CHAPTER 10

CONTROL OF HAZARDOUS ENERGY: LOTO PROGRAM

SCOPE

This procedure applies to all HTS AmeriTek employees who work with machinery or equipment capable of movement, and/or steam or hydraulic equipment. HTS AmeriTek employees will not initiate lock-out procedures. All procedures specified in the customer facilities lock-out/tag-out program will be followed. As part of this program, appropriate employees are provided with individually keyed personal safety locks. Employees are required to keep personal control of their key(s) while they have safety locks in use.

PURPOSE

This procedure establishes requirements for the lock-out or tag-out of energy isolating devices. It should be used to ensure that the machine or piece of equipment is isolated from all potentially hazardous energy. Equipment must be locked out or tagged out, and freed of all residual or accumulated energy before HTS AmeriTek employees may perform any service or maintenance activities where the unexpected energization of start-up, release, or stored energy could cause harm.

AUTHORIZATION AND RESPONSIBILITIES

Appropriate employees shall be instructed in the safety significance of the lock-out or tag-out procedures, as well as how to use those procedures. Training will be conducted at the safety council and by in-house personnel.

Affected employees whose work operations are or may be in the area will be instructed in the purpose and the specific lock out procedures of the host employer facility by the supervisor.

Affected employees or their job titles are identified on each Hazardous Energy Control Procedure Form. The authorized employee or site safety representative will notify them whenever a lock-out or tag-out will occur, as well as when the equipment is being placed back in service.

It is the responsibility of the site safety representative to approve all hazardous energy control procedures and to control the lock-out/tag-out program. HTS AmeriTek employees will not initiate lock-out/tag-out and will only participate in group lock-out/tag-out operations. The site safety representative will also inform the supervisor of the type and magnitude of the energy, the hazards of the energy to be controlled and the methods or means to control the energy.

GROUP LOCK-OUT/TAG-OUT

HTS AmeriTek employees will always participate in a group lock-out, as well as being familiar with the HTS AmeriTek Lock-out/Tag-out program. Employees must also be familiar with the host /client's program.
The supervisor will work with the site safety representative to ensure that the correct procedures are followed.

LOCK-OUT/TAG-OUT DEVICES

Every field level operations employee will be trained as an authorized employee to participate in lock-out/tag-out. Upon initial assignment, the employee will be issued an individually keyed, master lock. This lock will indicate the employee's name and the company name. The sole purpose of this lock is to hold an energy-isolating device in a safe position. The use of a lock is the preferred method to isolate an energy source, however, if an energy source cannot be locked out, a tag out system shall be utilized.

A tag-out device is a warning tag that is weather and chemical resistant, standardized in size and color, with wording warning of hazardous energy (i.e. Do Not Start, Do Not Open, Do Not Energize, and Do Not Operate). The tag-out device, where used, shall be affixed in such manner as will clearly indicate that the operation or movement of energy isolating devices from the safe or off position. If a lock can be attached it will be used instead of a tag. Where a tag cannot be attached directly to the energy isolating device, the tag shall be located as close as safety possible to the device in a position that will be immediately obvious to anyone attempting to operate the device.

PREPARATION FOR LOCK-OUT OR TAG-OUT

The HTS AmeriTek supervisor or authorized employee will obtain the proper Hazardous Energy Control Procedure for the equipment or machine to be locked out or tagged out. The supervisor or authorized employee will identify all affected employees by name and their job title that may be involved in the impending lock-out and/or tag-out.

LOCK-OUT/TAG-OUT ENERGY CONTROL OF HAZARDOUS ENERGY PROCEDURES

The Client or host employer's safety representative controls the lock out procedure.

All HTS AmeriTek employees must follow the customer's procedure. However, if a lock-out/tag-out is not initiated by the customer in a situation where it is necessary, it is the responsibility of the HTS AmeriTek supervisor / employee to insist that a lock-out procedure is initiated. A lock-out operation will proceed as follows:

Notify all affected employees that a lock-out or tag-out system is going to be utilized and the reason thereof. The site safety representative will inform the supervisor about the type and magnitude of energy that the machine or equipment utilizes so that the hazards are understood.

LOCK-OUT/TAG-OUT CHECKLIST:

RIGS

When using equipment inside the rigs follow these Lock-out/Tag-out procedures:

1. The secondary cables that connect to the panel inside the control room have power switches.
2. The power switches must be in the off position and tagged out when not in use, to prevent accidental start-up.
3. All three switches (power, controller and temperature set knob) shall remain in the off position when not in use
4. Rig must be grounded.

GENERATORS

When working with generators the following Lock-out/Tag-out procedures apply:

1. Make sure the main power switch and the emergency off switch are in the off position.
2. If there is no physical way to Lock-out these switches then disconnects battery cable.
3. Tag-out main power switch.
4. Follow the same procedures for working inside the power panel.
5. Generators must be grounded.

CONSOLES

When hooking up or disconnecting primary cables the following Lock-out/Tag-out procedures apply:

1. Lock-out/Tag-out has to be performed at power panel.
2. If there is no physical way to Lock-out at power panel follow generator Lock-out/Tag-out
3. Secondary cables at consoles, switch off and disconnect lead at console when performing work or troubleshooting
4. Consoles must be grounded.

When you have to do maintenance work on a machine, take these four steps to protect yourself and your co-workers from injury.

1. De-energize the machine using the procedures established for that machine or equipment. Positively disconnect the machine from the power source. If there is more than one source of power, then disconnect them all.
2. If possible, lock out all disconnects switches. You must be given a lock and a key for each disconnect before you begin working on the machine.
3. Tag all disconnect switches. Use the yellow or red safety tags, which state in large letters – "Danger – Do Not Operate", or "Danger – Do Not Energize" and gives the name of the individual who locked out the equipment, date and time. The tag must also state "DO NOT REMOVE THIS TAG" (except the person who placed the tag may remove it only after the machinery maintenance has been completed).

4. Test the equipment to insure it is de-energized before working on it. First, attempt to operate the equipment by turning on normally. Next check all electrical lines and exposed areas with test equipment or a "lamp". Finally, short to ground any exposed connections using insulated grounding sticks. This test must be done even if the electrical connection is physically broken, such as pulling out a plug, because of the chance of discharging components or stored/residual energy.

   Note: Combination locks may not be used for lock-out purposes.

A tag-out only procedure may be used if the machine cannot be locked out. If the machine is supplied electrical power from a single source, which is under the exclusive control of a trained and qualified repair person at all times and there are not any other persons in the repair area that could be harmed by the accidental energizing of the machinery, then tag-out may be used instead of lock-out/tag-out.

In the event that the Lock-out/Tag-out has to be interrupted for safety testing the following procedure must be followed:

- Clear away all tools from the work area
- Have all employees leave the work area
- Remove the tags or locks
- Energize and proceed with the testing of the equipment
- De-energize and reapply control measures
- This procedure will be documented by the site safety representative

HTS AmeriTek employees must always adhere to the following general rules:

- Each employee will affix his or her lock or tag to the equipment being serviced, inspected or maintained.
- No employee may remove another employee's lock or tag.
- Employee will remove their own lock or tag when their part of the operation is completed.
- When service or maintenance will involve more than one shift the off going shift will remove their locks and/or tags as the oncoming shift applies their locks and/or tags.
- When equipment has only room for one lock, the coordinator of the procedure, who is the host employer's representative, will place the lock on the equipment and place the key in a cabinet or box and each employee will affix their lock to the cabinet or box.

RESTORING EQUIPMENT TO NORMAL PRODUCTION OPERATION

Many accidents occur at the moment of re-energizing. If the machinery is to be re-energized, all persons must be kept at a safe distance away from the machinery. The re-energization can be performed only by a person who either performed the lock-out/tag-out, a person acting under the immediate and direct commands of the original lock-out/tag-out person, or, in the event of a shift change, or other unavailability of the original person, then the original shall, before leaving, appoint a surrogate original person and show him or her all steps taken to lock-out/tag-out the equipment.

Ensure that all tools have been removed from the equipment and that all guards have been reinstalled.

LOCK-OUT/TAG-OUT TRAINING

Lock-out/Tag-out training is provided to new hires at initial orientation and to all employees annually thereafter as part of a weekly safety meeting. Training will also be conducted anytime there is a change in job assignments, in machines, in energy control procedures or when a new hazard is introduced.

Training will be conducted by either in-house personnel or by an outside agency such as the contractor safety council. The training will meet the requirements of 29CFR 1910.147, Control of Hazardous Energy. Training records are maintained at the administrative office and includes the sign in sheet, a copy of the outline, the training date, the instructor's signature and copies of any test that may have been administered.