

1891/7

115938

BY THE COMPTROLLER GENERAL

# Report To The Congress

OF THE UNITED STATES

## Improving Sanitation And Federal Inspection At Slaughter Plants: How To Get Better Results For The Inspection Dollar

The Department of Agriculture's Food Safety and Inspection Service inspects federally approved meat and poultry slaughter plants to see that they are sanitary and that they produce wholesome, unadulterated products. GAO made surprise visits to 62 randomly selected plants in six States to test the effectiveness of the inspection program.



115938

Service supervisors accompanying GAO rated 26 percent of the 62 plants--27 percent of the meat plants and 24 percent of the poultry plants--as unacceptable in one or more of six basic program requirements and noted numerous deficiencies not severe enough to warrant unacceptable ratings.

GAO makes several recommendations to strengthen enforcement of inspection program requirements, assure that plant managers carry out their responsibility to operate and maintain sanitary plants, and help ensure the most efficient use of Federal inspection resources.



GED-81-118  
JULY 30, 1981

017710 / 115938

Request for copies of GAO reports should be sent to:

U.S. General Accounting Office  
Document Handling and Information  
Services Facility  
P.O. Box 6015  
Gaithersburg, Md. 20760

Telephone (202) 275-6241

The first five copies of individual reports are free of charge. Additional copies of bound audit reports are \$3.25 each. Additional copies of unbound report (i.e., letter reports) and most other publications are \$1.00 each. There will be a 25% discount on all orders for 100 or more copies mailed to a single address. Sales orders must be prepaid on a cash, check, or money order basis. Check should be made out to the "Superintendent of Documents".



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON D.C. 20548

B-203654

To the President of the Senate and the  
Speaker of the House of Representatives

This report discusses the Department of Agriculture's administration of the Federal Meat Inspection Act and the Poultry Products Inspection Act at meat and poultry slaughter plants that do business in interstate commerce. It identifies certain areas in which the Department could improve inspection activities to assure that slaughter plant operations are sanitary and that meat and poultry products are wholesome, unadulterated, and properly marked. In particular, this report addresses needed improvements in sanitation, pest control, plant water systems, product acceptance testing programs, ante mortem and post mortem examinations, and controls over condemned and inedible materials. This report also discusses the impact of inspector shortages on the overall inspection program.

We are sending copies of this report to the Director, Office of Management and Budget, and to the Secretary of Agriculture.

*Milton J. Fowler*

Acting Comptroller General  
of the United States



D I G E S T

Inspectors from the U.S. Department of Agriculture's Food Safety and Inspection Service monitor meat and poultry slaughter plants doing business in interstate commerce to make sure that plant operations are sanitary and that products are wholesome, unadulterated, and properly marked.

GAO made this review to evaluate how well the inspectors were carrying out their responsibilities, whether plant managers were complying with inspection program requirements, and how efficiently the Department was using its inspection resources.

Assisted by Service supervisors, GAO made unannounced visits to 62 randomly selected meat and poultry slaughter plants in six States to evaluate plant and inspection staff compliance with inspection program requirements. Sixteen, or 26 percent, of the plants--27 percent of the meat plants and 24 percent of the poultry plants--were not in compliance with one or more of the six basic inspection program requirements. (See pp. 5 and 7.)

Eleven plants were unacceptable in sanitation, 7 in pest control, 4 in controls over condemned and inedible materials, 2 in ante mortem and post mortem inspection, and 1 in water supply potability. All plants were acceptable in sewage and waste disposal. (See p. 9.)

Based on the results at the 62 plants, GAO estimates that 44, or 18.4 percent, of the 238 plants sampled in the six States--181 meat plants in four States and 57 poultry plants in two States--do not acceptably comply with one or more inspection program requirements. Further, 24.9 percent of the meat and poultry slaughtered in those 238 plants comes from plants unacceptable in one or more requirements. (See p. 7.)

The high incidence of unacceptable ratings and the large number of deficiencies found at plants not bad enough to warrant unacceptable

ratings show that both plant managers and inspection program staff are not fully meeting their responsibilities. (See p. 9.)

#### SANITATION PROBLEMS

Of the 62 randomly selected plants, 18 percent received unacceptable sanitation ratings. The majority of the remaining plants had numerous sanitation deficiencies that the reviewers did not consider serious enough to warrant unacceptable ratings but which indicated that inspectors and plant managers were not fully carrying out their responsibilities. In some cases plant managers appeared to rely extensively on inspectors to identify sanitation problems rather than having their own controls over sanitation.

Some of the sanitation deficiencies noted were

- condensation dripping on, and thereby contaminating, carcasses;
- very dirty overhead structures and equipment;
- dead flies on work surfaces that meat contacts; and
- meat dragging through dirty drip trays.

In some cases, the deficiencies were due to inadequate cleanup from the prior day's work. In other cases, the deficiencies were more long term. (See pp. 11 to 16.)

#### PEST CONTROL

The seven plants with unacceptable pest control programs had rodent, insect, or insecticide problems. Rodent problems existed in storage rooms and buildings and in maintenance areas. Some plants had fly or other insect problems inside and outside. One plant had inadequate controls to assure that insecticides were used properly. (See p. 17.)

#### WATER SYSTEM PROBLEMS

Only one plant received an unacceptable water supply rating. However, 39, or 63 percent, of the 62 random sample plants had water system deficiencies that could result in contamination of the plants' potable water supplies. These deficiencies included improper cross-connections

between potable and nonpotable waterlines and inadequate back-siphonage protection. (See pp. 21 and 22.)

#### ACCEPTANCE TESTING PROGRAMS OF QUESTIONABLE VALUE

The Service's acceptance testing programs for cattle and poultry carcasses are ineffective because they are not being conducted as designed. The programs were designed as statistically valid random sampling programs, whereby sample results would be indicative of slaughter dressing defects (such as grease, hair, or bruises) of the universe sampled. However, inspection and plant personnel carrying out the programs invalidated them by substantially deviating from the prescribed sampling plans and methods. (See pp. 24 to 29.)

#### ANTE MORTEM AND POST MORTEM INSPECTIONS AND CONTROLS OVER CONDEMNED AND INEDIBLE PRODUCTS

Ante mortem and post mortem inspections and controls to assure that condemned and inedible products are not sold as edible products were generally adequate. However, some deficiencies existed in plant facilities and equipment and in inspection procedures. (See pp. 31 to 40.)

Service inspectors devote a significant portion of post mortem inspection time to examining meat carcasses for dressing defects (the presence of contamination or unwholesome or inedible parts) that plants failed to remove. The plants, not the inspectors, should be responsible for checking for dressing defects. (See pp. 37 and 38.)

#### INSPECTION STAFF SHORTAGES

During 1980 from 6 percent to 10 percent of the Service's slaughter inspection positions were unfilled. As of February 21, 1981, the Service had a shortage of about 7 percent among its authorized 5,995 slaughter plant inspectors. The shortages were due to hiring and budget restrictions.

Because of these shortages, certain inspection responsibilities had been neglected, including supervising line inspectors, performing

acceptance tests, monitoring plant conditions and operations, and inspecting processing departments. (See pp. 42 to 45.)

#### BETTER MONITORING NEEDED

The deficiencies at the randomly selected slaughter plants show that Service supervisors need to better monitor plant and inspection staff compliance with program requirements. One problem is the lack of adequate guidance to supervisors as to what constitutes an acceptable level of compliance. (See pp. 47 to 50.)

#### RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

To better assure that meat and poultry plants produce only wholesome and unadulterated products, the Secretary should direct the Service, among other things, to:

- Strengthen its enforcement of sanitation requirements. (See p. 18.)
- Require plant managers to fulfill their responsibilities for operating and maintaining plants in a sanitary manner through a system of financial disincentives. Imposing some disincentives, such as levying fines, would require the Secretary to obtain legislative authority. (See pp. 18 and 19.)
- Initiate a special one-time effort to identify and correct water system deficiencies and take action to prevent recurrences. (See p. 23.)
- Revise, and require that Service inspection staff follow, procedures governing the quality acceptance testing program. (See p. 30.)
- Make improvements governing inspection of edible and inedible meat and poultry products. (See pp. 40 and 41.)
- Take actions to assure more effective monitoring of meat and poultry inspection activity. (See p. 51.)

AGENCY COMMENTS

Department of Agriculture officials who provided oral comments on a draft of this report expressed concern about whether a system of financial disincentives for plants not complying with inspection requirements could be equitably administered and whether such a system could be effective. GAO believes that the system could be equitably administered if done at a high level, such as by regional directors, and that it could provide an effective enforcement tool, short of withdrawing inspection, to deal with plants having serious or regular sanitation problems. (See p. 19.)



C o n t e n t s

		<u>Page</u>
DIGEST		i
CHAPTER		
1	INTRODUCTION	1
	FSIS organization	2
	Amount of meat and poultry inspected	2
	Inspection budget	3
	Previous GAO reports	3
	Objectives, scope, and methodology	4
2	SLAUGHTER PLANT COMPLIANCE WITH INSPECTION REQUIREMENTS--AN OVERVIEW	7
	Compliance rating categories	7
	Ratings given to plants	8
	Conclusions	10
3	IMPROVEMENTS NEEDED IN SANITATION AND PEST CONTROL	11
	Sanitation unacceptable in some plants	11
	Most plants rated acceptable also had numerous sanitation deficiencies	14
	Excessive plant reliance on in- spectors to police sanitation	15
	Pest control problems	17
	Conclusions	17
	Recommendations to the Secretary of Agriculture	18
	Agency comments and our evaluation	19
4	MEAT AND POULTRY PLANT WATER SYSTEMS NEED MORE THOROUGH MONITORING	20
	FSIS approval and inspection of water systems	20
	Most plants have water system problems	21
	Plumbing changes should be approved by inspectors	22
	Conclusions	22
	Recommendations to the Secretary of Agriculture	23
5	ACCEPTANCE TESTING PROGRAMS NEED IMPROVEMENT	24
	Description of testing programs	24
	Test results unreliable	25
	Are acceptance criteria too liberal?	27
	Conclusions	29

		<u>Page</u>
CHAPTER		
5	Recommendations to the Secretary of Agriculture	30
	Agency comments and our evaluation	30
6	SOME IMPROVEMENTS NEEDED IN ANTE MORTEM AND POST MORTEM EXAMINATIONS AND CON- DEMNED AND INEDIBLE MATERIAL CONTROLS	31
	Ante mortem examinations	31
	Post mortem examinations	33
	Plants should assume responsibility for examining meat carcasses for dressing defects	37
	Guidance and documentation needed for reinspecting edible meat byproducts	38
	Condemned and inedible material controls	39
	Conclusions	40
	Recommendations to the Secretary of Agriculture	40
7	STAFF SHORTAGES LIMIT INSPECTION PROGRAM EFFECTIVENESS	42
	Slaughter inspection vacancy rate	42
	Inadequate supervision	43
	Inadequate monitoring of plant operations	43
	Morale problems	44
	Inspectors spend time traveling rather than inspecting	44
	Intermittent employees used to fill vacancies	44
	Some alternatives	45
	Conclusions	45
8	NEED FOR MORE EFFECTIVE MONITORING OF SLAUGHTER PLANT INSPECTION PROGRAMS	47
	Ineffective monitoring	47
	Supervisors need uniform plant rating criteria	49
	Conclusions	50
	Recommendations to the Secretary of Agriculture	51
APPENDIX		
I	Results of our analysis of slaughter plants' compliance with inspection requirements	52

APPENDIX

II	Random sample plants we visited that were unacceptable on one or more of the basic requirements	53
III	Random sample plants we visited that were acceptable on the basic requirements	56
IV	Plants we visited because FSIS had designated them as problem plants	58
V	Defects scored in testing sample cattle carcasses for acceptability	59
VI	Defects scored in testing sample poultry carcasses for acceptability	60

ABBREVIATIONS

FSIS	Food Safety and Inspection Service
GAO	General Accounting Office
USDA	U.S. Department of Agriculture

## GLOSSARY OF TERMS

Chillers	Large, cold water tanks in which dressed poultry is immersed until it reaches 40 degrees.
Dressing defects	The presence of contamination or unwholesome or inedible parts which should have been removed in the slaughtering process; for example, grease, fecal material, hair, feathers, bruises, and lungs.
Edible meat byproducts	Edible parts of livestock besides the carcass meat, such as cheek meat, lips, brain, tongue, liver, stomach, and kidney.
Eviscerate	Remove the viscera from the body cavity.
Offal	The viscera and trimmings removed in dressing a butchered animal.
Palpate	Examine by touch.
Potable	Suitable for drinking.
Rails, chains, rollers, and shackles	Parts of overhead equipment used to suspend and move carcass along the slaughter and inspection line.
Trolley return	System which transports dirty shackles to the wash tank and clean ones back to slaughter area.
Viscera	Internal organs such as heart, liver, and intestines.

## CHAPTER 1

### INTRODUCTION

The Federal Meat Inspection Act (21 U.S.C. 601 et seq.) and the Poultry Products Inspection Act (21 U.S.C. 451 et seq.) require that livestock and poultry slaughtered at plants that do business in interstate or foreign commerce be federally inspected. Federal inspection is also required at slaughter plants that do intrastate business in States not having their own inspection programs. The acts require that federally inspected plants operate in a sanitary manner and that the products they sell be wholesome, unadulterated, and properly labeled. Plant managers are primarily responsible for meeting these requirements.

To do business, slaughter plants subject to the acts must first receive approval from the Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA). 1/ FSIS approves a plant for Federal inspection after determining that the plant's facilities, equipment, and operating procedures meet inspection program requirements.

After approval, FSIS assigns inspectors to the plant. The inspectors examine the animals before they are slaughtered--ante mortem--to identify any apparent problems. The inspectors condemn any animals found unfit for human consumption and allow the plant to slaughter the rest. Inspectors then examine each carcass post mortem for evidence of disease, adulteration, or other indications of unwholesomeness. The inspectors reject for human consumption any unwholesome or adulterated product. The product that passes inspection is marked or labeled to show that USDA has inspected and passed it. The label also shows the slaughter plant's inspection number.

The inspectors also make daily preoperative sanitation inspections and monitor plant operations to assure that management fulfills its obligation to operate and maintain the plant in accordance with program regulations. The inspectors can reject the use of any facilities or equipment not in compliance. Also, FSIS may withdraw or suspend inspection in cases where unsanitary conditions result in an adulterated product, the plant fails to destroy condemned products, or plant personnel assault

---

1/Various agencies in USDA have been responsible for meat and poultry inspection activities over the years. These have included the Consumer and Marketing Service established in Feb. 1965; the Animal and Plant Health Inspection Service established in Apr. 1972; the Food Safety and Quality Service established in Mar. 1977; and effective June 17, 1981, FSIS. Although the Food Safety and Quality Service was the agency's name during the period we reviewed, we will refer to the agency in this report by its current name, FSIS.

or intimidate inspection program personnel. Because plants cannot operate without inspection, withdrawals of inspection are severe actions which are costly to the plants. FSIS rarely withdraws inspection, but it frequently suspends inspection for short periods.

#### FSIS ORGANIZATION

FSIS includes a meat and poultry inspection organization and a compliance program organization. The meat and poultry inspection organization has basic responsibility for carrying out the inspection program both in slaughter plants and in plants that further process meat and poultry products. As of February 9, 1981, the inspection organization included a headquarters office, 5 regional offices, and 27 area offices. Each area is divided into several circuits, each of which has a circuit supervisor responsible for overseeing the inspection program in a number of plants. The circuit supervisors or other supervisors not directly engaged in inspection activities visit plants at least monthly to evaluate both plant and inspection staff compliance with inspection program policies and requirements. The supervisors also make annual indepth reviews at each plant.

The size of the inspection staff at each slaughter plant depends on the slaughter volume and can range from one part-time inspector to several full-time inspectors. A veterinary medical officer either heads each inspection staff or, in the case of smaller plants, is available to the inspection staff. In February 1981 the inspection organization was authorized about 6,000 inspectors in about 1,930 slaughter plants.

The compliance program organization is responsible for a centralized review of FSIS activities. Its meat and poultry inspection program coverage includes in-plant reviews by its Program Review Branch. That Branch, which conducted 3,600 such reviews in 1980, assigns each plant reviewed a numerical rating based on the likelihood that it is producing adulterated or misbranded products. The Branch reviews the worst (category 1) plants semiannually and the best (category 4) plants every 3 years or on a sampling basis. The Branch designates plants that repeatedly receive category 1 or 2 ratings as problem or chronic problem plants. As of March 1, 1981, 40 plants were so designated.

#### AMOUNT OF MEAT AND POULTRY INSPECTED

The following table shows the increasing amounts of meat and poultry FSIS has inspected.

	Year (note a)				
	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
	----- (millions) -----				
Meat:					
Carcasses	121	117	117	122	129
Pounds (note b)	58,639	63,407	66,168	68,268	70,110
Poultry:					
Carcasses	3,589	3,681	3,874	4,260	4,313
Pounds (note b)	22,759	24,900	27,770	30,436	34,614

a/Calendar years except 1980, when FSIS changed to fiscal year reporting.

b/Includes inspection of meat, poultry, and other ingredients processed into food products.

FSIS inspectors accepted as fit for human consumption 99.6 and 98.7 percent of the meat and poultry carcasses, respectively, presented for slaughter in 1979.

#### INSPECTION BUDGET

FSIS' budget for fiscal year 1981 is \$308.3 million, including \$159.5 million for Federal inspection of slaughter operations. The estimated 1982 budget for slaughter inspection is \$165.9 million. The compliance program organization's budgets for fiscal years 1981 and 1982 are \$7 million and \$7.5 million (estimated), respectively.

#### PREVIOUS GAO REPORTS

We have issued several reports on the meat and poultry inspection program. Those reports discussed sanitation in federally and State-inspected plants and ways to improve program administration. We last reported on the adequacy of Federal inspection at meat slaughter plants in 1970 and at poultry slaughter plants in 1971. 1/ In those reports, which covered both slaughter and processing plants, we said that many plants were not meeting Federal sanitation standards. Since then, we also reported on the adequacy of State inspection programs, 2/

1/"Consumer and Marketing Service's Enforcement of Federal Sanitation Standards at Poultry Plants Continues to Be Weak," B-163450, Nov. 16, 1971, and "Weak Enforcement of Federal Sanitation Standards at Meat Plants by the Consumer and Marketing Service," B-163450, June 24, 1970.

2/"Consumer Protection Would Be Increased by Improving the Administration of Intrastate Meat Plant Inspection Programs," B-163450, Nov. 2, 1973.

the adequacy of inspection at plants inspected under Federal-State cooperative agreements, 1/ and the adequacy of inspection at meat and poultry processing plants. 2/ In each of those reports, we said that some plants did not meet inspection program requirements. In an April 1981 report, 3/ we said that USDA could realize substantial cost savings if it could move to a system of periodic, unannounced inspections at processing plants and if processors were required to implement quality control systems, as we had recommended in the December 1977 report. We said that more efficient methods of inspecting processing plants were urgently needed to help curb rapidly escalating costs, to meet vastly expanded workloads, and to fill slaughter inspector vacancies. This latter situation is further discussed in chapter 7 of this report.

### OBJECTIVES, SCOPE, AND METHODOLOGY

We reviewed the inspection program at meat and poultry slaughter plants to (1) evaluate whether meat and poultry inspection personnel were adequately carrying out their responsibilities under the Federal inspection program, (2) evaluate whether slaughter plant managers were adequately complying with inspection program requirements, and (3) identify needed improvements to assure that slaughter plants produce only wholesome and unadulterated products and that USDA's inspection resources are used most efficiently.

Because we recently reported on our review of processing plants, we limited the scope of this review to slaughter plants. In cases where a slaughter plant also had processing operations, we reviewed only the slaughter-related operations.

We reviewed legislation, regulations, and program instructions on the inspection program. We examined records and interviewed officials at USDA headquarters, Washington, D.C., and at the following FSIS offices:

North Central Regional Office, Des Moines, Iowa  
Program Review Branch, Lawrence, Kans.  
Area offices: Ames, Iowa                      Springfield, Ill.  
                  Lincoln, Nebr.                    Athens, Ga.  
                  Topeka, Kans.                      Springdale, Ark.

---

1/"Selected Aspects of the Administration of the Meat and Poultry Inspection Program," CED-76-140, Aug. 25, 1976.

2/"A Better Way for the Department of Agriculture To Inspect Meat and Poultry Processing Plants," CED-78-11, Dec. 9, 1977.

3/"Department of Agriculture Should Have More Authority To Assess User Charges," CED-81-49, Apr. 16, 1981.

Our examination of records and our interviews at the headquarters, regional, and area offices covered various aspects of the inspection program, including staffing, monitoring, and general program administration. Our work at the Program Review Branch covered its in-plant reviews.

We made unannounced visits to 40 swine and cattle slaughter plants in Illinois, Iowa, Kansas, and Nebraska and 26 poultry slaughter plants in Arkansas and Georgia. With the assistance of FSIS circuit supervisors, we examined plant sanitation conditions and operating and inspection procedures for compliance with inspection program requirements. We examined inspection records, observed ante mortem and post mortem inspection procedures, and interviewed inspection staff and plant officials. The FSIS circuit supervisors, who, except at two plants, were from outside the meat and poultry inspection organization's region in which the plant inspected was located, prepared detailed reports on the results of the indepth reviews. We conducted the plant reviews from June 1980 through January 1981.

Although we comment in this report on the general subjectiveness and lack of consistency by FSIS inspectors in carrying out their normal inspections (see ch. 8), we assured ourselves of less subjectivity and more consistency by accompanying the FSIS inspectors, having the inspectors use a specific and detailed checklist during the inspections, and discussing each deficiency found with plant management.

We selected the States primarily on the basis of their large slaughter volumes and to provide some coverage of plants in three of the five meat and poultry inspection organization's regions. Iowa, Nebraska, Illinois, and Kansas were first, second, fourth, and fifth, respectively, in red meat slaughtered in 1979. Arkansas was first and Georgia second in poultry slaughtered.

The universe of slaughter plants in the six States--obtained from a USDA listing of 1979 slaughter activity at federally inspected plants--consisted of 181 meat plants in four States and 57 poultry plants in two other States. From this universe we initially selected on a statistically random basis 62 meat plants and 37 poultry plants. To assure that high-volume plants had a proportionately greater chance of being selected than low-volume plants, we gave each plant a weighting factor based on its slaughter volume. For example, a plant with 10 times the slaughter volume as another plant had 10 times the chance of being selected in our statistically random sample. The results of our review are projectable to the six-State universe and not to the inspection program nationwide.

We selected for review the first 37 of the 62 randomly selected meat plants and the first 25 of the 37 randomly selected poultry plants. In some cases a selected plant no longer slaughtered so we selected as a replacement the next plant in

the random sequence listing. The selected plants included one plant that FSIS had designated as a problem plant. We also reviewed the other four slaughter plants in the six States that FSIS, as of September 1980, had designated as problem or chronic problem plants. Although we mention these other four problem plants at various places in this report, our review results mainly refer to the 62 plants in our random sample.

The 37 randomly selected meat plants we reviewed slaughtered 55.6 percent of the meat slaughtered in federally inspected plants in the four meat States sampled. The 25 randomly selected poultry plants slaughtered 51.1 percent of the poultry slaughtered in federally inspected plants in the two poultry States sampled. The 62 plants accounted for 22.4 percent and 14.4 percent of the meat and poultry, respectively, slaughtered by all federally inspected plants in 1979.

We obtained oral comments from USDA officials on a draft of this report. Except for our recommendation dealing with a system of financial disincentives, they did not comment on our recommendations. Their major comments are discussed on pages 19 and 30.

## CHAPTER 2

### SLAUGHTER PLANT COMPLIANCE WITH INSPECTION REQUIREMENTS--AN OVERVIEW

Of the 2 meat and poultry slaughter plants in our random sample, 16, or 26 percent, were rated as not acceptably complying with one or more Federal inspection program requirements. The 16 plants included 10, or 27 percent, of the meat plants and 6, or 24 percent, of the poultry plants sampled. Based on the findings on our sample, we estimate that 18.4 percent, or 44, of the 238 meat and poultry slaughter plants in the review universe--181 meat plants in four States and 57 poultry plants in two States--were not acceptably complying with one or more inspection program requirements and that 24.9 percent of the meat and poultry slaughtered in those 238 plants comes from plants that are not meeting one or more requirements. 1/

#### COMPLIANCE RATING CATEGORIES

Each year at each federally inspected slaughter plant, an FSIS circuit supervisor makes an indepth evaluation of how well the plant complies with inspection program requirements. The supervisor records the evaluation results on a rating form, showing whether the plant is acceptable overall. This is the supervisor's judgment on whether the plant as a whole is acceptably complying with inspection program requirements. The supervisor also shows whether the plant meets the following six basic requirements or rating categories for slaughter operations.

--Sanitation. Operational sanitation must permit production and handling of wholesome products without undue exposure to contaminants. Facilities and equipment must be properly cleaned at regular intervals. All personnel must practice good personal hygiene, and management must provide necessary equipment and materials for hygiene. Reviewers should consider the significance of individual deficiencies in arriving at a judgment of overall sanitation of the plant.

--Pest control. The plant's pest control program must be capable of preventing or eliminating product contamination by pests. Plant management must make reasonable efforts to prevent entry of rodents, insects, or animals into areas where products are handled, processed, or stored.

---

1/See app. I for our table of estimates and their variances at the 95-percent confidence level.

- Water supply. Controls must be adequate to assure that water used in areas where edible products are slaughtered, eviscerated, dressed, processed, handled, or stored is potable.
- Ante mortem and post mortem inspection. Facilities and procedures for performing ante mortem and post mortem examinations must be adequate. Inspectors are to conduct these examinations in a manner that will detect and remove from human food channels any unwholesome carcass, part, or organ.
- Condemned and inedible material control. Controls and procedures must be adequate to prevent condemned and inedible materials from entering human food channels.
- Sewage and waste material disposal. The plant must have adequate onsite handling and State or local government approval of disposal systems.

#### RATINGS GIVEN TO PLANTS

The FSIS circuit supervisors assigned to review the plants with us rated each plant acceptable or unacceptable overall and in the six rating categories. An acceptable rating does not mean a plant had no deficiencies, but rather that the reviewer did not consider the deficiencies that were found significant enough to warrant an unacceptable rating. Either plant management, the inspection staff, or both, may be responsible for deficiencies, including those causing unacceptable ratings. Management may not have maintained or operated the plant according to FSIS requirements. The inspection staff may not have adequately performed ante mortem and post mortem inspections or enforced the inspection program requirements.

Our FSIS reviewers rated 15 of the 62 randomly selected plants unacceptable in one or more of the rating areas and 2 of the 15 plants unacceptable overall. One additional plant would have been rated unacceptable in one area if the reviewer had rated it on the same basis as the other plants. (See note b, p. 9.) For our review, we considered this plant to have received an unacceptable rating.

Eleven plants were unacceptable in sanitation, 7 in pest control, 4 in condemned and inedible material controls, 2 in ante mortem and post mortem inspection, and 1 in water supply. One plant was unacceptable for three requirements, six for two requirements, and nine for one requirement. All plants were rated acceptable in sewage and waste material disposal.

The FSIS reviewers rated one of the four problem plants unacceptable in sanitation and water supply. The following schedule summarizes the rating results.

### Plant Ratings

	<u>Random sample plants</u>			<u>Problem plants (note a)</u>		
	<u>Meat</u>	<u>Poultry</u>	<u>Total</u>	<u>Meat</u>	<u>Poultry</u>	<u>Total</u>
Sanitation:						
Acceptable	29	22	51	2	1	3
Unacceptable	8	b/ 3	11	1	0	1
Pest control:						
Acceptable	32	23	55	3	1	4
Unacceptable	5	2	7	0	0	0
Water supply:						
Acceptable	37	24	61	2	1	3
Unacceptable	0	1	1	1	0	1
Ante mortem and post mortem inspection:						
Acceptable	36	24	60	3	1	4
Unacceptable	1	1	2	0	0	0
Sewage and waste material control:						
Acceptable	37	25	62	3	1	4
Unacceptable	0	0	0	0	0	0
Condemned and inedible material control:						
Acceptable	34	24	58	3	1	4
Unacceptable	3	1	4	0	0	0
Overall plant:						
Acceptable	36	24	60	3	1	4
Unacceptable	1	1	2	0	0	0

a/The random sample included one problem meat plant, which received unacceptable ratings in sanitation and pest control.

b/Includes one plant the FSIS reviewer said he would have rated unacceptable if the plant had not corrected some deficiencies. We considered sanitation unacceptable because ratings at other plants were based on conditions found, not conditions as corrected.

Based on a statistical analysis of the results of our plant reviews, we estimate that about 25.1 percent of the meat in the four meat States and about 24 percent of the poultry in the two poultry States slaughtered at federally inspected plants comes from plants not acceptably complying with inspection requirements. We also estimate that 18.4 percent of the federally inspected slaughter plants in the sampled universe--181 meat plants in four States and 57 poultry plants in two States--were not acceptably complying with all inspection requirements. This figure includes 23.7 percent of the poultry plants in two States and 16.7 percent of the meat plants in four States. (See app. I.)

Appendixes II through IV list the plants we reviewed and the areas rated unacceptable at each plant. The problems we found in the slaughter plant inspection program, which concern

the responsibilities of both plant managers and inspection program personnel, are discussed in further detail in subsequent chapters.

### CONCLUSIONS

Although most plants we reviewed received acceptable ratings, the extent of unacceptable ratings received indicates a need for FSIS to do more to assure that slaughter plants produce wholesome, unadulterated products. The percent of plants rated unacceptable in one or more of the inspection program requirements shows that some FSIS inspectors and supervisors and slaughter plant managers are not fulfilling their responsibilities under the meat and poultry inspection program.

Our recommendations to correct these problems are included in subsequent chapters.

## CHAPTER 3

### IMPROVEMENTS NEEDED IN SANITATION AND PEST CONTROL

Most of the slaughter plants we reviewed had numerous sanitation problems; at 11 of the 62 randomly selected plants, sanitation was rated unacceptable. The major factors used in rating sanitation are the potential for product contamination and the extent of actual contamination observed. In some cases inspection staff delayed slaughter until the plants corrected the most severe problems. The sanitation deficiencies included flaking paint and rust on overhead structures, fat and other residues on slaughter equipment, dripping condensation, excessive grease on overhead chains, meat dragging through dirty drip pans, and inadequate equipment sanitizing. Some problems, such as dirty overhead structures, scale buildup on equipment, and grease particles falling from production line chains, resulted from relatively long-term neglect by plant managers and inspection staffs in maintaining and enforcing good sanitation. Other problems, such as fat, blood, and meat particles on slaughter equipment, resulted from inadequate cleanup after the prior day's work.

Many plants also had deficiencies in their pest control programs; 7 of the 62 plants were rated as having unacceptable pest control. The problems included inadequate fly and rodent control.

We estimate that about 14.1 percent, or 34, of the 238 slaughter plants in the universe sampled--181 meat plants in four States and 57 poultry plants in two States--were not acceptably complying with FSIS sanitation requirements, and about 8.5 percent, or 20, were not complying with pest control requirements. (See app. I.)

The widespread sanitation and pest control deficiencies can be attributed to inadequate enforcement by inspection personnel and, more importantly, inadequate commitment of plant managers. Although plant management is responsible for producing wholesome products in a clean plant, in many cases plant managers relied extensively on inspectors rather than their own plant supervisors to identify sanitation and pest control problems.

In our opinion, slaughter plant sanitation and pest control improvements are not likely to be made until inspection personnel strengthen their enforcement of FSIS standards and plant managers acknowledge and carry out their responsibilities.

#### SANITATION UNACCEPTABLE IN SOME PLANTS

Sanitation was unacceptable at 11, or 18 percent, of the 62 plants in the random sample. Poor sanitation was more prevalent at meat plants where 8, or 22 percent, of the random sample of 37 meat plants had unacceptable sanitation. Three, or 12 percent, of the 25 random sample poultry plants had unacceptable sanitation.

The table below shows the results of our sanitation reviews by State and is included for information only. We caution the reader that no sound statistical basis exists for using the results of our work in a particular State to project the incidence of unacceptable sanitation within that State. This is because our sample universes were the four meat States collectively, the two poultry States collectively, and the combination of these meat and poultry universes.

<u>State</u>	<u>Type of plants</u>	<u>Number of plants</u>	
		<u>Reviewed</u>	<u>Sanitation unacceptable</u>
Kans.	Meat	7	0
Ill.	Meat	6	2
Iowa	Meat	17	6
Nebr.	Meat	7	0
Ark.	Poultry	15	3
Ga.	Poultry	<u>10</u>	<u>0</u>
Total		<u>62</u>	<u>11</u>

### Sanitation problems

The magnitude of sanitation problems varied at the 11 plants rated unacceptable in this requirement. The unacceptable conditions in eight cases were widespread throughout the plants or were extensive in certain slaughter areas. Unacceptable conditions at the other three plants were fewer in number or existed in more isolated areas but were significant enough to warrant unacceptable sanitation ratings. The number of sanitation deficiencies at the plants rated unacceptable in sanitation ranged from 25 to 68.

We and the FSIS reviewers observed many of the sanitation deficiencies while inspecting facilities and equipment before slaughtering started. FSIS inspectors generally begin sanitation inspections about 1 hour before slaughtering starts.

The following examples illustrate some of the conditions that resulted in unacceptable sanitation ratings.

#### Land O'Lakes, Inc.-Spencer Beef, Oakland, Iowa

This cattle slaughter plant had sanitation problems throughout the slaughter areas. The FSIS reviewer's report listed 52 sanitation deficiencies, which included

- very dirty overhead structures and fixtures in the slaughter area, including lights, fans, beams, service walkways, and trolley return equipment;
- an oil drip over the carcass rail in the shackle return area;

- beef tongues dragging through a dirty drip tray;
- dead flies on various work surfaces that meat products would likely contact;
- inadequately cleaned slaughter equipment, such as a splitting saw, fat table, edible product tubs and pails, and weasand (windpipe) meat table; and
- rust and/or peeling paint in the cooler areas.

Arkansas Poultry Co., Inc., Batesville, Arkansas

Sanitation was unacceptable at this poultry slaughter plant primarily because

- the plant was using contaminated ice,
- considerable fat and slime were on the prechiller, and
- inspection personnel were not routinely checking the cleanliness of the chiller before filling it with water.

Davenport Packing Co., Inc., Milan, Illinois

FSIS rated this cattle slaughter plant unacceptable on sanitation because of numerous sanitation problems observed throughout the slaughter area during our review in December 1980. The FSIS reviewer's report listed 68 sanitation deficiencies, including rusty water in equipment sanitizers, deteriorated floor with standing water, scaling paint on cooler ceiling, and contaminated water dripping on carcass. FSIS had designated this plant as a chronic problem plant in June 1979 because of its history of unacceptable ratings by FSIS' Program Review Branch. In February 1981 FSIS withdrew inspection service at this plant because of continuing unsanitary conditions.

More effective corrective action needed

Revisits to 8 of 12 plants rated as having unacceptable sanitation on the first visit (11 random sample plants and 1 problem plant) showed that 5 plants continued to have major sanitation problems 3 to 17 weeks later. In four of the five cases, the FSIS reviewer rated sanitation unacceptable on the second visit. In the fifth case, the reviewer, who had not made the initial visit, said sanitation was marginal but acceptable. In our opinion, however, sanitation at this plant was no better on the second visit than it was on the first.

After our initial visits, the inspectors-in-charge or circuit supervisors had reported to FSIS area supervisors that many of the deficiencies had been or were scheduled to be corrected. However, our revisits showed that the inspection staffs and their supervisors at the five plants discussed above were ineffective in obtaining sustained compliance with sanitation requirements.

For example, in a revisit to one plant about 4 months after the initial visit, sanitation was again rated unacceptable because the overhead structures were dirty. The inspection staff had reported that this deficiency had been corrected within 1 month after our initial visit. Also, in our followup visit we found many sanitation problems which were not present during our initial visit.

#### MOST PLANTS RATED ACCEPTABLE ALSO HAD NUMEROUS SANITATION DEFICIENCIES

Even though FSIS reviewers rated sanitation acceptable at 51, or 82 percent, of the slaughter plants reviewed, most of these plants had numerous sanitation deficiencies. The sanitation deficiencies that the reviewers did not consider serious enough to warrant unacceptable ratings varied in significance depending on factors such as whether the deficient conditions were in product or nonproduct zones. Some of the deficiencies caused product contamination, others had a contamination potential, and still others had little or no likelihood of product contamination at the time of our review.

We realize it is not reasonable to expect to find no sanitation deficiencies at a slaughter plant. However, considering the many sanitation deficiencies found at most of these plants and the importance of keeping plants clean so that they produce wholesome and unadulterated products, we believe more attention is needed on improving plant sanitation.

#### Types of deficiencies

The sanitation deficiencies found in the 51 plants rated acceptable included flaking paint, rust, and loose insulation on overhead structures; grease accumulation on overhead rails or chains; beading or dripping condensation; and fat, blood, grease, and other residues on slaughter equipment.

In reviewing plants the FSIS circuit supervisors used a checklist to note whether the various sanitation areas were acceptable, had minor variations, or were unacceptable. USDA's Animal and Plant Health Inspection Service used this checklist in plant reviews until April 1972, when it was replaced with a less detailed review form. At the plants where they rated overall sanitation acceptable, the supervisors generally marked all the sanitation areas as acceptable or as having minor variations. In those few cases where they marked areas unacceptable, the supervisors did not consider the problems serious enough to rate overall sanitation unacceptable.

#### Plant examples

The following examples of plants with acceptable, but nevertheless deficient, sanitation illustrate sanitation deficiencies that management and inspection staff should try to prevent.

Land O'Lakes, Inc.-Spencer Beef, Spencer, Iowa

This cattle slaughter plant had 37 sanitation deficiencies, including

- shackles not sufficiently cleaned from the previous day's use,
- fat scraps on head chain sprocket and overhead beams at several locations in the slaughter room,
- dirt on head wash cabinet from overhead catwalk,
- loose paint on the ceiling over viscera table,
- fat scraps on carcass-splitting saws,
- loose paint on the support beam over the table in the offal room,
- slight dripping of water on a carcass in a cooler,
- tongue dragging in drip pan under offal chain, and
- debris and dust under racks in the dry storage room.

Fieldale Corp., Cornelia, Georgia

This poultry slaughter plant had 13 sanitation deficiencies, including

- additional cleaning of hock cutter needed,
- flaking paint on eviscerating room wall,
- rust and flaking paint on ceiling superstructure at end of eviscerating line,
- trash in corner of upstairs box storage room, and
- condensation on ice auger above chicken drip line.

EXCESSIVE PLANT RELIANCE ON  
INSPECTORS TO POLICE SANITATION

In many cases plant managers rely extensively on inspectors rather than their own plant supervisors to identify sanitation problems. This conclusion is based on (1) our observation of plant cleanup personnel following inspectors around during pre-operative sanitation inspections, (2) reviews of inspectors' daily sanitation reports, and (3) findings of numerous sanitation deficiencies during our visits.

For example, at one meat plant, our FSIS reviewer noted that nearly all daily sanitation reports showed poor sanitation and

downtime for additional cleanup. He said that it appeared that plant management was using the inspector-in-charge as its foreman; that is, plant employees were doing only those things that the inspector-in-charge made them do. During our revisit, another FSIS reviewer made a similar comment. Also, at a poultry plant we observed employees following inspectors during their preoperative inspection and correcting deficiencies as they were pointed out.

The inspectors are supposed to record on daily sanitation reports all the sanitation deficiencies they find. Reports we reviewed at 45 plants showed that inspectors regularly found that some plants had not adequately cleaned all facilities and equipment. The reports for 9 of the 45 plants averaged 10 to 16 deficiencies daily and 19 plants averaged 5 to 10. In some cases the inspectors frequently reported the same or similar deficiencies. A table showing examples from two plants follows.

Type of plant	Item found deficient	Number of days	
		In period reviewed	Found deficient
Poultry	Hock cutting machines	51	17
	Giblet equipment	51	22
	Carcass chiller	51	22
Meat	Fat tank	65	23
	Fat table	65	27
	Door to cooler	65	16

Although the sanitation reports often listed many deficiencies, they sometimes provided a misleading indication of how well the plant was cleaned. We asked inspectors at 35 plants whether they recorded all sanitation deficiencies found. In 28 cases they said they did not. For example, the inspector-in-charge at one poultry plant said that only major deficiencies are recorded while minor deficiencies are corrected immediately and are not recorded unless they continue to occur. Because the daily sanitation report provides a history of sanitation deficiencies and a means of notifying plant management and the inspector-in-charge of sanitary conditions in a plant, it is important that inspectors list all deficiencies found.

Current financial disincentives for plants to allow poor sanitation consist primarily of operational delays or curtailments that inspectors can impose until significant deficiencies are corrected. These sanctions do not appear to have been especially effective, considering the sanitation problems found in the plants reviewed. Also, inspectors begin their sanitation inspections early enough to allow plants to correct many deficiencies before slaughter begins. USDA does not have authority to levy fines on plants for not complying with sanitation regulations. Some Federal agencies, such as the Environmental Protection Agency and the Occupational Safety and Health Administration, have the authority to levy fines, and do so, for violations of their regulations.

## PEST CONTROL PROBLEMS

Seven, or 11 percent, of the 62 random sample plants visited had unacceptable pest control programs, including 14 percent of the meat plants and 8 percent of the poultry plants. Six of the plants with unacceptable pest control had rodent, fly, or other pest problems. The FSIS reviewer rated pest control unacceptable at the seventh plant because of indications that the plant had used an unauthorized insecticide.

The conditions at the Dubuque Packing Co. plant in Le Mars, Iowa, provide an example of unacceptable pest control conditions. The primary reason for the unacceptable rating was inadequate pest control in a separate building used to store meat-packing materials. Birds were inside the building (the door was open), numerous rodent droppings were observed between pallets of packaging materials, and trash and debris had accumulated along the walls. The circuit supervisor immediately instructed plant management to correct these problems. The plant also had flies inside and outside the plant.

Twenty-seven plants had pest control deficiencies that warranted attention but were not considered significant enough to be rated unacceptable. For example, at the Farmland Foods, Inc., plant in Iowa Falls, Iowa:

- The door in the dry storage area had a gap at the bottom corner that permitted rodents to enter.
- Trash in several areas and broken concrete blocks in barn areas provided excellent rodent harborage.
- Several holes where pipes penetrated an exterior wall provided rodent entry.

## CONCLUSIONS

Many FSIS inspectors and slaughter plant managers in the six States reviewed had not effectively carried out their responsibilities for assuring that plants are sanitary. FSIS personnel were not adequately enforcing sanitation requirements, and plant managers were not sufficiently committed to maintaining a high level of sanitation.

The incidence of plants rated unacceptable in sanitation and pest control, 18 percent and 11 percent, respectively, and the sanitation and pest control problems we observed at other plants show the need for FSIS and plant managers to pay more attention to these areas. The increased attention is needed for better assurance that meat and poultry products leaving the plants are not adulterated or contaminated.

FSIS needs to have its inspectors and supervisors adopt a stronger enforcement attitude. It also needs to adequately

monitor field level inspections to achieve better plant sanitation. (Ch. 8 discusses the need for more effective FSIS monitoring of the slaughter inspection program.) Problems such as flaking paint and rust, scale buildup, dirty overhead structures, and grease buildup indicate more long-term neglect than simply inadequate cleanup from the prior day's work.

Inspectors need to check on plant sanitation; but it is also important that they do not allow themselves to become de facto plant sanitation foremen. Inspectors should keep complete records of sanitation problems found to provide complete and accurate documentation of poor sanitation conditions and trends. When preoperative inspections regularly show inadequate cleanups or sanitation, the inspector should seek specific improvements in the plant's method of maintaining quality control over sanitation.

The number of sanitation deficiencies and our own observations lead us to conclude that plant managers, in many cases, rely extensively on inspectors rather than their own plant supervisors to identify sanitation problems. Plant managers have insufficient incentive to present a well-cleaned plant to inspectors. Greater financial disincentives than now exist are needed to discourage plants from maintaining unsanitary conditions. For example, preoperative sanitation inspections might begin shortly before operations start to assure that any problems found would cause a delay. Also, USDA could seek authority to levy fines for serious sanitation violations.

#### RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

We recommend that the Secretary of Agriculture direct the Administrator, FSIS, to:

- Require meat and poultry inspectors and supervisors to enforce more strictly FSIS sanitation requirements at slaughter plants, with objectives of improving day-to-day plant sanitation and having plants maintain better sanitation on their own initiative rather than responding to deficiencies pointed out by inspectors.
- More effectively monitor inspectors and inspection supervisors as they work to bring slaughter plants into compliance with sanitation requirements.
- Instruct plant inspectors on the need to document all deficiencies found during sanitation inspections and emphasize to supervisors that deficiency records need to be kept.
- Develop a system of financial disincentives for slaughter plant managers who allow less than sanitary conditions to exist in their plants. This kind of system could include

financial penalties (for which legal authority would be required) for poor sanitation or scheduling preoperative inspections late enough so that correcting any problems found would delay slaughter operations.

#### AGENCY COMMENTS AND OUR EVALUATION

Except for the recommendation dealing with a system of financial disincentives, USDA did not comment on our recommendations. It questioned whether a financial penalty system could be equitably administered and whether such a system would be effective. It suggested that an alternative might be for FSIS to require slaughter plants to have sanitation quality control programs. It noted that FSIS cannot levy fines or require slaughter plant quality control systems under existing legislation.

We believe that requiring slaughter plants to have sanitation quality control programs would help assure good sanitation. However, the effectiveness of any such requirement depends to some extent on the penalty or penalties imposed for noncompliance. Accordingly, we believe that a system of financial disincentives as we recommend is a necessary component of any effort to assure good sanitation and that such a system, including fines, can be an effective way to deal with plants having serious or regular sanitation problems. We also believe that the system could be administered equitably if done at a high level, perhaps by regional directors, with adequate provisions for appeal.

USDA should, of course, seek the legislative authority needed to implement a financial penalty system and/or to require slaughter plants to have sanitation quality control programs.

## CHAPTER 4

### MEAT AND POULTRY PLANT WATER

#### SYSTEMS NEED MORE THOROUGH MONITORING

Of the 62 plants in our random sample, 39, or 63 percent, had water system deficiencies that could result in contaminating their potable water supplies. The use of contaminated water in meat and poultry plants creates a potential health hazard for the consumer and can result in economic losses for the plant. While only one plant received an unacceptable water supply rating, all plants with water system deficiencies need to correct them to assure that water used in producing meat and poultry products remains potable. The deficiencies included cross-connections between potable and nonpotable waterlines, inadequately marked nonpotable lines, inadequately covered potable water tanks, and improper water connections that could result in contaminated water siphoning into the potable water systems. On the basis of our sample, we estimate that about 121, or 51 percent, of the 238 meat and poultry slaughter plants in our six-State review universe had water system deficiencies. (See app. I.)

FSIS does not require plants to notify it of plumbing system repairs and changes that could affect compliance with FSIS requirements. In our opinion, this notification is necessary to assure that repairs and changes will not result in water contamination.

We believe that FSIS needs to require supervisors to make a special effort to identify and correct water system deficiencies. Also, to assure that deficiencies do not recur, FSIS needs to require plants to notify inspectors of any plumbing repairs and changes so that they can be inspected.

#### FSIS APPROVAL AND INSPECTION OF WATER SYSTEMS

Meat inspection regulations require that, before FSIS begins inspection service, the applicant must submit complete drawings, including the plant's floor plans, that show the locations of principal pieces of equipment. The applicant must also submit specifications describing the water supply, plumbing, drainage, refrigeration, equipment, lighting, and plant operations related to sanitation. Before beginning inspection service, an FSIS supervisor evaluates the plant to see whether it meets inspection requirements. Requirements include the following:

"The water supply shall be ample, clean and potable, with adequate facilities for its distribution in the plant and its protection against contamination and pollution. \* \* \* Equipment using potable water shall be so installed as to prevent back-siphonage into the potable water system. Nonpotable water is permitted only in those parts of official establishments

where no edible product is handled or prepared. \* \* \*  
In all cases, nonpotable waterlines shall be clearly identified and shall not be cross-connected with the potable water supply unless this is necessary for fire protection and such connection is of a type with an adequate break to assure against accidental contamination, and is approved by local authorities and by the circuit supervisor."

The poultry inspection regulations include similar requirements.

### Periodic inspections

FSIS requires that supervisors visit plants monthly to evaluate compliance with inspection policies. Water supply is one of six basic review areas. Supervisors also make an annual indepth review at each plant. FSIS' guidelines on reviewing water systems include:

- Waterlines connected to various equipment shall be provided with vacuum breakers, where necessary, to prevent contamination of waterlines by back-siphonage.
- The use of nonpotable water shall be limited to prescribed areas, and nonpotable waterlines shall be adequately identified.

In-plant inspectors are also responsible for inspecting plant water systems. In a 1980 water systems handbook, FSIS directed inspectors to tour the plant frequently. They are to check lines and outlets to be sure the water supply is not being contaminated within the plant and that no potable and nonpotable waterlines cross-connect and no pipelines dead end. The inspectors are to notify their supervisors and plant management of back-siphonage problems, contaminated water, or unauthorized use of nonpotable water.

FSIS' 1980 water systems handbook does not include detailed descriptions or illustrations of the various types of water system deficiencies that might be found in meat and poultry plants. The lack of detailed guidance and the need for more effective circuit supervisor monitoring of how well inspectors carry out their water system inspection responsibilities (see ch. 8) likely contribute to the existence of water system deficiencies.

### MOST PLANTS HAVE WATER SYSTEM PROBLEMS

Of the 39 plants having water system deficiencies with the potential to contaminate potable water supplies, 29 had connections that could allow contaminants to siphon into the potable water system if water pressure dropped. Other deficiencies included cross-connections between potable and nonpotable waterlines and inadequately covered potable water tanks. The following two cases illustrate some of the deficiencies found.

Wilson Foods Corp., Cherokee, Iowa

- Nonpotable water used in refrigeration and condensers is stored in a holding tank that has a potable water inlet. Nonpotable water could siphon into the potable waterline. The plant corrected the deficiency during our visit.
- Neither stomach nor tongue scalders had vacuum breakers to prevent back-siphoning. Both scalders had incoming potable waterlines located below the water level.

Tyson Foods, Inc., Cumming, Georgia

- Nonpotable and potable waterlines were connected by a valve.
- A nonpotable water tank, refilled through a potable waterline, lacked protection against the nonpotable water back-siphoning into the potable waterline.
- An overflow pipe designed to protect against contaminated water back-siphoning into potable waterlines was rendered useless by a closed valve on the pipe.

PLUMBING CHANGES SHOULD BE  
APPROVED BY INSPECTORS

FSIS does not require plant management to inform inspectors of all plumbing system repairs and changes made to waterlines that could affect compliance with FSIS requirements. As a result, there is no assurance that inspectors will evaluate whether repairs or changes could cause water contamination problems.

Requiring notification of repairs or changes could prevent situations such as we found at one meat plant where a circuit supervisor had previously identified a potential back-siphonage problem involving a submerged water inlet. The plant reportedly corrected the deficiency by raising the inlet. However, during our review we found the same submerged inlet problem. According to the plant engineer, apparently someone had extended the inlet below the water level again. If plants were required to obtain approval from inspectors before making any repairs or changes to waterlines that could affect FSIS water system requirements, inspectors could better assure that the work would not cause water contamination problems.

CONCLUSIONS

Some FSIS supervisors and inspectors have not effectively carried out their responsibilities for assuring that plant water systems meet inspection program requirements. As a result, most of the plants reviewed had deficiencies that could contaminate the plants' potable water systems and, ultimately, the meat and poultry products produced.

Of the plants reviewed, 63 percent had one or more deficiencies. Although these deficiencies were not considered significant enough to warrant unacceptable ratings by the FSIS supervisors accompanying us (we agreed with the supervisors' ratings), they were of the type specifically mentioned in FSIS regulations and instructions that inspectors are to identify and have corrected.

Because of the high percentage of plants having water system deficiencies, FSIS first needs to make a special, one-time effort to identify and correct these deficiencies. This could be done by requiring supervisors, during one of their monthly visits to each plant, to concentrate on identifying water system deficiencies and preparing special reports on their findings. Once this special effort is completed, FSIS needs to assure that similar deficiencies do not recur. To do this FSIS should issue more detailed guidelines that would

- advise both inspection staff and plant managers of FSIS requirements on water systems and

- reemphasize to inspectors and supervisors the need to regularly inspect plant water systems for compliance with inspection program requirements.

Also, FSIS needs to increase controls over repairs and changes to plant water systems to assure that they conform to inspection program requirements. FSIS could gain more control by requiring plant management to obtain inspector approval of repairs and changes that could affect FSIS water system requirements before they are made.

#### RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

We recommend that the Secretary of Agriculture direct the Administrator, FSIS, to:

- Require supervisors, as a one-time effort, to determine compliance with inspection program water system requirements during one of their monthly visits to each slaughter plant and to prepare special reports on their findings and any corrective actions taken.

- Issue more detailed guidelines on inspection program requirements for slaughter plant water systems and emphasize to inspectors and supervisors the importance of regularly inspecting these systems. The guidelines should include illustrations and descriptions of deficiencies likely to be encountered.

- Require plant managers to obtain inspector approval of water system repairs and changes that could affect FSIS system requirements.

## CHAPTER 5

### ACCEPTANCE TESTING PROGRAMS NEED IMPROVEMENT

FSIS' acceptance testing programs for cattle carcasses and poultry carcasses, necks, and giblets do not provide the intended assurance that these products are reasonably free of contamination or dressing defects when they leave the plant. FSIS designed statistically valid sampling plans and procedures to test whether cattle and poultry products meet specific quality level standards or criteria. However, in many cases the testing programs were not being carried out as designed because supervisors were not assuring that inspectors and plant personnel followed prescribed procedures. As a result, the test findings are not statistically valid indicators of whether the products covered by the testing programs meet FSIS acceptance standards.

Of the 47 1/ randomly selected cattle and poultry plants visited, 33 were deviating in some manner from FSIS' prescribed testing procedures or requirements. The deviations included (1) not selecting samples correctly, (2) testing the wrong number of carcasses, (3) not performing all required tests, and (4) testing under inadequate lighting. In addition, cattle plant personnel in some cases had the opportunity to rework sample carcasses before inspectors examined them.

We question whether FSIS' acceptance criteria are stringent enough to challenge the industry to produce as unadulterated a product as practicable. Our opinion is based on the rarity of test failures and inspection personnel comments about the criteria being too liberal. Also, the poultry acceptance criteria are based on what inspectors were accepting when the criteria were developed rather than on an independent determination of the quality of poultry the industry should be expected to produce.

At the time of our review, FSIS did not have a swine carcass acceptance testing program but was developing one. FSIS plans to implement the program by October 1, 1981.

#### DESCRIPTION OF TESTING PROGRAMS

FSIS established the acceptance testing programs to provide a uniform measure for determining whether cattle carcasses and poultry carcasses, necks, and giblets that had passed post mortem inspection were acceptably free of adulteration and ready to enter consumer food channels. The testing programs also provide information on the origin, extent, and nature of product contamination.

The testing programs provide for FSIS inspectors or plant personnel to test periodically a random sample of the product to

---

1/The other 15 randomly selected plants were swine plants.

determine whether the incidence of dressing defects or other adulteration is within the limits permitted by FSIS acceptance criteria. Those criteria classify defects as minor, major, or critical and establish the number of each class of defect allowed in the sample being tested. Defects to spot include dressing defects, such as failure to remove hair and inedible organs or parts, and other defects, such as contamination from unsanitary equipment. (Apps. V and VI describe the defects looked for during acceptance tests of cattle and poultry carcasses, respectively.)

At poultry plants, plant personnel test a sample of 10 carcasses, necks, and giblets at a random time each hour. FSIS inspectors test a different sample at least every 4 hours to verify that the plant is recording defects correctly. At cattle plants, either plant personnel or FSIS inspectors select carcasses at random times throughout the day and examine one-half of each carcass (a side containing a forequarter and hindquarter). The number of carcass sides to be tested depends on the size of the production lot being tested. A lot can be either a full day's or a partial day's production. When the plant does the acceptance testing, FSIS inspectors are required to do a monitoring test at least once a week.

When a poultry sample fails the acceptance test, subsequent samples must pass testing criteria allowing fewer defects, until two consecutive samples pass the more stringent test. The plant must rework and retest some, but not all, poultry in samples that fail acceptance tests. The more stringent criteria are used in retests. If a cattle sample fails the acceptance test, the plant must rework all carcasses in the sample and retest them using more stringent acceptance criteria.

#### TEST RESULTS UNRELIABLE

FSIS designed its acceptance testing program so that the results would be statistically representative of the universes sampled. However, at 33 of the 47 randomly selected cattle and poultry plants visited, we noted one or more deficiencies in the way acceptance tests were conducted. The deficiencies were present at 17, or 77 percent, of the cattle plants and 16, or 64 percent, of the poultry plants visited. These deficiencies invalidate the test results, which therefore cannot be considered a reliable indicator of the quality of products produced by the slaughter plants. Many of the deficiencies could have been avoided if FSIS supervisors were more adequately monitoring the acceptance programs to assure that inspectors and plant personnel followed the prescribed acceptance testing procedures.

#### Test carcasses not selected as prescribed

FSIS inspectors were not always selecting test carcasses in the prescribed manner. Deficiencies included not selecting test carcasses at random times, not maintaining the confidentiality of sample selection times, not randomly selecting cattle carcasses, and testing the wrong number of cattle carcasses.

#### Times not random

At 4 of 22 cattle plants visited, inspectors either were not using the cards FSIS prescribed for selecting random times or were using them incorrectly. For example, the inspector at one plant did not block out times on the card when there was no cattle production, such as during rest and lunch periods. He also incorrectly determined the interval between samples and when to select the first sample. At two poultry plants, plant personnel conducted hourly tests but not at random times.

#### Sampling times not confidential

According to FSIS, plant employees should not be aware of sample selection times until the carcass reaches the sampling point. This helps assure that plant employees do not give any special attention to the sample carcasses. However, at 4 of the 22 cattle plants we reviewed, the inspector controlling the sample selection had posted the sampling times in full view of plant employees.

#### Carcasses not selected randomly

Most cattle plants visited used a two-step test procedure. Test personnel examined a prescribed portion of the total sample on the first step and, if the number of defects was within allowable limits, the total lot was accepted without going to the second step. The carcasses selected for the first step should be randomly selected from among the total sample; however, this was not being done at three plants.

#### Testing wrong number of carcasses

At 5 of the 22 cattle plants reviewed, the inspection staff selected or tested the wrong number of carcasses. For example, personnel at one plant tested only half the required number of carcasses because they examined both sides rather than only one side of each carcass. At another plant, 16 carcasses were selected for testing when the lot size required testing 22.

#### Required tests not performed

FSIS inspectors did not perform all required acceptance tests at 11 plants--4 cattle plants and 7 poultry plants. For example, inspectors at one cattle plant performed only two acceptance tests during a 13-week period to validate the plant's testing program, although FSIS requires weekly monitoring tests. At another cattle plant, inspectors performed acceptance tests every fifth day instead of every fourth day as required by the reduced sampling plan authorized for this plant. Inspectors at the seven poultry plants performed only one monitoring test daily rather than the required two.

### Inadequate lighting

Adequate lighting is essential for accurate acceptance testing, and FSIS has determined that at least 50-foot candle power is necessary. Ten of the randomly selected poultry plants had less lighting than required at the inspection station with 30-foot candle power or less at 5 plants.

### Inadequate security over cattle test carcasses

In many cases sample cattle carcasses are selected one day and tested the next day. Inspectors have no control over the carcasses overnight, which gives plant personnel an opportunity to tamper with the carcasses before they are examined. We observed an employee at one plant trimming carcasses before the inspector's examination. Employees at another plant had removed the shrouds from the carcasses before the inspector arrived. The shrouds should remain on the carcasses until the acceptance testing starts. In October 1980 USDA's Inspector General also reported on the lack of control over test carcasses and the opportunity for plant employees to tamper with the carcasses to assure they passed acceptance tests. In January 1981 FSIS responded that it would review methods for assuring better controls over the test carcasses.

### Guidance needed on sampling when slaughter schedules change

FSIS' procedures for determining the random times to select sample cattle carcasses are based on the assumption that slaughter operation hours are known. FSIS has provided no guidance on what to do when actual operation hours differ. As a result, when slaughter operation times are extended, none of the additional cattle slaughtered during the extended period would have a chance to be part of the sample. When slaughter operation times are shortened, some of the sample selection times may not be reached. This could result in fewer carcasses being selected for testing than are required for the number of cattle slaughtered.

### ARE ACCEPTANCE CRITERIA TOO LIBERAL?

Although we would not expect FSIS' acceptance criteria to be so stringent as to not allow any meat or poultry dressing defects, indications are that the current criteria allow too many defects. Acceptance test failures rarely occur, and various FSIS representatives have expressed concern that current criteria permit excessive defects. The FSIS poultry acceptance criteria are reportedly less stringent than what some plants had to meet under earlier acceptance testing procedures.

Few samples fail acceptance tests

Our review of acceptance test records at 19 of the 22 cattle plants and 14 of the 26 poultry plants showed that less than 1 percent of the samples failed to pass the acceptance tests.

<u>Type test</u>	<u>Tests performed</u>	<u>Tests passed</u>	<u>Tests failed</u>	
			<u>Number</u>	<u>Percent</u>
Cattle:				
FSIS	272	267	5	1.8
Plant	894	894	0	0.0
Poultry:				
FSIS	4,018	4,007	11	0.3
Plant	<u>17,696</u>	<u>17,572</u>	<u>124</u>	0.7
Total	<u>22,880</u>	<u>22,740</u>	<u>140</u>	0.6

USDA's Inspector General reported in October 1980 that several FSIS veterinarians commented that acceptance test criteria are too liberal to be meaningful and that only flagrant violations result in test failures. Also, FSIS' Program Review Branch stated in October 1979 that its reviews of poultry plants indicated that the acceptance criteria allowed the sale of poultry with an inordinate number of feathers. For example, the Program Review Branch cited one case where 75 to 80 percent of the birds being loaded for shipment had feathers on the wings, necks, and hocks, and another case where at least 40 percent of the cutup chicken parts ready to go to a retail outlet contained numerous feathers. The quality control supervisor at a Georgia poultry plant said that because FSIS' acceptance criteria were too liberal to meet the plant's customer requirements, it uses its own more stringent criteria.

Poultry defect criteria based on what industry was doing

USDA established its poultry acceptance testing program to help assure consumers of a uniform, ready-to-cook product. However, USDA based the acceptance criteria on the average number of defects found in a selected number of plants rather than determining how unadulterated or contamination-free a poultry carcass the industry should be expected to produce.

Before USDA established the current uniform acceptance testing program, poultry inspectors reportedly varied in how defect-free they required poultry to be to satisfy regulation requirements that slaughter plants produce ready-to-cook poultry. Based on a study of the defects inspectors were allowing at a sample of

43 plants, 1/ USDA's Animal and Plant Health Inspection Service in 1972 developed new, uniform acceptance criteria. One circuit supervisor told us that the current criteria had the effect of allowing some plants to produce poultry with more dressing defects, especially feathers, than what inspectors had allowed previously.

During 1980 FSIS began reevaluating its poultry acceptance criteria, and it plans to implement a revised poultry acceptance testing program by September 1, 1981. FSIS found that the number of dressing defects in poultry had increased during the period 1976-79 and that problems existed in uniformly applying the acceptance testing procedures. According to the FSIS official responsible for revising the program, the major changes will be to require that (1) test results be charted from day to day to better identify trends and initiate corrective actions when trend lines reach designated "action" points and (2) carcasses be reworked when action points are reached on either the major defect trend line or the minor defect trend line.

### CONCLUSIONS

FSIS' acceptance testing programs for cattle carcasses and poultry carcasses, necks, and giblets are ineffective because many plants do not implement them the way FSIS has prescribed. FSIS designed the programs as statistically valid methods for assessing the acceptance quality of products produced by cattle and poultry slaughter plants. Therefore, deviations from prescribed methods negate the statistical validity of test results. FSIS needs to better monitor both inspection and plant performance in the testing programs to assure that the programs are implemented as designed.

The acceptance testing programs also need improvements to assure that (1) random sampling guidance covers changes in hours of slaughter operations and (2) adequate security is maintained over sample cattle carcasses until they are tested. FSIS also needs to reevaluate whether its cattle acceptance criteria are too liberal; that is, whether they present too little challenge to the industry and too little protection to the consumer against adulterated or contaminated products.

FSIS should consider these needs in revising its cattle and poultry acceptance program and in developing a swine carcass acceptance testing program.

---

1/According to FSIS' Associate Deputy Administrator for Meat and Poultry Inspection, the sample initially included about 45 or 46 plants. He said 2 or 3 plants had been deleted from the sample because of excessive defects on their poultry.

RECOMMENDATIONS TO THE SECRETARY  
OF AGRICULTURE

We recommend that the Secretary of Agriculture direct the Administrator, FSIS, to:

- Improve FSIS' monitoring of acceptance testing programs to assure that the programs are conducted in the prescribed manner and to better assure the programs' integrity.
- Reevaluate and, where appropriate, strengthen the acceptance criteria to provide consumers with greater protection against receiving meat products contaminated or adulterated by dressing defects.
- Improve the acceptance testing programs by (1) providing more detailed guidance for selecting random cattle carcass samples when the day's operation is longer or shorter than anticipated and (2) prescribing security measures to assure that cattle carcasses are not tampered with before the acceptance tests.
- Consider the findings in this chapter in developing a swine carcass acceptance testing program and in any revising of the cattle and poultry acceptance testing programs.

AGENCY COMMENTS AND OUR EVALUATION

USDA said that it believed the problem with the acceptance testing programs was undercounting of defects rather than too liberal criteria. We noted some undercounting of defects during our review, but our limited tests did not identify it as a major problem. USDA said that FSIS would further consider whether a criteria problem exists in the poultry program after it has properly implemented the revised poultry acceptance testing program in the field.

USDA took exception to our statement on page 28 that it had not determined how wholesome and unadulterated a poultry carcass the industry should be expected to produce. It said that the acceptance criteria had been developed on the basis of the condition of poultry at a sample of plants and that when data from two or three plants producing unacceptable products was eliminated, the resulting criteria were what the industry was expected to meet.

The information FSIS provided us earlier describing the sample plan used to establish the acceptance criteria did not mention excluding data from bad plants. We agree that eliminating the worst plants from the sample helps upgrade the acceptance criteria. However, we believe that undue emphasis was placed on what was being accepted at the time.

## CHAPTER 6

### SOME IMPROVEMENTS NEEDED IN ANTE MORTEM AND POST MORTEM

#### EXAMINATIONS AND CONDEMNED AND INEDIBLE MATERIAL CONTROLS

The FSIS reviewers rated all but 2 of the 62 random sample plants acceptable in ante mortem and post mortem inspection procedures and all but 4 acceptable in condemned and inedible material controls. However, we observed some deficiencies that need to be corrected at plants rated acceptable. The ante mortem and post mortem deficiencies were due to (1) facility and equipment problems, which are essentially the plants' responsibility, and (2) incomplete or inadequate examinations, which are the inspectors' responsibility. Meat inspectors devote considerable time to examining carcasses for dressing defects that the plants should have removed during slaughter operations. Identifying and removing dressing defects should be the plants' responsibility, not the inspectors'.

The lack of formal criteria for reinspecting edible byproducts, determining their acceptability, and recording the results leaves little assurance that inspectors conduct the reinspections uniformly and adequately. The FSIS reviewers found the reinspections to be inadequate at some plants. Some plants also had inadequate controls to assure that condemned and inedible materials were not mixed with or disposed of as edible materials. The deficiencies included inadequate denaturing of and inadequate security over condemned materials. Denaturing, often done by using colored dyes, is a process that gives condemned materials an inedible appearance.

In our opinion, FSIS needs to better enforce inspection requirements to assure that ante mortem and post mortem examinations, controls over condemned and inedible materials, and reinspection of edible byproducts are effective and that slaughter plants produce only wholesome and unadulterated products.

#### ANTE MORTEM EXAMINATIONS

Examining animals before slaughter (see photograph on p. 32) is intended to remove from human food channels those animals which are obviously unfit for human food because of abnormalities or diseases, such as central nervous system disorders, which are difficult to detect on routine post mortem inspection. The plants we visited generally had few ante mortem inspection deficiencies. Nevertheless, some had problems such as

--ante mortem inspection not properly documented (5 plants);

--inadequate inspector control of animals suspected of having disease or abnormalities (3 plants);



Source: USDA

ANTE MORTEM INSPECTION OF SWINE

- inspectors not adequately inspecting animals (1 plant);
- insufficient lighting in ante mortem/suspect pens (6 plants);
- ante mortem pens needed cleaning or repair (2 plants);
- crowded ante mortem pens, which hampered the inspection of animals (1 plant); and
- ante mortem pens lacked a roof to protect the inspector during inclement weather (1 plant).

#### POST MORTEM EXAMINATIONS

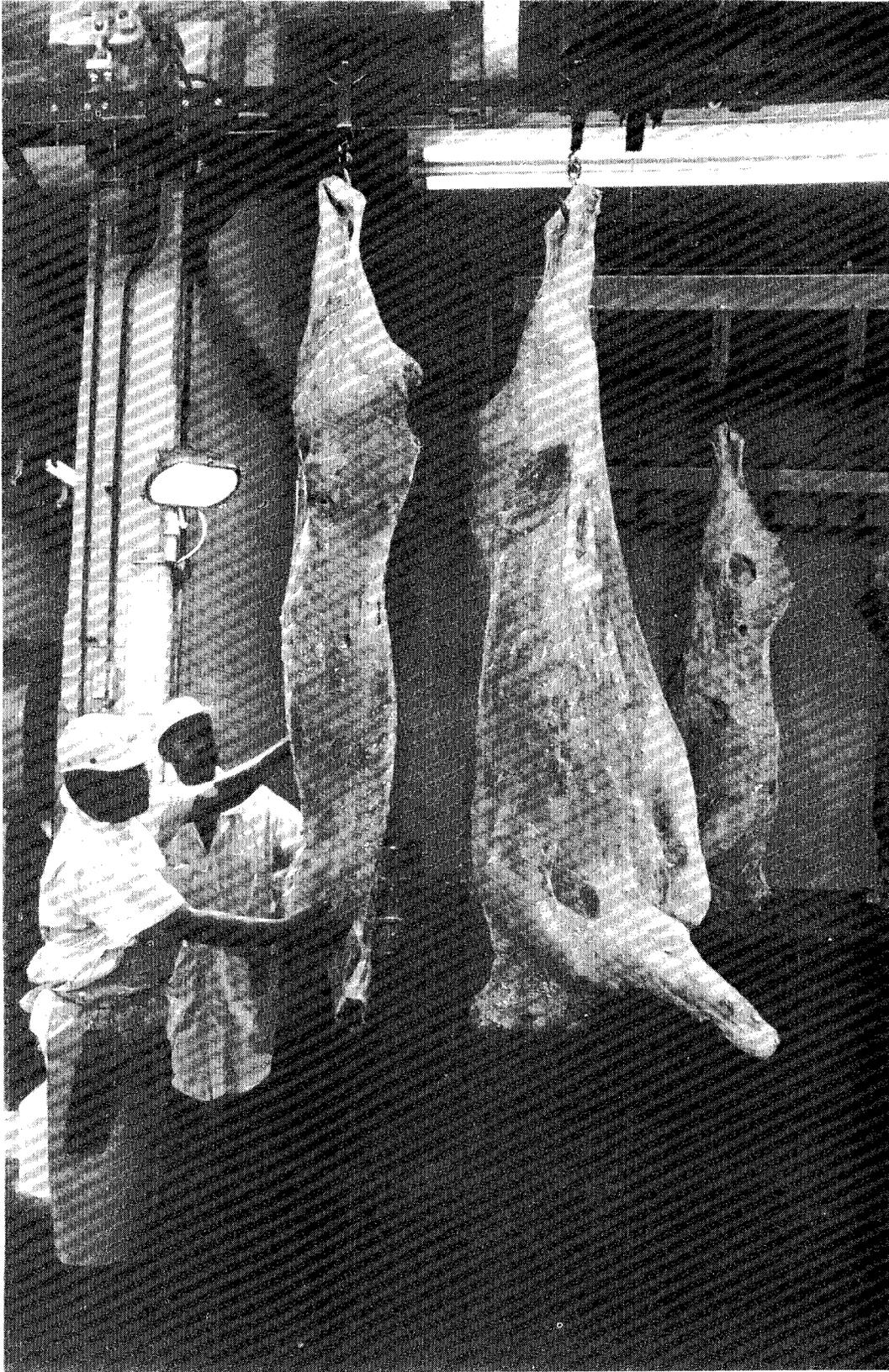
Post mortem examinations consist of carcass-by-carcass inspections of livestock and poultry for pathological conditions and contamination that make all or part of the animal unwholesome or adulterated. (See photographs on pp. 34 to 36 illustrating post mortem inspection.)

The FSIS reviewers, who observed inspectors making post mortem examinations and examined poultry, swine, and cattle that inspectors had passed as fit for human food, gave unacceptable ratings to two plants. Farmland Foods, Inc., Iowa Falls, Iowa, was rated unacceptable because (1) inspectors doubled up for personal breaks, resulting in inadequate head inspections, (2) several swine jowls had not been trimmed of cervical tuberculosis, and (3) carcasses with retain tags were not separated from inspected and passed carcasses, as required. Lane Poultry Co., Grannis, Arkansas, was rated unacceptable because of unacceptable post mortem facilities, including (1) inadequate lighting at all inspection stations, (2) flaking rust and/or paint on beams over eviscerating lines and chillers, and (3) missing light covers that protect against shattered bulbs falling on product or equipment. Although post mortem examinations at the other plants reviewed were generally adequate, improvements were needed in some cases.

#### Poultry plants

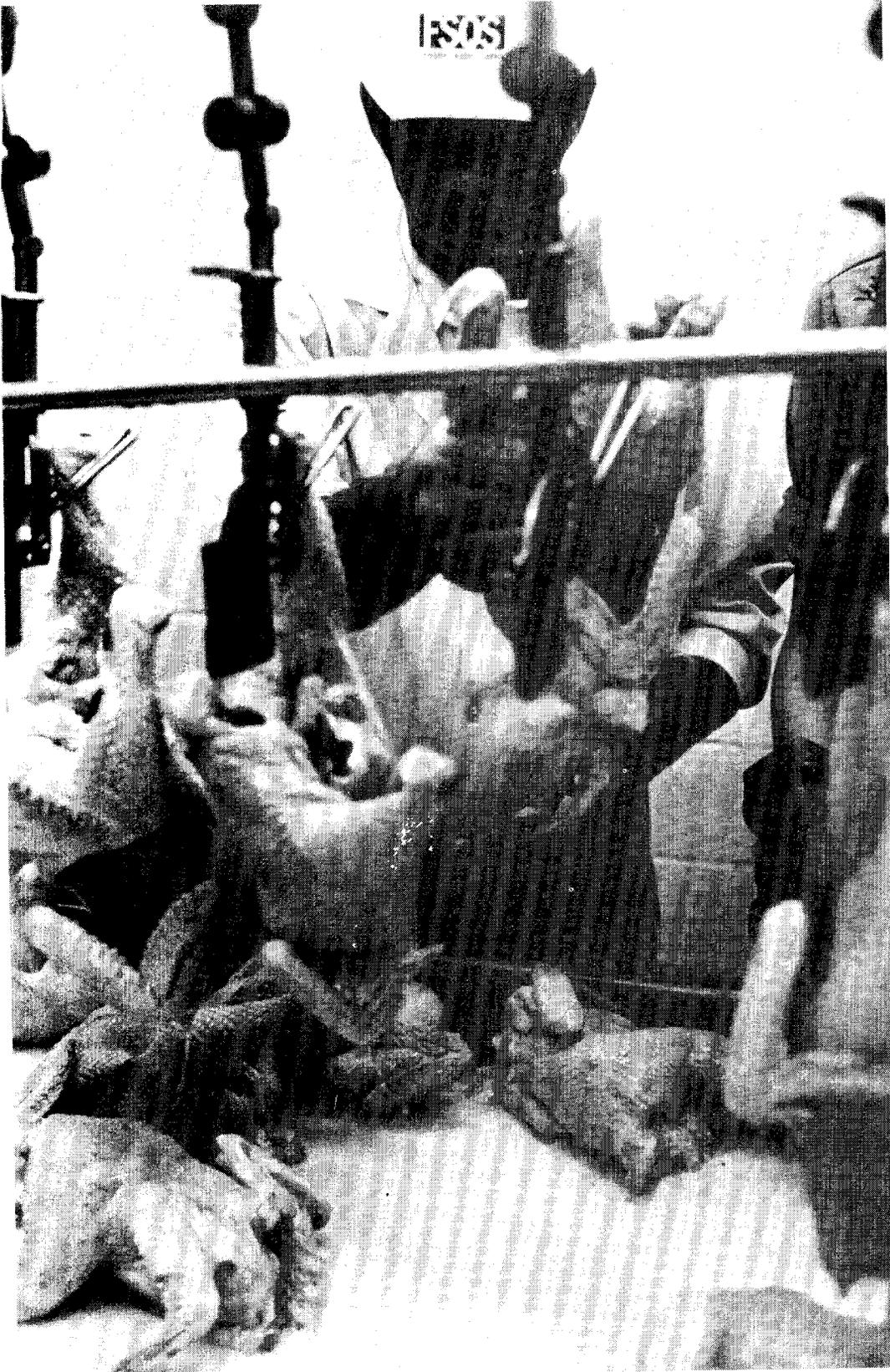
Poultry plants generally had few post mortem deficiencies, but what they had included

- inspectors overlooking dressing defects; usually this deficiency accounted for less than a 2-percent error rate (18 plants);
- inattentive inspector not examining poultry (2 plants);
- inspector not correcting improper plant procedures (4 plants);
- mirrors used in examining outside of carcass not positioned correctly or reflecting properly (5 plants); and



Source: USDA

### CATTLE CARCASS RAIL INSPECTION



Source: USDA

## POST MORTEM INSPECTION OF POULTRY



Source: USDA

POST MORTEM INSPECTION OF SWINE CARCASSES (BACKGROUND)  
AND SWINE VISCERA (FOREGROUND)

--inadequate lighting at inspection stations (3 plants).

### Meat plants

At swine and cattle plants, the FSIS reviewers cited the following post mortem deficiencies.

#### Facility and equipment deficiencies

- Inadequate lighting at inspection stations (7 plants).
- Retention cage used to hold questionable carcasses not properly identified (5 plants).
- Mirrors used to view back of carcasses faded, inadequately cleaned, and/or cracked (3 plants).
- Sterilizer water at inspection stations below required 180-degree temperature (3 plants).

#### Inspection deficiencies

- Inspectors not adequately examining lymph nodes (4 plants).
- Inspectors not adequately palpating various carcass parts (5 plants).
- Inspectors not adequately observing carcasses (2 plants).
- Retained carcasses not properly identified with USDA retained tags (1 plant).
- Carcasses with retained tags being commingled with inspected and passed carcasses in cooler (2 plants).
- Inspectors allowing plant personnel to place USDA retained tags on contaminated heads--the tags are for inspector use only (1 plant).

### PLANTS SHOULD ASSUME RESPONSIBILITY FOR EXAMINING MEAT CARCASSES FOR DRESSING DEFECTS

FSIS' final inspection of each meat carcass is made by a "rail inspector." These inspectors examine the carcasses for pathological defects related to wholesomeness, but most of the inspection involves identifying adulteration or contamination that the plants caused or failed to remove in the slaughter or dressing process. The plant, not FSIS, should be responsible for examining each carcass for dressing defects and assuring that defects are corrected. In poultry plants, plant personnel make the final carcass examinations for dressing defects. Inspectors then monitor the plants' quality control tests.

FSIS inspectors spend considerable time inspecting meat carcasses for dressing defects. In all but small plants, the

slaughter line inspection force consists of head, viscera, and rail inspectors. For example, the FSIS north central region had 644 in-plant meat slaughter inspector positions as of March 18, 1981. About 13 percent of those positions were rail inspection positions.

In 1977 a committee of FSIS staff members reviewed the post mortem inspection program. The committee noted that although in theory the prevention, detection, and correction of dressing defects are the plants' responsibility, the inspectors were performing much of this plant function. The committee suggested that USDA try to minimize this use of inspection resources. Also in 1977, a contractor that studied the inspection program criticized the use of inspectors to identify dressing defects, noting that:

"Because dressing defects are not medical problems inherent in the carcasses, but are a result of industrial procedures, it should be an industry responsibility to correct the problem, not an inspection responsibility to do what, in essence, is a quality control function for the plant." 1/

Until 1981 FSIS did not have a plan for revising post mortem procedures to make the plants, rather than inspectors, responsible for examining carcasses for dressing defects. The 1981 plan covers only cattle carcasses. FSIS plans to complete the testing of the revised post mortem procedures in selected cattle plants by August 31, 1981. An FSIS Slaughter Inspection Standards and Procedures Staff officer said that programwide implementation of the revised procedures would be contingent on the test results and on strengthening FSIS' cattle carcass acceptance testing program. The official said that the acceptance program needed to be strengthened to assure that plants have effective quality control over dressing defects.

FSIS has not developed a plan for having plant personnel examine swine carcasses for dressing defects. The FSIS staff officer said that FSIS first has to develop and implement a swine carcass acceptance testing program, which will serve as a dressing defect acceptance standard. FSIS plans to implement a swine carcass testing program by October 1, 1981.

#### GUIDANCE AND DOCUMENTATION NEEDED FOR REINSPECTING EDIBLE MEAT BYPRODUCTS

Little assurance exists that edible meat byproduct reinspections, part of the post mortem examination procedures in meat plants, are performed uniformly and adequately. Because of the lack of FSIS guidance, inspectors determine for themselves how

---

1/"Study of the Federal Meat and Poultry Inspection System," Booz, Allen, and Hamilton, Inc., June 1977.

much of the product to reinspect and what basis to use for accepting or rejecting the product. They do not document their reinspections or findings.

The FSIS inspection manual requires inspectors to carefully reinspect edible meat byproducts, such as livers, snouts, and kidneys, before they leave the slaughter plant. This reinspection is to assure that parts are not contaminated and do not have abnormalities, such as hair or parasites. However, the manual and related regulations do not address how to draw samples, when to examine these products, what acceptance criteria to use, or how to record test results. The Director, Slaughter Inspection Standards and Procedures Division, said FSIS has not developed a formal program for reinspecting edible meat byproducts because the staff has been working on higher priority projects, such as more efficient ways to conduct post mortem carcass inspections.

#### CONDEMNED AND INEDIBLE MATERIAL CONTROLS

Condemned and inedible materials must be controlled to prevent their diversion into human food channels. Such materials are to be under inspection control until effectively denatured or rendered incapable for use as human food. Nearly half of the random sample plants had inadequate controls over condemned and inedible materials. Four plants received unacceptable condemned and inedible material control ratings because of this problem. The primary causes for the unacceptable ratings were

- inspectors not slashing condemned livers (slashing and denaturing livers is done to assure that livers to be sold for animal food do not enter human food channels),
- insufficient denaturing of condemned or inedible material, and
- inadequate cleaning of facilities used to process inedible materials.

For example, Farmland Foods, Inc., Iowa Falls, Iowa, had the following deficiencies:

- One inedible product, which could have been mistaken for an edible product, had insufficient denaturing material readily identifying it as inedible.
- Inspectors were not slashing condemned livers that were to be sold for animal food.

Twenty-two other plants had less serious problems, involving matters such as

- inadequate identification of inedible or condemned material containers (13 plants),

- inadequate cleaning of inedible and condemned material facilities (1 plant),
- lack of or untimely denaturing of inedible and condemned materials (7 plants),
- dead animals not properly tagged or otherwise identified as being condemned (4 plants), and
- condemned and inedible material areas and facilities not properly secured (2 plants).

#### CONCLUSIONS

By examining carcasses for dressing defects, FSIS inspectors in effect do the plants' quality control work. The plants should make the quality control checks; the inspectors should only monitor the effectiveness of the quality control.

Although an FSIS staff committee and an FSIS contractor both reported in 1977 on the need to have the plants, not the inspectors, make dressing defect examinations, FSIS has only recently initiated action to do so. To assure the efficient and effective use of inspection personnel, FSIS needs to complete its development of post mortem inspection procedures that make plants responsible for quality control over dressing defects.

We found no major overall problems with the quality of ante mortem and post mortem inspections. However, at most of the plants we visited, deficiencies noted in some areas indicate a need or opportunity for FSIS to strengthen the program. For example, increased supervisory attention would be appropriate in cases where inspectors are not conducting fully adequate post mortems due to inattentiveness or poor procedures. Also, FSIS inspectors and supervisors should give increased attention to facility problems, such as inadequate lighting and low sterilizer temperature, and to deficiencies in controlling inedible and condemned materials.

The edible byproduct reinspection program is of questionable value considering that FSIS allows each inspector to determine how the program should be carried out. FSIS needs to prescribe specific reinspection procedures to assure that a uniform, properly designed, and effectively implemented reinspection program is carried out.

#### RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

We recommend that the Secretary of Agriculture direct the Administrator, FSIS, to:

- Instruct slaughter plant inspectors and supervisors to give increased attention to assuring that (1) ante mortem facilities and equipment are properly maintained and

(2) inspectors perform their examinations of edible and inedible products in the prescribed manner.

--Develop a formal program for reinspecting edible meat byproducts. The program should (1) provide a reliable indicator that the product sampled is representative of the universe sampled and (2) include specific guidance to inspectors for conducting reinspections and documenting the results.

## CHAPTER 7

### STAFF SHORTAGES LIMIT INSPECTION PROGRAM EFFECTIVENESS

As of February 21, 1981, about 7 percent of FSIS' 5,995 authorized full-time slaughter inspector positions were vacant. The shortage has lowered the inspection program's effectiveness by (1) reducing the amount of supervision and monitoring that inspectors-in-charge and floor inspectors can perform, (2) contributing to neglect of acceptance testing duties, (3) causing staff morale problems, and (4) reducing inspection coverage of processing operations.

The shortages have resulted from executive branch hiring and budget restrictions. Under these restrictions, the inspection force has decreased while plant production levels have increased. Slaughter plants cannot operate without inspection, and USDA is required by law to provide inspectors to perform carcass-by-carcass examinations. Although FSIS has generally managed to fill the slaughter line inspection positions, it has done so at the expense of other activities.

FSIS has generally covered slaughter inspection position vacancies by (1) using processing inspectors to do slaughter inspection, (2) detailing inspectors from one plant to another, (3) using intermittent (part-time) employees, and (4) using supervisory personnel. USDA's Inspector General reported in October 1980 that about 140 processing inspectors, or about 6 percent, had been temporarily detailed to slaughter operations at any given time. Such detailing results in reduced inspection of processing activities.

Supervisors also detail inspectors from one plant to another to fill vacant slaughter inspection positions. In those cases, the losing plant usually suffers because it is minus an inspector. In addition, detailed inspectors commonly travel long distances and lose inspection time to travel.

Supervisory personnel sometimes have to fill the vacancies themselves. At two plants visited, the inspector-in-charge and circuit supervisor worked vacant positions after exhausting other alternatives. By filling slaughter line positions, supervisory personnel greatly limit their ability to fulfill their day-to-day supervisory responsibilities and duties.

### SLAUGHTER INSPECTION VACANCY RATE

From 6 to 10 percent of FSIS' slaughter inspection positions were unfilled during calendar year 1980. The following table shows the vacancy rate as of February 21, 1981.

## Full-Time Permanent Slaughter Inspection Positions

	<u>Number of positions</u>		
	<u>Authorized</u>	<u>Vacant</u>	<u>Percent</u>
Veterinary circuit supervisor	171	15	8.8
Veterinary medical officer	1,084	150	13.8
Food inspector (slaughter)	<u>4,740</u>	<u>238</u>	5.0
Total	<u>5,995</u>	<u>403</u>	6.7

Under the previous administration's partial hiring freeze, announced in March 1980, FSIS could hire only one new employee for every two vacancies. The current administration imposed a total hiring freeze, effective in November 1980. In seeking a partial exemption from this freeze, FSIS reported in February 1981 that a continued hiring freeze would result in an inspection crisis. Although the hiring freeze was lifted in March 1981, budgetary restraints prevented FSIS from hiring to its employment ceiling. An FSIS March 1981 estimate showed that funding was available to support a staffing level of 91 percent of FSIS' employment ceiling.

### INADEQUATE SUPERVISION

Circuit supervisors and inspectors-in-charge are devoting time detailing personnel to cover vacancies or filling the vacancy themselves to the detriment of their other supervisory responsibilities. For example, one circuit supervisor said that he spent 1 day each week ensuring adequate coverage for slaughter inspection. Due to a vacant circuit supervisor position nearby, he also had the responsibility for part of an additional circuit. Due to these additional workloads, he did not make the required annual indepth reviews at nearly two-thirds of the plants in his circuit or at any plants in the additional circuit.

### INADEQUATE MONITORING OF PLANT OPERATIONS

The inspection staff is to monitor overall plant operations. This monitoring is usually done by the inspector-in-charge, by a senior slaughter inspector called a "floor" man, and by processing inspectors in the processing plant. Frequently, these inspectors fill vacant post mortem inspection positions and, as a result, neglect their monitoring responsibilities. For example, one floor man said that when he performs slaughter line inspection, his monitoring of the plant's product handling and outlying areas, such as coolers, freezers, storage areas, and shipping docks, suffers. Another area neglected is FSIS' quality control checks. At 7 of the 15 poultry plants where officials cited staff shortage problems, they said that the shortages had resulted in less than the required number of acceptance quality level tests and/or moisture tests being done.

## MORALE PROBLEMS

Staff shortages have caused low inspection staff morale, which we believe impairs an effective inspection program. We found inspectors had canceled scheduled leave because no replacement was available, worked overtime, and worked temporary duty in locations and/or positions other than normally assigned. One veterinarian, detailed to a plant 65 miles away on short notice, said that he had never seen morale so low. A processing inspector detailed to slaughter inspection also cited morale problems due to detailing. Circuit supervisors and inspectors-in-charge also said that canceled leave, detailing, and overtime caused morale problems.

## INSPECTORS SPEND TIME TRAVELING RATHER THAN INSPECTING

FSIS authorizes inspectors temporarily detailed from one plant to another to travel during regular duty hours or collect overtime. In both instances, time spent traveling reduces the amount of paid time spent performing inspection duties. One inspector, temporarily detailed to a plant visited, traveled 25 miles on Government time each morning and evening and was being paid for about 1 hour a day travel time. In another case an inspector traveled nearly 200 miles to temporarily fill a vacancy. He was authorized 8 hours overtime for the round trip.

## INTERMITTENT EMPLOYEES USED TO FILL VACANCIES

FSIS uses intermittent employees to supplement its regular work force. As of February 1981 FSIS had nearly 1,200 intermittent employees. Although intermittents are used primarily to cover regular inspector absences for such things as leave and training, about 10 percent of them are used to cover vacant full-time inspection positions. Using intermittent employees helps FSIS alleviate staff shortages; however, their availability to fill in for full-time employees is limited. They can work only about 1,200 hours a year, receive minimum training, and are used to fill only the less demanding positions. The hiring freeze also limited the number of intermittents FSIS could hire.

We found that FSIS generally used intermittents more at poultry plants than meat plants. For example, in December 1980 Iowa, a large meat-producing State, had 20 intermittents while Georgia, a large poultry-producing State, had 124. FSIS officials in the meat States said that getting applicants for intermittent positions is limited by high qualification requirements and the lack of a set work schedule. One official said that high-pay rates in many meat States also limit FSIS' ability to hire people for lower paying intermittent inspection positions.

## SOME ALTERNATIVES

FSIS has some alternatives which would allow it to reduce the number of inspectors needed. In December 1977, and again in April 1981, we recommended that FSIS implement a mandatory quality control program in processing plants. <sup>1/</sup> The program would permit FSIS to reduce the number of processing inspectors needed and to reallocate the unneeded processing positions to slaughter operations. Instead of implementing a mandatory program, which would require congressional approval, FSIS requested processing plants to implement an FSIS-approved voluntary quality control program. As of March 3, 1981, 28 total quality control systems had been submitted for FSIS approval; 12 of these had been approved and 8 had been implemented. At that time, there were about 6,300 processing plants.

FSIS previously adopted some new inspection procedures which require fewer inspectors but still afford the same level of consumer protection. For example, FSIS modified its poultry post mortem inspection procedures, which reduced inspection staffing requirements at some plants and avoided staff increases at other plants. In a June 1980 report, FSIS estimated that the modified poultry inspection procedures save about \$2.8 million annually in inspection costs.

FSIS is currently studying additional changes in inspection procedures that would reduce inspection requirements. One change involves eliminating rail inspection positions. (See ch. 6.) Staffing reductions realized from these changes would help alleviate inspector shortages in other slaughter inspection areas.

## CONCLUSIONS

The meat and poultry inspection program has suffered from hiring freezes and budgetary restrictions to the point that some inspection activities are being neglected. The staff shortages have also caused inefficiencies in that FSIS has had to shift inspectors to temporarily fill slaughter inspection vacancies, sometimes to the detriment of processing operations.

The need to use available resources to fill slaughter inspection line positions has resulted in neglect of supervisory, monitoring, and other nonline inspection activities. These neglected activities, although perhaps not as critical as post mortem line inspections, are nonetheless important to assuring that plants produce wholesome and unadulterated products.

In 1977 and 1981 we recommended that the meat and poultry inspection acts be amended to authorize the Secretary of Agriculture to require processing plants to have total quality control systems. The systems could be used to help alleviate

---

<sup>1/</sup>See footnotes 2 and 3 on p. 4.

inspection staffing shortages. Also, as noted in chapter 6, FSIS needs to complete expeditiously its development of post mortem inspection procedures that make plants responsible for quality control over dressing defects to free these inspectors to fill other slaughter inspection needs. Implementation of effective plant quality control systems would result in more efficient use of processing inspectors, help curb escalating inspection costs, and allow FSIS to reprogram resources to help alleviate slaughter inspector shortages.

## CHAPTER 8

### NEED FOR MORE EFFECTIVE MONITORING OF SLAUGHTER PLANT INSPECTION PROGRAMS

The deficiencies at the plants we visited, as discussed in the preceding chapters, show that FSIS has not effectively monitored all slaughter plants to assure that they comply with inspection program requirements. This is evidenced by 26 percent of the randomly selected plants being rated unacceptable in one or more rating areas and by the deficiencies needing correction at plants rated acceptable. (See chs. 2 through 6.) As noted in chapter 3, five of the eight plants that we revisited because they received unacceptable ratings on the first visits also received unacceptable ratings on the revisits. Also, Program Review Branch records on the six States we reviewed showed that its reviewers gave some plants successive unacceptable ratings.

Circuit supervisors need to be more objective in rating plant compliance and more effective in assuring that plants comply with inspection program requirements. Records we examined of supervisory visits to the plants showed few unacceptable ratings. That does not seem reasonable, considering that the FSIS reviewers found 26 percent of the randomly selected plants we visited unacceptable in one or more rating areas. Also, circuit supervisors did not always prepare reports showing conditions they found during required monthly plant visits and listing deficiencies that should be followed up.

FSIS has given circuit supervisors little guidance on rating plants acceptable or unacceptable on each of the basic requirements or on overall plant compliance. As a result, the ratings are largely subjective with little assurance of consistency among supervisors. FSIS needs to provide better guidance to assure that ratings are more objective and are based on uniform criteria.

#### INEFFECTIVE MONITORING

As previously discussed, 26 percent of the 62 randomly selected plants (including 1 FSIS-classified problem plant) and 1 of the other 4 FSIS-classified problem plants we visited were rated unacceptable because of noncompliance with one or more inspection program requirements. These findings show that FSIS' monitoring of plant compliance has not been effective. Supervisors had rarely given the plants any unacceptable ratings and often did not document the results of their required monthly plant reviews.

#### Visits to problem plants

FSIS had previously designated five plants we reviewed as problem or chronic problem plants because of their history of noncompliance. Our visits to these plants (1 of which was among the 62 randomly selected plants) showed that 2 (including the

randomly selected plant) still were not complying with all the basic requirements. FSIS had designated these two plants as problem or chronic problem plants 16 to 18 months before our visits. Circuit supervisors are responsible for assuring that plants comply with inspection requirements, including taking corrective action when deficiencies are found. Supervisory monitoring had not been effective in achieving full compliance at these two plants. The continued noncompliance at one of the two plants resulted in FSIS' terminating inspection service in February 1981. The plant had a history of unacceptable ratings dating back to 1977.

Supervisory reviews at the randomly selected plants we visited

Inspection program supervisors are required to make monthly visits and annual indepth reviews to evaluate plants' compliance with inspection program requirements. Documentation was not available on the results of all the required visits and reviews during a recent 12-month period for the 62 randomly selected plants we visited. However, 341 reports were available in which supervisors had rated the plants in one or more of the basic requirements. Of those cases the supervisors had rated only two plants unacceptable in any basic requirement. We question whether the supervisors were sufficiently critical or objective in their ratings. We base this position on our having found, with the assistance of FSIS supervisors having no responsibility for these plants, that 26 percent of the plants were unacceptable in one or more of FSIS' basic requirements.

The following table shows the number of supervisory plant ratings in each State for the plants we reviewed and the number with unacceptable ratings in any area.

<u>State</u>	<u>Supervisory plant ratings</u>	
	<u>Number documented</u>	<u>Number unacceptable in any area</u>
Iowa	12	0
Ark.	164	1
Ga.	83	0
Nebr.	7	0
Ill.	4	0
Kans.	<u>71</u>	<u>1</u>
Total	<u>341</u>	<u>2</u>

In some cases supervisors documented their plant reviews by narrative reports rather than the formal ratings referred to in the preceding table, and in some cases we found no plant review reports showing that supervisors made the required monthly visits and what they found. The following table shows, by State, the extent to which we found review reports documenting required monthly visits to the 62 randomly selected plants for a recent 12-month period.

### Documented Supervisor Reviews

<u>State</u>	<u>Required reviews</u>	<u>Reports available</u>	
		<u>Number</u>	<u>Percent</u>
Iowa	204	41	20
Ill.	72	18	25
Nebr.	84	39	46
Ga.	120	87	73
Kans.	84	73	87
Ark.	<u>180</u>	<u>165</u>	92
Total	<u>744</u>	<u>423</u>	57

Supervisors in three meat States were particularly lax in documenting the results of their monthly reviews. Supervisors may have made additional reviews, but they need to document that the reviews were made and, more importantly, what deficiencies were found. Documentation is needed to help assure that all deficiencies are properly identified and eventually corrected.

#### SUPERVISORS NEED UNIFORM PLANT RATING CRITERIA

FSIS needs to provide better guidance to inspection program supervisors on rating plants acceptable or unacceptable in each of the program's basic requirements and in overall plant compliance. Current plant ratings largely represent each rater's judgment. The ratings provide little assurance that raters are as objective as they should be and that uniform rating criteria are used and understood by all raters. Current ratings are more subjective than those of a few years ago when supervisors used a detailed plant review checklist, which produced a score that determined whether a plant received an acceptable rating.

Current objectivity and uniformity problems are illustrated by the fact that although 26 percent of the randomly selected plants we visited with "outside" FSIS reviewers were rated unacceptable for one or more requirements, local supervisors had rarely given the plants unacceptable ratings. Even the "outside" FSIS reviewers gave different ratings for the same problems. One reviewer rated sanitation in a swine plant unacceptable because of generally poor sanitation. On our return visit to that plant about 4 weeks later, another reviewer rated sanitation acceptable although we observed virtually no improvement. In another case a reviewer rated a plant's sanitation acceptable because some deficiencies had been corrected, but the other reviewers based their ratings on conditions found, not conditions as corrected.

Confusion existed about the criteria for rating a plant's overall compliance unacceptable. In one case a reviewer who accompanied us initially rated a poultry plant unacceptable on overall compliance because the plant was unacceptable in one of the basic rating areas. He said this was his normal practice.

When plant management took exception to the rating, the reviewer contacted his regional director. The director said that no such rating criterion existed for overall plant compliance. The reviewer then changed the overall rating to acceptable.

#### Rating guidance provided to supervisors

A meat and poultry inspection program directive, in effect since 1973, describes inspection program requirements under each of the basic rating areas. The directive, however, provides no clear instructions on circumstances for rating the plants acceptable or unacceptable in each area or overall. The only guidance states that

"Operating procedures are not acceptable if they result in unnecessary product contamination during handling even though subsequently cleaned."

Literal interpretation of that statement could result in unacceptable ratings if any contamination is observed at any stage of operations. We found that the FSIS reviewers did not apply the criteria in that manner. Also, FSIS product acceptance testing criteria permit some contamination on "acceptable" products. (See ch. 5.)

The directive also does not clearly state what criteria should be used for rating plants unacceptable in overall compliance. It does describe criteria for designating a plant as endangering public health. An FSIS headquarters official said that this was the intended criterion for rating a plant's overall compliance unacceptable. We observed that at least 4 of the 14 supervisors who rated plant compliance for us did not understand that a plant had to be identified as endangering public health, as defined in the directive, before it could be rated unacceptable on overall compliance.

#### CONCLUSIONS

FSIS' monitoring of slaughter plant operations does not effectively assure plants' compliance with inspection program requirements. The 26-percent incidence of plants rated unacceptable in one or more of the rating areas and the continued unacceptable levels of compliance in some plants show the need for more effective monitoring.

FSIS needs to provide its meat and poultry inspection supervisors with definitive criteria for rating plants acceptable or unacceptable in the various rating areas and in overall compliance to better assure an objective, uniform, and effective monitoring system. FSIS has not established this criteria and, as a result, ratings are largely judgmental. The overreliance on raters' judgment promotes inconsistencies among plant reviewers and does little to help assure that reviewers are reasonably critical during their reviews and in their plant ratings.

FSIS' monitoring of plant compliance is also weakened by supervisors' not always documenting the results of their monthly plant reviews. Documenting the results of these reviews is important to provide a record of compliance trends and a record of deficiencies to be followed up on during subsequent visits.

RECOMMENDATIONS TO THE SECRETARY  
OF AGRICULTURE

We recommend that the Secretary of Agriculture direct the Administrator, FSIS, to:

- Emphasize to meat and poultry inspection program supervisors the importance of taking effective actions to bring plants up to acceptable levels of compliance when they are found to be out of compliance.
- Provide meat and poultry inspection program supervisors with improved plant-rating criteria that can be applied uniformly and that specify review findings which require a plant to be rated unacceptable in each rating area and overall.
- Require meat and poultry inspection program supervisors to document the results of their required monthly plant reviews.

RESULTS OF OUR ANALYSIS OF SLAUGHTER PLANTS<sup>1</sup>COMPLIANCE WITH INSPECTION REQUIREMENTS

	<u>Meat plants</u>	<u>Poultry plants</u>	<u>Total</u>
Number of plants in review universe (note a)	181	57	238
Number of plants reviewed	37	25	62
Number of plants given unacceptable ratings (note b) for:			
--One or more basic requirements	10	6	16
--Sanitation	8	3	11
--Pest control	5	2	7
Number of plants found with water system problems (note c)	20	19	39
Estimated percent (note d) of plants in the review universe that would have received unacceptable ratings for:			
--One or more basic requirements:			
Best	16.7	23.7	18.4
Lowest	6.1	10.5	7.5
Highest	29.5	44.1	29.3
--Sanitation:			
Best	14.4	14.1	14.1
Lowest	4.4	6.4	4.6
Highest	26.9	21.8	24.6
--Pest control:			
Best	8.7	7.8	8.5
Lowest	2.8	3.5	2.9
Highest	18.1	19.5	16.2
Estimated percent of meat and poultry in re- view universe that is produced by plants that would have received unacceptable rat- ings for one or more basic requirements:			
Best	25.1	24.0	24.9
Lowest	14.3	15.3	14.5
Highest	38.6	41.1	36.4
Estimated percent of plants in review universe that had water system problems:			
Best	45.3	69.6	51.0
Lowest	18.2	50.7	30.0
Highest	72.2	88.5	72.1

a/Meat plants in four States and poultry plants in two other States.

b/Unacceptable ratings not shown for condemned and inedible material controls, ante mortem and post mortem inspection, water supply, and sewage and waste material control, because we did not project these lower incidences of unacceptable ratings (see p. 9) to the review universe.

c/Includes the one plant rated unacceptable for water supply.

d/The estimates shown are the lowest, highest, and best estimates at the 95-percent confidence level. The lower limit is not below the percent of plants we actually found not to be in compliance.

RANDOM SAMPLE PLANTS WE VISITED THAT WERE  
UNACCEPTABLE ON ONE OR MORE OF THE BASIC REQUIREMENTS

<u>Name and location</u>	<u>Date(s) of visit(s)</u>	<u>Rating areas found unacceptable</u>	<u>Corrective action information</u>
<u>Meat plants</u>			
Illinois:			
Davenport Packing Co., Inc., Milan	Dec. 9-10, 1980	Sanitation, pest control	FSIS corrective action report dated Dec. 15, 1980, shows some deficiencies corrected, but the report was generally unresponsive. Inspector reported plant is aware of pest control problem but has made no efforts toward correction. FSIS withdrew inspection on Feb. 13, 1981.
Wilson Foods Corp., Monmouth	Dec. 16-17, 1980	Sanitation, condemned and inedible material controls	FSIS corrective action report dated Feb. 2, 1981, shows most deficiencies corrected or planned for correction.
Iowa:			
Land O'Lakes Inc.- Spencer Beef, Oakland	Aug. 7-8, 1980	Sanitation, pest control, overall plant	Some deficiencies corrected during visit. FSIS corrective action report dated Sept. 1980 shows most deficiencies corrected or planned for correction. FSIS supervisor found plant acceptable on Nov. 25, 1980.
	Dec. 8, 1980 (revisit)	Sanitation, overall plant	FSIS did not permit slaughter operations to start until the unsanitary areas were cleaned. FSIS corrective action report dated Jan. 1981 shows most deficiencies corrected or planned for correction. Followup visit by area supervisor in Jan. 1981.
Dubuque Packing Co., Le Mars	Sept. 11-12, 1980	Pest control	Correction started on day of review. FSIS corrective action report dated Oct. 21, 1980, shows most deficiencies corrected or planned for correction.
Dubuque Packing Co., Dubuque	Oct. 15-16, 1980	Sanitation	FSIS corrective action report dated Dec. 1, 1980, shows most deficiencies corrected or planned for correction.
	Dec. 15, 1980 (revisit)	Sanitation	FSIS supervisor found the plant acceptable on Dec. 10, 1980. FSIS corrective action report dated Jan. 9, 1981, shows most deficiencies corrected or planned for correction.

<u>Name and location</u>	<u>Date(s) of visit(s)</u>	<u>Rating areas found unacceptable</u>	<u>Corrective action information</u>
Swift and Co., Marshalltown	Oct. 27-28, 1980	Sanitation	FSIS corrective action report dated Dec. 17, 1980, shows most deficiencies corrected or planned for correction.
	Dec. 12, 1980 (revisit)	None	Not applicable
Marshall Packing Co., Inc., Marshalltown	Oct. 29-30, 1980	Sanitation	FSIS corrective action report dated Dec. 17, 1980, shows most deficiencies corrected or planned for correction.
	Dec. 11, 1980 (revisit)	None	Not applicable
Famland Foods, Inc., Iowa Falls	Nov. 13-14, 1980	Sanitation, ante mortem and post mortem, condemned and inedible material controls	FSIS supervisor found sanitation and condemned and inedible material controls acceptable on Dec. 10, 1980. FSIS corrective action report dated Dec. 23, 1980, shows most deficiencies corrected or planned for correction.
	Dec. 10, 1980 (revisit)	Sanitation (note a)	FSIS corrective action report dated Dec. 30, 1980, shows most deficiencies corrected or planned for correction.
Geo. A. Hormel & Co., Fort Dodge	Nov. 17-18, 1980	Pest control, condemned and inedible material controls	Subsequent corrective action report undated shows most deficiencies corrected or planned for correction.
Iowa Beef Processors, Inc., Fort Dodge	Nov. 19-20, 1980	Sanitation, pest control	Subsequent corrective action report undated shows most deficiencies corrected or planned for correction.
	Dec. 9, 1980 (revisit)	Sanitation	FSIS corrective action report dated Dec. 31, 1980, shows most deficiencies corrected or planned for correction.

<sup>a</sup>/The FSIS reviewer rated sanitation acceptable, but we rated it unacceptable. (See pp. 13 and 14.)

<u>Name and location</u>	<u>Date(s) of visit(s)</u>	<u>Rating areas found unacceptable</u>	<u>Corrective action information</u>
<u>Poultry plants</u>			
Arkansas:			
Arkansas Poultry Co., Inc., Batesville	Oct. 22-23, 1980	Sanitation	FSIS corrective action report dated Jan. 12, 1981, shows most deficiencies corrected or planned for correction.
	Dec. 2, 1980 (revisit)	None	Not applicable. FSIS supervisors found the plant acceptable on Nov. 20 and Dec. 2, 1980.
Valmac Ind., Inc., Dardanelle	Dec. 11-12, 1980	Sanitation (note b)	FSIS corrective action report dated Jan. 15, 1981, shows most deficiencies corrected or planned for correction.
Country Pride Foods, Ltd., El Dorado	Jan. 6-7, 1981	Condemned and inedible material controls	Company corrective action report dated Jan. 8, 1981, shows most deficiencies corrected or planned for correction.
Lane Poultry Co., Grannis	Jan. 8-9, 1981	Sanitation, water supply, ante mortem and post mortem, overall plant	Company corrective action report undated and FSIS corrective action reports dated Jan. 14 and 17, 1981, show most deficiencies corrected or planned for correction.
Valmac Ind., Inc., Pine Bluff	Jan. 14-15, 1981	Pest control	FSIS and company corrective action reports dated Jan. 19 and 21, 1981, show most deficiencies corrected or planned for correction.
Georgia:			
Gold Kist Poultry, Athens	June 18-19, 1980	Pest control	Corrections started on visit date. FSIS supervisor found plant acceptable in Oct. 1980. FSIS corrective action report dated Dec. 5, 1980, shows most deficiencies corrected or planned for correction.

b/We considered sanitation unacceptable at this plant. (See footnote b on p. 9.)

RANDOM SAMPLE PLANTS WE VISITED THAT  
WERE ACCEPTABLE ON THE BASIC REQUIREMENTS

<u>Name and location</u>	<u>Date(s) of visit(s)</u>
<u>Meat plants</u>	
Illinois:	
Royal Packing Co. National Stockyards	Oct. 7-8, 1980
Oscar Mayer and Co., Inc., Beardstown	Oct. 13-14, 1980
Swift Fresh Meats Co., National Stockyards	Oct. 15-16, 1980
E.W. Kneip, Inc., Elburn	Dec. 11-12, 1980
Iowa:	
Wilson Foods Corp., Des Moines	Aug. 5-6, 1980
Wilson Foods Corp., Cherokee	Sept. 9-10, 1980
Land O'Lakes, Inc.-Spencer Beef, Spencer	Sept. 15-16, 1980
Hygrade Food Products Corp., Storm Lake	Sept. 17-18, 1980
Oscar Mayer and Co., Inc., Davenport	Oct. 17, 20, 1980
Geo. A. Hormel & Co., Ottumwa	Oct. 21-22, 1980
Jimmy Dean Meat Co., Inc., Osceola	Oct. 23-24, 1980
John Morrell and Co., Estherville	Dec. 2-3, 1980
Iowa Beef Processors, Inc., Denison	Dec. 4-5, 1980
Kansas:	
Dubuque Packing Co., Mankato	Sept. 29-30, 1980
National Beef Packing Co., Liberal	Oct. 28-29, 1980
Hyplains Dressed Beef, Dodge City	Oct. 30-31, 1980
Doskocil Sausage, Inc., South Hutchinson	Nov. 3-4, 1980
Dubuque Packing Co., Wichita	Nov. 13-14, 1980
John Morrell and Co., Arkansas City	Nov. 17-18, 1980
Iowa Beef Processors, Inc., Emporia	Nov. 19-20, 1980
Nebraska:	
Union Packing Co. of Omaha, Omaha	July 8, 1980
Geo. A. Hormel & Co., Fremont	July 9, 1980
Land O'Lakes, Inc.-Spencer Beef, Schuyler	July 10, 1980
Iowa Beef Processors, Inc. West Point	July 15-16, 1980
Cornland Dressed Beef Co., Lexington	Sept. 25-26, 1980
Dugdale Packing Co., Norfolk	Oct. 2-3, 1980
Madison Foods, Inc., Madison	Oct. 6-7, 1980
<u>Poultry plants</u>	
Arkansas:	
Tyson Foods, Inc., Green Forest	Oct. 24, 27, 1980
Simmons Industries, Inc., Siloam Springs	Oct. 28-29, 1980
Campbell Soup Co., Fayetteville	Oct. 30-31, 1980
Peterson Ind., Inc., Decatur	Nov. 17-18, 1980
Cargill, Inc., Springdale	Nov. 19-20, 1980
Southerland Division of Banquet Foods Corp., Clinton	Dec. 3-4, 1980
Cargill of Arkansas, Inc., Ozark	Dec. 5-8, 1980
Wayne Poultry Division of Allied Mills, Inc., Danville	Dec. 9-10, 1980
OK Foods, Inc., Ft. Smith	Dec. 15-16, 1980
Hudson Foods, Inc., Hope	Jan. 12-13, 1981

<u>Name and location</u>	<u>Date(s) of visit(s)</u>
Georgia:	
Gold Kist, Inc., Ellijay	June 9, 1980
Mar-Jac, Inc., Gainesville	June 10, 1980
Fieldale Corp., Cornelia	June 11, 1980
Marell Poultry Co., Murrayville	June 12, 1980
Country Pride Foods, Ltd., Gainesville	June 13, 1980
Tyson Foods, Inc., Cumming	June 16-17, 1980
Claxton Poultry Co., Inc., Claxton	Dec. 2-3, 1980
Joseph Campbell Co., Douglas	Dec. 4-5, 1980
Gold Kist, Inc., Carrollton	Dec. 8-9, 1980

PLANTS WE VISITED BECAUSE FSIS HADDESIGNATED THEM AS PROBLEM PLANTS

<u>Name and location</u>	<u>Date(s) of visit(s)</u>	<u>Rating areas found unacceptable</u>	<u>Corrective action information</u>
Meat plants:			
Diamond Meat Packers Inc., Carlinville, Ill. (Designated June 4, 1979)	Oct. 9-10, 1980	Sanitation, water supply	Operations delayed 1 hour on Oct. 9, 1980. FSIS correc- tive action report dated Dec. 22, 1980, shows most deficiencies corrected or planned for correction.
	Jan. 7, 1981 (revisit)	Sanitation	FSIS corrective action report dated Jan. 23, 1981, shows most deficiencies corrected or planned for correction.
Flanery Foods, Inc., Scottsbluff, Neb. (Designated Nov. 5, 1979)	Sept. 23-24, 1980	None	Not applicable
Foremost Packing Co., East Moline, Ill. (Designated May 29, 1980)	Dec. 18-19, 1980	None	Not applicable
Poultry plant:			
Springdale Farms, Inc., Plant No. 1, Spring- dale, Ark. (Designated July 26, 1979)	Nov. 13-14, 1980	None	Not applicable

DEFECTS SCORED IN TESTING SAMPLE  
CATTLE CARCASSES FOR ACCEPTABILITY

<u>Defect description (note a)</u>	<u>Class of defect</u>
Bruises or other injuries measuring:	
more than 2 inches wide and 1 inch or less deep	Minor
2 inches or less wide and more than 1 inch deep	Minor
more than 2 inches wide and more than 1 inch deep	Major
Grub parasites (wormlike larva of an insect):	
one grub	Minor
two or three grubs	Major
four or more grubs	Critical
Eleven or more hairs only on hock	Minor
Hairs on carcass:	
11 to 25 hairs	Minor
26 to 50 hairs	Major
over 50 hairs	Critical
Clusters of hair:	
one or two clusters	Minor
three or four clusters	Major
five or more clusters	Critical
Piece of hide measuring:	
less than 1/2 inch	Minor
1/2 inch to 3 inches	Major
over 3 inches	Critical
Grease, oil, or other stains measuring:	
less than 2 inches	Minor
2 inches or more	Major
Dust from overhead production line rails or similar specks:	
11 to 25 specks	Minor
26 or more specks	Major
Improper trim, such as failure to remove pieces of organs or large blood clots	Minor
Dressing defects (any defects not previously described that should have been removed per FSIS carcass dressing standards) measuring:	
1/4 to 2 inches	Minor
more than 2 inches and up to 4 inches	Major
over 4 inches	Critical

a/Counts as one defect each time the described condition is found on a test carcass.

DEFECTS SCORED IN TESTING SAMPLE  
POULTRY CARCASSES FOR ACCEPTABILITY

<u>Defect description (note a)</u>	<u>Class of defect</u>
Each group of five or less specks of digestive tract material	Minor
Any fecal material	Major
Any part of the crop (food packet)	Major
Any part of the intestines	Major
Any part of the cloaca (chamber into which the intestines empty)	Major
Feathers of 1 inch or more	Major
Six or more stains measuring 1/32 inch or less	Minor
Each stain measuring more than 1/32 inch but not more than 1/2 inch	Minor
Each stain measuring more than 1/2 inch	Major
Six or more grease or wax specks measuring 1/32 inch or less	Minor
Each grease or wax speck measuring more than 1/32 inch but not more than 1/2 inch	Minor
Each grease or wax speck measuring more than 1/2 inch	Major
Six or more unidentified material specks measuring 1/32 inch or less	Minor
Each speck of unidentified material measuring more than 1/32 inch but not more than 1/2 inch	Minor
Each speck of unidentified material measuring more than 1/2 inch	Major
Any part of the windpipe	Major
Any part of the esophagus (muscular tube running down the neck)	Major
Any fragments of mature reproductive organs	Minor
Complete mature reproductive organs	Major
Each two or less lung portions measuring 1/4 inch or less	Minor
Each lung portion measuring more than 1/4 inch	Minor
Each whole lung	Major
Each two or fewer oil gland fragments (limited to two defects)	Minor
Each whole oil gland (limit of two defects)	Minor
Each hock fragment covering one condyle (knuckle) (limit four defects)	Minor
Each incidence where hock fragments cover both condyles (limit two defects)	Major
Feathers or protruding pinfeathers (5 to 10 equals one defect; 11 to 15 equals two defects; and 16 or more equals three defects)	Minor

a/Counts as one defect each time the described condition is found on a carcass.



**AN EQUAL OPPORTUNITY EMPLOYER**

**UNITED STATES  
GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548**

**OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300**

**POSTAGE AND FEES PAID  
U. S. GENERAL ACCOUNTING OFFICE**



**THIRD CLASS**