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# An Examination of the Removal of Federal Meat and Poultry Inspection

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**An Examination of the Removal of Federal Meat and Poultry Inspection**

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**Master of Public Administration**

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# **An Examination of the Removal of Federal Meat and Poultry Inspection**

## **Executive Summary**

The United States Department of Agriculture (USDA) is one of the largest federal agencies in the U.S. It has many different subdivisions. Food Safety and Inspection Service (FSIS) is one of them. FSIS is responsible for ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, healthy, and correctly labeled and packaged. Last year, the U.S. House of Representatives has introduced an enormous bill called the Food and Energy Security Act of 2007. Nutrition, conservation, energy, producer income protection, rural development, trade, forestry, and livestock are the major provisions that are part of this massive farm bill. The purpose of this paper is to examine how a policy issue is introduced, planned, and carried out, along with the differences among the state inspections and federal inspection techniques to show how effective they are.

In the livestock provision, it stated that this bill would remove all federal inspection of meat and poultry products done by the USDA-FSIS in the U.S. Inspection would then have been done by individual states with their own individual agendas. This would have lowered food safety standards by encouraging meat and poultry producers to forgo rigorous safety enforcement and opt for less stringent state guidelines. The bill was found to be very objectionable and not in the public interest. The consequences of such an issue could have a huge impact to both the food industry and the citizens of the world since the U.S. is a major exporter of beef and poultry.

The role that the FSIS plays in the U.S. food industry is invaluable. FSIS has come a long way since the establishment of the Federal Meat Inspection Act in 1906. The processes of meat and poultry inspections have improved over the years. Systems like the Hazard Analysis Critical Control Point (HACCP) system are used to control the full range of physical, chemical and biological factors that affect the safety of a food product. HACCP is a preventive system in which safety is designed into the food formulation and the production process. Recent occurrences related to inhumane handling of animals have also led the FSIS to implement strict rules for slaughter houses to abide by. Because of the tremendous impact USDA-FSIS plays in meat and poultry inspection, letting it go now will create too many problems. These sorts of problems had led to the ongoing debates among senators and representatives in Congress and eventually reassessing and amending the Food and Energy Security Act of 2007.

# An Examination of the Removal of Federal Meat and Poultry Inspection

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# **An Examination of the Removal of Federal Meat and Poultry Inspection**

## **Introduction**

The American government has many purposes. The purpose and meaning of governing would vary from person to person and country to country. Some people would say that government is here to protect us. Others would say government is here to provide social services or protect private property. People in the community create governments for themselves for the purposes of safety and public order. Thus, the fundamental purpose of government is the maintenance of basic security and public order. Safety is one of the many services that the government provides to its citizens. Safety comes in various forms. Food safety is one of the most important forms of services that federal government provides. The United States Department of Agriculture (USDA) is one of the biggest federal agencies in the United States. It has many different subdivisions. Food Safety and Inspection Service (FSIS) is one of them. FSIS is responsible for ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, healthy, and correctly labeled and packaged.

Recently, the U.S. House of Representatives has introduced a bill that will lower food safety standards by encouraging meat and poultry producers to forgo rigorous safety enforcement and opt for less stringent state guidelines. The bill would cancel all federal inspection of meat and poultry products done by the USDA-FSIS. This bill has been found to be very objectionable and not in the public interest. The purpose of this paper is to examine how a policy issue is introduced, planned, and carried out, along with the

differences among different state inspections and federal inspection techniques to show how effective they are. It provides an in-depth analysis of the farm bill and what the USDA-FSIS does and also shows both the view points of proponents and opponents on this historic bill.

### **The Evolution of the Twenty-first Century Farm Legislation**

The Farm Security and Rural Investment Act of 2002 is the current farm bill. It expired in October of 2008. Many of the provisions of this bill expired. With this in mind, the 110<sup>th</sup> Congress's Agricultural Committee has been busy since January 2007 trying to come up with a new farm bill that will set forth the next six years for the United States' agricultural industry. A major responsibility of the Agriculture Committee in the 110th Congress is reauthorization of federal farm programs in the farm bill. The bill authorizes commodity support, agricultural trade, marketing, food assistance and rural development policies over several years (CRS Report for Congress, 2007). There have been a lot of on-going debates concerning the multiple areas of the agriculture business in both the House Committee on Agriculture and the U.S. Senate Committee on Agriculture, Nutrition, and Forestry.

The 2007 farm bill debates were different from the previous farm related debates in some significant ways. First, the 2007 farm bill faced significant budgetary and spending constraints as well as restraints due to U.S. trade commitments and obligations under continued multilateral negotiations. Second, it was the first time that any presidential administration had its own proposal for a farm bill. The Bush administration has submitted its own detailed proposal for the 2007 farm bill, which seeks certain

changes to existing programs and provisions. The administration's goals for a new farm bill was that it had to be equitable, predictable and beyond challenge. Third, many other interest groups including both traditional and non-agricultural interests, have also presented recommendations for the 2007 farm bill. Each of these groups is seeking to exert influence on the scope of U.S. farm policy and might also seek certain modifications to current law. In addition, some non-traditional coalitions have emerged in pursuit of specific farm bill policies or programs that would benefit themselves. For the purposes of this paper, many of these interest groups were made up of meat and poultry producers and distributors. They wanted resolutions that were in their favor economically.

The 2007 farm bill was initially known as the Food and Energy Security Act of 2007, also known as farm bill 2419. The approximate budget for this bill is \$290 billion for the next ten years. The bill was introduced in the House on May 22, 2007 by Representative Collin Peterson of Minnesota. The House passed the bill on July 27, 2007 by a vote of 231 to 191. The Senate passed its version of the Farm Bill on December 14, 2007, by a vote of 79 to 14. President Bush had vowed to veto this enormous bill. History was made when the President vetoed the farm bill for a second time requiring an override of the veto by Congress. This was the first farm bill since 1956 to be vetoed. It is now called the Food, Conservation and Energy Act of 2008. Nutrition, conservation, energy, producer income protection, rural development, trade, forestry, and livestock are the major provisions that are part of this massive farm bill.

Nutrition is a major provision of the farm bill. The farm bill has put aside approximately \$10 billion for food and nutrition programs. The Agricultural Committee

said that the recent economic downturn has increased the strain on all Americans, especially low-income Americans. They wanted to make reforms to help meet the food needs of eligible Food Stamp program participants. This provision would also expand United States Department of Agriculture's ability to eliminate fraud in the Food Stamp programs. There has also been \$1 billion set aside for the fresh fruit and vegetable snack program which would allow three million low-income children to benefit from the program. There are plans to expand food assistance to low-income seniors by \$56 million over the next ten years in order to help them purchase agricultural products at farmers markets and roadside stands. Finally, this provision also had included programs that would strengthen regional agricultural economies and local food systems. One of those programs is the one that has divided Congress and many personnel at USDA and other federal agencies. That is, the interstate shipment of state-inspected meat. Very small meat processing plants with state rather than federal inspection that meet strong food safety standards will be allowed for the first time to sell across state lines (Democratic Policy Committee, May 2008). This would increase marketing options for sustainable livestock producers and improving regional food systems.

Conservation is another provision of the farm bill 2419. Conservation measures will help to protect tens of millions of acres of land all across the country from being degraded for development or losing to natural disasters. The ability to sustain these lands has played a central role in improving air, water, soil, and wildlife habitat throughout the country. This provision had put aside \$1.3 billion for the wetlands reserve program which is equivalent to enrolling 746,000 acres of wetlands over the next five years. There is also a grassland reserve program that would enroll 1.2 million acres of fragile

grazing land and prevent it from becoming cropland or from developments (Democratic Policy Committee, May 2008). Another program that will continue to assist in conservation of habitat on agricultural, forest, and tribal land is the wildlife habitat incentives program. This important program provides cost-share assistance to participants seeking to improve and protect wildlife habitat. Another part of the conservation provision is the open fields program that would provide incentives to state governments and American Indian tribes to provide public access to private land for hunting and fishing and it would receive \$50 million in funding for 2009 through 2012 (Democratic Policy Committee, May 2008).

Energy is the third major provision of the farm bill 2419. This farm bill will make several important contributions to the continued growth of renewable energy in rural America. The bill contained funding for producing petroleum-alternative fuels like ethanol from plants. The farm bill report includes \$300 million in mandatory funding for payments to support the production of advanced biofuels, including biodiesel and cellulosic biofuels. The legislation also would direct a comprehensive analysis of effects of biofuels production and use on fuel prices, land use, commodity and food prices, and the price of forest products. The farm bill would also create and fully fund a program to encourage farmers to establish and grow biomass crops in areas around biomass facilities such as bio-refineries (Democratic Policy Committee, May 2008). Biomass is organic plant matter that can be converted to fuel and is therefore regarded as a potential energy source. It would also provide payments to producers for costs associated with harvest, transport and storage of biomass for use at such a facility. There is also a clause in the energy provision called the "Enron loophole." This loophole would be closed by

requiring increased transparency in the oil, gas and energy markets and by increasing federal oversight and regulation of these markets to better detect and prevent fraud and manipulation that might affect the prices consumers, farmers and businesses pay for energy.

Producer income protection provision is pretty much the same as the 2002 farm bill. It includes revised authorizations for direct payments; revised counter cyclical payments; marketing loans; specialty crops; and provides producers with the option of enrolling in a new average crop revenue program. In addition, the bill includes payment limitation reform. A controversial and hard fought issue in the 2008 farm bill is that of commodity program payment limits. These limits were considered controversial because some of the Agricultural Committee members do not think limits have been set low enough to constitute reform and hard fought in that others think reform has gone too far. Limits imposed under the new law state that farm program payments cannot be received if non-farm income exceeds \$500,000 or if farm income exceeds \$750,000 average adjusted gross income based on Internal Revenue Service's report over 3 year average income (The Food, Conservation, and Energy Act of 2008 Summary and Possible Consequences, 2008). There is also a Disaster Assistance Trust Fund that will be created under this bill. It will ensure that farmers have a dependable and timely safety net when disasters strike rather than having to wait for Congress to appropriate emergency funding.

Another essential provision that the Food, Conservation and Energy Act of 2008 provided is the research and development programs. Economies in rural America lack the infrastructure that is necessary to create jobs and diversify their economic bases and improve their quality of life. For example, a poor rural home is two and a half times

more likely than a poor urban home to lack proper indoor plumbing. According to the Agricultural Committee, five states—New Mexico, Arizona, West Virginia, Kentucky, and Mississippi—nearly half of the homes that lack adequate indoor plumbing are also below the poverty level. This provision will allow \$120 million in mandatory funding for pending qualified applications for water and waste disposal grants and loans. It will also provide \$15 million in mandatory funding for new programs to provide low and moderate income individuals financial and technical assistance to start rural microenterprises. There will also be \$230 million in mandatory funds for a new specialty crop research initiative, \$78 million in mandatory funds for the Organic Research and Extension Initiative, and \$75 million in mandatory funds for the Beginning Farmer and Rancher Development Program (Democratic Policy Committee, May 2008). All of these research and development programs will ensure that rural America's way of life will foresee changes in the upcoming years.

The trade provision provides for increased spending over baseline with some emphasis on responding to the global food crisis and maintaining access to foreign markets. Trade provision has also set aside a special fund responding to criticisms of food emergency response. This will help the United States Agency for International Development (USAID) warehouse food in developing countries and for planning for rapid distribution of food in emergencies. The trade provision will also provide \$9 million by 2012 to help address the technical and sanitary and phyto-sanitary barriers against specialty crops in overseas markets. A pilot program has been initiated to purchase \$60 million worth of food locally in developing countries during food

emergencies and humanitarian assistance (The Food, Conservation, and Energy Act of 2008 Summary and Possible Consequences, 2008).

Under the forestry resolution, the farm bill would establish national priorities for private forest conservation. A new Emergency Forest Restoration Program would be established to help restore non-industrial private forest land after disasters such as wildfires and hurricanes. The House Committee on Agriculture has proposed to fund \$39 million in mandatory funding over ten years for the program. This provision also includes a resolution to strengthen prevention of illegal domestic and international logging (Democratic Policy Committee, May 2008).

Finally, a small portion of the massive Food, Conservation, and Energy Act of 2008 provided a provision for the livestock industry. It was the first time that a farm bill had a separate title covering the livestock and poultry and meat competition issues. Initially, the bill gave the meat and poultry industry the right to choose its inspection method. They were given the right to choose a federal inspection under the United States Department of Agriculture, or individual states inspection. Almost immediately, all establishments had shown its interest in choosing the state inspection program over the federal one. This also allowed the inspected meat to enter the interstate commerce. This had created many disastrous confrontations among health officials, USDA employees across the United States, labor unions, and Congress. Much of this will be discussed in detail later on. As the Agriculture Committee and Congress had hearing after hearing, the old provision was amended. The 2008 farm bill also includes a new livestock title that provides basic protections for producers in livestock and poultry markets. It would implement mandatory Country of Origin Labeling (COOL) for meat such as beef, lamb,

pork, chicken and goat meat. It would increase market access for small, state inspected meat and poultry processing plants. This provision would allow selected establishments in state meat or poultry inspection programs to receive Federal inspection from state inspectors, and ship products in interstate commerce. Such selected establishments would be subject to all federal inspection requirements.

The livestock industry is extremely enormous. According to the National Agricultural Statistics Service (NASS), there are about 1.4 billion poultry at any given time. Almost eight billion poultry are processed annually. There are approximately 100 million cattle with an estimated 40 million wild animals like deer and buffalos. There are also 70 million hogs and ten million sheep in the United States at a given time. Cattle and their dairy products alone account for 60 percent of the livestock industry. Over nine million of the 100 million cattle are milk cows (USDA, June, 2008d). This is just another reason why the issue of food safety is extremely important. It not only affects the American consumers, but also other countries in the world.

### **Exploring the Economic Role of U.S. Department of Agriculture**

United States has the most efficient and productive agricultural system in the world. The U.S. agriculture is the world's largest agricultural exporter. Agriculture is one of the main sources of income for America's economy. The U.S. agriculture industry is valued to be at \$230 billion. It generates approximately \$1 trillion in economic activity. It has the largest employer in the United States. One out of six jobs in the U.S. is related to agriculture. There are approximately two million farms in the United States. Nearly 63 percent of it is individually or family operated (An Introduction to USDA,

2008, 3). The U.S. is the world's largest agricultural exporter, and agriculture is the only sector of the economy that generates a net trade surplus. According to the National Agricultural Statistics Service (NASS), in 2002, agriculture was the second highest export industry in the United States (\$54.7 billion) and the only industry to show a positive balance of trade in the amount of \$12.7 billion. The United States produces 46 percent of the world's soybeans, 40 percent of its corn, 20 percent of cotton, and 12 percent of wheat. Sixteen percent of the world's meat is produced in the United States. Five billion dollars of wheat is exported yearly. One billion dollar worth of soybeans exported just to China alone. Over the last ten years, agricultural exports have averaged around \$55 billion with a positive trade balance of \$25 to \$30 billion (USDA, June 2008d). These figures alone speak volume. If attention and care to food safety is not provided, the agricultural industry will greatly impact the United States' economy.

One of the top agencies that is responsible for national food safety is the United States Department of Agriculture (USDA). The mission of USDA is to provide leadership in matters relating to food, agriculture, natural resources and associated issues based on sound public policy, the best available science, and efficient management. Apart from ensuring safety of meat, poultry, and egg products, USDA has many other responsibilities. USDA's role has evolved and expanded well beyond its original mission. The agency leads anti-hunger efforts with the Food Stamp, School breakfast/lunch, and WIC programs. They bring housing, modern telecommunications and safe drinking water to rural America. USDA also provides food aid to needy people all over the world. It also ensures open markets for U.S. agricultural products. One of the other major functions of USDA is the stewardship of the 192 million acres of national

forests and rangelands. They also encourage efforts to protect soil, water, and wildlife on privately owned land. They are also leading in research in human nutrition, new crop technologies and a number of other important fields. Such cutting-edge research has made the United States a world leader in agriculture.

The USDA has come a very long way. The history of USDA shows the rationale behind the importance of a federal inspection program. The department was founded by President Abraham Lincoln in 1862. He had called it the “People’s Department.” Back then, nearly half the populations of the country were farmers. Farmers at the time were in need of good seed and information to grow their crops. During that time period, the meat industry began to grow, and so did the meat packing industry. The railroads provided transportation for livestock to markets where they were slaughtered. Towards the mid 1870s, refrigerator cars were introduced and later the development of electricity allowed meat processing to become a year-round business (USDA, June 2008a). The development of a large packing industry allowed for terminal markets and stockyards to flourish. Large quantities of livestock could be handled.

In 1865, USDA Secretary Isaac Newton recommended for Congress to pass a legislation that would provide for the quarantine of imported animals. This legislation was passed but the jurisdiction was given to the Treasury Department. Treasury Department took little preventive actions which led to diseases on imported animals. Individual states at the time attempted to control and wipeout these livestock diseases but they were ineffective. Every state had its own way of controlling these diseases. States were beginning to object to each other’s methods. State departments and livestock owners wanted a national approach to meat processing. This led to President Chester

Arthur to sign into law the act establishing the Bureau of Animal Industry (BAI) on May 29, 1884. BAI is the true forerunner of the current Food Safety and Inspection Service (FSIS) under USDA. The primary function of BAI was to prevent diseased animals from being used as food. A few months following the establishments of BAI, the quarantine stations of the Treasury Department were transferred to BAI. The stations in Baltimore, New York, Boston, and Philadelphia, along with the customs offices on the Canadian and Mexican borders served as guardians against foreign animal diseases (USDA, June 2008a). A few years later on August 30, 1890, the initial Meat Inspection Act was approved for salted pork and bacon that was intended for export. In 1891, the Act was amended to cover the inspection and certification of all live cattle for export, as well as live cattle that were to be slaughtered and the meat exported.

A turning point for food inspection came after an author named Upton Sinclair published the novel titled “the Jungle” in 1905. It was about the brutalization and exploitation of workers in a Chicago meatpacking house (USDA, June 2008c). The filthy conditions and threat they posed to meat consumers described at the meatpacking house created a public furor. This led to the Food and Drug Act and the Meat Inspection Act of 1906. The purpose of this act was detection and destruction of diseased and contaminated meat. BAI was responsible for preventing adulteration. Adulteration is the addition of harmful substances or products considered improper in certain specified quantities and the presence of chemical or drug residues. The American public was to be given assurance of clean and sanitary handling and preparation of meat. Following World War II, the processing industry changed significantly. There was rapid growth of the federal highway system and the development of refrigerated trucks which allowed

packinghouses to move out of expensive urban areas. There was competition in the meatpacking business which led to the building of sophisticated, mechanized plants in less expensive rural areas. There was also an explosive growth in the poultry industry. During the 1950s and 1960s, inspection increasingly focused on wholesomeness and visible contamination.

The American public's concern about invisible hazards from chemicals added directly or indirectly to foods led to the amendment of the Federal Meat Inspection Act. The act was now changed to the Wholesome Meat Act of 1967. This amendment addressed the difficulties that had arisen from an inspection system that had become increasingly complicated as the marketing system changed. Under the Wholesome Meat Act of 1967, states were to conduct an adequate inspection of the nation's meat. Legislation that specifies that all meat produced for sale in the United States must be inspected. Prior to this point, the meat and poultry inspection programs, which had been separate, were merged into one program within the Consumer and Marketing Service of USDA's Agricultural Research Service. This act also led to the end of BAI and the creation of FSIS.

### **Exploring the Role of U.S. Department of Agriculture in Meat and Poultry Inspection**

Food Safety and Inspection Service is one of the seventeen agencies that operate under the United States Department of Agriculture. USDA is one of the large departments in the federal government. FSIS is responsible for ensuring that meat (derived from cattle, sheep, swine, goats, and horses) and poultry products moving in interstate and foreign commerce are safe, wholesome for consumption, and accurately

labeled. Under the Federal Meat Inspection Act and the Poultry Products Inspection Act, FSIS inspects all meat and poultry sold in interstate and foreign commerce, including imported products. The Department is also responsible for assuring that state meat and poultry inspection programs for commerce within that state are at least equal to federal standards. There are approximately 7,600 Federal Consumer Safety Inspectors that carry out meat and poultry inspection laws in about 6,200 plants nationwide. Inspectors check animals before and after slaughter (USDA, June 2008c). They prevent diseased animals from entering the food supply and examine carcasses for visible defects that can affect safety and quality. FSIS also inspects products during processing, handling, and packaging to ensure that they are safe and truthfully labeled. Consumer Safety Inspectors also test for the presence of pathogenic microorganisms and volatile drug and chemical residues.

Inspection of meat is performed at the location of processing; each animal is inspected at the point of slaughter and is passed or rejected. Beyond the point of slaughter, federal inspectors that are stationed in each plant, maintain a continuous supervision of processing methods and sanitation. Food and drug inspection is conducted on products on the market, outside the producing plant. In meat inspection, there is a concentration on the construction and cleanliness of the plant and on the method of formulating products while in food and drug inspection the attention is on the finished product itself (Weiss, 1964). On the face of it, the latter method should permit a smaller staff of inspectors and a greater reliance on scientific analysis; the former is more reminiscent of a time when, lacking better methods, one had to see what went in order to judge the quality of the finished article.

There are generally four types of slaughtering plants or establishments. They are: Federally Inspected Plants, Talmedge-Aiken Plants, Non-Federally Inspected Plants, and Custom-Exempt Plants. First, Federally Inspected Plants are establishments that transport meat interstate and employ federal inspectors to assure compliance with USDA standards. Any state whose commercial plants operate entirely under federal inspection may still have custom-exempt establishments for which Non-Federally Inspection estimates are made. Plants that are federally inspected can also export their products to any country outside the United States. The second type of plants, Talmedge-Aiken (TA) Plants are slaughter plants in which USDA is responsible for inspection. However, federal inspection is carried out by state employees. These plants are considered to be federally inspected. The Talmedge-Aiken Act, adopted in 1962, was an effort to more closely coordinate federal and state laws that affected the flow of agriculture from the farm gate to the consumer (Texas A&M University, 2008). The law authorized the Secretary of Agriculture to enter into cooperative agreements with states to foster uniform administration of agricultural laws in general. There are approximately 350 meat and poultry establishments that operate under this program which are located in 9 states, and are considered federally-inspected establishments but are inspected by state employees. Unlike State-inspected establishments, these establishments can market their products interstate and are governed by FSIS regulations, but they cannot be exported outside of the United States (Texas A&M University, 2008).

The third type of plants is called the Non-Federally Inspected (NFI) Plants. These are plants which sell and transport only intrastate. State inspectors assure compliance with individual state standards for these NFI plants. The products under such

plants cannot be sold outside the specific state and definitely cannot be exported. USDA has no authority under these types of plants. The fourth type of plant is the Custom-Exempt Plants. These types of plants are custom-exempt because they do not sell meat but operate on a custom basis only. The animals and meat are not inspected, but the facilities must meet health standards. These are considered Non-Federally Inspected Plants.

### **Implementation of the HACCP System**

The Food Safety and Inspection Service (FSIS) is responsible for regulating the meat and poultry products intended for distribution into commerce. It is the individual establishment or plants responsibility to produce safe wholesome meat and poultry products. When the Hazard Analysis Critical Control Point (HACCP) system was initiated in 1996, the regulation was first implemented in large establishments in January 1998 and in small establishments in January 1999, and in very small establishments in January of 2000 (USDA, June 2008a). The HACCP system was regulated under Title 9 Code of Federal Regulation (CFR) Part 417. This rule itself showed how important and necessary federal inspection is. FSIS required all establishments that produce federally inspected meat and poultry products to design and operate HACCP systems. This system provided a framework for establishments to conduct science-based process controls that can be validated as effective in eliminating, preventing, or reducing to an acceptable level the food safety hazards that are reasonably likely to occur in an official establishment's particular production processes. According to the HACCP regulatory system, establishments assume full responsibility for generating products that are safe for

consumers. The HACCP system is composed of seven principles, which includes a systematic approach to the identification, prevention, and control of food safety hazards. These principles were created by the National Advisory Committee on Microbiological Criteria for Food (NACMCF). The Food Safety Regulatory Essential (FSRE) explains these principles in depth (USDA, July 2008b). The seven principles include:

1. Conducting a Hazard Analysis
2. Determining Critical Control Points
3. Establishing Critical Limits
4. Establishing Monitoring Procedures
5. Establishing Corrective Actions
6. Establishing Recordkeeping and Document Procedures
7. Establishing Verification Procedures

The first principle states that establishments must conduct a hazard analysis. Hazard analysis is the key to preparing an effectively designed HACCP plan. The purpose of the hazard analysis is to develop a list of hazards which are reasonably likely to cause injury or illness if not effectively controlled. The NACMCF defined hazard as a biological, chemical or physical agent that is reasonably likely to cause illness or injury in the absence of its control (USDA, July 2008b). Each establishment must consider all types of hazards at each step of the production process. For a food safety hazard that is likely to occur, every establishment must establish controlling measures.

The second principle states that establishment control hazards by determining critical control points. A critical control point is defined as a point, step, or procedure in a food process at which control can be applied, and as a result, a food safety hazard can be prevented, eliminated, or reduced to acceptable levels (USDA, July 2008b). Each hazard that is determined to be reasonably like to occur, plants must identify critical control points and corresponding critical limits that are measureable or observable. They

must have supporting documentation of all these decisions, and must be able to demonstrate that their plan designs are valid and effective in operation. This leads to the third principle that states that establishments establish critical limits for each critical control points. Critical limits are the parameters that indicate whether the control measure at the critical control point is in or out of control. These limits are usually based on process parameters such as temperature, time, physical dimensions, or presence of target pathogens. Establishments must be able to provide the basis for their decisions regarding the selection and development of their critical limits.

The fourth principle states that establishments create monitoring procedures to observe the critical control points to determine whether the critical limits are being met (USDA, July 2008b). Monitoring is a planned sequence of observations or measurements to assess whether a critical control point is under control and to produce an accurate record for future use in verification. Monitoring has three objectives that must be met. First, monitoring is done to track control of the production process. Second, it determines when there is a loss of control and if a deviation occurs. And finally, monitoring results must be written and recorded on official HACCP records. When monitoring concludes that critical limits are not being met, the next principle comes into action. That is the process of the establishment to determine corrective actions for each critical control points whose critical limits have failed. Corrective actions are required to prevent potentially hazardous foods from reaching consumers. Corrective action requires the establishment to identify and eliminate the cause of the deviation of critical limits. It ensures that measures are established to prevent recurrence and that no product affected by the deviation has been shipped and made available for consumers.

The sixth principle ensures that establishments create an effective recordkeeping and documentation system. Records are written evidence that documents the operation of the HACCP system. It should include a summary of the hazard analysis including the rationale, supporting documentation such as validation records, and the daily operational records generated during the operation of the HACCP plan. Records should contain actual observations or data values obtained throughout the day and contain the signature or initials of the plant employee making the entry.

The last principle that the Food Safety and Regulatory Essentials (FSRE) mentions that all HACCP systems should include in their plans is the verification procedures. HACCP systems must be systematically verified. Verification activities consist of calibration procedures, direct observations of monitoring and corrective actions, and records review (USDA, July 2008b). The goal of the calibration procedure is to ensure that all measurements are accurate. Direct observation should be done very frequently to ensure that plants are following procedures in their HACCP plans. The purpose of records review is to ensure that the records were prepared correctly and that all activities were performed as required by the HACCP plan, and that no activity in the plan was missed.

HACCP plans also called for mandatory microbiological testing for *E. coli* and *Salmonella* on meat and poultry. It was developed by food microbiologists. Diseases such as tuberculosis, leucosis, septicemia, synovitis, tumors, airsacculitis, and other contaminations were able to be detected upon inspection on meat and poultry carcasses. Visibility of any of these diseases required the condemnation of the entire carcass. HACCP system can also be used to control the full range of physical, chemical and

biological factors that affect the safety of a food product. HACCP is a preventive system in which safety is designed into the food formulation and the production process. Also, under the HACCP system, facilities were required to institute preventive and corrective measures at each stage of the food production process where food safety hazards could occur. The HACCP system not only allowed the government but also the industry to work together to ensure that the nation's food supply is safe and secure. Prior to the adoption of the HACCP system, there was no other critical form of inspection that is as stringent as the HACCP system. HACCP was implemented in all the slaughtering establishments in the United States that processed meat and poultry products for consumers.

### **Humane Slaughtering of Animals**

Consumer Safety Inspectors are not only responsible for post-mortem inspection, but also random ante-mortem inspection. All slaughter plants across the United States are required by law to slaughter animals that are going to enter commerce to be killed in a method that is humane. Congress passed the Humane Methods of Slaughter Act (HMSA) in 1978. The HMSA required that humane methods be used for the handling and slaughtering of livestock. According to Barbara J. Masters, a systematic approach is beneficial in meeting these requirements and encourages livestock slaughter establishments to use a systematic approach to humane handling and slaughter to best ensure that they meet the requirements of the HMSA, Federal Meat Inspection Act, and other implementing regulations (Masters, 2004). With a systematic approach, establishments focus on treating livestock in such a manner as to minimize excitement,

discomfort, and accidental injury the entire time they hold livestock in connection with slaughter.

Animal slaughter has been a significant issue in the last year or so. How they are killed and how such killing is regulated by law has been a hot topic after several incidences that have occurred in various slaughter establishments throughout the United States. Because there has been considerable congressional and public interest about the humane treatment of animals, the number of humane handling noncompliance incidents documented by Food Safety Inspection Service personnel's in establishments has increased over the last three years. The potential for animals to suffer stress, pain, and fear during slaughter is unusually high. It is a critical stage in the life cycle of a farm animal and therefore calls for the highest levels of care and consideration.

The Humane Methods of Slaughter Act provides that two methods of slaughter and handling are humane (Welty, 2007). Under the first humane method, all livestock are rendered insensible to pain by a single blow or gunshot or an electrical, chemical, or other means that is rapid and effective, before being shackled, hoisted, thrown, cast, or cut. Cattles, pigs, and sheep are usually killed by stunning, gunshots, or by electric shocks. The most common method of stunning cattle is captive-bolt stunning. Using a hand-held device that is powered by blank gunpowder cartridges or compressed air, the slaughterer places it against the forehead of the animal. Then the slaughterer pulls the trigger which results in an explosion drive of a metal bolt through the animal's skull and into its brain. Welty (2007) says that if that procedure is done properly, the animal is instantly stunned and causes 'brain death'. The animal's throat is then cut to let it bleed out thoroughly. There are some establishments that stun cattle using electricity. An

electric shock is administered to the animal's head, rendering it insensible. Sometimes this is followed by the administration of a larger electric current to the animal's body, killing it by cardiac arrest. Once the animal is down, a worker attaches a metal shackle to the animal's left hind leg, and the animal is lifted off the floor. A slaughterhouse worker then cuts its throat, severing its carotid arteries. The animal then "bleeds out," or exsanguinates. Once exsanguination is complete, it is butchered.

The slaughtering process for poultry is quite different from the process for livestock. The Food Safety and Regulatory Essentials (FSRE) manual explain the process. Normally, chickens are raised in barns, placed in cages, and transported by truck to the plant at which they will be slaughtered. Upon arrival, they are manually removed from the cages and hung upside down by their legs onto metal shackles. The shackles are part of an automated "line," with chicken following closely in a single file. The chickens then go through a station that is filled with salty water. The water is electrified while the heads of the upside down chickens pass through. This shocks and immobilizes the chickens. After the birds come out of the water, their necks are cut usually by machine. The goal is to sever both carotid arteries, which causes relatively rapid death by exsanguination. The line then carries the birds into the scald tank, which is a tank full of hot water designed to facilitate the removal of feathers. Birds that avoided the cutting machine by moving and twisting or birds that have not yet died from exsanguination are dropped in the tank alive and conscious (USDA, July 2008b). This results in conditions that are inhumane.

The second humane method under the Humane Methods of Slaughter Act (HMSA) states that slaughtering is in accordance with the ritual requirements of the

Jewish faith or of any other religious faith that prescribes a method of slaughter whereby the animal suffers loss of consciousness by anemia of the brain caused by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument (Welty, 2007). Such religious faith prescribes killing of animals in ways without using stunning or electrical shocks. Usually, that is done with a sharp knife. Whichever their method is, HMSA requires it to be in humane methods. In the end, it all has to come down to making sure the animals are prevented from needless sufferings.

Under the new farm bill, the Food, Conservation, and Energy Act of 2008, as discussed earlier, states were initially given rights to take over the meat and poultry inspections. It would have removed federal inspection. The consequences of such an issue could have a huge impact to both the food industry and the general public. Canceling federal inspection of meat and poultry products potentially will lower the food safety standards and will result in having thousands of federal inspectors facing unemployment. That proposal brings in other dilemmas regarding inspection policies and interstate commerce. Many questions have arrived from various organizations and Congressmen. Will the state inspections be as rigorous as federal inspection? What and how will meat products be transported in interstate commerce if inspection is done by individual states?

Letting states do their own inspections instead of one set of federal inspection standards will create chaos. Each state will have its own set of regulations regarding commerce and food safety. Each will have regulatory problems when doing business with each other. States are known to have less rigorous inspection guidelines. Many state inspection programs do not maintain the same high level of food safety inspection as

the federal program. There will be problems with interstate commerce since each state will have their own inspection policies. According to Consumers Union, letting states “pick” their regulators (state or federal inspection), would result in 80 percent of all federally inspected meat and poultry processing plants to drop out of federal inspection. They also said “though the federal meat inspection system is not without its flaws, the USDA has in place a well trained federal meat inspection system with inspectors who are sworn to protect the public’s health and who have done so for over 40 years” (Consumer Unions, 2008). These inspectors have been an important part of the nation’s public health protection structure.

Some of the members of Congress have also stated that they believe the states play an essential role in protecting consumers from contaminated and adulterated foods, and that they can and should supplement the role of the national strategy for meat inspection. They do not want to create a system that allows producers to “game the system” by pressuring certain states to implement less rigorous inspection and enforcement programs. That result would undermine the national safety net established by the Federal Meat Inspection Act. Allowing state-inspected meat and poultry to be sold in interstate commerce also would seriously hamper efforts to recall possible meat found to be contaminated, but sold across state lines. No state has the authority to institute and manage the recall of adulterated meat or poultry that has gone to another state. Individual states lack the authority and resources to track shipments of meat and poultry to other states and conduct thorough recalls. Only the federal government has the authority, staff, and resources to quickly recall contaminated meat and poultry products and have them removed from kitchens, stores and restaurants in all of the fifty states.

This objectionable bill has drawn a lot of attention. Opponents want Congress to withdraw plans regarding canceling federal meat inspection done by USDA. Federal labor unions have strong oppositions to it. They view this as a product of massive lobbying efforts by meat producers who are searching for more “understanding” and “flexible” enforcement by state inspectors. Proponents do not have much support from the government or the public. Of course, meat producers want less strict rules and regulations. That way they will save money and produce more.

### **Conclusion**

Due to the tremendous impact USDA-FSIS plays in meat and poultry inspection, letting federal inspection go will create too many problems. The massive farm bill’s tiny portion that included the removal of federal inspection under the livestock section has caused so much drama. With that being said, there has been a compromise on the Food, Conservation and Energy Act of 2008. The compromise created a new, optional program within federal law that provides federal oversight of state-inspected facilities that want to ship products across state lines. It is pretty much like the Talmadge-Aiken Act, except with a few minor changes to it. Under the compromise, state inspection programs will continue to maintain their current cooperative agreements with the federal government which require state programs to be at least “equal to” federal requirements. The goal of this new program is to ensure the safety of meat and poultry products sold in interstate commerce and to open new markets for products from smaller, state-inspected companies. That was part of the original proposal by the proponents of the 2008 farm bill. The term “smaller plants” has been defined to be processing establishments that have no more than 25 employees. Companies will be required to use a federal mark,

stamp, tag or label of inspection. This compromise has given a win-win situation for both parties involved with the Food, Conservation and Energy Act of 2008.

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