Attachment 3

BACKGROUND INFORMATION AND CHRONOLOGY OF U.S. BSE-RELATED ACTIONS

- November 1986 - BSE first recognized as new cattle disease by researchers at Central Veterinary Laboratory of British MAFF, Weybridge, England

- December 12, 1990 - First meeting of FDA BSE Task Force; initial discussions of product inventories and guidance letters to regulated industry on products of bovine origin

- May 3, 1991 - FDA/CBER Letter to Biologics Manufacturers requesting information on sources of bovine- or ovine-derived products

- August 13, 1992 - FDA BSE Working Group established in Office of Commissioner to provide coordination across FDA Centers on emerging BSE-related issues

- September 1, 1992 - FDA Import Bulletin alerting field units to imports from BSE countries of animal by-products and regulated products with animal by-product ingredients

- November 9, 1992 - FDA/CFSAN Letter to Manufacturers of Dietary Supplements asking to ensure that bovine- and ovine-derived materials do not come from countries reporting BSE

- December 17, 1993 - FDA Letter to Manufacturers of FDA-Regulated Products (human drugs, biologics, and medical devices) requesting that bovine-derived materials from cattle which have resided in or originated from countries where BSE has been diagnosed not be used in manufacture of FDA-regulated products intended for administration to humans

- July 1, 1994 - After review of processing and manufacturing procedures for pharmaceutical gelatin, FDA letter to legal counsel of gelatin industry stating it does not object to use of bovine-derived materials from BSE countries in manufacture of pharmaceutical grade gelatin; considers it prudent, however, to obtain such materials from non-BSE countries whenever practical, and to maintain records of bovine material sources

- August 17, 1994 - FDA Letter to Manufacturers of FDA-Regulated Products for Animals; FDA Letter to Manufacturers and Importers of Dietary Supplements and Cosmetics recommending that firms manufacturing or importing dietary supplements and cosmetics containing specific bovine tissues ensure that such tissues do not come from cattle born, raised, or slaughtered in countries where BSE exists. Extracts of these tissues and ingredients derived from these tissues are also of concern. FDA is not extending the recommendations to dairy products or gelatin, at this time, because available evidence does not suggest the transmission via these foods

- August 29, 1994 - FR Notice: FDA proposal to ban use of offal from adult sheep and goats in feed for ruminants and Letters (4) to Manufacturers requesting that bovine-derived materials from cattle that have resided in, or originated from, countries designated by the USDA,

APHIS as countries where BSE exists not be used in FDA-regulated products intended for humans or animals

- October 19, 1995 - FDA Import Alert - detention, without examination, of bulk shipments of high-risk bovine tissues, and tissue-derived ingredients from the United Kingdom, France, Ireland, Oman, Switzerland, and Portugal

- March 20, 1996 - British government announcement of 10 cases in Great Britain of previously unrecognized form of Creutzfeld-Jakob Disease (CJD) and possible relationship with BSE. SEAC postulates link between cases of variant CJD (vCJD) and exposure to BSE-infected beef, most likely before 1989

- March 29, 1996 - USDA and PHS press release supporting voluntary industry efforts to keep U.S. free of BSE; FDA/CVM will expedite regulations prohibiting ruminant protein in ruminant feeds

- March 29, 1996 - FDA reinstitutes meetings of FDA BSE Working Group

- May 9, 1996 - FDA letters (4) to manufacturers of FDA-regulated products to alert them to new information from U.K. and to reiterate earlier recommendations

- May 10, 1996 - HHS Fact Sheet - actions to prevent BSE in U.S. cattle and to minimize any potential risk to humans from BSE exposure

- May 14, 1996 - FDA Advanced Notice of Proposed Rulemaking soliciting comments on use of protein derived from ruminants in ruminant feed

- May 21, 1996 - FDA letter to legal counsel of gelatin industry reiterating earlier statement that FDA does not object to FDA-regulated products containing pharmaceutical grade gelatin made from cattle from BSE countries and that FDA was not extending the recommendations concerning material from BSE countries to dairy products and gelatin

- June 9, 1996 - FDA recharters CJD Advisory Committee as the TSE Advisory Committee

- January 3, 1997 - FDA/CVM publishes proposed rule on feed ban

- January 29, 1997 - FDA Update on proposed feed ban rule to U.S. House of Representatives Committee on Government Reform and Oversight

- April 23-24, 1997 - First meeting of TSE Advisory Committee to assess safety of imported and domestic gelatin and gelatin by-products used in FDA-regulated products with regard to risk posed by BSE

- April 15, 1997 - FDA/CVM publishes draft rule on mammalian to ruminant feed ban for comment

- June 5, 1997 - FDA/CVM publishes final rule - "Substances Prohibited from Use in Animal Food or Feed: Animal Proteins Prohibited in Ruminant Feed"

- October 6-7, 1997 - Second meeting of TSE Advisory Committee to: 1) assess safety of processed human dura mater as an implant for surgical use with regard to the risk of CJD transmission, considering its purported clinical benefits, and the adequacy of alternative products; and 2) consider appropriate actions for FDA on TSE-implicated "secondary" products - products in which, before it was withdrawn, a TSE-implicated plasma derivative was added as an excipient or used as a reagent in manufacturing process

- October 7, 1997 - FDA publishes Guidance for Industry, "The Sourcing and Processing of Gelatin to Reduce the Potential Risk Posed by BSE in FDA-Regulated Products for Human Use"

- April 15-16, 1998 - Third meeting of TSE Advisory Committee to: 1) assess the safety of both imported and domestic tallow and tallow derivatives with regard to the risk posed by TSEs (specifically, BSE); 2) assess whether healthy cattle from BSE countries or BSE-status unknown countries are a safe source of bones to produce gelatin intended for oral consumption or topical application by humans if, as previously recommended, the cattle are from BSE-free herds and the heads, spines, and spinal cords are removed, and whether such cattle are a safe source of hides to produce gelatin intended for the same purposes if, as previously recommended, the cattle are from BSE-free herds and contamination of the hides with CNS tissue and eyes is avoided; and 3) to provide comments on FDA's proposed course of action on the human dura mater issue, including FDA's considerations for a letter to dura manufacturers to be published in the Federal Register.

- June 8-9, 1998 - The Joint Institute for Food Safety and Applied Nutrition (JIFSAN), a partnership between the FDA and the University of Maryland, sponsors the "Workshop on TSE Risks in Relation to Source Materials, Processing, and End-Product Use." Workshop outcomes include a Draft Document of Critical Elements for material sourcing, material processing, and end use of product, the first step in developing a framework of practical guiding principles related to these topics.