Brieser CONSTRUCTION

Section 12
Safety Health and Environmental Manual

2025

Lockout/Tagout

PURPOSE

The purpose of this program is to establish procedures for the safe control of energy through locking and tagging of equipment and machinery at *Brieser Construction.* This procedure establishes the minimum requirements for controlling hazardous energy whenever maintenance or repair is done on machinery at the corporate facility and at construction sites. It is 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. Hazards being guarded against include being caught in, being crushed by, being struck by, being thrown from, or contacting live electrical circuits/parts. This program supports compliance with the Occupational Safety and Health Administration Lockout/Tagout Standard as found in 29 CFR 1910.147.

The procedure herein established will ensure that machines and equipment are properly isolated from hazardous or potentially hazardous energy sources during servicing and maintenance and properly protect against reenergization as required by 29 CFR 1910.147.

While any employee is exposed to contact with parts of fixed electrical equipment or circuits which have been deenergized, the circuits energizing the parts shall be locked out and tagged in accordance with the requirements of 29 CFR 1910.333(b)(2). **Brieser Employees shall not work around deenergized circuits/parts that do not have locks/tags applied as part of either the customers' LOTO plan or Brieser's.**

OSHA's Construction Industry Standard 29 CFR 1926 Subpart K states; No employer shall permit an employee to work in such proximity to any part of an electric power circuit that the employee could contact the electric power circuit in the course of work, unless the employee is protected against electric shock by deenergizing the circuit, grounding it or by guarding it effectively by insulation or other means.

Brieser Construction employees are also faced with underground utilities during excavation. Some of which are underground electrical lines. It is our policy that no employee of Brieser Construction will be allowed to excavate by any means when it known that an underground/buried live electrical line is present unless properly guarding it effectively by insulation perform and set in place by a qualified person.

PURPOSE continued

NFPA 70E Standard for Electrical Safety in the Workplace covers electrical safety-related work practices and procedures for employees who work on or near exposed energized electrical conductors or circuit parts in the workplace. Article 110.8 Working on or Near Electrical Conductors or Circuit Parts states: Safety-related work practices shall be used to safeguard employees from injury while they are working on or near exposed electric conductors or circuit parts that are or can become energized. Live parts to which an employee might be exposed shall be put into an *electrically safe work condition* before an employee works on or near them.

Only when disconnecting means or other devices are incapable of being locked out, and until lockout capability is provided, will a tagout procedure (without lockout), be utilized. See Appendix A

Copies of the NFPA 70E written program may be obtained from the corporate office.

ENFORCEMENT

Any employee who fails to follow these procedures will face disciplinary action in accordance with those listed in the Brieser Construction Safety Manual Section 3. The Site Superintendent has the responsibility to ensure that the program is followed and enforced.

DEFINITIONS

Affected Employee – An employee whose job requires him/her to operate or use a machine or equipment on which service or maintenance is being performed under lockout/tagout, or whose job requires him/her to work in an area in which such service or maintenance is being performed. Affected employees must be informed when lockout/tagout is being performed.

Authorized Employee – A person who locks and tags machines or equipment to perform service or maintenance on that machine or equipment. 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.

Electrically Safe Work Condition – A state in which the conductor or circuit part to be worked on or near has been disconnected from energized parts, locked/tagged in accordance with established standards, tested to ensure the absence of voltage, and grounded if determined necessary.

DEFINITIONS continued

Energy – A device is energized if it is connected to an energy source or if it contains any residual or stored energy. An energy source is any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, nuclear, or other 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 line valve, slip blind, slip gate, or a block and any similar device used to block or isolate energy.

The following are not considered to be energy isolating devices:

- Push Button
- Selector Switch

An energy isolating device will be capable of being locked out if:

- It is designated with a hasp or other attachment or integral part of which, or through which, a lock can be affixed.
- It has a locking device built into it.

For the purpose of this program, if a device is capable of being locked out, then it shall be locked out to provide maximum safety to all employees. If an energy isolating device is not capable of being locked out, the tagout procedure shall be utilized.

Lockout – The process used to identify, cut off ad secure all energy sources before beginning repairs, adjustments, or maintenance. A lockout device is used to secure equipment or machinery in the off position, ensuring that the equipment or machinery cannot be operated.

Lockout Device – A lock (either key or combination type) that holds an energy isolating device in a safe position and prevents the machine or equipment from energizing.

Group Lockout Device – A group lockout device is a device to which more than one lockout device may be attached by more than one authorized employee to provide protection for a group of employees working on the same machinery or equipment.

Qualified Person – One who has demonstrated skills and knowledge related to the construction and operation of electrical equipment and installations and has received safety training to identify and avoid the hazards involved.

DEFINITIONS continued

Servicing and/or Maintenance – Workplace activities that require lockout/tagout on the equipment before beginning the activities because employees may be exposed to the unexpected energization or startup of the equipment or the release of hazardous energy. Servicing and/or maintenance includes constructing, installing, setting up, adjusting, inspecting, modifying, lubricating, cleaning or un-jamming and making tool changes.

Tagout Device – A warning tag (weather & chemical resistant) standardized in size, color, with wording warning of hazardous energy.

Zero Energy State – All energy has been controlled in machinery or equipment.

RESPONSIBILITIES

The Program Administrator-Brieser Safety Department

These people are responsible for:

- Issuing and administering this program and making sure that the program satisfies the requirements of all applicable standards.
- Providing initial and annual training of employees on lockout/tagout procedures
- Maintaining the training records of all employees included in the training sessions.
- Verifying through periodic audit that the energy control program effectively protects employees servicing powered equipment.

Superintendent/ Supervisors whose Job Sites/Areas Contain Energized Equipment

These people are responsible for:

- Assuring that all employees who are authorized to service equipment within the facility have received training on appropriate lockout/tagout procedures and energy control plans.
- Completing energy control plans for each specific piece of equipment or process at their jobsite.
- Assuring that appropriate energy isolation devices are available for all equipment or processes.
- Assigning locks to authorized employees.
- Coordinating activities of contractors that may affect lockout/tagout and energy control procedures within the company.

RESPONSIBILITIES continued

Authorized Employees

These people are responsible for:

- Complying with the company's energy control program
- Following all safe shutdown and startup procedures
- Communicating activities to all affected employees and other authorized employees
- Ensuring the security of their own lock and key
- Ensuring that the appropriate procedures for Lockout/Tagout are in place when a group of employees works on the same equipment or machinery.

Affected Employees

These people are responsible for:

- Following the direction of the authorized employee as it affects the operation of their equipment.

PROGRAM ACTIVITIES

Site/Client Specific Energy Control Procedures

Due to the nature of *Brieser Construction* activities and that *Brieser Construction* projects are of short duration at one specific geographic location, the development of site-specific Energy Control Procedures cannot be reasonably developed. Therefore, it will be the responsibility of the Superintendent and the client's representative to identify what work practices at a specific site will require an Energy Control Procedure. Once identified, site specific procedures can be developed. Quite often the client will have written current procedures in-place.

For these situations, *Brieser Construction* will collaborate with the client's site representative and follow the requirements of the client's programs. Site-specific training will be provided to all *Brieser Construction employees* on the site who may be exposed to energy sources. **Individual locks and tags will be provided for all Brieser Construction employees to use in conjunction with the customers specified energy control procedures.**

The Site Superintendent will provide the client a list of Authorized and Affected employees for that specific construction site.

PROGRAM ACTIVITIES continued

Other situations such as working near an excavation or steep slope have procedures that may require personnel to use mobile equipment as an anchorage point. Specific procedures have been developed to address those instances: *Mobile Equipment LOTO for Fall Protection Anchorage* a*nd Vac Truck LOTO for Fall Protection Anchorage* and are attached as **Appendix I** and **Appendix J** respectively as part of this document.

GENERAL

- All machines/equipment that contain energy shall be locked out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Lockout will also apply when working on or near exposed deenergized electrical circuits/parts.

- Appropriate employees will be instructed in the safety significance of the lockout procedures. **Appendix C** is a list of job titles authorized to lockout. **Appendix D** are lists of job titles for affected and other employees.

- All employees who are authorized to work on equipment or machinery in the company will follow appropriate company lockout/tagout procedures.

- Contractors who perform work on company equipment will comply with company lockout/tagout procedures.

- An **Energy Control Plan** will be completed for all pieces of equipment requiring lockout. This plan will identify all energy isolation points to be locked and tagged, as well as any special information required to safely achieve a zero-energy state.

- A **Lockout Checklist** (App. G) and a **Safe Startup Checklist** (App I) will be used during all service and maintenance activities to ensure the safety of both authorized and affected employees.

- Lockout devices shall be singularly identified. They shall be the only devices used for controlling energy and shall not be used for other purposes.

- The lockout devices shall indicate the identity of the employee applying the devices.

GENERAL continued

- No employee shall attempt to operate any switch, valve, or other energy-isolating device which is locked out.

- Each lockout device shall only be removed by the employee who applied the device. (Exception; see Removal of Lockout Devices section of this program.

- All machines/equipment shall be locked out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Lockout will also apply when working on or near exposed deenergized electrical circuits/parts.

ENERGY CONTROL PROCEDURE

- Preparation for Shutdown:
  - In preparation for lockout, an initial survey must be made to locate and identify all energy isolating devices to be certain which switch, valve, or other energy isolating devices apply to the machine/equipment to be locked out. (See **Appendix E** for the Energy Source Evaluation). More than one energy source (electrical, hydraulic, pneumatic, chemical, thermal, or others) may be involved.
  - Before an authorized or affected employee turns off a machine or piece of equipment, the authorized employee must have knowledge of the type and magnitude of the energy to be controlled, and the methods or means to control the energy (See **Appendix F** Lockout Checklist).

- Machine or Equipment Shutdown:

  - All affected employees shall be notified that a lockout system is going to be utilized and the reason for it before the controls are applied.
  - If the machine or equipment is operating, shut it down by normal stopping procedure. (Depress stop button, open toggle switch, etc.). Next, follow the procedures established for the machine or equipment (see **Appendix G**-Lockout/Tagout Procedures for Specific Equipment).

- Machine or Equipment Isolation

  - Physically locate and operate the switch, valve, or other energy isolating devices so that the equipment is isolated from its energy sources and apply adequate hardware.

ENERGY CONTROL PROCEDURE continued

- Lockout Device Application

    - Authorized employees shall lockout the energy isolating devices with assigned individual locks.
    - Lockout devices shall be applied so that they will hold the energy isolating devices in a “Neutral” or “Off " position.

- Tagout Device Application

    - Only when disconnecting means or other devices are incapable of being locked out, and until lockout capability is provided, will a tagout procedure (without lockout), be utilized.
    - Tagout devices, where used, shall be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the safe or off position.
    - Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment shall be fastened at the same point at which the lock would have been attached.
    - Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device in a position that will be immediately obvious to anyone attempting to operate the device.

- Stored Energy

    - All stored or residual energy in rams, flywheels, springs, pneumatic, or hydraulic systems, etc. shall be blocked or dissipated. If there is a possibility of reaccumulation of stored energy, verification of isolation must be continued until servicing or maintenance is completed.

- Verification of Isolation

    - Prior to starting work on machines or equipment that have been locked and after ensuring that no personnel are exposed, the authorized employee shall operate the push button or normal operating controls to verify that the appropriate equipment or machine has been deenergized and make certain it will not operate.
    - CAUTION: Return Operating Controls to the “Neutral” or “Off " position after the test.

The machine/equipment is now locked out. Servicing or maintenance may now occur.

REMOVAL OF LOCKOUT

- After the servicing and/or maintenance are completed and before the lockout devices are removed and energy is restored, the sequence of specific activities in **Appendix H** shall be completed by the authorized employee(s). The general procedure to follow is:

    - Clear away all tools.
    - Remove employees from the area.
    - Remove the LO/TO device(s).
    - Energize and proceed. (If this is a temporary removal, reapply LO/TO devices).

- If the authorized employee who applied the lock is not available, the supervisor shall take the following steps:

    - Verify that the authorized employee who locked out the equipment is not on plant property.
    - Verify that the servicing and/or maintenance are complete.
    - Contact the authorized employee to inform him/her that his/her lock will be removed from the machine. (Communication must be made, Voice mail is not acceptable)
    - Remove the lock.
    - Make sure the employee is notified that his/her lock has been removed before he/she resumes work at the facility.

- In situations in which lockout devices MUST be temporarily removed from the isolating device and the machine or equipment energized to test or position the machine, equipment, or component, the following sequence of actions will be followed:

    - Clear the machine or equipment of tools and materials.
    - Remove employees from the machine or equipment.
    - Energize and proceed with testing or positioning.
    - Deenergize all systems and reapply energy control measures in accordance with procedures set forth under Lockout Procedures & Techniques.

GROUP LOCKOUT

In the preceding steps, if more than one individual is required to lockout machines/equipment (group lockout), the following procedures shall be implemented to provide protection to all employees.

- A primary authorized employee will be designated and responsible for the number of people working under the protection of the group lockout device. The primary authorized employee will ascertain the exposure status of the individual member participating in the group lockout to ensure continuity of protection for each individual. In addition, this primary authorized employee will be responsible for notifying affected employees before and after lockout procedures are performed.

- Each authorized employee will place his/her own personal lockout device on the energy isolating device(s).

- When an energy isolating device cannot accept multiple locks, a multiple lockout system must be used.

If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his/her own lock to secure the box or cabinet. As each person no longer needs to maintain his/her lockout protection, that person will remove his/her lock from the box or cabinet.

SHIFT OR PERSONNEL CHANGES

If a lockout procedure will extend into the following shift, the authorized employee who originally placed the lock will remove it and it will immediately be replaced with the lock of the authorized employee who is to continue the repair or maintenance on that equipment or machine for the following shift.

LEAVING THE JOB SITE / PREMISES

If the Brieser Construction employee is going to leave the job site/premises, they should contact the authorized person from the customer or the Brieser Construction project manager and determine if the Brieser Construction Lockout/Tagout device will remain in place or removed. Then the following steps should be taken:

- Leaving the Lockout or Tagout Device in Place:
    - Notify the authorized person of the customer or job site that you are leaving the premises and that your device is still in place.
    - Provide a telephone number for contact in the event of an emergency.
    - Complete the Lockout/Tagout Record Sheet (see **Appendix K**).

- Removing the Lockout or Tagout Device:
    - Notify the authorized person of the customer or job site that you are leaving the premises and that you are removing your device.
    - Have the authorized person of the customer or job site substitute their device for your device. (Do not remove your device until a substitute has been secured).
    - Record changes on the Lockout/Tagout Record Sheet (see **Appendix K**).

CORD AND PLUG CONNECTED

Equipment - if servicing or maintenance is performed on cord and plug connected equipment the following procedures shall be performed to protect employees:

- Unplug equipment from its electrical socket.

- Place a lockable cover over the plug and a lock on the plug cover during machine/equipment servicing or maintenance.

OUTSIDE CONTRACTORS

If outside contractors perform servicing or maintenance that requires lockout, a Brieser Construction Superintendent/supervisor, or designated employee shall take the following steps:

- Inform the outside contractor of Brieser Construction's lockout procedures and provide a copy.
- Obtain and review a copy of the outside contractor's lockout procedures.
- Ensure that our employees understand and comply with the responsibilities and prohibitions of the outside contractor's lockout procedures.

TRAINING

Training shall be provided by the company to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required by employees for the safe application, usage, and removal of energy controls shall be met. When tags are used, employees will be trained as to the specific limitations of using the tagout system.

Authorized employees shall receive the following training:

- Recognition of hazardous energy sources.
- Types and magnitude of hazardous energy in the workplace.
- Methods, devices, and procedures used to lockout, verify lockout, and otherwise control hazardous energy on all pieces or types of equipment (including cord and plug connected equipment).
- Procedures for removing locks and returning a machine or piece of equipment to operation.
- When tagout systems are used and the limitations of tags
- Transfer of lockout responsibilities.
- Group lockout procedures.

Affected and all "other" employees shall receive training so that they are able to:

- Recognize when energy control procedures are being implemented, and.
- Understand the purpose of the procedures and the importance of not attempting to start up or use the machine/equipment that has been locked.
- When tagout systems are used including the limitations of a tag and that a tag is not to be removed without authorization. The tag is never to be ignored or defeated in any way.
- All training will be certified (See page 20 Training Subsection)

RETRAINING

Authorized and affected employees shall receive retraining in proper application of lockout procedures when there is a change in:

- Job assignments that expose an authorized employee to new hazards or lockout procedures.
- Machines, equipment, or processes that present a new hazard or require modified lockout procedures.
- Energy control procedures for a piece or type of equipment.
- Or when an employee incorrectly performs lockout procedures.

Retraining will re-establish employee proficiency in lockout and ensure that employees are knowledgeable of new or revised procedures. All retraining will be documented and will include the employees' names and dates of training. All training and retraining will be documented, signed & certified.

Periodic Inspections

- An inspection of the energy control procedures will be conducted annually and will be certified (See **Appendix B**). It will be performed under the guidance of the Manager of Safety.

- Energy control procedures for each or type of machine must be inspected.

- The inspection shall include a review of lockout responsibilities with each individual authorized to lockout the machine/equipment.

- The person who performs the inspection must be authorized to perform the lockout procedures being inspected. The inspector cannot, however, review his/her own use of lockout procedures.

- Any deviations or inadequacies identified shall be immediately addressed

APPENDIX A

TAGOUT PROCEDURES

- When a disconnecting means or other energy-isolating device is incapable of being locked out tagout systems shall be utilized. A tag used without a lock, shall be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained using a lock such as opening an additional disconnecting device, removal of an isolating circuit element, blocking of a controlling switch or the removal of a valve handle to reduce the likelihood of inadvertent energization.
- Only tags furnished by Brieser Construction, which meet the requirements of 1910.14 (c) (5) (ii) and (iii) shall be used.
- **All** employees shall be trained in the use and limitations of tags as described in 1910.147 (c) (7) (ii) and (d) (4) (iii).
- **All** employees must be able to understand the hazard warning written on the tags such as: DO NOT START; DO NOT OPEN; DO NOT CLOSE; DO NOT ENERGIZE; and DO NOT OPERATE.
- On machines and equipment where tagout is used in lieu of lockout, the periodic inspection required by 1910.147 (c) (6) shall include the **affected** as well as the **authorized** employee(s). The periodic inspection shall be certified on **Appendix B.**
- If tagout is used, all other lockout rules and procedures apply.

NOTE: Should the machine/equipment require upgrade or modification, it will have lockable switches, fittings, valves, etc. added so that it becomes possible to lockout.

Due to the nature and various geographic locations of *Brieser Construction* activities, the Site Superintendent will be responsible for providing each client a list of Authorized and Affected employees for the job. Site Superintendent, Maintenance Personnel, and various Operators and Laborers are the job titles that can be classified as "Authorized employees," provided they have received the proper training.

Appendix B

PERIODIC INSPECTION CERTIFICATION

Facility: _____ **Date:** _____
Evaluator Name: _____ **Title:** _____

Describe the job being evaluated:

Names of persons working on the job:	Check the persons being interviewed
1.	☐
2.	☐
3.	☐
4.	☐
5.	☐
6.	☐
7.	☐
8.	☐

	Yes	No	Comments
Did authorized employees understand their responsibilities under the Lockout/tagout Program? Verify training Pg. 26	☐	☐	
Was a lock number identified? Pg. 26 Column "Lock Number"	☐	☐	
Were affected employees notified? Either Affected or Other? Pg. 27	☐	☐	
Was the Energy Source Evaluation completed? Pg. 28	☐	☐	
Was the Lockout/Tagout checklist completed? Pg. 29	☐	☐	
Was the Lockout/Tagout Procedure Form completed? Pg. 30	☐	☐	
Was the Safe Startup Checklist completed? Pg. 31	☐	☐	

Appendix B

Annual LOTO Program Audit

11 Jan 2023 / Kevin Colwell — Complete

Score	0%	Flagged items	0	Actions	0

Conducted on	01/11/2023 8:22 AM CST
Prepared by	Kevin Colwell
Location	24533 S Edwin Dr, Channahon, IL 60410, USA (41.4371793, -88.1974052)

Annual LOTO Program Audit

Number of Permits Reviewed	1
Overall Permit Compliance	Excellent
Are there any permit issues?	Yes

If your answer was YES, please check the items that needed improvement below:

Affected/Other Employees - Proper Training	☑
Affected/Other Employees Overall compliance	Excellent
Comments	Describe best practices or opportunities here.
Appendix F: Lockout Checklist	☑
Lockout Checklist Overall Compliance	Excellent
Comments	Describe best practices or opportunities here.
Appendix G: Lockout/Tagout Form	☑
Lockout/Tagout Form Overall Compliance	Excellent
Comments	Describe best practices or opportunities here.
Appendix H: Safe Startup Checklist	☑
Safe Startup Checklist Overall Compliance	Excellent
Comments	Describe best practices or opportunities here.
Appendix I: Lockout/Tagout Record Sheet	☑
Lockout/Tagout Overall Compliance	Excellent
Comments	Describe best practices or opportunities here.
Confined Space Entry Log	☑
Confined Space Entry Log Overall Compliance	Excellent
Comments	Describe best practices or opportunities here.
Recommended Actions	Describe actions necessary to close gaps in the process here.

BRIESER CONSTRUCTION
SAFETY & HEALTH MANUAL
SECTION 12
CONTROL OF HAZARDOUS ENERGY
SUB-SECTION TRAINING

Energy Control Learning Exercise
Brieser Construction

Score: %

Each question is worth 7% passing score is 11 out of 14 correct = 77%

Employees Name:		Date:	
Company:		Instructor:	
Employee ID #:		Job Title:	

Answer the following questions "True" or "False" by circling the appropriate letter.

T F 1. All energy sources, no matter how remote, should be locked and tagged out to insure a zero-energy state.
T F 2. Electrical, pneumatic/hydraulic, process fluids and gases, and mechanical are all types of energy sources.
T F 3. All energy sources can be locked out.
T F 4. Lockout/tagout procedures are only necessary for complex machinery.
T F 5. Every employee working on the same piece of equipment must attach a personal lockout device.
T F 6. Routine maintenance and equipment repair does not require lockout/tagout procedures.
T F 7. Each lock should have the name or identification number of the employee that owns it.
T F 8. Before beginning any work, the machine or equipment should be tested for a zero-energy state.
T F 9. Pulling fuses is a method for locking out a piece of equipment.

Answer the following questions by circling the appropriate letter.

10. A lockout device must be placed at:
a. All isolation points.
b. The main switch
c. The fuse box.

11. There must be only _____ key(s) per lock:
a. One duplicate
b. One
c. Two

12. Removal of someone else's lock is okay when:
a. All efforts to locate the person have been unsuccessful.
b. The person has left to go on break.
c. You need to use the machine.

13. If there will be a shift change during the maintenance or repair, the second shift employees should:
a. Cut off the first shift's locks.
b. Add their locks to the first shift's locks.
c. Wait for the first shift to remove their locks, then attach the second shift locks.

14. Compliance with lockout/tagout procedures is the responsibility of:
a. The manufacture of the equipment
b. The company
c. OSHA

Energy Control Learning Exercise
Brieser Construction
Answer Sheet

T 1. All energy sources, no matter how remote, should be locked and tagged out to insure a zero-energy state.
T 2. Electrical, pneumatic/hydraulic, process fluids and gases, and mechanical are all types of energy sources.
T 3. All energy sources can be locked out.
F 4. Lockout/tagout procedures are only necessary for complex machinery. *Lockout/tagout procedures are necessary for all equipment and machinery.*
T 5. Every employee working on the same piece of equipment must attach a personal lockout device.
F 6. Routine maintenance and equipment repair does not require lockout/tagout procedures. *Lockout/tagout procedures are required for all service and maintenance activities.*
T 7. Each lock should have the name or identification number of the employee that owns it.
T 8. Before beginning any work, the machine or equipment should be tested for a zero-energy state.
F 9. Pulling fuses is a method for locking out a piece of equipment. *Pulling fuses should not be substituted for lockout/tagout.*

Answer the following questions by circling the appropriate letter.

10. A lockout device must be placed at:
a. all isolation points

11. There must be only _____ key(s) per lock:
b. one

12. Removal of someone else's lock is okay when:
a. all efforts to locate the person have been unsuccessful.

13. If there will be a shift change during the maintenance or repair, the second shift employees should:
b. add their locks to the first shift's locks.

14. Compliance with lockout/tagout procedures is the responsibility of:
b. the company

BRIESER CONSTRUCTION
SAFETY & HEALTH MANUAL
SECTION 12
CONTROL OF HAZARDOUS ENERGY
SUB-SECTION
LOCKOUT/TAGOUT PERMIT PACKET

Each permit covers pages 26-32. All pages including this page must be filled out completely and turned into the office to our personnel manager. Under the Routing section please note if you have given a copy to our customer and initial next to personnel manager when finish and turned in to be routed to the office.		
PERMIT INFORMATION	**PROCEDURE**	
	AUTHORIZED EMPLOYEE	
	DATE	
	LOCATION	
	SAFETY APPROVAL **(Must have signature before work begins)**	
ROUTING	**CUSTOMER**	
	PERSONNEL MANAGER	
	SCAN	**SAFETY/PERMITS COMPLETED/LOCK OUT TAGOUT/MMDDYY /LOCATION**

APPENDIX C

LIST OF "AUTHORIZED" LOCKOUT INDIVIDUALS

(In order to be an authorized lockout employee, you must have training)

FULL NAME (PRINT)	JOB TITLE (PRINT)	LOCK NUMBER	HAVE YOU BEEN TRAINED?		VERIFY TRAINING DATE
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	
			YES	NO	

DATE:

LOCATION:

FOREMAN SIGNATURE: _____

APPENDIX D

LIST OF "AFFECTED"& “OTHER” LOCKOUT INDIVIDUALS

Affected employee: 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.

Other Employee: An employee who may be under a different or the same Lockout Tagout process that a Brieser employee is performing. This standard requires on-site employers and outside employers to inform each other of their respective lockout/tagout procedures.

JOB TITLES “AFFECTED”	MACHINERY, EQUIPMENT, OR PROCESS
JOB TITLES “OTHER”	**MACHINERY, EQUIPMENT, OR PROCESS**

DATE: ___/___/___

LOCATION: _____

SITE FOREMAN SIGNATURE _____

APPENDIX E

ENERGY SOURCE EVALUATION

DATE: ___/___/___ **CONDUCTED BY**: _____

To determine all energy sources for each piece or type of machine or equipment, fill in the following table.

LOCATION: _____

EQUIPMENT LOCKED OUT: _____

MODEL: _____ **SERIAL #**: _____

ENERGY SOURCE/ *MAGNITUDE	LOCATION(S) OF ISOLATING DEVICE(S)	WHAT METHOD USED TO LOCKOUT**
ELECTRICAL		
ENGINE		
SPRING		
COUNTERWEIGHT		
FLYWHEEL		
HYDRAULIC		
PNEUMATIC		
CHEMICAL		
THERMAL		
OTHER		

MAGNITUDE Example - ELECTRICAL = 480V three phase - PNEUMATIC = 125 p.s.i.
****METHODS USED MAY BE A KEYED LOCK WITH # OR A PIPE VALVE COVER WITH LOCK #***

APPENDIX F

Lockout Checklist

Step 1: Before Beginning to Service Equipment	Yes	No	N/A
Have the type and amount of energy source on the equipment been identified?	☐	☐	☐
Have the possible dangers related to the energy source being controlled been identified?	☐	☐	☐
Are the steps necessary to control the energy source understood?	☐	☐	☐
Have affected employees been notified when the equipment will be shut off for service?	☐	☐	☐
Step 2: Shut Down Equipment			
Have the company's safety procedures been followed?	☐	☐	☐
Have the manufacturer's instructions been referred to?	☐	☐	☐
Step 3: Isolate the Machine or Equipment			
Has the main breaker or control switch been shut off?	☐	☐	☐
Have valves been closed?	☐	☐	☐
Have process lines been disconnected?	☐	☐	☐
Step 4: Attach Lock and Tag			
Have the lock and tag been attached?	☐	☐	☐
Step 5: Control Stored Energy			
Has the electrical capacitance been bled?	☐	☐	☐
Have pressure or hydraulic lines from the work area been vented or isolated?	☐	☐	☐
Are switches or levers that could be moved into the start position blocked, clamped, or chained?	☐	☐	☐
Are lines containing process materials that are toxic, hot, cold, corrosive, or asphyxiating cleared?	☐	☐	☐
Step 6: Verify That the Energy State is at Zero			
Have the start switches on the equipment been tested?	☐	☐	☐
Have pressure gauges been checked to ensure that lines are depressurized?	☐	☐	☐
Are blocks or cribs secured?	☐	☐	☐
Have electrical circuits been checked to verify that voltage is at zero energy?	☐	☐	☐
Are blanks, used to block feed chemicals, secure and not leaking?	☐	☐	☐
Step 7: If you have answered yes to the above steps, begin working.			

APPENDIX G

Lockout Tagout Procedure Form ***Brieser Construction***		
Company Vehicles	**File name:**	
Location:	**Energy Sources:** Taken from Energy Source Evaluation Form	**1)** **2)** **3)** **4)**
Failure to utilize the lockout procedure will result in disciplinary action. **Unauthorized removal of a lock could result in discharge.**		
LOCKOUT STEPS **1.** Know the types and magnitudes of hazardous energy. **2.** Shut down the equipment. **3.** Isolate the equipment from hazardous energy. **4.** Apply the lockout tagout procedures. **5.** Relieve stored energy. **6.** Verify isolation try to start the equipment	**RELEASE FROM LOCKOUT** **1.** Remove non-essential materials. **2.** Make sure all employees are safely positioned and notified. **3.** Remove locks. Their owners may only remove locks. **4.** If exceptions, your supervisor must be contacted.	
SPECIFIC LOCKOUT STEPS		
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

APPENDIX H

Safe Startup Checklist

Step 1: Inspect the Area	**Yes**	**No**	**N/A**
Are all machine components operational?	☐	☐	☐
Are all safety guards in place?	☐	☐	☐
Have all tools been removed from the machine?	☐	☐	☐
Have all braces, pins, blocks, and chins been removed?	☐	☐	☐
Are all pressure tubing, pipes and hoses connected with valves closed?	☐	☐	☐
Is the work area clear for mechanical operation?	☐	☐	☐
Step 2: Remove Lockout Devices and Tags	☐	☐	☐
Step 3: Notify Affected Employees			
Is the work area cleared before starting up the equipment?	☐	☐	☐
Has the servicing been completed, and the locks and tags removed?	☐	☐	☐

Step 4: If you answered yes to all the above, start up the equipment.

Comments:

_____

_____

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APPENDIX I

Mobile Equipment Lock-Out Tag-Out for Fall Protection Anchorage

STEPS:

1. Complete Brieser Construction Fall Protection Permit, Rescue Plan and LOTO forms.

2. Identify a proper tie off point. Typically lifting/retrieval lugs are the best locations. If the point does not look capable of supporting 5,000 pounds, or you are unsure, contact the safety department for assistance: Kevin Colwell 815-341-1728, Jim Hazzard 815-592-1067, Ken Renicker 815-641-1541

3. Ensure equipment is inoperable by removing ignition key and master-switch key (typically located in the engine compartment) and keeping those keys in your pocket. If more than yourself is affected by the LOTO, the key must be kept in a lockbox with each affected person having a lock on the lockbox.

4. Complete LOTO tag and place on controls of machine in operator compartment.

5. Perform Daily Visual inspection of all fall protection equipment.

6. Don Fall Protection Harness and adjust as needed.

7. Install Retractable Lanyard with carabiner to machine to identified tie off point.

8. Ensure machine position and tie off point will protect you in the event of a fall (will not allow you to fall farther than the fall you are exposed to

9. Once work is complete, perform steps in reverse.

APPENDIX J

Vac Truck Lock-Out Tag-out for Fall Protection Anchorage

Steps:

1. Complete Brieser Fall Protection Permit, Rescue Plan, and LOTO forms.
2. Start Vehicle
3. Place Vehicle in Park
4. Pull out Air Brake Knob
5. Place Lock on Air Brake Knob.
6. Remove key from lock and place in your pocket. If more than yourself is affected by the LOTO, the key must be kept in a lockbox with each affected person having a lock on the lockbox.
7. Place LOTO tag on lock
8. Place Wheel Chocks
9. Perform Daily Visual inspection of all fall protection equipment.
10. Don Fall Protection Harness and adjust as needed.
11. Install cross arm strap by wrapping the strap around the rear bumper, frame, or front pull ring. Strap must be installed between cross members, vertical supports, or other means to prevent horizontal movement.
12. Once work is complete, perform steps in reverse.

APPENDIX K

LOCKOUT / TAGOUT RECORD SHEET

Leaving the Job Site/Premises

If the Brieser Construction employee is going to leave the job site/premises, they should contact the authorized person from the customer or the Brieser Construction project manager and determine if the Brieser Construction Lockout/Tagout device will remain in place or removed.

If you are going to leave the lockout devices intact, then fill this sheet out and leave with paperwork at lockout location.
If the lockout device will be removed, then complete your permit under standard procedure or fill this form out so the next crew that will apply their locks knows the details of the job.

Person Performing Lockout/Tagout:	Date/Time:
System or Component:	Lock No.

Reason For Lockout/Tagout:

Personnel/Equipment Hazards Involved:

Work Necessary to Clear Locks/Tags (include tests, inspections, QA, etc.):