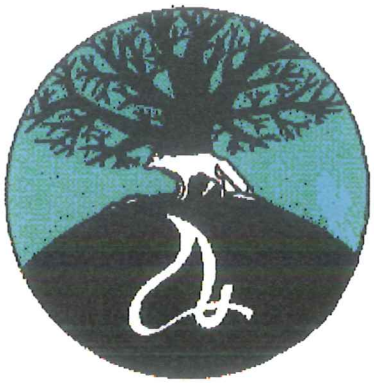

Lockout Tagout Program
Control of Hazardous Energy

Foxwoods Engineering Department

Updated April 19, 2018

LOCKOUT TAGOUT PROGRAM

1.0 Background

Foxwoods Engineering Department has implemented the procedures outlined in this written lockout tagout program to meet the requirements of OSHA 29 CFR 1910.147 lockout tagout the control of hazardous energy and ensure that employees are effectively informed of potential and existing workplace energy hazards associated with equipment serving and repair.

2.0 Purpose

Control of Hazardous energy is the purpose of the Lockout- Tagout Program. This program establishes the requirements for isolation of, kinetic, potential, electrical, chemical, thermal, hydraulic, pneumatic and gravitational energy prior to equipment repairs or serving.

3.0 Hazards

Improper or failure to use Lockout - Tagout procedures may result in:

- Electrical shock
- Chemical exposure
- Skin burns
- Lacerations & amputation
- Fires & explosions
- Chemical releases
- Eye injury
- Death

4.0 Hazard Controls

- Only authorized and trained team members may engage in tasks that require the use of lockout-tagout procedures
- **Lockout procedures** will be completed and on file prior to locking out equipment consisting of more than one source of potential energy hazards.
- Restoration from Lockout is a controlled operation
- All employees receive training regarding the purpose of lockout tagout

5.0 Definitions

Authorized Employees – A person who has received training on locking out or tagging out machines or equipment in order to perform servicing or maintenance on that machine, equipment or system. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

Affected Employees – An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

Capable of being locked out - An energy isolating device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy isolating devices are capable of being locked out, if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.

Competent Person - One who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees and who has authorization to take prompt corrective e measures to eliminate them.

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

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 devices are not energy isolating devices.

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

Hot tap - A procedure used in the repair, maintenance and services activities which involves welding on a piece of equipment (pipelines, vessels or tanks) under pressure, in order to install connections or appurtenances. It is commonly used to replace or add sections of pipeline without the interruption of service for air, gas, water, steam, and petrochemical distribution systems.

Lockout - The placement of a lockout device on an energy isolating device, 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, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

Normal production operations - The utilization of a machine or equipment to perform its intended production function.

5.0 Definitions continued

Servicing and/or maintenance - Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the **unexpected** energization or startup of the equipment or release of hazardous energy.

Setting up - Any work performed to prepare a machine or equipment to perform its normal production operation.

Tagout - The placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the 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, which can be securely fastened to an energy isolating device in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

6.0 Training

Authorized Employee Training

The employees with the job titles listed below will be trained as authorized employees under the lockout / tag out program

Electricians; Plumbers; HVAC mechanics; Power Plant Operators; Kitchen Mechanics; Water Technicians.

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 and means necessary for energy isolation and control.

Affected Employee Training

All employees will be trained during new employee orientation to recognize the hazards associated with lockout tagout. The training will consist of the following:

1. Only trained and authorized employees will repair, replace or adjust machinery, equipment or processes
2. Affected employees may not remove Locks, locking devices or tags from machinery, equipment or circuits.
3. Purpose and use of the lockout procedures.

7.0 Lockout - Tagout Procedures

A Lockout - Tagout survey has been conducted to locate and identify all energy sources to verify which switches or valves supply energy to machinery and equipment. Dual or redundant controls have been removed.

A Lockout - Tagout energy control procedure has been developed for each job specific lockout prior to being performed. This document describes the energy sources, location of disconnects, type of disconnects, special hazards and special safety procedures. The procedures will be reviewed each time to make certain employees properly lockout equipment and or machinery. If a written energy control procedure does not exist for a piece of equipment or job task **or** if the lockout requires only a partial lockout of a larger system that has an existing procedure on file and the job task has multiple lockout points. A procedure must be developed **prior** to conducting the lockout – Tagout.

8.0 Personal Locks

All personnel working on locked out equipment and or systems will be assigned a personal lock with one key; all locks will be keyed differently. In some cases more than one lock is needed to completely de-energize equipment and machinery, in such cases additional locks will be issued. All locks shall be uniquely identifiable to a specific employ. If numerous locks are required to safely lockout large systems, lockout boxes will be used.

9.0 General Lockout – Tag out Procedures

Before working on, repairing, adjusting or replacing machinery and equipment, the following procedures will be utilized to place the machinery and equipment in a neutral or zero energy state.

Preparation for Shutdown

Before authorized employees turn off a machine or piece of equipment, the authorized employees will have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the means to control the energy.

Notify all affected employees that the machinery, equipment or process will be out of service.

Machine or Equipment Shutdown

The machine or equipment will be turned or shut down using the manufactures recommended procedures for that specific machine, if there are no manufactures procedures on file a shutdown procedure will be created with the team members performing the lockout and placed on file (a written lockout procedure). An orderly shutdown will be utilized to avoid any additional or increased hazards to employees as a result of equipment de-energization.

If the machinery, equipment or process is in operation, follow normal stopping procedures as recommended by the manufacture.

Move switch or panel arms to "Off" or "Open" positions and close all valves or other energy isolating devices so that the energy source(s) is disconnected or isolated from the machinery or equipment.

Machine or Equipment Isolation

All energy control devices that are needed to control the energy to the machine or equipment will be physically located and operated in such a manner as to isolate the machine or equipment from the energy source.

Lockout or Tagout Device Application

Authorized employees will affix lockout and tagout devices to energy isolating devices. Lockout devices will be affixed in a manner that will hold the energy isolating devices in the "open" or "off" position.

The tagout devices used will be affixed in such a manner that will clearly state that the operation or the movement of energy isolating devices from the "open" or "off" positions is prohibited.

Lock and tag out all energy devices by use of hasps, chains or valve covers with an assigned individual lock.

Stored Energy

Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained, and otherwise rendered safe.

Where the re-accumulation of stored energy to a hazardous energy level is possible, verification of isolation will be continued until the maintenance or servicing is complete.

Release stored energy (capacitors, springs, elevated members, rotating fly wheels, and hydraulic/air/gas/steam systems) must be relieved or restrained by grounding, repositioning, blocking and/or bleeding the system.

Verification of Isolation

For electrical systems; use an approved electrical meter, before testing the tagged out system insure the meter is functioning properly by testing the meter on a known live source, then test the tagged out equipment or system by testing all wire connection points phase to phase and then phase to ground, after you have verified that all electrical power has been removed, re-verify that the electrical meter is working properly by re-testing on the same live source that was used.

Extended Lockout - Tagout

Should there be a shift change before the locked out equipment / system can be restored to service, a Managers systems lock must be issued and installed **prior** to the removal of any personal locks, once the systems lock is in place it will remain part of the lockout system until all work has been completed. Once the repairs or installation is complete and after all personal locks have been removed only then can the systems lock be removed and the equipment or system reenergizing.

Release from LOCKOUT/TAGOUT

Before lockout or tagout devices are removed and the energy restored to the machine or equipment, the following actions will be taken:

1. The work area will be thoroughly inspected to insure that all tools, parts and or debris have been removed from the area and equipment guarding has been reinstalled.
2. The work area will be checked to ensure that all employees have been safely positioned outside the affected area. Before the lockout and tagout devices are removed, the affected employees will be notified that the lockout and tagout devices are being removed
3. Personal locks can only be removed by the owner of the lock. Managers' systems locks can be removed by an authorized engineering team member.

10.0 Procedure For Electrical Plug-Type Equipment

This procedure covers all Electrical Plug-Type Equipment such as battery chargers, slot machines, office equipment, powered hand tools, powered bench tools etc.

When working on, repairing, or adjusting the above equipment, the following procedures must be utilized to prevent accidental or sudden startup:

1. Unplug Electrical Equipment from wall socket or in-line socket.

An exception is granted to not lock & tag the plug if the cord & plug remain in the exclusive control of the employee working on, adjusting or inspecting the equipment.

2. Test Equipment to assure power source has been removed by using an approved electrical meter by first testing it on a known live source, then test the effected equipment, after you have verified the equipment has been de-energized re-test the meter on a known live electrical source to verify the meter is working.

3. Perform required operations.

4. Replace all guards removed.

5. Inspect power cord and socket before plugging equipment into power source. Any defects must be repaired before placing the equipment back in service.

11.0 Procedures Involving More Than One Team Member

In the preceding SOPs, if more than one team member is assigned to a task requiring a lock and tag out, each must also place his or her own lock and tag on the energy isolating device(s).

12.0 Management's Removal of Locks and Tags

Only the team member that locks and tags out machinery, equipment or processes may remove his/her personal locks and tags. However, should the employee leave the facility before removing his/her locks and or tags, the Operations Manager may remove the lock and tag. Notification of the employee who placed the lock is required prior to lock removal.

The Operations Manager must be assured that all tools have been removed, all guards have been replaced and all employees are free from any hazard before the lock and tag are removed and the machinery, equipment or process is returned to service.

AN F8 CAN NOT CUT ANY LOCK UNDER ANY CIRCUMSTANCE

It is recommended that the locking tree or lock holding device be cut and not the lock.

13.0 Program Inspections

The **Safety Manager** will conduct annual inspections of the lockout tagout program. These inspections will be conducted using the attached inspection checklist. The inspector must observe an authorized team member conducting a lock out tagout procedure. All discrepancies will be discussed with team member and corrective actions will be taken.

14.0 Contractors

Contractors working on Foxwoods property must follow Foxwoods Engineering's Lockout / Tag out procedures, this includes filing a Lockout Tag out request within 24 hours of performing work, Contractors must supply their own locks and must inform the operations manager and team members working in the area, contractors are not allowed to perform a lockout – tagout, only trained Foxwoods engineers are authorized to perform a lockout – tagout. All contractors and there employees that are working on locked out equipment and or, systems must place their personal locks prior to starting work. Contractors must also inform Dispatch when their personal locks are added and removed in order to complete the Hotsys lockout forms.

Lockout - Tagout Audit

Auditor _____ **Date** _____

Area	Satisfactory	Action Required	Action completed
Employee Knowledge			
Date of training			
Purpose of LOTO			
Devices Used			
Procedure Location			
Energy Control Methods			
Programs Administration			
Training Certificates			
Annual review of program			
Equipment Procedures			
Annual proficiency review			
List of Locks Issued			
Safeguards			
Engineering Safeguards			
Administrative Safeguards			
Training Safeguards			
Area Inspection			
Standardized Locks & Tags			
Locks issued to individuals			
Notification procedures			
LOTO procedure used			
Sufficient devices available			

Operational Questions

	Is all machinery or equipment capable of movement, required to be de-energized or disengaged and locked-out during cleaning, servicing, adjusting or setting up operations, whenever required?
Where the power disconnecting means for equipment does not also disconnect the electrical control circuit:	
	Are the appropriate electrical enclosures identified?
	Is means provided to assure the control circuit can also be disconnected and locked-out?
	Is the locking-out of control circuits in lieu of locking-out main power disconnects prohibited?
	Are all equipment control valve handles provided with a means for locking-out?
	Does the lock-out procedure require that stored energy (mechanical, hydraulic, air, etc.) be released or blocked before equipment is locked-out for repairs?
	Are appropriate associates provided with individually keyed personal safety locks?
	Are associates required to keep personal control of their key(s) while they have safety locks in use?
	Is it required that only the associate exposed to the hazard, place or remove the safety lock?
	Is it required that associates check the safety of the lock-out by attempting a startup after making sure no one be exposed?
	Are associates instructed to always push the control circuit stop button immediately after checking the safety of the lock-out?
	Is there a means provided to identify any or all associates who are working on locked-out equipment by their locks or accompanying tags?
	Are a sufficient number of accident preventive signs or tags and safety padlocks provided for any reasonably foreseeable repair emergency?
	When machine operations, configuration or size requires the operator to leave his or her control station to install tools or perform other operations, and that part of the machine could move if accidentally activated, is such element required to be separately locked or blocked out?
	In the event that equipment or lines cannot be shut down, locked-out and tagged, is a safe job procedure established and rigidly followed?

Notes

MASHANTUCKET PEQUOT TRIBAL NATION
Foxwoods Resort Casino

Lockout/Tagout Energy Control Procedures

Equipment or Process:

Location of Equipment:

A tag is required on each **Isolation Location** listed below
The Specific **Type of Lock** must be applied at the location listed

Type of Energy	Isolation Location	Type of Lockout Device
Electrical – volts		
Potential (Stored)		
Kinetic (in-motion)		
Pneumatic (air - gas pressure)		
Hydraulic		
Thermal –		
Chemical		

Special Hazards	Procedure for Control of Special Hazard

Procedures

Notify all affected employees
Shut down using normal operating procedures
Disconnect and isolate the sources of energy (Lock and Tag Out)
Ensure personnel are not exposed verify the lockout by pressing the start button
When finished ensure that all tools are removed from the machinery and all guards are replaced
Remove lockout devices
Restart machine
Inform affected employees that the machinery is back up and running

Stored Energy Release Procedure

Notes

Isolation Location shall positively identify the exact breaker, valve, switch or other disconnect or blocking device to be locked and tagged to isolate the source of energy from the work area.

Type of Lockout shall specifically name the exact type of locking device needed to ensure the disconnect or blocking device stays in the isolated condition/position. i.e.. Breaker Clip, Valve Handwheel Cover, Blank Flange, etc.

Stored Energy: Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained, and otherwise rendered safe.

This policy supersedes all previous written programs for lock out/tag out and shall be complied with totally to satisfy the requirements of OSHA 1910.147, for Lock out Tag out.

Anyone that fails to comply with this policy will be subject to disciplinary action.

Ted Welch 5/16/18

Ted Welch Date
Executive Director of Engineering & Projects

4/23/18

Jennifer Gasparino Date
Director of Engineering

4/25/18

Alan Pearson Date
Director of Building Service