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Report to Congressional Requesters

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FOOD SAFETY

Issues USDA Should Address Before Ending Canadian Meat Inspections

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Resources, Community, and
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The Honorable Byron L. Dorgan
The Honorable Tim Johnson
House of Representatives

In response to your April 27, 1989, letter and subsequent discussions with your offices, this report examines the U.S. Department of Agriculture's (USDA) Food Safety and Inspection Service (FSIS) "streamlined" inspection procedures for Canadian meat.[1] These procedures were introduced in response to the 1988 United States-Canada Free Trade Agreement (Free Trade Agreement). In particular, you asked us to review (1) the process used to determine that the Canadian inspection system meets U.S. standards; (2) how the current border inspection procedures differ from past procedures; (3) how changes in border inspection procedures between 1988 and 1989 affected the rejection rate, and how rejection rates are used to manage the import inspection program; and (4) whether U.S. plants exporting meat to Canada are receiving satisfactory treatment under the Canadian import inspection system.

In February 1990, FSIS and Agriculture Canada proposed conducting a 1-year experiment during which the streamlined inspection procedures would be replaced with an "open border" between the United States and Canada. An open border would eliminate import inspections by FSIS inspectors. As agreed, this report also discusses the legal and policy issues involved in this proposal.

Results in Brief

The assurance that Canadian meat is wholesome is primarily based on an FSIS determination that the Canadian meat inspection system meets U.S. standards, i.e., that it is at least equivalent to the U.S. inspection system. FSIS officials base this determination on their familiarity with the Canadian inspection system and their review of available information. FSIS officials believe that Canada's system is equal, if not virtually identical, to the U.S. system. FSIS is confident that Canada, more so than other countries, can ensure wholesome meat. FSIS has also changed its procedures for determining Canadian equivalency in two principal ways. First, FSIS is not using its standard approach for assessing a foreign inspection system's ability to control such major hazards as residues and disease. Second, beginning in 1989, Canadian inspectors, rather

[1] Because Canada exports only a small amount of poultry to the United States, this report refers only to meat, unless otherwise noted.

than FSIS reviewers, are conducting on-site reviews of Canadian plants. However, the documentation in FSIS' files was not adequate for us to independently review the basis for FSIS' conclusions about the equivalency of the Canadian inspection system.

Under the streamlined border inspection procedures, several changes have occurred to ease entry of Canadian meat into the United States. Among other things, every shipment of Canadian meat no longer must be unloaded, inspected for general condition and proper labeling, and stamped "U.S. Inspected and Passed." Selected Canadian meat shipments are subject to inspections for wholesomeness.

Rejection rates of Canadian meat were higher in 1989 than in 1988, according to FSIS inspection data, but the causes and significance of these higher rates are unclear. In 1989, 3 percent of 3,030 randomly selected lots for Canada as a whole failed product examination; and 8 percent of an additional 1,866 lots were rejected under an intensified inspection program for individual plants failing inspections. In 1988, 1 percent of 13,466 lots failed product examinations. Because FSIS does not calculate sampling errors for rejection rates, it cannot determine to what extent the increased rates may have resulted from random chance, a decline in product quality, or some other reason. Moreover, FSIS has no criteria for an acceptable rejection rate for Canada.

Regarding whether U.S. plants exporting meat to Canada are receiving satisfactory treatment under the Canadian inspection system, our contacts with 25 major U.S. plants indicated they were satisfied.

The open border proposal raises both legal and policy issues. FSIS' program officials have raised a possible legal issue about whether authority exists to permanently establish an open border or whether FSIS needs to ask the Congress to amend the Federal Meat Inspection Act (21 U.S.C. 601 et seq). From a policy perspective, FSIS needs to ensure that food safety will not be compromised under an open border system. Also, we believe the rejection rates experienced under streamlined inspection and the lack of a well documented equivalency review are concerns that FSIS should address in its decision on the proposal.

Background

The Federal Meat Inspection Act requires that meat imports be produced under inspection systems that are at least equal to that of the United States and that the imports are wholesome, unadulterated, properly marked, labeled, and packaged. FSIS does not require a foreign

country's controls and practices to be identical to those in the United States, but they must achieve the same results. FSIS is responsible for reviewing the inspection systems of eligible exporting countries for equivalency and for inspecting imported meat items at the port of entry to help ensure product integrity.

One goal of the Free Trade Agreement is to facilitate commerce between the two countries by reducing technical and regulatory trade barriers. The Free Trade Agreement provides that both countries minimize inspection procedures applicable to each other's meat and poultry imports. Generally, it allows each country to make "spot checks" necessary to ensure compliance with the importing country's standards or technical regulations.

In January 1989, FSIS installed new, streamlined inspection procedures for Canadian meat to ease its entry into the United States. During the last quarter of 1989, Agriculture Canada and the Canadian meat industry objected to certain features of the streamlined procedures, citing what they viewed as an excessively high inspection frequency, questionable rejections of Canadian meat, and increased fees charged by private U.S. border inspection facilities. On February 26, 1990, following discussions between USDA and Agriculture Canada officials, the U.S. Secretary of Agriculture and Canada's Minister of Agriculture issued a joint statement announcing, consistent with the spirit of the Free Trade Agreement, their intent to conduct a 1-year experiment of an open border for trade in meat and poultry. An open border will eliminate port-of-entry inspections by FSIS inspectors. If successful, the open border is expected to become permanent. FSIS plans to initiate the open border experiment following a rulemaking procedure.

Determining Equivalency

Since the early 1980s, rather than relying on reviews of individual plants within a country to determine inspection system equivalency,[2] FSIS has been shifting to a "systems" approach, which uses risk profiles to evaluate foreign inspection systems as a whole. The profiles assess an inspection system's control over five areas—residues, disease, economic fraud (i.e., deliberate adulteration of product), contamination, and processing. FSIS first prepared risk profiles in 1983 for eligible exporting countries, including Canada, but by 1987 it found these profiles outdated and no longer useful. Also, FSIS modified and improved upon the

[2]FSIS has a permanent staff of veterinarians, called foreign program officers, responsible for conducting plant reviews in exporting countries.

risk assessment approach. FSIS is currently preparing new risk assessments for eligible countries using the improved profiles but has decided to exempt Canada from this process.

FSIS officials told us that to determine the Canadian inspection system's equivalency to the U.S. system, they reviewed Canada's meat inspection laws and regulations; evaluated Canada's ability to control potential hazards, such as residues and contamination; conducted on-site reviews of exporting plants; and reviewed data from port-of-entry inspections. The officials said that this information, along with more than 20-years' familiarity with the Canadian inspection system, assure them that the Canadian system is virtually identical to the U.S. system. As a result, they have more confidence in the Canadian inspection system's ability to ensure wholesome meat than they do in other countries'.

However, documentation in FSIS' files was not adequate for us to independently review how FSIS had determined the Canadian system's equivalency or the basis for FSIS' confidence in Canada's system.

Because of its high degree of confidence in the Canadian inspection system, FSIS changed the equivalency review process for Canada: It discontinued using its risk profiles and eliminated reviews of Canadian plants conducted by its foreign reviewers. Instead, FSIS has proposed that, annually, a single team of experts from both countries jointly determine their inspection systems' equivalence. Agriculture Canada is considering FSIS' proposal. In addition, Canadian inspectors have reviewed Canadian exporting plants for FSIS since 1989, and under the terms of the February 1990 agreement, FSIS and Agriculture Canada plan to end their reviews of each other's exporting plants.

USDA recognizes the importance of equivalency reviews in guarding against contaminated meat imports. In December 1989, in compliance with the Federal Managers' Financial Integrity Act (31 U.S.C. 3512), USDA reported to the President and the Congress that the lack of completed risk analyses for exporting countries is a material management control weakness that it is correcting.

Streamlined Inspection Procedures

Normal FSIS import inspection procedures require that every shipment of meat and poultry entering the United States be unloaded at a border inspection facility for a routine visual inspection. FSIS often refers to import inspections as reinspections to recognize that imported meat has

already been inspected and approved by the exporting country's inspectors. The FSIS inspector examines a shipment for general condition, proper certification, and labeling. Generally, rejections from this type of inspection result from transportation and water damage, labeling deficiencies, and improper certification. In addition, shipments are subject to more comprehensive inspections, using computer-assigned sampling procedures and individual plant performance history, to verify that the product is wholesome and unadulterated. Inspection frequency is increased whenever a shipment fails an inspection. Finally, except in cases where every shipment must be inspected, the shipping plant has no advance notice of whether a particular shipment will be inspected.

The product examination, a key inspection performed on meat imports including Canadian product, accounts for most rejections of Canadian meat. In a product examination, the inspector feels, smells, and visually examines exposed product samples to discover defects such as blood clots, bone fragments, extraneous materials, feces, hair, and lesions.

Under FSIS' streamlined inspection procedures, Canadian meat is no longer given the routine visual inspection or stamped "U.S. Inspected and Passed." However, Canadian meat is still subject to comprehensive inspections for wholesomeness, such as product examinations, although the methodology is now based on 3,000 randomly selected inspections for Canada as a whole rather than on the performance of individual plants. In April 1989, FSIS added an intensified inspection program for producing plants failing the comprehensive inspections. Under this program, 15 consecutive shipments from the responsible plant must stop at a border inspection facility where an FSIS inspector pulls the samples and performs the inspection.

Nevertheless, the streamlined procedures offer Canadian meat exporters a significant advantage over the former procedures. Shipments that have not been assigned one of the more comprehensive inspections can proceed directly to their delivery point.

To determine whether a planned shipment of Canadian meat will be subject to U.S. inspection, a Canadian government inspector calls an FSIS field office and provides product information, which is entered into the FSIS computer system. If the computer system selects a shipment for one of the random inspections, a Canadian inspector draws samples following FSIS instructions and places them in an accessible location in the back of the truck, eliminating the necessity of unloading the entire

vehicle. After passing through U.S. Customs, the shipment goes to a privately owned and operated import inspection facility located near the border where the samples are examined by an FSIS inspector.

During 1989, the new procedures experienced several start-up problems, which FSIS has been working to correct. For example, from January through April 1989, 15 truckloads of Canadian meat designated for inspection failed to stop for inspection. As a result, FSIS directed, beginning in April 1989, that plants whose trucks failed to stop for inspection would have to send their next 10 shipments to the border inspection facility regardless of whether the shipment would be inspected. This penalty reduced but did not eliminate the problem. During the last 8 months of 1989, another 22 designated trucks did not stop.

Although FSIS has attempted to strengthen controls and correct problems, it continues to allow Canadian inspectors to draw samples for FSIS inspection. FSIS has no control procedure to ensure that samples are pulled in accordance with FSIS instructions; rather, it trusts the Canadian inspector to ensure samples are pulled properly. The FSIS inspectors union has expressed concern about this procedure because it reduces the control its members have over the inspection process. However, if inspections are eliminated entirely, as now proposed, the use of Canadian inspectors to draw samples for FSIS inspections will be moot.

Rejection Rates

According to FSIS inspection data, the rejection rates of Canadian meat were higher in 1989 than in 1988. In 1989, 90, or 3 percent, of 3,030 randomly selected lots for Canada as a whole failed product examination; and 151, or 8 percent, of an additional 1,866 lots failed inspection under the intensified inspection program. Twenty-one, or almost 8 percent, of 271 randomly selected shipments failed at the Pembina, North Dakota, port of entry, a rate about three times as high as the average rate of six other ports of entry and twice as high as the port of entry with the next highest rate. In 1988, 129, or 1 percent, of 13,466 lots failed product examinations. Data by port of entry could not be developed for 1988.

The causes and significance of the increased 1989 rejection rate and the higher rate at Pembina are unclear for several reasons. First, the many changes made to import inspection procedures in 1989 make comparisons with prior years difficult. Second, FSIS generally has not used countrywide rejection rates to manage its import inspection program and has no criteria for an acceptable rejection rate for Canada. FSIS officials said

that the 1989 random, countrywide sampling approach, if followed for several years, may provide a basis for developing better information on rejection rates. Historically, FSIS has structured its inspection program to focus primarily on ensuring wholesome product from individual plants by intensifying the level of inspection for plants failing inspection. And third, FSIS has not calculated sampling errors for these rejection rates, and thus it cannot determine to what extent the increased rates may have resulted from random chance, a decline in product quality, or some other reason.

FSIS has not analyzed the reasons why the rejection rate increased from 1988 to 1989. It has conducted an analysis of 1989 rejection data (see app. III), which shows that low-rated Canadian plants had higher rejection rates than high-rated plants.[3] Because of the proposed open border and limited staff resources, FSIS officials view additional analyses of rejection rates as a low priority.

Others have found the 1989 Canadian rejection rates significant. Beginning in February 1990, the FSIS inspector assigned to the Sweetgrass, Montana, border inspection facility and the president of the U.S.-Canada Border Inspection Association, whose membership includes owners of 12 border inspection facilities, publicly criticized "loose" inspection procedures and expressed concern about "high" rejection rates for Canadian meat. (The Sweetgrass inspector accounted for about 30 percent of all Canadian rejections from product examination failures in 1989.) According to the inspector and the association president, the open border should not be implemented, and FSIS should return to the procedures applied to Canada prior to 1989. They noted that if streamlined procedures were continued, the procedures should be revised so that Canadians do not have advance notice of an assigned inspection. As support for the need for tighter procedures, the inspector provided us with documentation showing that in one 4-day period during May 1990 he rejected five of eight truckloads of fresh pork from one Canadian plant for product examination failures—a total of about 200,000 pounds.

The inspector's and association's concerns have been the subject of stories in a Montana newspaper and several industry publications. The head of FSIS' International Programs office told us that she believes that the inspector cannot generalize from his experience to the overall quality of Canadian product. Although the FSIS official's response is valid, we believe that the inspector's statements will generate confusion

[3]Canada rates its meat-producing plants on a five-point scale in descending order of excellence.

and concerns among consumers about the wholesomeness of Canadian meat, and FSIS needs to further evaluate Canadian rejection rates.

U.S. Plants Satisfied With Canadian Inspection Procedures

Canada has set the level of its import inspections at the same basic rate the United States uses—about one shipment in nine. Canada believes this rate is too high and would prefer to further reduce or eliminate inspections but has decided to follow whatever rate FSIS sets. Agriculture Canada officials told us that their import inspection system for U.S. meat and poultry was not experiencing any problems. Our contacts with 25 major U.S. meat and poultry plants exporting to Canada indicated satisfaction with the Canadian inspection procedures, principally because (1) they do not pay to use Canadian inspection facilities and (2) their meat exports to Canada were accepted, with few exceptions.

Open Border Raises Legal and Policy Issues

Our review identified several legal and policy issues about FSIS' proposal to establish an open border for meat and poultry trade between the United States and Canada.

From a legal perspective, there is a question of whether the open border proposed under the Free Trade Agreement conflicts with the requirements of U.S. meat inspection laws and whether a legislative change is necessary. The United States-Canada Free-Trade Agreement Implementation Act of 1988 (P.L. 100-449) specifies (section 102(a)) that "no provision of the Agreement, nor the application of any such provision to any person or circumstance, which is in conflict with any law of the United States shall have effect." FSIS' program officials have raised a possible legal issue about whether legal authority exists to permanently establish an open border or whether FSIS needs to ask the Congress to amend the Federal Meat Inspection Act. Before the open border agreement, the head of FSIS' International Programs office told us that port-of-entry inspection of Canadian meat imports was required under FSIS' statutes. Subsequently, she told us that a legislative change may be necessary to permanently eliminate import inspection for Canadian product.

On June 29, 1990, FSIS' proposed rule for a 1-year open border experiment was published in the Federal Register. According to USDA's Deputy Assistant General Counsel, the legality of the open border experiment may be an issue that is raised during the public comment period.

If, following the rulemaking, FSIS decides to test the open border concept, the key policy issue will be whether FSIS still has adequate import controls to ensure the wholesomeness of Canadian meat. FSIS reviewers no longer review Canadian plants, and an open border will eliminate border reinspections. These are two controls that enabled FSIS to obtain some direct assurance that the Canadian inspection system was functioning in conformance with USDA laws and regulations. Without them, FSIS' equivalency review becomes FSIS' basic management control for ensuring the wholesomeness of Canadian meat.

Finally, there is the issue of how FSIS should determine the success of an open border experiment. In March 1990, USDA issued a "Joint U.S.-Canada Plan for Implementing the Open Border Experiment in Meat and Poultry Trade," which includes an evaluation plan for determining the extent to which objectives of the Free Trade Agreement are met during the experiment. These objectives are about eliminating trade barriers, facilitating fair competition, and liberalizing conditions for investment. The evaluation plan, however, does not discuss how it will assess the effectiveness of an open border in ensuring the wholesomeness of imported meat and poultry.

Conclusions

Our review identified two areas that raise concerns about whether FSIS' loosening of import controls over Canadian meat will ensure wholesome meat. First, FSIS' determination that the Canadian inspection system is virtually identical to the U.S. system and that FSIS can have more confidence in Canada's ability to ensure wholesome meat than it can for other countries has not been documented to allow an independent, objective review of how FSIS arrived at its determination. Second, the unexplained 1989 rejection rates for Canadian product are cause for concern. Without an adequate explanation, the rates could be interpreted as indicating a decline during 1989 in the effectiveness of the Canadian inspection system. The rates can also be expected to raise concerns in consumers' minds about the wholesomeness of Canadian meat that was not inspected, especially in light of the criticisms from the Sweetgrass inspector and inspection facility owners.

FSIS' proposal for a U.S.-Canadian team to annually review the equivalency of the two inspection systems appears to recognize the need to establish a documented record. FSIS' proposal calls for the preparation of a report that would "serve as a record of the state of equivalence of

the two systems." We believe FSIS needs to clearly demonstrate and document that American consumers can rely on the Canadian inspection system to guard against contaminated meat under an open border.

Also, if FSIS decides to proceed with the open border test after the rulemaking, we believe it is important that both the economic and food safety impacts of an open border be evaluated.

Recommendations

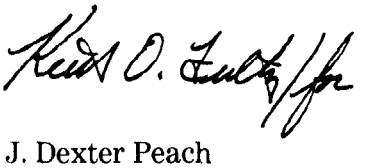
As part of the process for deciding whether to go forward with an open border test, we recommend that the Secretary of Agriculture direct the Administrator, FSIS, to

- review and document the equivalency of the Canadian inspection system using the risk assessment systems approach or the proposed team approach;
- investigate, as part of the equivalency review, the reasons for the high rejection rates in 1989; and
- if the open border test is approved, incorporate into the evaluation plan an assessment of the impact of an open border on food safety.

More detailed information on each question is presented in appendixes I, II, and III. Our objectives, scope, and methodology are in appendix IV.

FSIS officials reviewed portions of a draft of this report for technical accuracy, and changes have been made where appropriate. However, requested, we did not obtain official agency comments on this report. As arranged with your offices, we plan to distribute copies of this report to the Secretary of Agriculture and other interested parties.

This work was done under the direction of John W. Harman, Director, Food and Agriculture Issues, who can be reached on (202) 275-5138. Other major contributors to this report are listed in appendix V.



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Abbreviations

AIIS	Automated Import Information System
FMFIA	Federal Managers' Financial Integrity Act
FSIS	Food Safety and Inspection Service
GAO	General Accounting Office
OIG	Office of the Inspector General
USDA	U.S. Department of Agriculture

FSIS' Current Equivalency Review for Canada Is Outdated and Poorly Documented

This appendix discusses the Food Safety and Inspection Service's (FSIS) meat inspection program for exporting countries, including its efforts to develop an effective approach for evaluating the equivalency of foreign inspection systems. The appendix also examines FSIS' reasons for exempting Canada from the standard requirements for exporting countries and assesses the information that is available on the Canadian inspection system.

FSIS' Inspection Program to Ensure Wholesomeness of Imported Meat

The Federal Meat Inspection Act requires that meat imports be produced under inspection systems that are at least equal to that of the United States. The act also provides that, to be imported into the United States, meat items must be wholesome, unadulterated, and properly marked, labeled, and packaged. The U.S. Department of Agriculture's (USDA) FSIS carries out these requirements through an import control program centering on (1) the review of foreign inspection systems, supplemented by on-site reviews of inspection activities in foreign plants,[1] and (2) port-of-entry inspection.

The review of a foreign country's inspection system is to be completed using the risk analysis systems approach. This approach examines the exporting countries' entire system of maintaining security over a product as it moves from point of production to the loading dock for export. FSIS considers the eligible foreign countries' inspection system the primary control for ensuring that imported meat and poultry products meet U.S. standards.[2] Port-of-entry inspections are intended as a check on the effectiveness of foreign inspection systems in ensuring that wholesome, accurately labeled products are imported that meet U.S. standards.

FSIS Efforts to Develop a Systems Approach

Since the mid-1960s, FSIS has sought to develop an import inspection program that ensures protection "equal to" that provided by its domestic inspection program. In 1963, FSIS began an on-site review process of the operations in individual plants certified to export to the United States. In 1966, FSIS formalized this procedure and established a

[1]FSIS has a staff of foreign program officers, who are licensed veterinarians with experience in domestic inspection; they evaluate foreign inspection systems and conduct periodic reviews of establishments certified to export to the United States to determine if U.S. requirements are being met.

[2]Examples of U.S. inspection standards required of other countries include (1) the assignment of competent, qualified inspectors and (2) national inspection officials with sufficient authority and responsibility to enforce meat inspection laws and regulations and to certify or refuse to certify product intended for export.

permanent staff of veterinarians, called foreign program officers, responsible for conducting plant reviews. Over the next decade, FSIS believed that this review procedure served the needs of the public adequately for the amount of resources that were invested. However, during those years the volume and the product variety of foreign exports changed significantly, and FSIS realized that the acceptability of individual plants greatly depended on the controls built into each country's inspection system.

In November 1979, a USDA task force report recommended comprehensive changes to reorient the resources of the imported meat and poultry inspection program to ensure that the inspection process focuses on examining the most critical areas of a meat inspection system. The task force criticized the agency's reliance on individual plant reviews as a means of assessing the adequacy of foreign inspection systems and proposed that a systematic method be developed to evaluate each country's regulatory control system. According to the task force, by concentrating on individual establishments rather than entire inspection systems, the program was focusing resources on proving the compliance of particular products from particular plants on a periodic basis rather than on ensuring the effectiveness of foreign country inspection programs over the long run.

To improve the equivalency review process and shift its focus from plant reviews, the task force report identified various risk areas that needed to be analyzed as part of a systematic review of a country's meat inspection system. A risk area analysis is the process of (1) assessing a hazard in terms of its severity, probability, and the extent of its impact and (2) measuring each country's ability to control the hazard. A risk area analysis is not intended as a one-time look at a country but as an ongoing and dynamic process that reflects changes occurring in the country.

In response to the 1979 task force recommendations, FSIS began developing the methodology and necessary tools to conduct risk area analyses. For example, a profile instrument was developed for each risk area that could affect meat acceptability. In 1983, risk area profile assessments were conducted for all meat exporting countries' inspection systems for the risk areas identified in the 1979 task force report. These assessments evaluated how a foreign inspection system deals with certain risk areas: residues, diseases, additives, gross contamination, microscopic contamination, economic fraud, and compliance.

Program officials, however, found this initial effort did not adequately assess the risks associated with a country's meat inspection program and began to develop a revised risk profile format. By 1987, the risk area profiles identified in the 1983 systems approach review were modified to reflect a more accurate systems approach review of a foreign country's inspection system. It included residues, disease, contamination, processing, and economic fraud/compliance. FSIS believes it now has created an appropriate way to implement a systems approach, and it is preparing new risk area profiles for eligible countries, except Canada. The reasons for exempting Canada are discussed in subsequent sections of this appendix.

Reinspection at Port of Entry

The second aspect of import inspection is inspection of product at the port of entry. FSIS refers to port-of-entry inspections as reinspections because all the imported product has already been examined and approved by the exporting countries' own inspection systems. FSIS inspectors are required to examine each lot of a product for general condition, proper certification, and labeling. In addition to this limited visual inspection, individual shipments are subject to further, more thorough inspections, based on computer-assisted sampling procedures, to verify that the product is wholesome and unadulterated.[3]

The import reinspection program acts as a spot-check of the country's inspection system and gathers data to evaluate the continuing performance of the foreign inspection system. However, FSIS considers the eligible foreign countries' inspection system, not port-of-entry reinspection, the primary control for ensuring that imported meat products meet U.S. standards.

USDA Cites Inadequate Systems Approach as a Material Management Control Weakness

In 1983, 1987, and 1989, GAO and USDA Office of the Inspector General (OIG) reports recommended that USDA place greater emphasis on completing the development and implementation of systems approach reviews, instead of individual plant reviews, for the countries eligible to export meat to the United States. USDA has cited the lack of an effective systems review approach as a material management control weakness and is taking action to update systems reviews for all countries, except Canada, by September 1991.

[3]Port-of-entry inspection procedures are discussed in detail in app. II.

GAO Reports

In two reports, we found that FSIS was not completing its systems approach review expeditiously. In 1983,[4] we concluded that FSIS was making slow progress in ensuring that foreign countries' regulations were equal to U.S. regulations, especially for the systematic approach the 1979 task force recommended. In 1987,[5] we concluded that the risk profiles, which form the basis for the systems approach, should be updated to better ensure the safety of imported meat. Specifically, the report found FSIS' acquisition of data to support its foreign country evaluations was piecemeal, and important information, such as the risk profiles, was not current.

OIG Reports

In its 1987 report on FSIS' imported meat process,[6] USDA's OIG said that FSIS needs to more effectively utilize the systems approach to evaluate a country's eligibility to export meat and/or poultry products to the United States. The OIG concluded that FSIS did not have reasonable assurance that systemic problems in foreign inspection systems were detected and corrected. Therefore, an increased risk exists that products not meeting U.S. standards are exported to the United States. The OIG also recommended that FSIS revise and evaluate the most current information concerning eligible countries' meat inspection programs to determine whether the foreign systems have remained equal to that of the United States. In a 1989 follow-up,[7] the OIG emphasized the importance of implementing the systems approach recommendations made in 1987 and the need to centrally maintain documentation supporting the residue certification of foreign countries.

[4]Improved Management of Import Meat Inspection Program Needed (GAO/RCED-83-81, June 1983).

[5]Imported Meat and Livestock: Chemical Residue Detection and the Issue of Labeling (GAO/RCED-87-142, Sept. 1987).

[6]Food Safety and Inspection Service: Audit of the Imported Meat Process (USDA/OIG, Audit Report No. 38002-2-Hy, Jan. 1987).

[7]FSIS Follow-Up Audit of the Imported Meat Process (USDA/OIG, Audit Report No. 38002-4-Hy, Mar. 1989).

Inadequate Systems Reviews Cited as Material Management Control Weakness

The Federal Managers' Financial Integrity Act (FMFIA) (31 U.S.C. 3512) requires agencies to assess and report annually to the President and the Congress on the adequacy of the internal management controls in their programs.

In its fiscal year 1988 and 1989 FMFIA reports, USDA described how FSIS' evaluation systems are not designed to detect and correct systemic problems in the inspection programs of countries exporting to the United States. The USDA reports cited the following FSIS material weaknesses and planned action with a scheduled completion date of September 1991:

- Material Weakness: Evaluation systems are not designed to detect and correct systemic problems in the inspection programs of countries exporting to the United States. Planned action: Fully implement conversion of the foreign inspection review program to a systems approach instead of the plant-by-plant approach.
- Material Weakness: New written guidance is needed for evaluating the inspection programs of foreign countries. Planned action: Develop and issue written guidance to foreign program officers as the systems review approach is implemented.

Status of Systems Approach Reviews

FSIS plans to complete support materials and risk area profiles for all countries, except Canada, at the rate of one per year through 1991. To date, two risk area profiles, contamination and residues, have been completed and another risk profile, processing, is scheduled to be completed this year.

Systems Approach and Plant Evaluations Will Not Be Done for Canada

Since January 1989, FSIS has made two major changes to the equivalency review process for the Canadian system. First, the systems approach risk area analyses will not be done for Canada. Instead, FSIS has proposed an annual equivalency review to be conducted by a single team of experts from both countries, with a single report prepared. FSIS believes this approach to equivalency is more appropriate for Canada, given its close relationship with the United States.

Second, FSIS' foreign program officers are no longer conducting on-site evaluations of Canadian plants, nor are Agriculture Canada inspectors conducting similar evaluations of U.S. plants. Before 1989, FSIS had a foreign program officer assigned to examine all aspects of the Canadian inspection system, including its plants, on a regular basis. Similarly,

Canadian reviewers routinely traveled to the United States and looked at establishments exporting to Canada. However, in 1989 FSIS began a new procedure: It now accepts on-site evaluations conducted by Agriculture Canada's internal review group and Agriculture Canada accepts FSIS' evaluations of domestic plants conducted for Agriculture Canada.[8] (Each country's inspection service has an internal audit group that evaluates the work of the inspection service. Inspectors from these internal audit groups now conduct the on-site plant evaluations.)

FSIS supports these changes because it believes that the Canadian meat inspection system is more like the U.S. system than is that of any other country. This equivalency is based on the close similarity between the goals, objectives, and other features of the two countries' inspection systems. Although FSIS recognizes that other countries have inspection systems "at least equal to" the U.S. system, FSIS believes the Canadian system is virtually identical to the U.S. system. (FSIS' standard of acceptability is equivalence with the U.S. inspection system; this means that controls and practices do not have to be identical to those in the United States if they achieve the same results.) As a result, FSIS has more confidence in the Canadian inspection system's ability to ensure wholesome meat than it does in other countries'. According to the head of FSIS' International Programs, the enactment of the Free Trade Agreement between the United States and Canada served as a mechanism to reduce the regulatory and bureaucratic burdens that each country imposes on each other and helped hasten the changes that had already been considered.

FSIS officials base their high degree of confidence in the Canadian inspection system on about 20 years of a close working relationship with Canadian inspection officials and a detailed familiarity with the Canadian inspection system. On the basis of this experience, and the expertise and judgment of FSIS' professional staff, FSIS believes that the Canadian inspection system is virtually identical to the U.S. system. However, we did not find documentation in FSIS' files supporting this belief.

[8]Under the recent Feb. 26, 1990, U.S.-Canada agreement, both countries plan to eliminate altogether on-site reviews of each other's plants if the proposed 1-year test of the open border proves successful. Success will be determined by a joint U.S.-Canadian team that will evaluate how well the test meets five objectives of the Free Trade Agreement: (1) elimination of trade barriers, (2) facilitation of fair competition, (3) liberalization of investment, (4) establishment of effective administrative procedures, and (5) establishment of further cooperation to expand and enhance the benefits of the agreement.

FSIS' Current Equivalency Review for Canada Is Outdated and Poorly Documented

Our evaluation, like our prior findings on all exporting countries, found that the available information on Canada's equivalency is outdated and fragmented. This information is not assembled in a document that systematically assesses the Canadian inspection system. Although FSIS officials said that they have a management process that periodically consolidates, analyzes, and summarizes information to determine the equivalency of the Canadian inspection system, our review of agency files found that this process was not documented.

The original equivalency review conducted for Canada in about 1970 evaluated the laws, policies, and administration of Canada's inspection system. However, FSIS did not prepare summary reports or management documents of this evaluation. An initial systems approach using the risk area profiles was completed in 1983 but has not been updated to reflect the revised and improved systems approach's risk areas. Although FSIS maintains more current information in its files on specific aspects of the Canadian meat inspection system, daily correspondence with Agriculture Canada concerning specific problem areas, and other miscellaneous information, we found no systematic assessment of this information that demonstrates how it supports FSIS' position that the Canadian inspection system is equivalent to the U.S. system. Also, documentation was not available in FSIS' files to allow an independent, objective review of how FSIS' arrived at its determination that the Canadian inspection system is virtually identical to the U.S. system and that FSIS can have more confidence in Canada's ability to ensure wholesome meat than it can in other countries'.

U.S. And Canadian Streamlined Inspection Procedures for Imported Meat

This appendix discusses the streamlined inspection procedures FSIS instituted in 1989 in response to the Free Trade Agreement.

FSIS Inspection Procedures for Canadian Meat

FSIS' 1989 streamlined inspection procedures for Canadian meat differ in several respects from previous procedures. FSIS, however, did not change its residue testing program, which checks for drugs and other chemical residues that may occur in meat products.

Under normal FSIS import inspection procedures, which Canada followed prior to the Free Trade Agreement and all other eligible foreign countries still follow, meat and poultry entering the United States must be unloaded at inspection facilities for a routine visual inspection.[1] The FSIS inspector examines a shipment for general condition, proper certification, and labeling. Product defects found in this inspection are generally related to transportation and water damage, inadequate labeling, and improper certification.

In addition, certain computer-selected shipments are subject to further, more comprehensive inspections to verify that the product is wholesome and unadulterated. The computer selects these shipments taking previous plant performance and the nature of the product into account. Inspection frequency is increased whenever a shipment fails an inspection. Also, except in cases where every shipment must be inspected, the shipping plant has no advance notice of the computer's inspection assignments.

The two key inspections performed on Canadian meat are product examinations and chemical residue tests. The product examination is an "organoleptic" type of inspection in which an inspector feels, smells, and visually examines exposed product samples to discover defects such as blood clots, bone fragments, extraneous materials, feces, hair, and pathologic lesions. For residue tests, the inspector draws samples and sends them to designated laboratories for analysis. Almost all rejections (by weight) of Canadian product result from product examination failures; few residue tests fail.

If meat passes these inspections, it (or the shipping containers) is stamped "U.S. Inspected and Passed," the product is reloaded, and the

[1] FSIS often refers to import inspections as reinspections to recognize that imported meat has already been inspected and approved by the exporting country's inspection system.

truck proceeds to its destination. Meat and poultry failing import inspection are refused entry; marked "U.S. Refused Entry;" and destroyed, converted to nonhuman food use, or returned to the originating country.

In 1988, Canadian exporting plants or their importers could elect to have inspection performed by FSIS either at inspection facilities near the port of entry or at the shipment's delivery point. Canadian plants would make their choice on the basis of such factors as cost and convenience.

Changes in 1989

In January 1989, under general provisions of the Free Trade Agreement to minimize inspections and remove barriers to trade, FSIS changed its inspection procedures for Canadian meat to ease entry into the United States. These changes, which FSIS called streamlined procedures, eliminated some inspections and reduced others. But the streamlined procedures involve more than just reducing the level of inspection. In certain areas FSIS has fundamentally changed its approach for inspecting Canadian product.

Canadian meat is no longer given the routine, visual inspection or stamped "U.S. Inspected and Passed." However, Canadian product is still subject to the more thorough types of inspection, such as product examinations, although the basic sampling methodology is now based on 3,000 randomly selected lots for Canada as a whole rather than on the past performance of individual plants. In 1989, all 3,000 lots selected were given at least a product examination. However, FSIS made no changes in its residue-testing approach for Canada because it believed it had a clear legislative mandate for a strong residue-testing program for imported meat and poultry. In fact, the sampling rate for residue tests of Canadian product, as set forth in FSIS' annual residue test plan, increased from 3,900 sample units in 1988 to 4,700 units in 1989 because of a relatively high number of Canadian violations in 1988. (More than one residue sample may be taken from a randomly selected lot.)

Also, beginning in January 1989, Canadian shippers no longer had the option of choosing the delivery point as the place where the FSIS inspection would be performed. If an inspection was required, it had to be performed at an inspection facility near the port of entry. This policy change did not result from the Free Trade Agreement but from a 1986 agency decision to improve control prior to inspection by requiring that imported product be inspected as soon as it enters the United States.

To determine whether a planned shipment of Canadian meat will be subject to a product examination, a residue test, or other types of inspection under the streamlined inspection procedures, the Canadian inspector calls an FSIS field office and provides product information, which is entered into the FSIS computer system. If the computer system selects the shipment for detailed inspection, the samples at participating Canadian plants are (1) drawn by Canadian inspectors according to FSIS instructions and (2) placed in an accessible location in the back of the truck.[2] After passing through U.S. Customs, the shipment must go to a privately owned and operated import inspection facility located near the border where the samples are examined by an FSIS inspector. Samples may be drawn up to 3 working days prior to FSIS inspection. If a shipment is not selected for any of the detailed inspections, the shipment can proceed directly to its destination, stopping at the border generally for only a paperwork check by U.S. Customs.

First Year Start-Up Problems

During its first year, the streamlined inspection procedures experienced several start-up problems. These problems appear to have been caused by (1) FSIS' decision to implement the procedures shortly after the effective date of the Free Trade Agreement and (2) limited testing and analysis of the new procedures.

Although the Congress approved the agreement in September 1988, the Canadian government did not give its approval until November 1988. The agreement was a controversial issue in Canada, and its approval by Parliament was uncertain. The agreement became effective on January 1, 1989. FSIS conducted no documented analysis or assessment of the impact of its proposed procedures nor did it evaluate alternatives. Although a pilot test of some elements of the proposed procedures was conducted during October 1988, no written report or analysis was prepared on test results.

Start-up problems with streamlined inspection included the following:

- From January through April 1989, 15 truckloads of Canadian meat designated for inspection "bypassed" FSIS border inspection facilities and

[2]Import inspection procedures call for two different types of sampling. One type selects individual shipments or lots for inspection. If a shipment is selected for inspection, the other sampling type determines how portions of the overall shipment are selected for examination. For example, if a 40,000-pound shipment is selected for inspection, procedures may call for the inspector to draw 30 12-pound samples at random from the overall shipment. On the basis of the inspector's findings on these 30 samples, the entire 40,000-pound shipment is accepted or rejected.

failed to stop for inspection. FSIS attributed the bypasses to the Canadian plants' unfamiliarity with the new procedures. To deal with this situation, FSIS directed in April 1989 that plants found bypassing inspection would have to send their next 10 shipments to the U.S. border inspection facility. In spite of this penalty, however, bypassing continued, with FSIS reporting 22 bypasses from May through December 1989.

- In April 1989, partly in response to an increased rejection rate of Canadian product, FSIS established an intensified inspection program for individual plants failing inspections. Under this program, if a plant fails a product examination, the next 15 shipments from that plant must stop at a border inspection facility where the samples are pulled by FSIS inspectors who perform the product examinations. For the 8-month period in 1989 during which the intensified inspection program was in effect, FSIS' performed 1,866 intensified inspections.
- The import inspection computer system, quickly reprogrammed to implement the new procedures for Canada, exhibited certain data problems. First, the computer system could not distinguish between inspections assigned on the basis of the 3,000-countrywide sampling plan and those assigned under the intensified inspection program. Consequently, FSIS could not determine the overall Canadian rejection rate. In early 1990, FSIS staff had reviewed 1989 inspection files to identify rejections resulting from the countrywide samples. Second, the system was double-counting some inspection failures and understating the weight of others. FSIS appears to have corrected these problems in 1990.

No FSIS Control Over Samples Drawn by Canadian Inspectors

FSIS has no control mechanism to ensure that its sampling procedures are properly performed at Canadian plants, other than its trust in the integrity of Canadian inspectors. In our view, the primary issue raised by these revised sampling procedures is not whether Canadian inspectors can be relied on to follow them, but whether the procedures themselves and the lack of FSIS oversight instill consumer confidence. In this respect, our work raised several concerns.

First, the Canadian inspector who is selecting the samples is part of the Canadian inspection system that FSIS import inspections are evaluating. To have the person being evaluated pull his or her own sample creates the appearance that the sampling process lacks independence and objectivity. Second, Canadian inspectors and officials told us that if a Canadian inspector pulls a sample that is clearly contaminated, the inspector would substitute another sample because he or she could not allow contaminated product to leave the plant. Substituting for a sample that would be rejected lowers the overall rejection rate and clearly destroys

the integrity of the sampling process. And third, in a visit to 1 of the 10 largest Canadian exporting plants, we found that pulling samples properly in accordance with FSIS instructions can be a time-consuming and difficult process within the busy operational environment of a typical large Canadian processing plant. (The manager of this plant decided to have the FSIS inspector draw the samples even though this may cause some delay at the U.S. border inspection facility.) While there is no evidence that Canadian inspectors are not following FSIS instructions when drawing samples, the apparent difficulty of pulling samples at Canadian processing plants and the possibility that new samples could be substituted for contaminated samples are conditions that are not conducive to an inspection program in which consumers can have confidence. However, if inspections are eliminated entirely, as now proposed, the use of Canadian inspectors to draw samples for FSIS inspection will no longer be an issue.

In contrast to FSIS procedures, Agriculture Canada representatives meet U.S. trucks at the border, where they determine whether a shipment will be inspected. Consequently, a U.S. plant does not know until its truck reaches the Canadian border whether a shipment will be inspected. If an inspection is assigned, the samples are selected by the Canadian inspector when the shipment arrives at its destination.

U.S. Customs Does Not View Contraband as a Problem

We were also asked whether the current streamlined procedures protect against the shipment of contraband.

U.S. Customs has primary responsibility for preventing contraband from entering this country. Customs officials told us that although FSIS' streamlined procedures provided the opportunity for smuggling contraband into the United States, they did not believe this was a problem. According to Customs officials at the two ports of entry we visited, Customs inspections for contraband are usually generated by tips and informal sources of information, rather than random testing of trucks entering the United States. With respect to drugs, they noted that Canada considers the United States a source for drugs and other contraband, not the reverse. In addition, Customs is now installing a random inspection process for the Canadian border. This system will identify high-risk shipments that will be subject to an intensive examination.

U.S. Plants Satisfied With Canadian Inspection Procedures for U.S. Meat and Poultry

Agriculture Canada has reciprocated for the U.S. streamlined procedures and reduced the level of its import inspection to the same rate as FSIS—about one shipment in nine. Agriculture Canada would prefer to reduce the level of inspection to a much lower rate but has decided to follow whatever rate FSIS sets. However, Canada's import inspection system differs from the U.S. system in ways that create several advantages for U.S. plants. For example, Canada conducts import inspections not at ports of entry but at the destination point where the truck will be unloaded, whether or not the shipment is inspected. Also, the U.S. plant does not have to pay a fee for use of Canadian inspection facilities. Agriculture Canada officials told us that their import inspection system for U.S. product is not experiencing any significant problems.

American plants exporting meat and poultry to Canada told us that they have received satisfactory treatment under the Canadian import inspection system. We contacted officials from 25 plants that were substantial exporters of meat or poultry products to Canada in 1989. Overall, these officials were satisfied with the Canadian inspection procedures and had not experienced any serious problems. Their responses indicated several reasons for their overall satisfaction. Since shipments to Canada were inspected at the destination rather than at the border, enroute delays were minimal. Also, American exporters did not pay for inspection services performed in Canada. (The fees charged by U.S. inspection facilities are an irritant to some Canadian plants.)

And finally, these plants experienced minimal rejections of their shipments by Agriculture Canada in 1988 and 1989. Although the plants contacted typically shipped 1 or 2 trucks to Canada each week, 18 plants reported they had had no rejections in 1989. The other plants reported only a few rejections. The pattern was similar in 1988.

Some plant officials did report problems with the paperwork required. They did not always know what Canada's requirements were or believed that the Canadian inspectors were unnecessarily meticulous about the preparation of the paperwork. Plant officials also reported that Agriculture Canada officials were very helpful in working out problems.

Reasons for Higher Rejection Rates in 1989 Are Unclear

This appendix discusses FSIS' information on Canadian rejection rates and examines the possible explanations for differences between the 1988 and 1989 rates. It also explains how FSIS uses rejection rates in managing its import inspection program.

Rejection Data Stored in Computer System Are Generally Reliable

Rejection data on imported product are maintained in FSIS' Automated Import Information System (AIIS), a computerized system that centralizes inspection and shipping information from all U.S. ports. Information stored in the system includes the amount of products offered from each foreign country and establishment, inspection results, and the amount refused entry.

Our analysis of rejection data focused on product examinations performed and failed in each year. Except for residue testing, product examination is the basic type of inspection performed on Canadian product and the primary reason for rejecting Canadian product. We did not look at residue tests because relatively few Canadian shipments fail these tests; FSIS reported 26 residue violations in 1988 out of 6,916 Canadian samples analyzed and only 7 violations in 1989 out of 3,173 samples analyzed.

Because our analysis of computer-processed rejection data was important for achieving our objectives, we tested the reliability of these data for 1989 by comparing the computer-processed data with paper source documents, including field office Refused Entry Logs, health certificates, and inspection results forms. Generally, inspection and rejection data were reliable, except for data on the weight of rejected shipments. We found rejected weight data to be inaccurate because of inadequate software changes made to the computer system to reflect changes made to Canadian inspection procedures during 1989. FSIS made additional software changes to correct this problem in January 1990.

Rejection Rates for Canadian Product Show Increase in 1989

According to FSIS inspection data, rejection rates for Canadian meat increased in 1989. As shown in table III.1, the rejection rate was about 1 percent in 1988 and about 5 percent in 1989. In addition, as shown in table III.2, the 1989 rejection rate of 5 percent resulted from a 3-percent rejection rate for product examinations performed under the random-based inspection approach and an 8-percent rate under the intensified inspection approach for plants failing inspections. These rejection rates should be reviewed with certain data limitations in mind. First, FSIS officials emphasized that rejection rates reported under the countrywide

inspection program are not comparable to rejection rates reported under the intensified inspection program. Second, sampling errors and confidence intervals have not been calculated for these rejection rates. Consequently, FSIS cannot determine to what extent the increased 1989 rates were actually the result of random chance due to statistical variability. (Sampling error for rejection rates is discussed later in this appendix.) And third, since the size of inspected lots can vary from a few thousand to over 40,000 pounds, a more meaningful comparison of rejection rates would also include data on the weight of rejected lots, adjusted to reflect the different lot sizes. However, reliable and consistent data on the weight of rejected lots were not available to make comparisons between 1988 and 1989.

Table III.1: Comparison of Canadian Meat and Poultry Inspection Data for 1988 and 1989

Data categories	1988	1989
Weight of product offered for entry into U.S. (in millions of pounds)	680	693
Total lots offered for entry into U.S.[a]	61,254	26,629
Lots inspected for a product examination	13,466	4,896
Ratio of lots assigned a product examination to total lots	1:4.5	1:5.4
Total lots failing a product examination	129	241
Percent of lots inspected failing a product examination	1	5

[a]A lot is made up of products produced by one plant that are similarly packaged and processed. A truckload can include single or multiple lots. In 1989 FSIS broadened its definition of a "lot" by grouping similar products together into single, "generic" lots, thereby eliminating inspections on many small lots of similar products.

Source: Data obtained from FSIS' Automated Import Information System.

Table III.2: Analysis of Canadian Lots Failing Product Examinations in 1989

Data categories	Number inspected	Number rejected	Percent rejected
Lots assigned a product examination on the basis of countrywide random selection	3,030	90	3
Lots from specific plants inspected because of prior product examination failures	1,866	151	8

Source: Data obtained from FSIS' Automated Import Information System.

Twenty-one, or almost 8 percent of 271 randomly selected shipments failed at the Pembina, North Dakota, port of entry, a rate about three times as high as the average rate of six other ports of entry and twice as high as the port of entry with the next highest rate, according to our analysis of AIIS data of the seven border ports of entry.[1] Agriculture Canada officials have expressed concern about the high failure rate at

[1]The private import inspection facilities are generally located within a few miles of the ports of entry along the U.S.-Canadian border.

Pembina and reported to FSIS that reinspection of refused shipments revealed no deficiencies.

FSIS cannot explain why rejection rates increased in 1989 or whether the rates were within acceptable ranges. FSIS has not analyzed the reasons why the rejection rate increased from 1988 to 1989. According to a FSIS' analysis of the 3,030 random inspections performed in 1989, rejections varied by the quality of the producing plant and by product category. In an April 1990 paper, Reinspection of Canadian Product Presented for Import Into the United States During 1989, FSIS reported that ratings of Canadian plants were related to the rejection of lots: Higher rated plants had lower rejection rates. Agriculture Canada rates its plants on a five-point scale in descending order of excellence —AAA, AA, A, B, C. FSIS' analysis found that the A-and B-rated plants had rejection rates (3.9 and 3.7 percent) about twice those of the AAA- and AA-rated plants (1.7 and 2.2 percent). C plants had relatively few product examinations performed on their product; none of which failed. The FSIS paper also found that product categories, such as boneless manufacturing meat and headmeat, had significantly higher rejection rates than other product categories, such as wholesale meat cuts. For example, 3 of 18 lots of headmeat were rejected—a 16.7-percent rejection rate.

However, the FSIS paper did not comment on the meaning of any of the reported rates for the import inspection program. For example, the paper did not comment on whether the higher rates for the lower rated plants and for some product categories were acceptable or not.

FSIS Uses Rejection Data to Monitor Performance of Individual Plants

FSIS officials have not focused attention on the higher rejection rates in 1989 because their management approach is directed towards ensuring acceptable performance from individual foreign plants, not towards evaluating changes in a country's overall rejection rate.

Generally, FSIS does not use a country's overall rejection rates on inspection failures to manage its import inspection program. It does not have criteria or a standard rate for what is an acceptable level of rejection for Canada, nor does it have threshold or target rates that trigger action when rejections rise to a given level. FSIS does not have standard or target rejection rates for imported product because it does not maintain

data on rejection rates for domestic meat and poultry.[2] Rather, FSIS uses rejection data primarily to monitor and react to the performance of individual plants. Where it finds a problem, FSIS responds by intensifying the level of inspection for subsequent shipments from that plant. FSIS officials believe that this approach will force the plant to either improve or stop exporting to the United States.

Since import inspections have been generally directed at monitoring individual plant performance, FSIS maintains that overall rejection rates have little meaning for a country as a whole. FSIS officials pointed out that the 3,000-countrywide sampling plan applied to Canada in 1989 offers FSIS its first opportunity to collect statistically sound data on a country's overall rejection rate. However, the officials also noted that they would need several years' data using this new sampling approach before they could make any meaningful analyses of changes in rejection rates from year to year. If the countrywide sampling approach proves useful, FSIS said it would consider applying it to other countries. However, with the recent U.S.-Canada agreement to conduct an experiment eliminating all import inspections, the issue of FSIS' sampling approach for Canadian product may be moot.

Reasons for Higher Rejection Rates Are Unclear

It is not clear why the rejection rate increased in 1989 and Pembina had a high rejection rate. It was difficult to analyze 1989 rejection rates for several reasons. First, overall rejection rates for 1989 and prior years cannot be directly compared because many changes were made to Canadian import inspection procedures in 1989. For example, in 1989, the 3,030 inspections performed were randomly assigned by the AIIS for Canada as a whole without regard to individual plant performance. In contrast, the 13,466 inspections in 1988 were assigned on the basis of individual plant performance, with plants failing inspections receiving more frequent inspections.

Second, even with the different procedures, rejection rates for 1989 could be compared with prior years if FSIS calculated sampling errors for

[2]Until FSIS installed its nationwide, computerized Performance-Based Inspection System in 1989, it did not have the capability to collect national data on inspection results. FSIS officials said that they are now beginning to study ways to use the data from this system to improve both the domestic and import inspection programs.

rejection rates.[3] Sampling errors could help FSIS determine whether increased rejection rates are due to a random chance or whether product quality has actually declined. For example, if the sampling error was plus or minus 1 percent, an increase in the rejection rate from 2 percent to 3 percent could be explained by random chance. However, FSIS has not calculated confidence intervals to reflect the degree of sampling error in rejection rates. FSIS explained that the performance-based sampling approach used in past years was directed at ensuring quality product from individual plants, not at determining a country's overall rejection rate. FSIS believes that going back to past years to calculate confidence intervals now would be complicated and not worth the effort required. However, FSIS' statistician said that calculating the sampling error for the 3,000 countrywide, random inspections taken in 1989 was much more practical. He estimated that the sampling error for the 3,000 inspections would be less than plus or minus 1 percent.

Third, as noted previously, FSIS has no criteria or standards for what it considers an acceptable rejection rate. Although the rejection rate of U.S. product inspected domestically could be a reasonable standard for assessing the product of other countries, FSIS does not collect such data. Without any standard for what is an acceptable quality level for imported product, FSIS does not know whether the Canadian countrywide and Pembina rejection rates reported during 1989 are within acceptable ranges.

For these reasons, neither we nor FSIS could explain the increased rejection rate in 1989 and the high rate at Pembina with certainty. However, our analysis and discussions with FSIS officials suggest several possible explanations. For example, FSIS inspectors are not uniformly performing product examinations. In other words, some inspectors may reject more product because they are more conscientious, thorough, or experienced than other inspectors. Data for 1989 show that the rejection rate of FSIS import inspectors performing at least 25 random product examinations varied from 0 percent to 9 percent, with 9 percent the rejection rate for the inspector who performed most of the product examinations at Pembina. FSIS contends, however, on the basis of a special study, that its import inspectors are performing inspections uniformly. FSIS suggests instead that some Canadian plants are shipping more product through Pembina in 1989 that cannot pass a product examination.

[3]An inspection or quality control system is generally based on statistical sampling because testing all lots of a product would be inefficient and costly. According to standard statistical sampling theory, an import inspection system should be able to estimate the rejection rate along with the sampling error associated with that rejection rate.

Related explanations include differences in product quality among plants and differences in product quality in the same plant over time. An additional explanation offered by FSIS, as mentioned earlier, is that comparisons between 1988 and 1989 are difficult, if not impossible, given the many changes to inspection procedures made in 1989.

Objectives, Scope, and Methodology

Our objective was to provide answers to a series of questions pertaining to four areas of U.S. and Canadian import meat inspection: equivalency determination, inspection procedures, rejection rates, and treatment of American plants exporting to Canada. Specifically, we addressed the following questions:

- Equivalency determination. What process has FSIS followed to determine that Canada's inspection system is equal to the U.S. inspection system?
- Inspection procedures. How do the current streamlined inspection procedures for Canada differ from procedures in 1988? What controls does FSIS have to ensure that the current sampling procedures are properly performed by Canadian inspectors? Do the current procedures protect against the shipment of contraband or contaminated meat?
- Rejection rates. How does the rejection rate under the system implemented on January 5, 1989, compare with the rejection rate under the previous system? Do the rejection rates reported in 1989 vary significantly by port of entry? If there are significant differences in rejection rates, is there any apparent explanation? How does FSIS compute rejection rates for imported product? How does FSIS use rejection rates to manage its import inspection program?
- Treatment of American plants. Has Canada instituted a similar streamlined inspection system for American meat being exported to Canada? If so, is this system experiencing any problems? Are American plants exporting to Canada basically satisfied that they are receiving satisfactory treatment under the Canadian import inspection system?

In addition, we were asked to comment on, on the basis of our field work, what we believe are the major issues that FSIS should address in its rulemaking proceeding to eliminate import inspection of Canadian meat.

To learn about FSIS' process for determining the equivalency of the Canadian inspection system, we reviewed FSIS' files for Canada; prior reports by GAO and USDA's Office of Inspector General, which included evaluations of the equivalency review process; and discussed the equivalency process with officials from FSIS' International Programs office.

To evaluate FSIS' 1989 streamlined inspection procedures for Canadian meat and compare them with 1988 procedures, we reviewed regulations, instructions, and procedures governing FSIS' meat inspection activities

for 1988 and 1989. To better understand how the 1989 import inspection procedures for Canadian meat differed from 1988 and from procedures followed for all other countries, we made field visits to two FSIS field offices in Detroit, Michigan, and Tacoma, Washington, and U.S. Customs ports of entry and four border inspection facilities at Detroit and Blaine, Washington. We also observed several inspections performed by FSIS import inspectors on meat from Canada and two other countries.

With respect to rejection rates, we obtained data from the Automated Import Information System, a computerized system that centralizes inspection and rejection data from U.S. ports. Because our analysis of computer-processed rejection data was important to accomplishing our review objectives, we tested the reliability of these data for 1989 by comparing the computer-processed data with paper source documents, including field office Refused Entry Logs, health certificates, and inspection results forms. Our tests found that generally inspection and rejection data were reliable, except for data on the weight of rejected shipments. We found rejected weight data to be inaccurate because of inadequate software changes made to the computer system to reflect changes made to Canadian inspection procedures during 1989. FSIS has begun making additional software changes to correct this problem. The implementation of the changes began in January 1990.

To determine whether Canada has instituted similar streamlined inspection procedures for American meat, we reviewed Agriculture Canada's import inspection procedures and discussed them with Agriculture Canada and FSIS meat inspection officials. We also contacted 25 major U.S. meat and poultry exporters to Canada to obtain comments on their experience with Canadian inspection procedures in 1989.

We also discussed various aspects of FSIS' import inspection program with FSIS' import inspectors, Canadian inspectors, border inspection facility owners, U.S. Customs headquarters and field office officials and inspectors, the American Meat Institute, the Canadian Meat Council, USDA's Office of Inspector General and Office of the General Counsel, and USDA's Assistant Secretary for Marketing and Inspection Services.

We conducted our work from July 1989 to March 1990, primarily at FSIS headquarters in Washington, D.C. Our review was performed in accordance with generally accepted government auditing standards. Our examination of the adequacy of internal controls and compliance with applicable laws and regulations was performed to the extent necessary to answer the questions asked by the congressional requesters. Our

examination of internal controls included a review of USDA's 1988 and 1989 reports to the Congress on USDA's evaluation of its management controls and financial management systems, as required by the Federal Managers' Financial Integrity Act.

We discussed the factual information in this report with FSIS officials during the course of our work and have incorporated their views where appropriate. However, as your offices requested, we did not obtain official agency comments on this report.

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