| OREGON MILITARY DEPARTMENT | NUMBER: AGP-99.200.17 |
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| ADJUTANT GENERAL PERSONNNEL | REVISED: December 16, 2020 |
| SUBJECT: Lock Out /Tag Out – Energy Control Program | |

## APPLICABILITY:

This policy and the procedures contained herein are applicable to state employees

This policy must be followed whenever any of the following conditions occur:

- The employee must either remove or bypass a main guard or other safety device resulting in exposure to hazards at the point of operation.
- The employee is required to place any part of his or her body in contact with the point of operation of operational machine or piece of equipment, or
- The employee is required to place any part of his or her body into a danger zone associated with a machine operating cycle.

## AUTHORITY/REFERENCE:

OAR 437-002-2303, OSHA 29 CFR 1910.147

## ATTACHMENTS:

Appendix A: Lockout Procedure Audit
Appendix B: Annual Audit
Appendix C: Energy Control Procedure Checklist
Appendix D: Energy Identification Form
Appendix E: Lockout Lock Removal Permit

## PURPOSE:

This policy establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury.

Exceptions:

- While servicing and maintaining **cord** and **plug** connected electrical equipment, provided that the equipment is unplugged from the energy source; and the plug remains under exclusive control of the employee performing the service and/or maintenance.
- Employees performing minor tool changes and adjustments and/or other minor servicing activities that are routine, repetitive, and integral to the use of the production equipment and that occur during normal production operations are not covered by the lockout/tag out standard, provided the work is performed using alternative measures that provide effective protection.

## DEFINITIONS:

Affected Employee: An employee who locks out equipment in order to perform servicing, maintenance or other procedures are being performed under lockout or whose job requires them to work in an area in which such servicing, maintenance, or other procedures are being performed.

Authorized Employee: An employee who locks out equipment in order to perform servicing, maintenance or other procedures on that equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing, maintenance, or other procedures.

Employee Lockout Lock: A lock used to secure equipment energy source(s). It must be able to be unlocked only by the employee who places it and it must have the employee's name displayed on the lock body or identifying tag.

Energy Isolating Device: A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker, a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy.

Push buttons, selector switches and other control circuit type of devices are not energy isolating devices. Just shutting off the air supply to an automatically operated air valve or turning off a hydraulic power unit without bleeding off the pressure does **not** constitute energy isolation. Energy isolation is achieved when there is no energy left to be released.

Energy Source: Any source of electrical, mechanical, hydraulic, pneumatic, thermal, pressure, chemical, radioactive, non-ionizing (radio frequency, laser, etc.) or other energy (including gravity).

Lockout: The placement of a lockout device on an energy isolating devise, in accordance with an established procedure, ensuring that the energy isolating device, and the equipment being controlled cannot be operated until the lockout device is removed.

Lockout Device: A device that utilizes a positive means, such as a lock. To hold an energy isolating device in a safe position and prevents the energizing of equipment.
Servicing and/or Maintenance: Work place activities such as constructing, installing, setting up, adjusting, inspecting, modifying and maintaining, and/or servicing machines or equipment. These activities include lubrication, cleaning or un-jamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or start-up of the equipment or release of hazardous energy.

Stored or Residential Energy: Includes such things as capacitors, spring and elevated machine members, rotating flywheels, hydraulic systems, air, gas, steam, water pressure.

## GUIDANCE:

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. Authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment.

## RESPONSIBILITIES:

All levels of management will be held accountable for providing the leadership and support for implementing the entire energy control program. Each employee will be expected to understand and utilize the safe work practices outlined in this policy.

Managers and supervisors must ensure that the policy and procedures outlined are implemented, appropriate records maintained, training provided to all employees and complete an annual audit of effectiveness and implementation as well as random periodic audit of compliance.

All employees must be trained in the recognition of energy sources for any equipment or system on which they are required to work; the type and magnitude of the energy; the proper method to isolate or control energy; and the proper procedures used to lockout that system or equipment. Authorized employees are responsible for installing their locks in order to perform servicing, maintenance, or other procedures on that equipment and for removing their locks once the job is complete.

The regional safety committee chair or designated safety committee member will ensure that the policy at each facility in their region is audited at least annually.

## USE OF LOCKOUT:

All equipment shall be locked out to protect against the accidental or inadvertent operation when such operation could cause injury to personnel. Once zero energy state has been verified, do not attempt to again operate any switch, valve, or other energy isolating device when it is locked out.

## HARDWARE:

All locations will utilize the following types of lockout tags and devices including but not limited to: **Electrical breaker lockouts, group hasps, individual locks, switch locks, plumbing valve locks, cord locks and approved marked and signed tags.**

## SINGLE ENERGY SOURCE LOCKOUT:

Equipment that has only one energy source must be locked out but does not require a separate, written lockout procedure when the following conditions are met:

- There is no remaining potential energy.
- The lockout device is under the exclusive control of the person performing service or maintenance.
- Maintenance or servicing does not create a hazard for other employees.
- There have not been accidents involving the unexpected activation of the equipment during maintenance.

## MULTIPLE ENERGY SOURCE LOCKOUT:

A device hasp capable of holding more than one lock must be used when the energy isolation device cannot accept multiple locks. Each authorized employee will then use his or her own employee lock and identifying tag to secure the energy isolation device.

### Machine and/or Task Specific Procedures

Machine and/or task specific procedures are required for all equipment with more than one energy source that must be locked out or when the conditions outlined in the Hardware paragraph above cannot be met.

Written procedures shall clearly and specifically meet the requirements of CFR 1910, 147(C) (4) (ii). The requirements include the scope, purpose, authorization, rules, and techniques to be used for the control of hazardous energy, and the means to enforce compliance. The procedure shall state the intended use of the procedure and specific procedural steps for shutting down, isolating, blocking and securing equipment; placement and removal of lockout devices and other energy control measures.
All procedures will be reviewed annually.

### Preparation for Lockout

Obtain and review the appropriate lockout procedures for the equipment to be locked out.

Obtain necessary locks and/or energy isolating devices.

*Note: If an employee does not feel comfortable performing a lockout procedure, he or she should contact their Supervisor.*

Sequence of Energy Control Procedure (Appendix C Checklist)

Using the machine and/or task specific lockout procedure as a guide, the authorized employee will:

**Know the magnitude and hazard of each energy** source that the machinery uses.
**Notify all affected employees** that equipment will be locked out and why.

**Shut down the equipment** following the step(s) outlined in the machine specific procedure.

**Using the main switch, valve or other energy isolating device(s), isolate the equipment from its energy source(s).**

**Secure the source of energy in its de-energized position with the lockout device.** Test each lockout device ensuring that it will hold the energy-isolating device in a safe (off) position.

**Dissipate or restrain any residual energy that may be stored within the equipment.** If there is a possibility of re-accumulation of stored energy, that equipment must be monitored.

- Bleed hydraulic or air pressure of the system after pumps have been shut off and their energy sources isolated.
- Stop turning flywheels.
- Release spring tensions.
- Block or otherwise restrain elevated objects or any other object that could move on its own.

Ensure that no personnel are in the machinery operating area. Verify that isolation and de-energization of the machine or equipment has been accomplished by following verification guidelines identified in the machine-specific lockout procedures, which specifically address each type of energy present. Return all controls to neutral or off, as appropriate. Once zero energy state has been verified, do not attempt to again operate any switch, valve, or other energy control device when lockout devices are in place.

Restoring Equipment to Normal Operation

After the servicing or maintenance is complete and the machinery is ready for normal operation, and using the lockout procedure as a guide:

Inspect work area to ensure that all items and tools have been removed. Reinstall guards and equipment components.

Notify all affected employees that equipment will be reenergized and inspect the work area to ensure that all affected employees have been safely positioned.

Verify equipment controls are in neutral or off position, as appropriate.

Remove all lockout devices.

Reenergize equipment.

## SHIFT OR PERSONNEL CHANGES

When an authorized person is finished servicing equipment or machinery, but the servicing project is not complete and another authorized person will be accepting responsibility to continue the project, the following procedures shall apply:

- The authorized person leaving the project shall remove their lock after the authorized person accepting the project has applied their lock on the multi-lock device (hasp).
- The authorized person accepting the servicing project must verify that all sources of energy have been isolated prior to continuance of work.

## OUT OF SERVICE ENERGY CONTROL PROCEDURES

This procedure is to be followed whenever equipment is taken out of service for extended periods of time (i.e. days, weeks, or months).

- Only authorized individuals may perform this procedure.
- Equipment that is being taken out of service permanently (i.e. being replaced with other equipment) should have its energy sources cut, capped, plugged, and/or blocked.
- Electrical disconnect devices(s), and any other energy control devices, shall be locked with an informational tag attached.
- The "out of service" tag will state: date out of service, who took it out of service, why it is out of service, and who may put the equipment back into service.
- This procedure does not take the place of normal lockout procedures when work is resumed on the equipment (i.e. personal lockout locks are to be used when work is resumed).
- Operations will designate who are the "authorized employees," (i.e. who is qualified to do "out of service" lock and tag procedures).
- All affected employees shall be trained in this procedure.
- All operations shall have a written, site specific procedure covering "out of service" energy control.

## PROCESS FOR LOCK REMOVAL OF ABSENT EMPLOYEE (See Appendix E)

Each authorized employee will remove their locks(s) when they stop working on the equipment.

An authorized employee must not perform servicing and maintenance on equipment after the key to a padlock affixed to an energy isolating device for that machine or equipment is determined to be lost. Also an authorized employee must not affix a lock to an energy-isolating device and perform servicing and maintenance on that machine after the key is determined to be lost.

If an authorized employee leaves work prior to the removal of their lock, the lockout removal form (See Appendix E) must be completed and the following actions taken:

- Attempt to locate the employee whose name is on the lockout device. If the employee cannot be located on the premises, telephone contact with the authorized employee will be attempted. If the employee is contacted, confirmation will be made that the job has been completed and management will proceed to remove the lock in the appropriate manner.
- Prior to the removal of the lockout device by any of the above individuals, the equipment will be inspected to ensure safe start up. Affected employees will be notified that the equipment will be activated. Employees will be stationed around areas that are not in sight of the isolating device to prevent employee access.
- Before resuming work, the employee whose lock was removed must be aware that their lock was removed from the equipment.

Employees will not tamper with, attempt to remove, or remove another employee's lockout device unless they are authorized (See above) and follow the proper sequential steps.

## OUTSIDE CONTRACTORS:

All of the policies regarding the training and use of lockouts apply to all contract employees that might be required to perform service or maintenance at our facilities. Review of the contactor's energy control program and documentation of training shall occur prior to allowing contractor work to begin. Contractor program deficiencies need to be resolved in accordance with this hazardous energy control policy.

## EMERGENCEY SERVICES PERSONNEL:

In an emergency, the responding incident investigator may request that a facility employee perform the lockout. If time or personnel permits, the incident investigator may designate a member of his crew to place their own emergency service lock on the affected equipment or witness the employee lockout. The facility manager will ensure that there are annual reviews of site hazards and emergency plans.

## INCIDENTS INVOLVING LOCKOUT

The Facility Manager will ensure that all lockout incidents (i.e., accidents, infractions, near misses, etc.) are fully investigated, so that their causes and means for their prevention are identified.

If the incident involved the control of hazardous energy with a single lockout source, a specific supplemental procedure will be written before work is continued. If the incident involved a specific procedure or a piece of equipment, the lockout procedure will be evaluated and modified (if necessary) prior to resuming work on the involved piece of equipment. Appendix D (Energy Source Determination Inventory Checklist) may be completed (It is the form we used to inventory our energy sources) to assist in evaluating the equipment and its lockout.

Documented retraining must be provided to all affected and authorized employees involved in the incident and all employees authorized to perform lockout on that equipment.

## NEW, MODIFIED OR ALTERED EQUIPMENT

All new machines or equipment with multiple sources of power and/or stored energy shall be evaluated by the Energy Source Determination Inventory (Appendix D). An authorized person, prior to placing the equipment into service, will make this evaluation, and a supplemental lockout procedure will be prepared.

In the event that certain equipment is modified or altered to the extent that the posted machine specific procedures are no longer correct, the Maintenance Operations Supervisor or Facility Manager will ensure that all changes have been incorporated into the updated machine specific procedures and then posted prior to placing the equipment back into service.

All authorized employees will be informed of and trained on any procedural changes prior to performing tasks that will expose them to the altered equipment.

Altered equipment in need of new written procedures will be red tagged and rendered inoperable until the new supplemental procedures are posted and training completed.

Equipment requiring modifications, alterations, or repairs and being hazardous to operate, must be taken out of service until made safe to operate.

## PROCEDURES FOR MOBILE EQUIPMENT:

Prior to any and all work to be done on mobile equipment the operation mode of the machine will be disengaged. The machine will be placed in a park/neutral position and will have all extensions placed in their lowest position. The ground key will be removed and maintained in the mechanic's possession until operation is deemed ready.

## AUDITING AND REVIEW

Periodic Lockout Audits (See Appendix A)

Periodic lockout audits will be conducted to evaluate employee lockout proficiency and effectiveness of lockout training. The audits are designed to correct, through coaching, any deviations or inadequacies observed.

Audits will be scheduled to ensure that each authorized employee will be audited on an annual basis.

The audit will be performed by an authorized employee other than the one(s) using the energy control procedure being audited.

Responsibilities of each employee participating in the lockout will be reviewed at the time of the audit.

All audits will be documented on the Lockout Audit Form, or similar document, (See Appendix A), filed and maintained at least three years.

Annual Program Audit (See Appendix B)

The Facility Manager or Maintenance Operations Supervisor will ensure that the unit Hazardous Energy Control Program is inspected at least annually. The Region Safety Committee Chairman will assist or conduct the review. Designated authorized employee(s) will assist in reviewing the hazardous energy control policy. The annual inspection is designed to correct any inadequacies in policy or procedures and ensure appropriate revisions have been made.

The annual audit will include an evaluation of employee lockout audits, lockout record-keeping data, and a thorough review and update of procedure and policy.

All identified inadequacies will be corrected, with the corrective action documented.

Record of the annual program audit will be maintained on file for three years.

## TRAINING:

Training will be provided to ensure that the purposes and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees. The training will include the following:

- Authorized Employees: Each authorized employee will receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods necessary for energy isolation and control.
- Affected Employees: All affected employees will be instructed in the purpose and use of the energy control procedures.
- Other Employees: The retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

Employee Retraining

Retraining shall be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures.

Additional retraining shall also be conducted whenever a lockout audit reveals, or there is a reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

All training and retraining will be documented and maintained on file for three years. Employee training records shall be certified that training has been accomplished and is current. The certification must contain, at minimum, the employee's name and date of training.

**COMPLIANCE:**

All employees must understand the Hazardous Energy Control Policy and the consequences for noncompliance. The agency will provide the appropriate training and materials to ensure that all employees are able to work safely with all sources of hazardous energy.

Every actual or perceived violation of the Hazardous Energy Control Policy will be investigated to collect the facts involved in the incident. The Facility Manager or Maintenance Operations Supervisor will review the facts from the completed investigation report and determine the appropriate action to be taken. In some incidents, this action may be to correct unsafe conditions or incorrect practices. If it is determined that a violation of the policy has occurred, appropriate measures will be imposed to ensure it is not repeated. Intentional violations of this policy will not be tolerated.

**INQUIRIES/QUESTIONS:** Questions pertaining to this guidance may be directed to AGP at (503) 584-3588.

Tracy Garcia
Adjutant General Personnel
Oregon Military Department

Lockout Procedure Audit
Appendix "A"

Employee: _____ Date_____
Supervisor: _____Job or Task_____

1. Does the employee know and understand the correct lockout procedure before starting the lockout process? [ ] Yes [ ] No

2. Did authorized employee notify affected employees that a lockout was being initiated and the reason for it? [ ] Yes [ ] No

3. Labeling on Electrical Box [ ] Adequate [ ] Inadequate

4. Identification of personal lock [ ] Adequate [ ] Inadequate

5. Did employee turn off control switch? [ ] Yes [ ] No

6. Did employee turn away from hinged side of disconnect breaker box? [ ] Yes [ ] No

7. Did employee trip proper disconnects? [ ] Yes [ ] No

8. Is residual energy isolated and locked out? [ ] Yes [ ] No

9. Is air pressure involved? [ ] Yes [ ] No
   Is hydraulic pressure involved? [ ] Yes [ ] No
   Is water pressure involved? [ ] Yes [ ] No
   Is gravity weight involved? [ ] Yes [ ] No
   Is steam heat or steam pressure involved? [ ] Yes [ ] No
   Other energy sources? (i.e. laser, R.F., & radioactive) [ ] Yes [ ] No

10. Is proper blocking equipment available? [ ] Yes [ ] No

11. Was proper blocking equipment used? [ ] Yes [ ] No

12. After employee is satisfied that zero energy has been achieved, did the employee:
   Try to start the equipment? [ ] Yes [ ] No
   Turn the switch back off? [ ] Yes [ ] No
   Remove the keys form the lockouts? [ ] Yes [ ] No

13. Was the lockout procedure adequate to reach a zero energy state? [ ] Yes [ ] No

14. Did employee follow appropriate start-up procedures? [ ] Yes [ ] No

15 At risk behaviors reviewed with employee:

Facility Lockout Program Annual Audit and Review
Appendix "B"

(Put location and division here)
Oregon Military Department

Conducted By: _____
Date(s) of Review: _____

**General Written Policy Review**

Comments and/or changes made to General Policy:

**Hardware**

Are lockout locks standardized (in color, shape, and/or size) and do they clearly indicate the identity of the employee that applied the device?

**Machine Specific Procedures Review**

Are written specific procedures complete and up-to-date?

Are written lockout procedures posted at operator's stations and motor control center?

Is a system in place (with documentation) whereby maintenance personnel are communicating changes to equipment in a timely manner and lockout procedures are being appropriately updated?

When specific lockout procedures are written or updated, is equipment being tested to verify effectiveness of the lockout procedure?

**Supervisor's monthly lockout checks**

Are all supervisors completing random (at least 2-3 per year) lockout checks and completing check sheets appropriately?

**Review of Accidents, Near Misses, and/or infractions involving Lockout Practices**

Are these cases appropriately documented and is there evidence of appropriate remedial action and follow through?

**Training Activities**

Are all employees receiving training annually on the overall lockout policy as well as job specific lockout requirements?

Are employees receiving refresher training when changes to equipment are made, infractions occur, or an employee has been off a job for 6 months?

During training, are employees being informed of the specific consequences of lockout violations?

**Investigation of Alleged Infractions**

Are lockout infractions being promptly and thoroughly investigated, and is appropriate action being taken?

Are lock removal procedures being followed with appropriate documentation available?

**Deficiencies Noted and Action to Be Taken to Address Each**
(use another sheet of paper if necessary)

Energy Control Procedure "Checklist"
Appendix "C"

(Put location and division here)

Oregon Military Department

This document may be used as a guideline when developing a new machine specific lockout procedure or to be used in the interim until a new procedure is completed. Also see the Machine Specific Procedures Section for additional guidance. Check off each step when writing a machine Specific Energy Control Procedure.

[ ] Identify and locate all sources of power to the equipment (see Energy Source Determination Inventory

[ ] Notify all affected personnel that equipment is going to be de-energized and worked on.

[ ] Disconnect the main sources of power by opening the primary power switch, valve, etc. Secondary power source such as isolation breakers or control panel switches are not acceptable.

[ ] Disconnect each separate power source of multiple power systems, i.e., air over hydraulic, electric over hydraulic

[ ] Release all residual energy remaining behind the power source, ie. Hydraulic, air pressure. Etc.

[ ] Secure all power sources in the de-energized position with a positive means, i.e., padlock, chain, cable, etc.

[ ] Block or restrain any machinery or device that can move on its own, with or without the power source. If chains or lines are used, anchor them solidly without winches or "come-along."

[ ] Affix a lock or warning tag identifying who attached it and the date it was attached. Each person working on piece of equipment shall affix his or her own lock or tag.

[ ] Test the equipment prior to working on it by manipulating the operating controls. Return the operating controls. Return the operating controls to the neutral position.

NOTE: If the LO/TO procedure must be interrupted to test a repair or adjustment, the following procedure must be followed:

[ ] Appoint a procedure supervisor, and

[ ] Notify all affected personnel.

Before re-energizing:

[ ] Check to make sure all personnel are clear.

[ ] Remove blocking, chains, tie-downs, etc., and any tools or parts that may have been left behind.

[ ] Replace barricades, guards, enclosures, etc.

[ ] Remove your lock or tab only when your work is completed.

[ ] The last person to remove his or her lock or tag is the authorized person and is responsible for re-energizing the equipment.

If this checklist has been completed pending the written procedure, please sign below and turn the checklist in to your supervisor.

_____

(Signature)

Lockout/Tagout Energy Identification Form
Oregon Military Department
Appendix D

Energy Source Determination

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.

Use one of these forms for each applicable piece of equipment.

Date_____ Conducted by_____
Location: _____ Work Center_____
Line: _____ Equipment #_____
Equipment Name _____ Model_____
Procedure # Assigned _____ Serial #_____

List of authorized employees:

| **Energy Determination** | **Yes/No** | **Comments** |
|---|---|---|
| **Electric power**? | | If YES, list Motor Control Center (MCC) or power panel and breaker number: |
| Lockout device for electric power? | | |
| **Battery power?** | | If YES, list location |
| **Engine driven?** | | If YES, switch or key location |
| Lockout device for engine? | | If NO, list method of preventing operation |
| **Spring loaded?** | | |
| Is there a method of preventing spring activation? | | If NO, how can spring tension be safely released or secured? |
| **Counter weight(s)?** | | |
| Can counter weights be prevented from moving? | | |
| Can counter weights be locked out? | | If NO, how can it be secured? |
| **Flywheel?** | | |

| | | |
|---|---|---|
| Does flywheel have a method of preventing movement? | | |
| Can flywheel be locked? | | If NO, how can it be secured? |
| **Hydraulic power?** | | If YES, location of main control/shutoff |
| Can control or shutoff for hydraulic be locked in OFF position? | | If NO, location of closest manual shutoff valve |
| Does manual shutoff valve have lockout device? | | If NO, what is needed to lock valve closed? |
| Is there a bleed or drain valve to reduce pressure to zero? | | If NO, what will be required to bleed off pressure? |
| **Pneumatic energy?** | | If YES, location of main control/shut off valve |
| Can control/shutoff valve be locked in "OFF" position? | | If NO, location of closest manual shutoff valve |
| Does manual shutoff valve have lockout device? | | If NO, what is needed to lock valve closed? |
| Is there a bleed or drain valve to reduce pressure to zero? | | If NO, what will be required to bleed off pressure? |
| **Chemical system?** | | If YES, location of main control/shutoff valve. |
| Can control/shutoff valve be locked? | | If NO, location of manual shutoff |
| Does manual shutoff valve have lockout device? | | 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? | | If NO, how can system be drained and neutralized?<br><br>What PPE will be needed for this procedure? |

| | | |
|---|---|---|
| **Thermal energy?** | | If YES, location of closest manual shutoff valve. |
| Can control/shutoff valve be locked in OFF or closed position? | | If NO, location of closest manual shutoff valve. |
| Does manual shutoff valve have lockout device? | | 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? | | If NO, how can system pressure and temperature be reduced and drained?<br><br>What PPE or equipment is needed? |
| Are there any special precautions not mentioned in this table? | | If YES, list them (i.e. fire hazards, chemical reactions, required cool down periods, etc.) |

You can use the information on this document to develop a specific procedure which will protect the authorized employees who will be performing LOTO at your facility. Appendix C has a sample procedure form.

LOCKOUT LOCK REMOVAL PERMIT"
Appendix "E"

(Put location and division here)
Oregon Military Department

Lock Owner_____
(Every effort must be made to determine owner: closely examine lock, talk to machine operator, talk to crew)

Equipment Device Locked Out: _____

Reason for Removing the Lock: _____

_____

Was the Owner contacted? _____

By Whom? _____ Date: _____ Time: _____

Did the lock owner authorize the removal of the lock? _____

Has the equipment, the immediate area, and the lines, tanks, and equipment downstream been checked and confirmed to be clear and safe for operation?

By Whom? _____ Date: _____ Time: _____

The above has been verified to be true:

Supervisor_____ Date: _____ Time: _____

TMS, Electrician or
Plumber _____ Date: _____ Time: _____

NOTE: Any salaried persons or maintenance supervisor can sign this permit, provided he or she has authorized responsibility. Any military employee working with the supervisor can sign this permit as a witness.

WHEN COMPLETED, SEND ORIGINAL TO PROGRAM SAFETY MANAGER AND SUPERVISOR TO RETAIN A COPY, AND SEND A COPY TO THE AGP SAFETY MANAGER