect, chosen to "pay the penalty" for not conforming with the provisions of the SPS Agreement; the EU has sent the message that it would rather live with 100% tariffs on selected exports to the United States than to remove the ban on GMOs.²¹²

V. OUTLOOK FOR RESOLUTION

A. EU-U.S. Veterinary Agreement

In July, 1999, the EU and the United States signed a veterinary agreement, which entered into force on August 1, 1999.²¹³ The "agreement [was] the result of long and difficult negotiations."²¹⁴ In 1997, the EU and the United States failed to meet an April 1st deadline for a Veterinary Equivalency Agreement (VEA) on poultry and meat inspection standards.²¹⁵ Failure to reach such an agreement meant that the EU and the United States continued to set their own measures, "disrupt[ing] transatlantic trade in animal products and potentially contaminat[ing] other facets of the EU-US relation-

²⁰⁷ Id.

²⁰⁸ Stewart et al., supra note 76, at 501.

²⁰⁹ Id.

²¹⁰ Id.

²¹¹ Id. at 502.

²¹² Id

²¹³ See Press Release, Delegation of the European Commission to the United States, European Union and the United States Sign Veterinary Agreement (Jul. 20, 1999), available at http://www.eurunion.org/news/press/1999/1999048.htm [hereinafter Veterinary Agreement].

²¹⁴ Id.

²¹⁵ EU, U.S. Engage in Game of Trade "Chicken," EURECOM (Apr., 1997), at http://www.eurunion.org/news/eurecom/1997/ecom0497.htm [hereinafter Chicken].

ship."²¹⁶ In light of the mad cow epidemic, the EU asserted that the 1997 discussions were about public health, and while VEA measures would have trade implications, the effect on trade was not the main concern.²¹⁷

After the 1999 Veterinary Agreement was signed, the Delegation of the European Commission to the United States announced:

The objective of the agreement is to facilitate trade in live animals and animal products between the EU and the US by establishing a mechanism for the recognition of equivalence of sanitary measures operating in the two regions. The recognition by an importing country of the sanitary measures applied by an exporting country can permit greater efficiency in the utilization of inspection and verification resources.²¹⁸

The 1999 Veterinary Agreement included U.S. acceptance of the EU's regionalization principle, indicating "that an outbreak of an animal disease in a defined and restricted region need not result... in a ban on trade." Furthermore, the 1999 Agreement lists commodities for which equivalence is recognized and implements a program to work towards recognition for those commodities where equivalence is not recognized. Approximately \$3 billion in EU-U.S. trade (\$1.5 billion in each direction) was affected by the 1999 Veterinary Agreement. Notably, nothing changed EU legislation, and the 1999 Veterinary Agreement took into account the rights and obligations of the EU and the United States under the SPS Agreement.

B. WTO Guidelines on Consistency

In March, 2000, the WTO's SPS Committee announced that it had completed a final draft for guidelines on "consistency."²²³ Article 5.5 of the SPS Agreement requires WTO members to be consistent in how they deal with risk.²²⁴ Primarily, Article 5.5 seeks to codify the

²¹⁶ Id.

²¹⁷ Id.

²¹⁸ Veterinary Agreement, supra note 213.

²¹⁹ Id

²²⁰ Id.

²²¹ See id.

²²² Id.

²²³ SPS Committee Completes Draft, supra note 177.

²²⁴ Id.

concept of what "level of protection" the SPS Agreement provides.²²⁵ The levels adopted by individual countries are not easy to specify, measure, and compare, as illustrated by the Hormone-Treated Meat Dispute.²²⁶

At its meeting on June 21 and 22, 2000, the SPS Committee adopted Guidelines to Further the Practical Implementation of Article 5.5 (Guidelines).²²⁷ Article 5.5 states:

With the objective of achieving consistency in the application of the concept of appropriate level of sanitary or phytosanitary protection against risks to human life or health, or to animal and plant life or health, each Member shall avoid arbitrary or unjustifiable distinctions in the levels it considers to be appropriate in different situations, if such distinctions result in discrimination or a disguised restriction on international trade. Members shall cooperate in the Committee . . . to develop guidelines to further the practical implementation of this provision. ²²⁸

The SPS Committee specified that the Guidelines address two elements within Article 5.5: "(1) the objective of achieving consistency in the application of the concept of the appropriate level of protection and (2) the obligation to avoid arbitrary or unjustifiable distinctions in the levels considered appropriate" when those distinctions hinder international trade.²²⁹ The Guidelines on consistency are not legally binding but "are intended as tools to help officials" implement the SPS Agreement "when they make decisions on levels of health protection, and adopt and implement measures on food safety, or animal... health."²³⁰ Moreover, the Guidelines suggest means for officials to employ in dealing with difficulties in implementing consistent measures.²³¹

²²⁵ Id.

²²⁶ See id.; see generally HANRAHAN, supra note 5.

²²⁷ WTO Committee on Sanitary and Phytosanitary Measures, Guidelines to Further the Practical Implementation of Article 5.5, WTO Doc. G/SPS/15 (July 18, 2000), available at http://docsonline.wto.org [hereinafter Guidelines].

²²⁸ Id.

^{229 17}

²³⁰ SPS Committee Completes Draft, supra note 177.

²³¹ Id.

B. European Food Authority

In consideration of the BSE scandal and the controversy over meat hormones, the Commission proposed in January, 2000 to overhaul the EU's food safety system.²⁵² In its White Paper on Food Safety, the Commission proposed a number of "ambitious reforms."²³³ The White Paper encompasses "all aspects of food products from "farm to table," and identifies as necessary over eighty separate actions to improve food safety standards."²⁵⁴

Included among the Commission's propositions was the creation of a European Food Authority (EFA), which would be "entrusted with a number of key tasks embracing independent scientific advice on all aspects relating to food safety."235 The EFA's tasks would include the "operation of rapid alert systems, communication and dialogue with consumers on food safety and health issues as well as networking with national agencies and scientific bodies."236 In designing the proposed European Food Authority, the Commission did not create an independent regulatory body akin to the U.S. Food and Drug Administration, which is authorized to promulgate regulations based on its own scientific findings.237 That duty, referred to as "risk management" in the White Paper, would be retained by the EU political bodies: the Commission, the EC, and the European Parliament.²³⁸ Under this format, "even a reformed EU food safety policy would continue to be governed by laws distinct from those of the [U.S.], posing barriers to transatlantic trade and triggering conflicts before international bodies such as the [WTO]."239

In November, 2000, the Commission put forward a proposal for regulation outlining the general principles of food law and establishing EFA.²⁴⁰ EU Heads of State determined that efforts should be made to adopt this regulation as quickly as possible so that the EFA could

²⁸² See Jeffrey R. Bernstein, What's So Scary About Trade, the WTO, and Globalization?, LA FOLLETTE POL'Y Rep., Fall, 2001, at 1, 12.

²³³ Id

 $^{^{234}}$ White Paper on Food Safety, WTO Doc. G/SPS/GEN/169 (Mar. 14, 2000), available at http://docsonline.wto.org.

²³⁵ Id.

²³⁶ Id.

²³⁷ Bernstein, supra note 232, at 12.

²³⁸ Id.

²³⁹ Id.

²⁴⁰ For the background of this proposal, see *Towards a European Food Authority, at* http://www.europa.eu.int/comm/food/fs/efa/index_en.html (last visited Dec. 28, 2001) [hereinafter European Food Authority].

begin operating in 2002.²⁴¹ Under the proposed regulation, the EFA would have six main functions: (1) independent scientific opinions; (2) advice on technical food issues to underpin policy and regulations; (3) collection and analysis of data to monitor food safety in the EU; (4) identification of emerging risks; (5) day-to-day operation of the rapid alert system covering both food and feed; and (6) a clear communication role to inform the public on all matters under its supervision.²⁴²

C. Labeling and GMOs

U.S. federal law requires most imports, including many food items, to bear labels informing the ultimate purchaser of their country of origin.²⁴³ The Federal Meat Inspection Act also requires imports of beef and other meats to be labeled clearly as to their country of origin.²⁴⁴ Thus, while the U.S. supports labels based on products' origins, it has held firm to the position that genetically modified products are no different from non-genetically modified goods and, therefore, do not require distinct labels.²⁴⁵ The United States opposes mandatory labeling of products containing GMOs on the basis that available scientific evidence shows that genetically modified products are safe for human and animal consumption.²⁴⁶

The EU contends that labels should be mandatory on all foods containing GMOs.²⁴⁷ According to the Commission's White Paper on Food Safety, labeling rules are necessary to ensure that consumers are provided with sufficient information to make informed decisions.²⁴⁸ The Commission specifies that labels must include information on product characteristics, composition, storage, and use of the product.²⁴⁹ In addition, "[o]perators should be free to provide more information on the label, provided this information is correct and not misleading."²⁵⁰ To achieve its goal, the Commission stated that it will

²⁴¹ Id.

²⁴² For a description of the EFA's functions under the proposal, see Press Release, Food Law from Farm to Table—Creating a European Food Authority (Nov. 8, 2000), at http://www.europa.eu.int/comm/dgs/health_consumer/library/press/press82_en.html.

²⁴³ Stewart et al., supra note 76, at 502.

⁴⁴ Id.

²⁴⁵ AGRICULTURAL TRADE, supra note 14, at 5.

²⁴⁶ Id

²⁴⁷ Id.

²⁴⁸ White Paper on Food Safety, supra note 234, ¶ 99.

²⁴⁹ Id.

²⁵⁰ Id.

pursue multilateral guidelines on labeling, given the fact that labeling has become a trade policy issue in regard to the SPS Agreement.²⁵¹

On July 25, 2001, the Commission unveiled two new regulations calling for an EU-wide system to trace and label GMOs.²⁵² According to the Commission, the new proposals ensure traceability by requiring business operators to transmit and retain information and to identify to whom and from where GMOs are made available.²⁵⁸ The legislation package also mandates labeling of all foods produced from GMOs and all genetically modified feed.²⁵⁴ Under the proposals, EFA would perform scientific risk assessment of GMOs, and its opinion would be made available to the public, who would then have the opportunity comment.²⁵⁵ Addressing the EU's proposed legislation on GMO labeling, David Byrne stated that, "[t]here is an irrational fear of [GMOs] in the EU. On the other hand, there are irrational fears [in the U.S.] about how [Europeans] are proposing to address the issue."256 Mr. Byrne further articulated that the new regulations, which must be approved by the Member States and thus are unlikely to enter into effect before 2003, were designed to provide reassurance to consumers. 257

CONCLUSION

The mad cow crisis, which began as a veterinary nightmare, has evolved into a trade epidemic, threatening relations between the EU and the United States. Without a common vision and understanding between the two leaders of the global economy, the crisis could deteriorate the relationship further. Chaos marked the onset of the BSE crisis, as exemplified by the UK's failure to implement immediate preventative measures and seek outside counsel. The EU's lack of a cohesive plan of attack exacerbated what was already a grave situation. This state of affairs set the stage for world-wide panic and rendered inevitable preventative trade restrictions, such as those put into place

²⁵¹ Id

²⁵² Press Release, Commission Improves Rules on Labeling and Tracing of GMOs in Europe to Enable Freedom of Choice and Ensure Environmental Safety (July 25, 2001), at http://www.europa.eu.int/comm/food/fs/biotech/biotech_index_en.html [hereinafter Commission Improves Rules].

²⁵³ Id.

²⁵⁴ Id.

²⁵⁵ Id.

²⁵⁶ The proposed legislation is described by David Byrne, A European Approach to Food Safety and GMOs, Speech at the National Press Club (Oct. 9, 2001), at http://www.europa.eu.int/comm/food/fs/biotech/biotech_index_en.html.

²⁵⁷ Id.; Commission Improves Rules, supra note 252.

by the United States in an effort to protect its own cattle industry, as well as its citizens' health. The GMO controversy exemplifies the apprehension in the EU stemming from the mad cow crisis. Now that the EU appears to have developed a comprehensive plan and has passed legislation rationally addressing the disaster, the disagreement over GMOs may be on its way to resolution. The Veterinary Agreement between the United States and the EU is another indication that a mutual understanding between the two governments could be just around the corner. Guidelines from the WTO on the application of preventative measures also may prove to lend a hand in reaching a trade agreement. Although the EU and the United States soon may resolve their trade disagreement resulting from the BSE epidemic, the true battle against the disease will not terminate until scientists and health officials develop adequate methods of attacking both BSE and nvCJD. The EU and the United States clearly would benefit from a common vision on preventative measures in relation to BSE. By putting their trade disagreements behind them, both nations might improve their focus on the problem itself.