

LOCKOUT/BLOCKOUT PROGRAM

**Environmental Health
And Safety Department
Cal Poly Pomona**

Revised August 24, 2009

Table of Contents

1.0	Reference	1
2.0	Policy	1
3.0	Purpose	1
4.0	Responsibilities	1
4.1	Environmental Health & Safety Department	1
4.2	Department Utilizing Lockout/Blockout Program	1
5.0	Definitions	2
6.0	When to Utilize Lockout/Blockout Program.....	2
7.0	Employees Authorized to Perform Lockout/Blockout Procedures.....	2
8.0	Lockout/Blockout Procedure.....	3
9.0	Work in Progress.....	4
10.0	Removing Lockout/Blockout... ..	4
11.0	Special Situations.....	4
12.0	Rules for Using Lockout/Blockout Program Procedures.....	4
13.0	Appendices	
A.	Lockout/Blockout Safety Orders.....	5
B.	Lock-Out/Block-Out Program Inspection/Audit Certification Form.....	

California State Polytechnic University, Pomona
Environmental Health & Safety Department

LOCKOUT/BLOCKOUT PROGRAM

1.0 REFERENCE

California Code of Regulations, Title 8, Sections:

3203	Injury and Illness Prevention Program
3314	Cleaning Repairing, Servicing and Adjusting Prime Movers, Machinery and Equipment
6004	Accident Prevention Tags
2320.4	De-energized Equipment or Systems
2320.5	Energizing (or re-energizing) Equipment or Systems
2320.6	Accident Prevention Tags
2530.43	Automatic Restarting
2530.86	Motor Not in Sight from Controller

2.0 POLICY

It is the policy of California State Polytechnic University, Pomona to protect the health and safety of employees performing maintenance on machinery and/or electrical circuits. No employee shall engage in or be required to perform any task which is determined to be unsafe or unreasonably hazardous.

3.0 PURPOSE

This program establishes the requirements for the lockout/ blockout of energy sources when performing service or maintenance that could cause injury by the unexpected start-up of equipment and/or release of stored energy. All employees must comply with this procedure.

4.0 RESPONSIBILITIES

- 4.1 Environmental Health & Safety Department
 - Develop, implement, and monitor the Lockout/Blockout Program in compliance with Cal-OSHA requirements.
 - Perform periodic inspections, record unsafe conditions and work practices and the corrective action taken. Maintain records for 3 years.
- 4.2 Department Utilizing Lockout/Blockout Program
 - Identify employees to be trained in lockout/blockout procedures.
 - Train employees in lockout/blockout procedures.
 - Retain copies of training records for 3 years. Records include: employee's name, training dates, type of training and training provider. Send a copy of the records to EH&S.
 - Provide employees with the equipment necessary to adhere to program procedures, i.e., locks with keys, tags, multiple-lock hasps, blocks, blinds, etc.
 - Ensure that personnel strictly adhere to lockout/blockout procedures.

5.0 DEFINITIONS

"Lockout" and "Blockout" are methods of keeping equipment from being set in motion and endangering workers.

To **Lockout** equipment the disconnect switch is put in the safe or off position and a lock is attached so that the equipment cannot be energized. A written warning or tag is also attached with the following information:

1. Reason for placing tag.
2. Name of person placing tag.
3. How that person can be contacted.
4. Date tag was placed.

To **Blockout** equipment blocks are placed under raised equipment so that parts that may fall are braced. Blinds are placed in pipes so that substances cannot pass through.

Locks, tags, blocks and blinds do not de-energize equipment. Attach them only after the machinery has been isolated from its energy sources.

6.0 WHEN TO UTILIZE LOCKOUT/BLOCKOUT PROGRAM

Situations most likely to require lockout/blockout procedures:

- When a guard or safety device must be removed or bypassed.
- When any part of your body is placed where you could be caught by moving machinery.
- When working on electrical circuits.

Typical jobs that require lockout/blockout procedures:

- Repairing electrical circuits.
- Cleaning or oiling machinery with moving parts.
- Clearing jammed mechanisms.

7.0 EMPLOYEES AUTHORIZED TO PERFORM LOCKOUT/BLOCKOUT PROCEDURES

The lockout/blockout procedures are to be applied only by employees who are authorized to perform service and/or maintenance work on machinery and who are trained in the procedures contained in this written program.

When outside contractors are servicing equipment the contractor and the job supervisor must exchange lockout/blockout information.

On job sites where an outside contractor is supervising workers, the contractor will be responsible for complying with Lockout/ Blockout Regulations.

8.0 LOCKOUT/BLOCKOUT PROCEDURE

Step 1. Preparation for Shutdown...

- All employees who work in the affected area must be notified.
- Know the types and amounts of energy that power the equipment, the hazards of that energy and how the energy can be controlled.

Step 2. Equipment Shutdown...

- Shut system down according to manufacturer's operating controls.

Step 3. Equipment Isolation...

- Operate all energy isolating devices to block energy flow from every source that feeds the equipment to prevent an unexpected movement of parts, or flow of energy.

Step 4. Application of Lockout/Blockout Devices...

- Lock and tag the energy isolation device.
- The lock and tag must clearly identify who it belongs to.
- Use only the lockout/blockout devices supplied by your job supervisor.
- If your lock and tag cannot be placed directly on the energy control, use a lockout device.
- Every employee working on the equipment must attach his/her personal lock and tag.
- Tags must be filled out completely and correctly.

Step 5. Control of Stored Energy...

- Release or block energy already in the equipment after it has been isolated from its energy source.
- Inspect equipment to be sure all parts have stopped moving and perform the following as appropriate to task:
 - Install ground wires.
 - Relieve trapped pressure.
 - Release the tension on springs or block movement of spring driven parts.
 - Block or brace parts that could fall due to gravity.
 - Bleed lines and leave vent valves open.
 - Drain process piping systems and close valves to prevent flow of hazardous materials.
 - If a line must be blocked where there is no valve, use a blank flange.
 - Purge tanks and process lines.
 - Dissipate extreme cold or heat, wear protective clothing.
 - If stored energy can re-accumulate, monitor it to make sure it stays below hazardous levels.

Step 6. Equipment Isolation Verification...

- Make sure that no energy is flowing to or within the equipment.
- Make sure danger areas are clear of workers.
- Verify that the disconnect switch cannot be moved to the on position.
- Press all start buttons and other activating controls on the equipment itself

to verify isolation.

- Shut off all machine controls when testing is completed.

9.0 WORK IN PROGRESS

Once lockout/blockout is complete do not bypass the lockout when putting in new piping or wiring.

10.0 REMOVING LOCKOUT/BLOCKOUT

Step 1. Make sure the equipment is safe to operate...

- Remove all tools from the work area and be sure the system is fully assembled.

Step 2. Safeguard all employees...

- Make sure workers are clear of equipment and notify everyone in the work area that the lockout/blockout is being removed.

Step 3. Remove lockout/blockout devices...

- Each lockout device must be removed by the person who put it on.
- The job supervisor must remove his/her lock and tag last.

Step 4. Re-energize equipment according to manufacturer's directions.

11.0 SPECIAL SITUATIONS

- If the machine being worked on must be temporarily re-activated, remove unnecessary tools from the work area and make sure everyone is clear of the equipment. Remove the lockout/blockout devices and re-energize the system. As soon as the energy is no longer needed, isolate the equipment and re-apply the Lockout/Blockout Program procedures, Steps 1 through 6.
- When a worker who applied a lock or tag is not there to remove it, the lock can be removed only in an emergency and only in the presence of the job supervisor.
- If servicing lasts more than one work day lockout/blockout protection must remain in place until the servicing is complete.

12.0 RULES FOR USING LOCKOUT/BLOCKOUT PROGRAM PROCEDURES

All equipment must be locked out when service and/or maintenance work is being performed. Do not attempt to operate any switch, valve, or other energy isolating device bearing a lock and/or tag.

APPENDIX A

LOCKOUT/BLOCKOUT SAFETY ORDERS

California Code of Regulations, Title 8, Sections:

3203. Injury and Illness Prevention Program.

(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program). The Program shall be in writing and shall, at a minimum:

(1) Identify the person or persons with authority and responsibility for implementing the Program.

(2) Include a system for ensuring that employees comply with safe and healthy work practices. Substantial compliance with this provision includes recognition of employees who follow safe and healthful work practices, training and retraining programs, disciplinary actions, or any other such means that ensures employee compliance with safe and healthful work practices.

(3) Include a system for communicating with employees in a form readily understandable by all affected employees on matters relating to occupational safety and health, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. Substantial compliance with this provision includes meetings, training programs, posting, written communications, a system of anonymous notification by employees about hazards, labor/management safety and health committees, or any other means that ensures communication with employees.

Exception: Employers having fewer than 10 employees shall be permitted to communicate to and instruct employees orally in general safe work practices with specific instructions with respect to hazards unique to the employees' job assignments as compliance with subsection (a)(3).

(4) Include procedures for identifying and evaluating workplace hazards including scheduled periodic inspections to identify unsafe conditions and work practices. Inspections shall be made to identify and evaluate hazards:

(A) When the Program is first established;

Exception: Those employers having in place on July 1, 1991 a written Injury and Illness Prevention Program complying with previously existing section 3203.

(B.) Whenever new substances, processes, procedures, or equipment are introduced to the workplace that represent a new occupational safety and health hazard; and

(C) Whenever the employer is made aware of a new or previously unrecognized hazard.

(5) Include a procedure to investigate occupational injury or occupational illness.

(6) Include methods and/or procedures for correcting unsafe or unhealthy conditions, work practices and work procedures in a timely manner based on the severity of the hazard:

(A) When observed or discovered; and

(B) When an imminent hazard exists which cannot be immediately abated without endangering employee(s) and/or property, remove all exposed personnel from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition shall be provided the necessary safeguards.

(7) Provide training and instruction:

(A) When the Program is first established;

Exception: Employers having in place on July 1, 1991 a written Injury and Illness Prevention Program complying with the previously existing Accident Prevention Program in section 3203.

(B) To all new employees;

(C) To all employees given new job assignments for which training has not previously been received;

(D) Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard;

(E) Whenever the employer is made aware of a new or previously unrecognized hazard; and

(F) For supervisors to familiarize themselves with the safety and health hazards to which employees under their immediate direction and control may be exposed.

(b) Records of the steps taken to implement and maintain the Program shall include:

(1) Records of scheduled and periodic inspections required by subsection (a)(4) to identify unsafe conditions and work practices, including person(s) conducting the inspection, the unsafe conditions and work practices that have been identified, and action taken to correct the identified unsafe conditions and work practices. These records shall be maintained for three (3) years; and

Exception: Employers with fewer than 10 employees may elect to maintain the inspection records only until the hazard is corrected.

(2) Documentation of safety and health training required by subsection (a)(7) for each employee, including employee name or other identifier, training dates, type(s) of training, and training providers. This documentation shall be maintained for three (3) years.

Exception No. 1: Employers with fewer than 10 employees can substantially comply with the documentation provision by maintaining a log of instructions provided to the employee with respect to the hazards unique to the employee's job assignment when first hired or assigned new duties.

Exception No. 2: Training records of employees who have worked for less than one (1) year for the employer need not be retained beyond the term of employment if they are provided to the employee upon termination of employment.

Exception No. 3: For employers with fewer than 20 employees who are in industries that are not on a designated list of high-hazard industries established by the Department of Industrial Relations (Department) and who have a Workers' Compensation Experience Modification Rate of 1.1 or less, and for any employers with fewer than 20 employees who are in industries on a designated list of low-hazard industries established by the Department,

written documentation of the Program may be limited to the following requirements:

A. Written documentation of the identity of the person or persons with authority and responsibility for implementing the Program as required by subsection (a)(1).

B. Written documentation of scheduled periodic inspections to identify unsafe conditions and work practices as required by subsection (a)(4).

C. Written documentation of training and instruction as required by subsection (a)(7).

Exception No. 4: Local governmental entities (any county, city, city and county, or district, or any public or quasi-public corporation or public agency therein, including any public entity, other than a state agency, that is a member of, or created by, a joint powers agreement) are not required to keep records concerning the steps taken to implement and maintain the Program.

Note 1: Employers determined by the Division to have historically utilized seasonal or intermittent employees shall be deemed in compliance with respect to the requirements for a written Program if the employer adopts the Model Program prepared by the Division and complies with the requirements set forth therein.

Note 2: Employers in the construction industry who are required to be licensed under Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code may use records relating to employee training provided to the employer in connection with an occupational safety and health training program approved by the Division, and shall only be required to keep records of those steps taken to implement and maintain the program with respect to hazards specific to the employee's job duties.

(c) Employers who elect to use a labor/management safety and health committee to comply with the communication requirements of subsection (a)(3) of this section shall be presumed to be in substantial compliance with subsection (a)(3) if the committee:

- (1) Meets regularly, but not less than quarterly;
- (2) Prepares and makes available to the affected employees written records of the safety and health issues discussed at the committee meetings and maintained for review by the Division upon request. The committee meeting records shall be maintained for three (3) years;
- (3) Reviews results of the periodic, scheduled worksite inspections;
- (4) Reviews investigations of occupational accidents and causes of incidents resulting in occupational injury, occupational illness, or exposure to hazardous substances, and where appropriate, submits suggestions to management for the prevention of future incidents;
- (5) Reviews investigations of alleged hazardous conditions brought to the attention of any committee member. When determined necessary by the committee, the committee may conduct its own inspection and investigation to assist in remedial solutions;
- (6) Submits recommendations to assist in the evaluation of employee safety

suggestions; and

(7) Upon request from the Division, verifies abatement action taken by the employer to abate citations issued by the Division.

3314. Cleaning, Repairing, Servicing and Adjusting Prime Movers, Machinery and Equipment.

(a) Machinery or equipment capable of movement shall be stopped and the power source de-energized or disengaged, and if necessary, the moveable parts shall be mechanically blocked or locked out to prevent inadvertent movement during cleaning, servicing or adjusting operations, unless the machinery or equipment must be capable of movement during this period in order to perform the specific task. If so, the employer shall minimize the hazard of movement by providing and requiring the use of extension tools (e.g. extended swabs, brushes, scrapers) or other methods or means to protect employees from injury due so such movement. Employees shall be made familiar with the safe use and maintenance of such tools by thorough training. For the purpose of Section 3314, cleaning, repairing, servicing and adjusting activities shall include unjamming prime movers, machinery and equipment.

(b) Prime movers, equipment, or power driven machines equipped with lockable controls or readily adaptable to lockable controls shall be locked out or positively sealed in the "off" position during repair work and setting up operations. Machines, equipment, or prime movers not equipped with lockable controls or readily adaptable so lockable controls shall be considered in compliance with Section 3314 when positive means are taken, such as de-energizing or disconnecting the equipment from its source of power, or other action which will prevent the equipment, prime mover or machine from inadvertent movement. In all cases, accident prevention signs and/or tags shall be placed on the controls of the equipment, machines and prime movers during repair work.

Exception: Minor tool changes and adjustments, and other minor servicing activities, which take place during normal production operations are not covered by the requirements of Section 3314 if they are routine, repetitive, and integral to the use of the equipment or machinery for production, provided that the work is performed using alternative measures which provide effective protection.

(c) The employer shall provide a sufficient number of accident prevention signs or tags and padlocks, seals or other similarly effective means which may be required by any reasonably foreseeable repair emergency. Signs, tags, padlocks, or seals shall have means by which they can be readily secured to the controls. Tagout device attachment means shall be of a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds.

(d) During repair prime movers, machines, or equipment shall be effectively blocked or otherwise secured to prevent inadvertent movement if such movement can cause injury to employees.

(e) On repetitive process machines, such as numerical control machines, which require power or current continuance to maintain indexing and where repair, adjustment, testing, or setting up operations cannot be accomplished with the prime mover or energy source disconnected, such operations may be performed under the following conditions:

(1) The operating station where the machine may be activated must at all times be under the control of a qualified operator or craftsman.

(2) All participants must be in clear view of the operator or in positive communication with each other.

(3) All participants must be beyond the reach of machine elements which may move rapidly and present a hazard to them.

(4) Where machine configuration or size requires that the operator leave his/her control station to install tools, and where machine elements which may move rapidly, if activated, exist, such elements must be separately locked out by positive means.

(5) During repair procedures where mechanical components are being adjusted or replaced, the machine shall be de-energized or disconnected from its power source.

(f) An energy control procedure shall be developed and utilized by the employer when employees are engaged in the cleaning, repairing, servicing or adjusting of prime movers, machinery and equipment. The procedure shall clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, and the means to enforce compliance, including but not limited to the following:

(1) A statement of the intended use of the procedure;

(2) The procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy;

(3) The procedural steps for the placement, removal and transfer of lockout devices or tagout devices and the responsibility for them; and

(4) The requirements for testing a machine or equipment to determine and verify the effectiveness of lockout devices, tagout devices and other energy control devices.

(g) The employer's hazardous energy control procedures shall be documented in writing.

(h) The employer shall conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the requirements of this section are being followed.

(1) The periodic inspection shall be performed by an authorized employee other than the one(s) utilizing the energy control procedures being inspected.

(2) Where lockout is used for energy control, the periodic inspection shall include a review between the inspector and each authorized employee of that employee's responsibilities under the energy control procedure being inspected.

(3) The employer shall certify that the periodic inspections have been performed. The certification shall identify the machine or equipment on which the energy control procedure was being utilized, the date of the inspection, the

employees included in the inspection, and the person performing the inspection.

- (i) Whenever outside servicing personnel are to be engaged in activities covered by this section, the on-site employer's lockout or tagout procedures shall be followed.

6004. Accident Prevention Tags.

(b) Definitions.

"Major message" means that portion of a tag's inscription that is more specific than the signal word and that indicates the specific hazardous condition or the instruction to be communicated to the employee. Examples include: "High Voltage," "Close Clearance," "Do Not Start," or "Do Not Use," or a corresponding pictograph used with a written text or alone.

"Pictograph" means a pictorial representation used to identify a hazardous condition or to convey a safety instruction.

"Signal word" means that portion of a tag's inscription that contains the word or words that are intended to capture the employee's immediate attention.

"Tag" means a device usually made of card, paper, pasteboard, plastic or other material used to identify a hazardous condition.

- (c) Use. Tags shall be used as a means to prevent accidental injury or illness to employees who are exposed to hazardous or potentially hazardous conditions, equipment or operations which are out of the ordinary, unexpected or not readily apparent. Tags shall be used until such time as the identified hazard is eliminated or the hazardous operation is completed. Tags need not be used where signs, guarding or other positive means of protection are being used.

(d) General Tag Criteria. All required tags shall meet the following criteria:

(1) Tags shall contain a signal word and a major message.

(A) The signal word shall be either "Danger," "Caution," "Biological Hazard," "BIO-HAZARD," or the biological hazard symbol.

(B) The major message shall indicate the specific hazardous condition or the instruction to be communicated to the employee.

(2) The signal word shall be readable at a minimum distance of five feet or such greater distance as warranted by the hazard.

(3) The tag's major message shall be presented in either pictographs, written text or both.

(4) The signal word and the major message shall be understandable to all employees who may be exposed to the identified hazard.

(5) All employees shall be informed as to the meaning of the various tags used throughout the workplace and what special precautions are necessary.

(6) Tags shall be affixed as close as safely possible to their respective hazards by a positive means such as string, wire, or adhesive that prevents their loss or unintentional removal.

- (e) Danger Tags. Danger tags shall only be used in major hazard situations where an immediate hazard presents a threat of death or serious injury to employees.

- (f) Caution Tags. Caution tags shall only be used in minor hazard situations where

a non-immediate or potential hazard or unsafe practice presents a lesser threat of employee injury.

(g) Warning Tags. Warning tags may be used to represent a hazard level between "Caution" and "Danger," instead of the required "Caution" tag, provided that they have a signal word of "Warning," an appropriate major message, and otherwise meet the general tag criteria of subsection (d) of this section.

2320.4. De-energized Equipment or Systems.

(a) An authorized person shall be responsible for the following before working on de-energized electrical equipment or systems unless the equipment is physically removed from the wiring system:

(1) Notifying all involved personnel.

(2) Locking the disconnecting means in the "open" position with the use of lockable devices, such as padlocks, combination locks or disconnecting of the conductor(s) or other positive methods or procedures which will effectively prevent unexpected or inadvertent energizing of a designated circuit, equipment or appliance.

Exception: Locking is not required under the following conditions:

(1) Where suitable tagging procedures are used, and

(2) Where the disconnecting means is accessible only to personnel instructed in these tagging procedures.

(3) Tagging the disconnecting means with suitable accident prevention tags conforming to the provisions of Section 2320.6.

(4) Effectively blocking the operation or dissipating the energy of all stored energy devices which present a hazard, such as capacitors or pneumatic, spring-loaded and like mechanisms.

2320.5. Energizing (or Re-energizing) Equipment or Systems.

(a) An authorized person shall be responsible for the following before energizing equipment or systems which have been de-energized:

(1) Determining that all persons are clear from hazards which might result from the equipment or systems being energized.

(2) Removing locking devices and tags.

(A) Locking devices and tags may be removed only by the employee who placed them. Locking devices and tags shall be removed upon completion of the work and after the installation of the protective guards and/or safety interlock systems.

Exception: When the employee has left the premises or is otherwise unavailable, other persons may be authorized by the employer to remove the locking devices and tags in accordance with a procedure determined by the employer.

2320.6. Accident Prevention Tags.

(a) Suitable accident prevention tags shall be used to control a specific hazard. Such

tags shall provide the following minimum information:

- (1) Reason for placing tag.
- (2) Name of person placing the tag and how that person may be contacted.
- (3) Date tag was placed.

2530.43. Automatic Restarting.

A motor-running overload device that can restart a motor automatically after overload tripping shall not be installed unless approved for use with the motor it protects. A motor that can restart automatically after shutdown shall not be installed if its automatic restarting can result in injury to persons. (Title 24, Part 3, Section 430-43.)

2530.86. Motor Not in Sight from Controller.

(a) If a motor and the driven machinery are not in sight from the controller location, the installation shall comply with one of the following conditions:

(1) The controller disconnecting means shall be capable of being locked in the open position.

(2) A manually operable switch that will disconnect the motor from its source of supply shall be placed in sight from the motor location. (Title 24, Part 3, Section 430-86.)

APPENDIX B

LOCK-OUT/BLOCK-OUT PROGRAM INSPECTION/AUDIT CERTIFICATION FORM



LOCK-OUT/BLOCK-OUT PROGRAM INSPECTION/AUDIT CERTIFICATION FORM

This form is to be utilized to inspect and/or audit the implementation of the Lock-Out/Block-Out Program during a job task.

Date: _____ Location: _____ Task: _____

Employees assigned to the task: _____

	Yes	No	N/A
Preparation for Shutdown			
Were the workers assigned to the task authorized/trained to perform Lockout/Tagout?			
Were employees who work in the affected area notified?			
Did the task require the machine to be blocked against inadvertent movement?			
If above response is "Yes", Was the it blocked?			
Were workers familiar with the types and amounts of energy that power the equipment, the hazards of that energy and how the energy could be controlled?			
Equipment Shutdown			
Was system/equipment shut down according to manufacturer's operating procedures			
Equipment Isolation...			
Were all energy isolating devices operated, placed or installed to block energy flow from every source that feeds the equipment to prevent an unexpected movement of parts, or flow of energy?			
Application of Lockout/Blockout Devices...			
Were locks and "Do Not Operate" tags tag placed on the energy isolation devices?			
Did the locks and tags clearly identify who they belongs to?			
Were only the lockout/blockout devices supplied by the job supervisor utilized?			
If a lock and tag could not be placed directly on the energy control, was a lockout device utilized?			
Did every employee working on the equipment attach his/her personal lock and tag?			
Were tags filled out completely and correctly?			
Control of Stored Energy			
Energy already in the equipment was release or blocked, after it was isolated from its energy source?			
Equipment was inspected to be sure all parts had stopped moving and the following performed as appropriate to task?			
Installed ground wires?			
Relieved trapped pressure?			
Released the tension on springs or blocked movement of spring driven parts?			
Blocked or braced parts that could fall due to gravity?			
Bleed lines and left vent valves open?			
Drained process piping systems and closed valves to prevent flow of hazardous materials?			
If a line was blocked, where there was no valve, was a blank flange used?			
Purged tanks and process lines?			
Dissipated extreme cold or heat or wore protective clothing?			
If stored energy could have re-accumulated, the equipment was monitored to make sure it stayed below hazardous levels?			
Equipment Isolation Verification			
Was it verified that no energy was flowing to or within the equipment?			
Danger areas were checked and cleared of workers or other individuals?			
Was it Verified that the disconnect switch could not be moved to the on position?			
All start buttons and other activating controls on the equipment itself were activated to verify isolation?			
All machine controls were Shut off when testing was completed?			
Work In Progress			
Once lockout/blockout was completed the lockout was not bypassed while work was in progress?			
Removing Lockout/Blockout			
Was it determined that the equipment was safe to operate before prior to removing Lockout/Tagout?			
Were all tools removed from the work area and the system fully assembled prior to removing Lockout/Tagout?			
Was it verified that all workers/individuals in the work area were clear of equipment and notified prior to the lockout/blockout is being removed?			
Each lockout device was removed by the person who put it on?			
The job supervisor removed his/her lock and tag last?			
Was equipment re-energize equipment according to manufacturer's procedures?			

Comments: _____

Signature of Inspector

Print Name

Date

Distribution: Department - Environmental Health & Safety