Appendix 1
Control of Hazardous Energy
(Lockout – Tagout)

WAC 296-803

Scope

This regulation applies to the service and maintenance of machines and equipment, including piping systems, if employees could be injured by the unexpected energization or start up of the machine or equipment or the release of stored energy.

Energy sources include mechanical, hydraulic, pneumatic, chemical, thermal or other energy, including gravity. Notes: (1) Machines and equipment include those that produce high intensity electromagnetic fields. (2) When other Title 296 WAC standards require the use of lockout or tagout, they have to be used and supplemented by the procedural and training requirements of this chapter.

Exemption: This chapter does not apply to:

- Work on electric equipment receiving power only through a cord and plug if unplugging the equipment eliminates the possibility of unexpected energization, unexpected start up, or the release of stored energy and, the plug is kept under the exclusive control of the employee doing the service or maintenance.
- Exposure to electrical hazards from electrical work on, near, or with conductors or equipment that is covered by chapter 296-24 WAC, General safety and health standards, Part L, Electrical.
- Service and maintenance during normal production operations, if an employee is not required to remove or bypass a guard or other safety device, place any body part into the point of operation, or any other hazardous area created by machine operation.
- Minor tool changes, adjustments and other minor service during normal production operations if they are routine, repetitive, and integral to the use of the equipment for production and the work is done using measures that provide effective protection from hazards.

Energy Control Program: WAC 296-803-20005

All employers must establish a written “Energy Control Program” to protect employees that service or maintain a machine or equipment from injury caused by the unexpected energization or start up of the machine or equipment or the release of stored energy.

The program must contain all of the following:

1. Energy control procedures as described in WAC 296-803-500.

2. Employee training as described in WAC 296-803-600.
3. Periodic reviews as described in WAC 296-803-700.

Energy Control Procedures: WAC 296-803-500.

Employers must develop and document, in writing, energy control procedures to protect employees doing service or maintenance of a machine or equipment from potentially hazardous energy.

Exemption: It is not required to have written energy control procedures for a particular machine or equipment if all of the following apply:

- The machine or equipment has a single energy source that is easily identified and can be isolated.
- The machine or equipment is completely de-energized and deactivated by isolating and locking out the energy source.
- There is no stored or residual energy that could be a hazard to employees and the machine or equipment cannot re-accumulate such energy after it's been shut down.
- The energy source can be locked out with a single lockout device.
- The machine or equipment is isolated from the energy source and locked out during service or maintenance.
- The authorized employee doing the service or maintenance has exclusive control of the lockout device.
- The service or maintenance does not create a hazard for other employees.
- The machine or equipment has never been unexpectedly energized or activated during service or maintenance.

The energy control procedures must clearly and specifically outline the scope, purpose, authorization, rules and techniques to control hazardous energy and detail how to make sure employees follow the procedures.

The energy control procedures must specifically identify when the procedure must be used and what the specific procedural steps are for shutting down, isolating, blocking and securing the machine or equipment. They must also specify the placing, removing, and transferring lockout or tagout devices, who is responsible for them and how to test the machine or equipment to verify the effectiveness of lockout devices, tagout devices, and other energy control measures.

Note: Similar machines and equipment may be covered by a single written procedure if all of the following apply:

- They use the same type and magnitude of energy.
- They have the same or similar types of controls.

- The specific machines and equipment covered by the procedure are identified by at least type and location.

New or modified machines and equipment must be able to accept lockout devices and energy-isolating devices must be designed to accept a lockout device on machines and equipment that are newly installed, have major repairs and/or are renovated or modified.

Employers must provide appropriate lockout and tagout devices and means to control energy.

Employers must provide the means necessary to isolate, secure or block machines and equipment from energy sources.

Note: WAC 296-803-40005 -- Examples of means to control energy include: locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners, blind flanges and cribbing.

Lockout and tagout devices meet all of the following: (WAC 296-803-40010)

- Create no additional hazards.
- Have a distinctive design or appearance.
- Are the only devices used for controlling energy.
- Are not used for any other purpose.
- Are durable enough to withstand the environment they're used in for the maximum time they are expected to be used.
- Are standardized within the facility by color, shape or size.
- Identify the person applying the device.

Lockout devices (WAC 296-803-40015) must be strong enough so that removing them by other than the normal unlocking method requires excessive force and/or unusual techniques such as the use of bolt cutters or other metal-cutting tools.

Tagout devices (WAC 296-803-40020) must use the same print and format within a facility and be constructed and printed so they will not deteriorate. The message on the tag must remain legible when exposed to weather, used in wet or damp locations or used in corrosive environments such as areas where acid or alkali chemicals are handled or stored.

Tagout devices must have a warning about not energizing the machine or equipment. The warning on the tag should include wording such as: “Do not start,” “Do not open,” “Do not close,” “Do not energize,” “Do not operate.”

Tagout devices must be strong enough to prevent unintentional or accidental removal.

The means used to attach the tag to the energy-isolating device must meet all of the following:

- Is not re-usable.

- Is self-locking.
- Can be attached by hand.
- Cannot be released with a force of less than fifty pounds.
- Is similar in design and basic characteristics to a one-piece, all-environment-tolerant, nylon cable tie.

Energy Control Procedures: WAC 296-803-50005

The Energy Control Program requires the establishment of Energy Control Procedures:

- Use energy control procedures when applying lockout and/or tagout devices.
- Protect employees from the hazards of stored and residual energy.
- Verify that the machine or equipment is safe before starting work.
- Meet these requirements when removing lockout or tagout devices and energizing the machine or equipment.
- Meet these requirements if it's necessary to temporarily energize a machine, equipment or component for testing or positioning.
- Protect employees during shift or personnel changes.
- Protect employees working in a group.
- Meet these additional requirements if more than one group is used.
- Coordinate with outside employers servicing or maintaining your machines or equipment.
- Protect employees servicing or maintaining machines and equipment from potentially hazardous energy.
- Use a lockout system if an energy-isolating device can be locked out.

Exemption: A tagout system may be used instead of a lockout system if it meets all of the following:

- The tagout device is attached where you would have put the lockout device.
- The tagout system provides the same level of employee protection as a lockout system.
- You can demonstrate that the tagout system:
  - Meets all tagout requirements of this chapter.
  - Includes additional safety measures to provide the same level of safety as a lockout system.

Note: Additional safety measures used with the tagout system to provide protection equal to a lockout system could include actions such as:

- Removing part of the isolating circuit.
- Blocking a controlling switch.
- Opening an extra disconnecting device.
- Removing a valve handle.
- If an energy-isolating device cannot be locked out.

Meet these requirements when applying lockout or tagout devices: WAC 296-803-50010

Before a machine or other equipment is turned off, the authorized employee must know the type and magnitude of the energy, the hazards of the energy to be controlled and the method or means to control the energy.

- Turn off or shut down the machine or equipment using established procedures.
- Completely isolate the machine or equipment from its energy sources using the appropriate energy-isolating devices after the machine or equipment has been turned off.
- Make sure you or the authorized employee notify affected employees that the machine or equipment is being locked or tagged out before the devices are applied.
- Make sure a lockout or tagout device is applied for each energy-isolating device and only by the authorized employee doing the service or maintenance.
- When applying lockout devices, include making sure the lockout devices hold the energy-isolating device in a "safe" or "off" position.
- A tagout device is put on an energy-isolating device so it clearly shows that moving the energy-isolating device from the "safe" or "off" position is prohibited.
- A tagout device, when used with an energy-isolating device that can be locked out, is fastened to the device at the same point a lock would have been attached.
- A tagout device that cannot be attached directly to an energy-isolating device must be located as close as safely possible to the energy-isolating device and is in a position that is immediately obvious to anyone attempting to operate the energy-isolating device.

Protect employees from the hazards of stored and residual energy.

- Make sure all potentially hazardous stored and residual energy is relieved, disconnected, restrained or otherwise rendered safe after the lockout or tagout devices have been put on the energy-isolating devices.

- Continue to verify the isolation of machines and equipment that could re-accumulate stored energy to a hazardous level until service or maintenance is completed or the possibility of re-accumulating hazardous energy does not exist.
- Make sure the authorized employee verifies that the machine or equipment that has been locked out or tagged out has been isolated from all energy sources and de-energized before starting work.

When removing lockout or tagout devices and energizing the machine or equipment: WAC 296-803-50035

Before removing any lockout or tagout device make sure the authorized employee inspects the work area to make sure nonessential items have been removed, verifies the machine or equipment is in operating condition and ready to energize, and checks that employees in the area are in positions that make it safe to energize the machine or equipment.

Only the authorized employee who applied a lockout or tagout device removes it.

Exemption: The employer may have the lockout or tagout device removed by someone other than the authorized employee who applied it if all of the following conditions are met:

- The energy control program has documented specific procedures and training for this situation.
- You can show that the specific procedures used are as safe as having the device removed by the authorized employee who applied it.
- The specific procedures include: verifying the authorized employee who applied the device is not at the facility, making all reasonable efforts to contact and inform the authorized employee that the lockout or tagout device is being removed, and making sure the authorized employee is informed, before resuming work at the facility, that the lockout or tagout device has been removed.
- Before energizing or starting the machine or equipment, notify affected employees that the lockout or tagout devices have been removed.

If it is necessary to temporarily energize a machine, equipment, or component for testing or positioning you must follow your normal energy control procedures to remove the lockout or tagout devices, energize the machine, equipment, or component or apply the lockout or tagout devices when testing or positioning is completed.

During shift or personnel changes, employees must use specific procedures to ensure that there is continuous lockout or tagout protection during the change and provide for the orderly transfer of lockout or tagout device protection between employees.

Employees working in a group must ensure that energy control procedures provide each member of a crew, craft, department, or other group with the same level of protection as that provided by an individual lockout or tagout device.

Each authorized employee must put a personal lockout or tagout device on the group lockout device, lockbox or comparable mechanism before beginning work; and not remove it until they have finished work on the machine or equipment.

A primary authorized employee must be assigned who has overall responsibility for the service or maintenance, attaches their lockout or tagout device to the energy-isolating device when the equipment is de-energized and before any work begins, and is the last person to remove their lockout or tagout device when the job is completed.

The primary authorized employee is the authorized employee who has overall responsibility for meeting the requirements of the lockout/tagout procedures.

All of the following requirements must be met if more than one group works on a machine or equipment that has to be locked or tagged out: (WAC 296-803-50050)

- Assign an authorized employee as the group coordinator with overall responsibility to coordinate the different work groups and maintain continuous lockout or tagout protection.
- Assign a primary authorized employee in each group who has responsibility for the group of employees who are protected by a group lockout or tagout device and determine a way that employees of the group are exposed to the machine or equipment that is locked or tagged out.

Coordinate with outside employers servicing or maintaining your machines or equipment. (WAC 296-803-50060)

Before allowing another employer's personnel to service or maintain machines or equipment, if your energy control procedures require they be locked or tagged out, inform the outside employer of your lockout or tagout procedures. Make sure the outside employer informs you of their lockout or tagout procedures and make sure you and the outside employer confirm that all employees understand and will follow the restrictions of each employer's rules.

Employee Training: WAC 296-803-600

It is your responsibility to provide and document employee training on the energy control program to make sure that they understand the purpose and function of the energy control program and have the knowledge and skills necessary to carry out their program responsibilities.

Train each authorized employee in the type and magnitude of energy available in the workplace, recognizing hazardous energy sources that apply and the methods and means to isolate and control energy.

Instruct each affected employee in the purpose and use of the energy control procedures.

Instruct all employees who work or may work where energy control procedures might be used about the procedures being used and the prohibition against attempting to restart or reenergize a machine or equipment that's locked out or tagged out.

Document that employee training has been done and kept up to date. Include the employee's name and the training date.

Provide additional training if you use tagout devices.

Employees must be trained in the following:

- Tags are warning devices and do not provide the same level of physical restraint as a lock.
- When attached to energy-isolating devices, tags are not to be removed without the approval of the authorized person responsible for it or by-passed, ignored, or otherwise defeated.
- Tags need to be legible and understandable to be effective.
- Tags may evoke a false sense of security.
- The meaning of tags needs to be understood as part of the overall energy control program.
- Tags and their means of attachment must be securely attached to energy-isolating devices so they cannot be inadvertently or accidentally detached. They must be made of materials that will withstand the environmental conditions they will be exposed to.

Employee Re-Training: WAC 296-803-60015

Retrain authorized and affected employees to introduce new or revised control methods and procedures when there's a change in any of the job assignments, machines, equipment, or processes that present a new hazard or energy control procedures.

Retrain employees to reestablish proficiency when a periodic inspection shows the employee deviates from, or has inadequate knowledge of, the energy control procedures or when the employer has reason to believe retraining is necessary.

Periodic Reviews: WAC 296-803-700

Perform and document periodic reviews to verify employees know and follow the energy control procedures. Employers must do a periodic review at least annually to ensure employees know and can apply the energy control procedures and correct any deviations or inadequacies identified.

Exemption: Energy control procedures used less frequently than once a year only need to be reviewed before being used.

Have the periodic review performed by an authorized employee other than the ones using the energy control procedure being reviewed.

Document that periodic reviews have been done. Include all of the following:

- Machines and/or equipment.
- Date of the review.
- Employees included in the review.
- Person actually performing the review.

If a periodic review involves lockout devices, the reviewing employee reviews responsibilities with each authorized employee who uses the procedure.

Note: Periodic reviews of authorized employees using energy control procedures involving only lockout devices can be done in a group meeting if desired.

If a periodic review involves tagout devices, the reviewing employee reviews with each authorized and affected employee the employee's responsibilities under the procedure and the limitations of tagout devices.

Note: Periodic reviews of authorized and affected employees using energy control procedures involving tagout devices have to be done with each employee individually.

Sample Lockout Procedure

Use with Lockout/Tagout (Control of Hazardous Energy), Chapter 296-803 WAC

SCOPE:

This lockout procedure covers all equipment and machinery that may have, or produce, hazardous stored energy in this site.

All Parish/School or Agency employees must utilize the following procedures whenever working with such equipment or machinery and whenever working in any condition that may produce hazardous stored energy.

The employees in the Parish/School or Agency that are most likely to be affected by these procedures include those working in Transportation, Maintenance, Custodial and Landscape departments.

PURPOSE:

This procedure contains the minimum requirements to protect employees from injury caused by the unexpected energization, start up, or release of stored energy during service or maintenance.

Use this procedure to make sure the machine or equipment is stopped and isolated from all potentially hazardous energy sources, and locked out before any employee begins work.

AUTHORIZATION:

The following persons are authorized to lock out the machine or equipment using this procedure:

- _____
- _____
- _____

(List above the names of authorized employees you want to use this procedure.)

MEETING THE REQUIREMENTS OF THIS PROGRAM:

All employees need to follow the restrictions and limitations that result from this procedure.

Authorized employees will perform lockout as described in this procedure.
No employee will attempt to start, energize or use any machine or equipment that is locked out.

Failure to follow this procedure will result in the following action:

_____
_____
_____

(List above the actions that will be taken if employees violate the procedure.)

INTENDED USE:

This procedure will be used for the following service or maintenance actions:

_____
_____
_____
_____

(List above the service and maintenance activities that require use of the procedure.)

SPECIFIC PROCEDURAL STEPS:

Step 1: The authorized employee will identify the type and magnitude of the energy that the machine or equipment uses, understand the hazards of the energy, and know the methods to control the energy before using this procedure.

_____
_____
_____

(List above the type and magnitude of the energy, its hazards and the methods to control the energy. For additional information, see WAC 296-803-50010)

Step 2: Notify all of the following affected employees that the machine or equipment will be shut down and locked out for service or maintenance:

_____
_____
_____

(List above the names or job titles of affected employees and how to notify them. For additional information, see WAC 296-803-50010)

Step 3: Shut down the machine or equipment by the normal stopping procedure (such as depressing a stop button, opening switches, or closing valves).

_____
_____
_____

(List above the types and locations of machine or equipment operating controls. For additional information, see WAC 296-803-50010)

Step 4: Completely isolate the machine or equipment from its energy sources by using the appropriate energy-isolating devices.

_____
_____
_____

(List above types and locations of energy isolating devices. For additional information, see WAC 296-803-50010)

Step 5: Lock out the energy isolating devices with assigned individual locks.

_____
_____
_____

(List above any additional procedural requirements, such as putting on a tag with amplifying information, necessary for the authorized employee to know. For additional information, see WAC 296-803-50010)

Step 6: Dispel or restrain stored and residual energy, such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, using methods such as grounding, repositioning, blocking, or bleeding down.

_____
_____
_____

(List above the types of stored and residual energy and the methods to dispel or restrain them. For additional information, see WAC 296-803-50025)

_____
_____
_____

(List above any actions necessary to prevent stored energy from reaccumulating to a hazardous level. For additional information, see WAC 296-803-50025)

Step 7: Make sure the equipment is disconnected from the energy sources, and stored and residual energy has been made safe. Check that no employees are exposed, and then verify the isolation of the equipment by doing the following:

_____
_____
_____

(List above the method of verifying machine or equipment isolation, such as operating the push button or other normal operating controls or by testing to make certain the equipment will not operate. For additional information, see WAC 296-803-50030)
CAUTION:

Return the operating controls to the safe, neutral, or off position, after verifying the equipment is isolated from its energy sources.

THE MACHINE OR EQUIPMENT IS NOW LOCKED OUT:

Restore the machine or equipment to service after the service or maintenance is completed and the machine or equipment is ready to return to its formal operating condition by following these steps:

Step1: Check the machine or equipment and the immediate area around it to make sure all nonessential items have been removed and that the machine or equipment is in operating condition and ready to energize.

Step 2: Make sure all employees are safely positioned for starting or energizing the machine or equipment.

Step 3: Verify that the controls are in neutral.

Step 4: Remove the lockout devices and reenergize the machine or equipment.

Note: You may need to re-energize the machine before you can safely remove some forms of energy blocking.

Step 5: Notify affected employees that the service or maintenance is completed and the machine or equipment is ready to use.
(*For additional information, see WAC 296-803-50035)*

Definitions: WAC 296-803-800

Affected employee. An employee who is required to operate, use, or be in the area where a machine or equipment could be locked or tagged out for service or maintenance.

Authorized employee. An employee who locks or tags out a machine or equipment to do service or maintenance.

Can be locked out. An energy-isolating device that can be locked in the "off" or "safe" position.

Employer. Based on chapter 49.17 RCW, an employer is any person, firm, corporation, partnership, business trust, legal representative, or other business entity which engages in any business, industry, profession, or activity in this state and employs one or more employees or who contracts with one or more persons, the essence of which is the personal labor of such person or persons and includes the state, counties, cities, and all municipal corporations, public corporations, political subdivisions of the state, and charitable organizations: Provided, that any persons, partnership, or business entity not having employees, and who is covered by the Industrial Insurance Act must be considered both an employer and an employee.

Energized. Connected to an energy source or containing residual or stored energy.

Energy-isolating device. A mechanical device that physically prevents transmitting or releasing energy. This includes, but is not limited to:

- Manually operated electrical circuit breakers.
- Disconnect switches.
- Manually operated switches that disconnect the conductors of a circuit from all ungrounded supply conductors if no pole of the switch can be operated independently.
- Line valves.
- Blocks.
- Similar devices used to block or isolate energy.

Energy source. Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other energy, including gravity.

Hot tap.	A procedure which involves welding on pressurized pipelines, vessels, or tanks to install connections or accessories. It's commonly used to replace or add sections of pipeline used in air, gas, water, steam, and petrochemical distribution systems without interrupting service.
Lockout.	Placing a lockout device on an energy-isolating device using an established procedure to make sure the machine or equipment cannot be operated until the lockout device is removed.
Lockout device.	A device that uses a positive means, such as a key or combination lock, to hold an energy-isolating device in the "safe" or "off" position. This includes blank flanges and bolted slip blinds.
Normal production operations.	Using a machine or equipment for its intended production function.
Primary authorized employee.	An authorized employee who has overall responsibility for meeting the requirements of the lockout/tagout procedures.
Service and Maintenance.	Activities such as constructing, installing, setting up, adjusting, modifying, maintaining and servicing machines or equipment. It also includes lubricating, cleaning, un-jamming and making tool changes.
Setting-up.	Work done to prepare a machine or equipment for normal production operations.
Tagout.	Placing a tagout device on an energy-isolating device using an established procedure to indicate that the energy-isolating device and the machine or equipment being controlled may not be operated until the tagout device is removed.
Tagout device.	A prominent warning device, such as a tag and a means of attachment. It can be securely fastened to an energy-isolating device to indicate that the energy-isolating device and the machine or equipment being controlled may not be operated until the tagout device is removed.
You.	See definition of employer.

NIOSH General Energy Control (LO/TO) Checklist

1. Does the program require that all hazardous energy sources be isolated, locked or tagged, and otherwise disabled before anyone performs any activity where the unexpected energization, startup, or release of stored energy could occur and cause injury?
2. Have procedures been developed, documented, and implemented for the control of hazardous energy when working with such equipment?
3. Do the procedures clearly outline the scope, purpose, responsibility, authorization, rules, and techniques to be applied to the control of hazardous energy, and measures to enforce compliance?
4. Do procedures exist for shutting down, isolating, blocking, and securing (locks and tags) energy?
5. Do procedures exist and is someone assigned responsibility for removing and transferring locks and tags?
6. Do requirements exist for testing a machine or equipment to determine and verify the effectiveness of lockout/tagout and other energy control measures?

Protective Materials and Hardware

7. Are locks, tags, chains, adapter pins, or other hardware available for securing or blocking energy sources?
8. Are these devices durable and substantial?
9. Are these devices standardized in either color, shape, size, or format?
10. Do these devices have a provision for identifying the person applying the device?
11. Do tagout devices or danger tags warn against hazardous conditions if the equipment is re-energized?

    Note: Acceptable wording includes:

    - **Do Not Open**,
    - **Do Not Start**,
    - **Do Not Close**, and
    - **Do Not Energize**.

Inspection

12. Are inspections conducted at least annually by an authorized person (other than the ones using the energy control procedures) to ensure control procedures are being implemented?

13. Is each inspection certified by identifying the machine or equipment on which the energy control procedure was being used, the date of the inspection, the people included in the inspection, and the person performing the inspection?

Training and Communication

14. Is training provided and documented to ensure that (a) the purpose and function of the energy control procedures are understood, and (b) the knowledge and skills required for the safe application and removal of energy controls are acquired?

15. Is this training repeated periodically when changes or deviations occur in the energy control procedure?

Energy-Isolating Devices

16. Are all energy-isolating devices operated only by authorized persons or under the direct supervision of an authorized person?

Notification of Employees

17. Are all employees notified of the application and removal of lockout and tagout controls whenever such controls directly affect their work activities?

Application of Control

18. Does the application of energy control follow the sequence:

    a. Machine or equipment shutdown by authorized personnel.

    b. Machine or equipment isolation: all energy-isolating devices that are needed shall be located and operated in a manner that isolates the machine or equipment from the energy source(s).

    c. Lockout and tagout device application:

        1. Lockout devices shall be affixed in a manner that will hold the energy-isolating device in a **safe** or **off** position.

        2. Tagout devices shall be affixed in a manner that clearly indicates that the operation or movement of energy isolating devices from the **safe** or **off** position is prohibited.

        3. If a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to

the device, in a position that will be immediately obvious to anyone operating the device.

d. Stored energy: following the application of lockout and tagout devices, all hazardous, stored, or residual energy shall be relieved, disconnected, restrained, or otherwise rendered safe.

e. Verification of isolation: before starting work on the isolated equipment or process, an authorized person must verify that isolation and de-energization of the machine or equipment has been accomplished.

19. Has the work area been inspected before the removal of lockout and tagout devices?

20. Has the lockout and tagout device been removed by the person who put it on?

    Note: This rule has some limited exceptions.

21. Are outside servicing personnel informed of the lockout and tagout procedures before equipment is serviced?

APPENDIX 1-1

List of Authorized LO/TO Personnel

Work Site	Lock #	Name

APPENDIX 1-2
List of LO/TO Affected Employees

Name	Job Title	Machinery, Equipment, or Process

Appendix 1-3
LO/TO Training Record

The following individuals received training on this site's Energy Control (LO/TO) Program in accordance with WAC 296-24-110.

Print name	Signature	Type of training (i.e. authorized, affected or other)

APPENDIX 1-4

LO/TO Energy Source Determination

Date _____ **Conducted by** _____

In order to determine all energy sources for each piece of equipment, all questions must be answered. If the question does not apply, write N/A in the blank.
Circle "yes" or "no" or fill in the blank.

Location: _____**Work Site:** _____

Equipment Name: _____**Model:** _____

Does this equipment have:

1. Electric power (including battery)? Yes No

   If yes, power panel and breaker number: _____

   Does it have a lockout device? Yes No

   Battery location: _____

   Battery disconnect location: _____

2. Mechanical power? Yes No

   Mark each type of energy source that applies:

3. Engine driven? Yes No

   If yes, switch or key location

   _____

   Is lockout device installed? Yes No

   If no, method of preventing operation _____

   _____

4. Spring loaded? Yes No

   If yes, is there a method of preventing spring activation? _____

   _____

   If no, how can spring tension be safely released or secured? _____

   _____

5. Counter weight(s)? Yes No

If yes, does it have a method of preventing movement? _____

If no, how can it be secured? _____

_____

6. Flywheel? Yes No

If yes, does it have a method of preventing movement? _____

_____

If yes, can it be locked? Yes No

If no, how can it be secured? _____

_____

7. Hydraulic power? Yes No

If yes, location of main control/shut off valve _____

_____

Can control/shut off valve be locked in "off" position?

Yes No

If no, location of closest manual shut off valve _____

_____

Does manual shut off valve have lockout device? Yes No

If no, what is needed to lock valve closed? _____

_____

Is there a bleed or drain valve to reduce pressure to zero?

Yes No

If no, what will be required to bleed off pressure? _____

_____

8. Pneumatic energy? Yes No

If yes, location of main control/shut off valve _____

_____

Can control/shut off valve be locked in "off" position?

Yes No

If no, location of closest manual shutoff valve _____

_____

Is there a bleed or drain valve to reduce pressure to zero?

Yes No

If no, what will be required to bleed off pressure? _____

_____

9. Chemical system? Yes No

If yes, location of main control/shut off valve _____

_____

Can control/shut off valve be locked in off/closed position?

Yes No

If no, location of closest manual shut off valve _____

_____

Does manual shut off valve have lockout device? Yes No

If no, what is needed to lock valve closed? _____

_____

Is there a bleed or drain valve to safely reduce system pressure and drain system of chemicals? Yes No

If no, how can system be drained and neutralized? _____

_____

What personal protective clothing or equipment is needed for this equipment?

10. Thermal energy? Yes No

If yes, location of main control/shut off valve

Can control/shut off valve be locked in "off" or closed position?

Yes No

If no, location of closest manual shut off valve

Does manual shut off valve have lockout device? Yes No

If no, what is needed to lock valve closed?

Is there a bleed or drain valve to safely reduce system pressure and temperature and drain system? Yes No

If no, how can system pressure and temperature be reduced and drained?

What personal protective clothing or equipment is needed for this equipment?

Special precautions not noted above (i.e. fire hazards, chemical reactions, required cool down periods, etc.):

Recommendations and Comments:

Completed by:

Reviewed by:

Approved by: