LOCKOUT/TAGOUT PROGRAM

1.0 PURPOSE:

The purpose of this policy is to establish rules and procedures for the protection of employees against the unexpected energizing, start-up, or release of stored energy from any machine or equipment located in all work places throughout the City of Wilson. This will be accomplished by affixing appropriate lockout and tagout devices to energy isolating devices. This policy meets all requirements set forth by 29 CFR 1910.147.

2.0 SCOPE

This policy applies to all employees and contractors at City of Wilson facilities.

3.0 APPLICATION

3.1 This policy applies to the control of energy in the following cases:

3.1.1 Service and/or maintenance of machines and equipment.

3.1.2 Service and/or maintenance which takes place during normal production operation is covered only if:

3.1.2.1 An employee is required to remove or bypass a guard or other safety device.

3.1.2.2 An employee is required to place any part of his/her body into an area of a machine or piece of equipment where work is actually performed upon the material at the point of operation or where an associated danger zone exists during a machine operating cycle.

NOTE:

Minor tool changes, adjustments and other minor servicing activities which take place during normal production operations *are not covered* if they are routine, repetitive, and integral to the use of the equipment for production purposes, provided that approval has been granted by the section/division head or superintendent. If permission is granted, these alternate procedures must be in writing, kept on file and communicated to the employees who are involved.

3.2 This policy *does not apply* in the following case:

3.2.1 Installations under the exclusive control of electric utilities for the purpose of power generation, transmission, and distributing, including related equipment for communication or metering.

3.2.2 Exposure to electrical hazards from work on, near or with conductors or equipment in electric utilization installations.

3.2.3 Work on cord and plug connected electric equipment for which exposure to the hazards of unexpected energization or start up of the equipment is controlled by the

unplugging of the equipment from the energy source and by the plug being under the exclusive control of the employee performing the servicing or maintenance.

3.2.4 Hot tap operations involving transmission and distribution systems for substances such as: gas, steam, water, or petroleum products when they are performed on pressurized pipelines provided that it can be proven that:

3.2.4.1 Continuity of service is essential.

3.2.4.2 Shut down of the system is impractical, and

3.2.4.3 Documented procedures are followed and special equipment is used which will provide proven effective protection for employees and contractors.

4.0 DEFINITIONS

4.1 **"AUTHORIZED EMPLOYEE"** means a person who locks or implements a tagout system procedure on machines or equipment to perform the servicing or maintenance on that machine or equipment.

4.2 **"ENERGIZED"** means connected to an energy source or containing residual or stored energy.

4.3 **"ENERGY ISOLATING DEVICE"** means a mechanical device that physically prevents the transmission or release of energy, including but not limited to the following:

4.3.1 A manually operated electrical circuit breaker

4.3.2 A disconnect switch

4.3.3 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.

4.3.4 A slide grate

4.3.5 A slip blind

4.3.6 A line valve

4.3.7 A block

4.3.8 Any similar device used to block or isolate energy. The term does not include a push button, selector switch, and other control circuit type devices.

4.4 **"ENERGY SOURCE"** means any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

4.5 **"HOT TAP"** means a procedure used in the repair, maintenance, and service activities which involves welding on a piece of equipment (pipelines, vessels, or tanks) under pressure, in order to install connections or appurtenances.

4.6 **"LOCKOUT (LOTO)"** means the placement of a lockout device on an energy isolating device in accordance with an established procedure. This will ensure that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

4.7 **"LOCKOUT DEVICE"** means a device that utilizes a positive means such as a lock to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment.

4.8 **"NORMAL PRODUCTION OPERATIONS"** means the utilization of a machine or equipment to perform its intended production function.

4.9 **"SERVICING AND/OR MAINTENANCE"** means 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 energizing or start-up of the equipment or release of hazardous energy.

4.10 **"TAGOUT DEVICE"** means a prominent warning device, such as a tag and means of attachment, which can be securely fastened to an energy isolating device in accordance with an established procedure. This is to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

5.0 ASSIGNMENT OF LOCKS AND TAGS

5.1 The Lock Out / Tagout Program for the City of Wilson may utilize two specific methods of lock and tag control. Division heads have the responsibility for the determination of which program they wish to apply to their work place.

5.1.1 Method One will have a bin of locks designated specifically for LOTO and will be maintained at a central site within that division or shop. Employees may check out these locks for jobs requiring LOTO and return them once the maintenance LOTO activity is completed. A lock control log will be utilized, having as a minimum, the name of the employee, lock number, equipment being locked out, and date the lock will be returned to the checkout bin. Tags will be handed out to employees as needed.

5.1.2 Method Two requires each City employee responsible for maintenance tasks to be assigned a specific lock, assigned exclusively for that employee, to be kept in their possession until either the lock is in use, damaged, or cut off and destroyed. Again, tags will be handed out to employees as needed.

5.2 Each method above must abide by the following rules:

5.2.1 Only trained employees will receive locks and keys. Each standardized lock will be identified to the person using it (if applicable). No duplicate keys will be retained or made.

5.2.2 Master keys will only be authorized with Method One listed above and must be checked out just as if it were a lock; stating in the checkout log where and why the master key was checked out and by what employee. Locks utilizing master key availability will not be used in Method Two. Supervision must order locks having only one key opening the lock and the spare destroyed.

5.2.3 All locks and tags will be of durable construction to withstand the environment in which they are to be used. Locks will be substantial enough to prevent removal without the use of excessive force or unusual techniques. Tag attachment for tagout procedures only will consist of the use of a plastic self-locking cable tie, capable of withstanding 50 pounds pull.

5.2.4 Locks assigned to employees for the Energy Control Program will only be used for lockout/tagout. No personal locks will be brought into work for that use or likewise, LOTO locks used for personal items (i.e. personal lockers, securing bikes).

5.2.5 A list of employees authorized to use the lockout/tagout devices and/or their corresponding lock numbers will be kept on file in the Maintenance/Golf Course Superintendents office.

6.0 LIMITATIONS AND USES OF TAGS

6.1 For those situations where the use of a tag device only is appropriate, the authorized employee will understand the following limitations:

6.1.1 Tags are warning devices **only**. They do not provide physical restraint.

6.1.2 Only the authorized employee who installed the tag will make the removal of tag devices. (See Section 4.0).

6.1.3 Tags must be legible and easily understood by all employees. Damaged tags will be immediately taken out of service and replaced with new.

6.1.4 Tags and their means of attachment must be made of materials that will withstand the environment conditions encountered in the work place.

6.1.5 Tags may evoke a false sense of security and their meaning needs to be understood as part of the overall energy control program.

6.1.6 Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

7.0 REMOVAL OF LOCKOUT/TAGOUT DEVICES

7.1 Each lockout/tagout device will be removed from each energy isolating device by the employee who applied the device.

7.2 There will be only one case in which someone else other than the authorized employee, who put on the lockout/tagout device, will be allowed to remove someone else's lockout/tagout device. **This is only if the employee left the facility to go home and forgot to remove the lock.**

7.3 **THE FOLLOWING PROCEDURE MUST BE FOLLOWED BEFORE REMOVAL OF THE LOCK:**

7.3.1 Call the employee at home and have him come in and remove his lock.

7.3.2 If employee cannot be reached, verify again that the employee is not at the facility (i.e. grounds, facility).

7.3.3 The supervisor will then authorize the removal of the lock.

7.3.4 Ensure that the authorized employee has this knowledge before he/she resumes work at the facility.

7.3.5 Documentation should be kept on file and in writing describing the persons called and what was done to prevent accidental start up prior to removing the lock.

8.0 LOCKOUT/TAGOUT PROCEDURE

8.1 The following procedures will be followed in all cases of lockout/tagout:

8.1.1 The machine to be locked out is designated and a survey is conducted to locate all isolating devices to be certain which switches valves, or other energy isolating devices apply.

8.1.2 Notify all affected employees that a lockout/tagout system is going to be utilized and the reasons for it.

8.1.3 If the equipment is operating, shut it down by normal stopping procedure (depress stop button etc.)

8.1.4 Turn off the main disconnect switch, valve, and other energy isolating devices. Stored energy such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, must be dissipated or restrained by methods such as repositioning, blocking, bleeding down of lines, etc.

8.1.5 Lock the padlock on the disconnect switch, or on the chain for closing the valves. Retain the key and attach a "Danger- Do Not Operate" tag.

NOTE

Each employee working on the equipment must place his/her own lock and tag on the disconnect switch, etc. (use a hasp). Test the disconnect switch to make sure it cannot be moved to the "ON" position.

8.1.6 After ensuring that no employees are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain that the equipment will not operate.

CAUTION

Return the operating controls to the "OFF" position before beginning the servicing and/or maintenance.

8.1.7 After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove the lockout/tagout device. If more than one employee has a lock and tag on the hasp, wait until all locks and tags are removed before continuing.

8.1.8 After all locks and tags are removed, check the area around the machines or equipment to ensure that no one is exposed. Turn the disconnect switch, etc., to the "ON" position to restore energy.

WARNING

Do not attempt to operate any switch, valve, or other energy isolating device when it is locked or tagged out.

9.0 LOCKOUT DOCUMENTATION

9.1 The Specific Lockout/Tagout Procedures format found at the end of this policy manual will be used for more complex systems or systems which are not capable of being locked out by standard means (lock and tag). Procedural steps will be developed and documented and kept in the section/division head/superintendent's office.

9.2 Documentation of procedures for machines and/or equipment is not required provided <u>all</u> of the following elements exist:

9.2.1 the machine or equipment has no potential for stored or residual energy after shut down which could endanger employees,

9.2.2 the machine or equipment has a single energy source that can be readily identified and isolated,

9.2.3 the isolation and locking out of that energy source will completely de-energize and deactivate the machine or equipment,

9.2.4 the machine or equipment is isolated from that energy source and locked out during servicing or maintenance,

9.2.5 a single lockout device will achieve a locked out condition,

9.2.6 the lockout device is under the exclusive control of the authorized employee performing the servicing or maintenance,

9.2.7 the servicing or maintenance does not create hazards for other employees, and,

9.2.8 the City of Wilson, in utilizing this exception, has had no accidents involving the unexpected activation or re-energizing of the machine or equipment during servicing or maintenance.

10.0 **TRAINING**

10.1 The superintendent will train, or ensure training is performed for all authorized employees in the purpose and function of the lockout/tagout procedures so that the knowledge and skills required for the safe application, usage, and removal of energy controls are understood.

10.2 The training will include but will not be limited to:

10.2.1 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.

10.2.2 Purpose and use of the lockout/tagout procedures.

10.2.3 Instruction regarding the procedure and disciplinary action relating to attempts to restart or re-energize machines or equipment which are locked and tagged out by other employees.

10.2.4 Limitations and uses of tags in the lockout/tagout procedures.

10.3 Retraining will also be conducted with all authorized employees in the following cases:

10.3.1 Whenever changes are made in job assignments, machines, equipment, or processes that present a new hazard.

10.3.2 Changes in the lockout/tagout procedure.

10.3.3 Whenever a periodic inspection is made as outlined in Section XI of these procedures, or whenever a City representative believes that there are deviations from or inadequacies in the employee's knowledge or use of the lockout/tagout procedures.

10.3.4 Documentation of training will be kept in the office of the division head/superintendent.

11.0 CONTRACTOR REVIEW

All contractors will be familiar with City of Wilson's Lockout / Tagout policy. It will be the responsibility of the Project Engineer, Contracting Coordinator, or Superintendent to review this with the contractor under his/her supervision.

12.0 PERIODIC PROGRAM INSPECTION

12.1 A periodic inspection will be conducted at least annually to ensure that the lockout/tagout policy is in compliance with all federal and state standards. If any deficiencies are found, they will be corrected immediately. The section/division head, superintendent, or City Safety & Risk Manager will conduct the inspection.

12.2 A review will be conducted with each authorized and affected employee on his or her responsibilities under the lockout/tagout procedure. In addition, whenever a tagout procedure is being used, the review will also include the requirements of section 4.1.4 of this policy.