

UNITED STATES DEPARTMENT OF AGRICULTURE
FOOD SAFETY AND INSPECTION SERVICE
WASHINGTON, DC

FSIS DIRECTIVE

4791.11
REVISION 1

6/2/97

LOCKOUT/TAGOUT SAFETY PROCEDURES

I. PURPOSE

This directive:

A. Describes OSHA's minimum safety * * * procedures that an inspector must perform before starting a pre-operational process verification inspection or verification of pre-operational or operational corrective action in which the unexpected startup or release of stored energy could cause injury.

B. Establishes procedures to ensure that an inspector who is not properly trained in * * * lockout/tagout safety shall not perform a pre-operational process verification inspection or verification of pre-operational or operational corrective action on a machine or equipment required to be locked or tagged out.

C. Ensures implementation of procedures to prevent inspection employees from being injured by the unexpected energization of equipment or machines.

D. Provides a model (Attachment 1) of an agreement developed by Field Operations frontline supervisors in cooperation with plant management on implementing lockout/tagout procedures within each establishment.

II. CANCELLATION

This directive cancels FSIS Directive 4791.11, dated 6/19/96.

III. REASON FOR REISSUANCE

This directive is reissued to include an additional lockout/tagout procedure which provides maximum safety for FSIS personnel and fully complies with regulatory requirements in CFR Title 29 parts 1960 and 1910. The additional recommended procedure includes entering into a cooperative agreement with federally inspected establishments for the utilization of a joint or group lockout/tagout process. This procedure ensures that a plant employee does not unlock and reenergize a piece of equipment while FSIS employees are in the process of inspecting equipment by requiring the inspector to place his or her lock or tag on an energy source or a group lockbox.

DISTRIBUTION:

All Inspection Offices; T/A Inspectors;
Plant Management; T/A Plant Management;
TRA; ABB; PRD; Union Officials

OPI:

OFO – Office of the Deputy
Administrator
ASD – Environmental Management
and Safety Branch

IV. **REFERENCES**

FSIS Directive 4791.12, Reporting and Correcting Occupational Hazards
FSIS Directive 11,100.3, Evaluating, Verifying, and Enforcing a
 Sanitation Standard Operating Procedure
29 U.S.C. 668, Occupational Safety and Health Act of 1970
Executive Order 12196, Occupational Safety and Health Program
 for Federal Employees
29 CFR Part 1960, Basic Program Elements for Federal Employees
 Occupational Safety and Health Programs and Related Matters
29 CFR Part 1910.147, The Control of Hazardous Energy (Lockout/Tagout)
* * *

USDA Safety and Health Manual
9 CFR Part 416.11-17, Sanitation
OSHA Instruction Standard 1-7.3, Inspection Procedures and Interpretive
 Guidance

V. **FORMS AND ABBREVIATIONS**

The following will be used in their shortened form:

| | |
|-------|---|
| CFR | Code of Federal Regulations |
| IIC | Inspector-In-Charge |
| * * * | |
| OSHA | Occupational Safety and Health Administration |
| SSOP | Sanitation Standard Operating Procedures |

VI. **SCOPE AND APPLICABILITY**

This directive applies to the control of energy during the pre-operational process verification inspection or verification of pre-operational or operational corrective action. These procedures apply to machinery and equipment in meat, poultry, and egg products plants and import inspection facilities. Lockout/tagout procedures are required **only if these tasks expose the inspector to the unexpected startup or release of stored energy which could cause injury**. Lockout/tagout applies when:

A. Tasks are performed on machines or equipment on which the guards or other safety devices have been removed or bypassed during cleaning or maintenance procedures resulting in exposure to hazards at the point of operation.

B. The inspector places any part of his or her body into the danger zone such as, the point of operation associated with the machine or equipment.

VII. **DEFINITIONS**

A. **Abatement.** The act or process of abating, correcting, neutralizing, or removing an unsafe or unhealthy workplace condition or practice.

B. **Affected Employee.** An inspector whose job requires the inspector to work in an area where inspection, service or maintenance of machines or equipment is being performed under lockout or tagout procedures.

C. **Authorized Employee.** A trained and qualified person who locks or tags out workplace machines or equipment to perform inspection, service or maintenance on that machine or equipment. An affected employee becomes an authorized employee when duties include performing an inspection, service or maintenance under lockout/tagout.

1. **Primary Authorized Employee.** A plant employee trained in lockout/tagout procedures and responsible for their implementation.

2. **Secondary Authorized Employee.** An FSIS employee trained in lockout/tagout procedures.

D. **Energy Isolating Device.** A mechanical device that physically prevents the transmission or release of energy. Devices include but are not limited to:

1. Manually operated electrical circuit breakers.
2. Disconnect switches.
3. Manually operated switches by which the circuit conductors can be disconnected from ungrounded supply conductors, and no pole can be operated independently.
4. Line valves.
5. Blocks.
6. Any similar devices to block or isolate energy. (**NOTE:** Push buttons, selector switches, and other control circuit-type devices are not energy isolating devices.)

D. **Energy Source.** Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or hazardous energy.

F. **Lockout Device.** A positive means, such as a key or combination-type lock, to hold an energy isolating device in a safe position and prevent energizing a machine or equipment. Lockout devices include blank flanges and bolted slip blinds.

G. **Serious.** A hazard, violation, or condition where there is a substantial probability that death or serious physical harm could result.

H. **Tagout Device.** A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device according to established procedure. The tagout device shows that the energy isolating device and the equipment being controlled may not be operated until the warning device is removed by the

authorized employee who placed the tagout device on the energy isolating device.

- I. **SSOP.** Requirements for implementing and maintaining sanitation standard operating procedures described in 9 CFR sections 416.11-17.

* * *

VIII. IDENTIFYING MACHINES AND EQUIPMENT

* * *

A. The IIC or inspector must assure that machines and equipment required to be locked out are clearly identified on a schematic or floorplan that:

1. Lists the exact location of the machines and equipment required to be locked out or assessed before a pre-operational or operational sanitation inspection. * * *
2. Lists the exact location of each energy isolating device and shows which machines and equipment each device controls.

B. The IIC, import inspector, or egg products inspector must post the lockout/tagout schematic or floorplan in a readily visible location. This allows relief inspectors responsible for performing SSOP verification activities to observe and review the exact locations of machines, equipment, and energy isolating devices within a plant before starting the inspection.

IX. PROCEDURES FOR ASSESSING LOCKOUT/TAGOUT SAFETY

A. An inspector **not properly trained** in * * * lockout/tagout safety procedures according to this directive and the cooperative agreement shall **not, under any circumstances**, perform a pre-operational process verification inspection or verification of pre-operational or operational corrective action which requires inspecting inside a machine or piece of equipment in which the unexpected energization of the machine or equipment, or the release of stored energy could cause injury to employees.

B. An inspector shall, as a **secondary** authorized FSIS employee, perform the following procedures before starting the pre-operational process verification inspection or verification of pre-operational or operational corrective action as a result of operational verification findings involving a machine or equipment meeting the scope and applicability of this directive and the cooperative agreement.

1. **Preparation for Shutdown.** Inform plant management that specific machines or equipment must be completely shut down and locked or tagged out for pre-operational or operational process verification in those situations meeting the scope and applicability of this directive and the cooperative agreement.

2. **Machine or Equipment Shutdown.** Ensure that an orderly shutdown occurs by observing the **primary** authorized plant employee(s) shut down the machine or equipment by the normal stopping procedure. (**EXAMPLES:** Depressing stop button, opening switch, and closing valve.)

3. **Machine or Equipment Isolation.** Ensure by observing and verifying that the **primary** authorized plant employee(s) has physically located and de-activated all energy isolating devices for that machine or piece of equipment.

4. **Lockout or Tagout Device Application.**

a. Ensure by observing and verifying that the **primary** authorized plant employee(s) has located and locked out the isolating devices with assigned individual locks. (**NOTE:** When a tagout device is used on an energy isolating device which can be locked out, the tagout device shall be attached where the lockout device would have been attached.)

b. The level of safety obtained using the tagout program must be equal to the level of safety obtained using a lockout program. Plant management must demonstrate * * * that the plant tagout program complies with all tagout-related provisions of the OSHA standard and with any additional safety elements necessary to provide full inspector protection that equals the level of safety received from using a lockout device. (**NOTE:** Additional safety elements include implementing measures such as removing an isolating circuit element, blocking a control switch, opening an extra disconnecting device, or removing a valve handle to reduce the likelihood of inadvertent energization.)

c. The **secondary** authorized FSIS employee locks or tags out energy isolation devices identified in the cooperative agreement under one of the following procedures:

1. After the primary authorized plant employee has placed his/her personal lock or tag upon each energy isolating device, the secondary authorized FSIS employee affixes his or her personal lock or tag to the energy isolating device. This procedure may be appropriate when there are limited numbers of isolated energy sources and pieces of equipment or machines.

2. The primary authorized plant employee places his/her personal lock or tag upon each energy isolating device, and places the key or tag tabs in a lockbox. Each authorized employee (plant and FSIS) affixes his or her lock to the lockbox. This procedure may be appropriate when there are many energy sources and pieces of equipment or machines.

3. A combination of the procedures in subparagraphs 1. and 2.

5. **Stored Energy.** Ensure by observing and verifying with the primary authorized plant employee(s) that stored or residual energy has been dissipated or restrained by methods such as grounding, repositioning, blocking, and bleeding down. Stored or residual energy may be found in items such as capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure.

6. **Verification of Isolation.** Ensure that equipment is disconnected from energy sources. Observe the primary authorized plant employee(s) operate the push button or normal operating controls or test to make certain the equipment will not operate. The machine or piece of equipment is now locked out. (**NOTE:** The plant employees should return operating controls to the neutral or "OFF" position after verifying the equipment isolation and before the inspector performs a pre-operational process verification inspection or verification of pre-operational or operational corrective action as a result of operational verification findings.)

7. **Locked or Tagged Out Equipment.** An inspector or affected employee shall leave all lock and tagout devices alone. Do not attempt to start or use equipment that has been locked or tagged out.

8. **Completion of Verifications.** When an inspector has completed a pre-operational process verification inspection or verification of pre-operational or operational corrective action, the inspector shall notify plant management **immediately** that the inspected machines or equipment may be released from the energy control procedures by the secondary authorized FSIS employee and the primary authorized plant employee(s). (**NOTE:** This action occurs upon completing the pre-operational process verification inspection or verification of pre-operational or operational corrective action on the specific machine or equipment regardless of inspection findings, such as acceptable or critical, and major or minor deficiency.) Official control actions for failure of sanitation requirements can occur at this time, but locks or tagouts must be removed.

X. **TEMPORARY REMOVAL OF LOCKOUT/TAGOUT DEVICE**

In extremely rare instances, components of certain machines and equipment must be energized in order to inspect during a pre-operational process verification inspection or verification of pre-operational or operational corrective action. When a lockout or tagout device must be temporarily removed from an energy isolating device to energize a machine or equipment, the secondary authorized FSIS employee:

A. **Informs** the primary authorized plant employee that the machine or equipment being inspected must be temporarily energized to move the component and removes his/her lock or tag.

B. **Deenergizes** the machine or equipment immediately after the component is moved.

C. **Ensures** deenergizing of all systems and reapplication of energy control measures (lockout or tagout devices) according to this directive, to allow the sanitation inspection to continue safely.

XI. **CORD-AND-PLUG CONNECTED ELECTRIC EQUIPMENT**

A. Cord-and-plug connected electric equipment is not required to comply with OSHA lockout/tagout procedures. The exposure to hazards of unexpected energization or startup is controlled by unplugging equipment from the energy source. The person doing the pre-operational process verification inspection or verification of pre-operational or operational corrective action must have exclusive control of the plug.

B. Prior to a pre-operational process verification inspection or verification of pre-operational or operational corrective action of cord-and-plug electric equipment which may expose the inspector to stored energy, the inspector shall:

1. **Determine** if the electric equipment is unplugged by conducting a visual inspection.

2. **Inform** plant management to unplug the electric equipment if the equipment is found to be plugged into an electrical outlet. The plant employee places the disconnected plug in a position that can be readily seen by the inspector during the inspection. (**NOTE:** The inspector has exclusive control of the cord-and-plug connected electric device during the pre-operational process verification inspection or verification of pre-operational or operational corrective action.)

3. **Inform** plant employees to operate the push button or normal operating controls of the cord-and-plug connected electric equipment to make certain the equipment has dissipated stored energy. (**NOTE:** The plant employees should return operating controls to the neutral or "OFF" position after verifying that stored energy has been dissipated.)

4. If the plant is located in an OSHA State Plan State, cord-and-plug equipment may be required to be locked or tagged out. FSIS will comply with the requirements of the State Plan State.

XII. **PERIODIC INSPECTION**

A. The circuit supervisor or designee shall conduct an annual inspection of the energy control procedures at the plant to identify and correct any deviations or inadequacies. The inspection shall be conducted by an authorized FSIS employee (circuit supervisor or designee) other than the one(s) using the energy control procedures at the facility. The inspection shall be completed within the first quarter of the calendar year.

B. The inspection includes a review of the employee's responsibilities under the energy control procedures being inspected.

C. The circuit supervisor certifies that the inspections have been performed and maintains each certification at the workplace for five years. The certification includes:

1. Observation of the identification of the machine or equipment on which the energy control procedure was being utilized.
2. Deviations or inadequacies.
3. Date of the inspection.
4. Names of the employees included in the inspection, and the name of the person performing the inspection.

XIII. **TRAINING**

A. **Employee Training.** The circuit supervisor ensures through scheduled safety awareness training reviews that inspectors are familiar with the lockout/tagout safety procedures in this directive and the cooperative agreement. Training reviews should be conducted at the same time of the periodic inspection.

B. **Employee Retraining.** Retraining shall reestablish the inspector's proficiency and introduce new or revised control methods and procedures, as needed. Supervisors and IIC's are responsible for:

1. **Retraining** inspectors under their supervision when a change occurs in:
 - a. Inspector's job assignment(s).
 - b. Machines.
 - c. Equipment or processes that present a new hazard.
 - d. Energy control procedures.
2. **Providing additional retraining** when a periodic inspection reveals, or when the supervisor or IIC has reason to believe, that there are deviations from, or inadequacies in, the inspector's knowledge or use of the "Lockout/Tagout Safety Procedures" outlined in this directive.
3. **Certifying** that inspectors under their supervision are proficient in the "Lockout/Tagout Safety Procedures". This is accomplished by personally conducting periodic inspections, at least annually, to ensure that the inspectors are following the lockout/tagout procedures outlined in this directive.
4. **Submitting** annually, each January, a written letter through the area office to the regional/district office certifying that:
 - a. All inspectors under their supervision who are conducting pre-operational or operational sanitation inspections are proficient in the "Lockout/Tagout Safety Procedures" outlined in this directive; **and**

b. The required retraining has been accomplished in compliance with this directive.

C. **Training Records.** Maintain training records and make the records readily available for inspection according to OSHA. The lockout/tagout safety procedures training records shall include the:

1. Names of the inspectors receiving training.
2. Name of the instructor.
3. Specific modes of training used. (**EXAMPLES:** Lecture, handout material, films, and walk through lockout training survey.)
4. Dates and times of the training sessions.
5. Signature of the trained inspector.

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XIV. **PLANTS WITHOUT LOCKOUT/TAGOUT PROCEDURES**

A. **Notifying the Plant of Withdrawal.** If a plant does not have or does not properly implement an OSHA-required lockout/tagout procedure **or** plant management refuses to properly lock out a machine or equipment that an inspector is scheduled to inspect, the inspector:

1. Takes "Official Control Action" (i.e., U.S. Rejected Tag procedure) in the area(s) of the plant where machines or pieces of equipment are physically located.
2. Informs plant management that FSIS requires the withdrawal of inspectors from the plant or areas of the plant to the extent necessary to assure that the inspectors are protected from unsafe or unhealthy workplace conditions. The withdrawal of inspectors complies with OSHA requirements governing Federal employees working in private sector workplaces. (See Attachment 2.)

B. **Reporting a Serious OSHA Violation.** When a plant does not have or has not properly implemented an OSHA-required lockout/tagout program, which is a serious OSHA violation (see Attachment 2.), employees shall promptly report the violation following the procedures in Part Two of FSIS Directive 4791.12.



Deputy Administrator
Office of Management

Attachments

- 1 Cooperative Agreement Model
- 2 OSHA Regulations

COOPERATIVE AGREEMENT MODEL

**COOPERATIVE AGREEMENT
FOR
LOCKOUT/TAGOUT PROCEDURES
BETWEEN
FSIS AND OFFICIAL ESTABLISHMENTS**

Lockout/tagout procedures for the Food Safety and Inspection Service and the (Name of Official Establishment), Est. No. _____, located at (street address), (city), (state).

I. PURPOSE

This procedure establishes the requirements for the lockout/tagout of energy isolating devices whenever pre-operational process verification inspection or verification of pre-operational or operational corrective action tasks are done on machines or equipment that may expose inspection personnel to hazardous energy. It shall be used to ensure that machines or equipment are stopped, isolated from all potentially hazardous energy sources and locked or tagged out before any inspection personnel perform pre-operational/operational sanitation and inspection tasks where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury to employees. These procedures do not apply to pre-operational/operational sanitation inspection tasks that do not expose inspection personnel to the unexpected release of hazardous energy. These procedures also do not apply to cord-and-plug connected electrical equipment under the following conditions: (1) The hazard must be controlled by unplugging the equipment from the energy source and (2) the plug must be under the exclusive control of the employee performing the pre-operational sanitation inspection.

II. COMPLIANCE

All FSIS and plant employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout/tagout procedures. The authorized FSIS and plant employees are required to perform the lockout/tagout in accordance with this procedure. All employees, upon observing a machine or piece of equipment which is locked/tagged out to perform pre-operational/operational sanitation inspection or other servicing tasks shall not attempt to start, energize, or use that equipment or machine.

III. SEQUENCE OF LOCKOUT/TAGOUT

- 1) The secondary authorized FSIS employee informs the primary authorized plant employee of the machines or equipment that will be inspected.
- 2) The primary authorized plant employee notifies all affected employees that sanitation inspection is required on a machine or equipment and that the machine or equipment must be shut down and locked/tagged out to perform the inspection.

3) The authorized FSIS and plant employees shall refer to the documented plant lockout/tagout procedures for the following information:

A. Description and location of machinery or equipment subject to lockout/tagout.

B. Type and magnitude of the energy that the machine or equipment utilizes.

C. Hazards of the energy.

D. Type and location of machine or equipment operating controls.

E. Type and location of energy isolating devices.

F. The lockout/tagout procedure used to lockout or tagout the machine or equipment.

G. Type of stored energy and method to dissipate or restrain.

H. Method of verifying the isolation of the machine or equipment.

(These procedures are located in _____.)

4) The primary authorized plant employee shuts down the machine or equipment by the normal stopping procedure if a machine or equipment is operating.

5) The primary authorized plant employee de-activates the energy isolating device(s).

6) The primary authorized plant employee and the FSIS secondary authorized employee locks or tags out the energy isolating devices with one of the following procedures.

A. The primary authorized plant employee locks/tags out the energy isolating device with an assigned individual lock or tag. The FSIS secondary authorized employee places his/her lock or tag on the energy isolating device.

AND/OR

B. The primary authorized plant employee locks/tags out the energy isolating device with an assigned individual lock or tag. The key to the lock or the tab to the tag is placed in a lockbox. The primary authorized plant employee and the secondary authorized FSIS employee affix their locks on the lockbox.

7) The primary authorized plant employee dissipates or restrains stored energy.

COOPERATIVE AGREEMENT MODEL

- 8) The primary authorized plant employee verifies the isolation of the equipment or machine. The secondary authorized FSIS employee observes verification tests and prior to inspection is certain that all energy sources have been isolated and there is no stored energy.
- 9) If the machine or equipment is satisfactorily locked or tagged out, the secondary authorized FSIS employee initiates pre-operational sanitation inspection tasks, following the procedures in the SSOP guide.

IV. RESTORING EQUIPMENT OR MACHINES TO SERVICE

- 1) Upon completion of the SSOP tasks, the secondary authorized FSIS employee removes his/her lockout device and/or tags and informs the primary authorized plant employee that the machine or equipment is ready to return to operating condition. The secondary authorized FSIS employee never leaves a plant without removing locks/tags.
- 2) The primary authorized plant employee checks the machine or equipment and the immediate area to ensure that nonessential items have been removed and the machine or equipment components are operationally intact.
- 3) The primary authorized plant employee checks the work area to ensure that all affected employees have been safety positioned or removed from the area.
- 4) The primary authorized plant employee verifies that the controls are neutral.
- 5) The primary authorized plant employee removes his/her lockout devices and/or tags and re-energizes the machine or equipment.
- 6) The primary authorized plant employee notifies affected employees that the pre-operational inspection is completed and the machine or equipment is ready for use.

V. GENERAL

The plant immediately informs FSIS when there is a change in machines, equipment, or energy control procedure.

If lockout/tagout procedures have not been implemented, SSOP hands-on verification tasks will not be performed. If this occurs, the secondary authorized FSIS employee will take "Official Control Action" (**EXAMPLE:** U.S. Reject Tag procedure) in the area(s) of the plant where machines or equipment are located. The inspector informs plant management of this action and withdraws him/herself and other inspectors to a safe location.

VI. TRAINING

All authorized employees must be trained and familiar with the requirements of the OSHA standards, and the cooperative agreement, covering lockout/tagout, agreed to at this establishment.

| | Plant | FSIS |
|---------------------|--------------|-------------|
| Signature | _____ | |
| Printed Name | _____ | |
| Title | _____ | |
| Date | _____ | |

OSHA REGULATIONS

I. **SERIOUS VIOLATION** [29 CFR 1910.147]

The following are examples of serious lockout/tagout violations.

- A. Failure to have a written lockout/tagout program that complies with the standard.
- B. Failure to train employees in lockout/tagout safety procedures.
- C. Exposure of employees to energized machines or equipment during service and maintenance operations.

II. **FEDERAL EMPLOYEES WORKING IN PRIVATE SECTOR WORKPLACES** [29 CFR 1960.1(g)]

Federal employees who work in establishments of private employers are covered by their agencies' occupational safety and health programs. Although an agency may not have the authority to require abatement of hazardous conditions in a private sector workplace, the agency head must assure safe and healthy working conditions for employees. This shall be accomplished by:

- A. Administrative controls.
- B. Personal protective equipment.
- C. Withdrawal of Federal employees from the private sector facility to the extent necessary to assure that the employees are protected.