Woodland Pulp LLC

Woodland Mill
Baileyville, Maine

Lockout Procedures

Document No.: Safety / LOCK
Issue #: 15
Date of Issue: 02/28/2017
Effective Date: 02/28/2017

Authorized by: Woodland Safety Department

Contents

Purpose
Scope
References
Responsibilities
Definitions
Procedure
Documentation

PURPOSE

It is the intent of this document to establish a consistent policy throughout the mill to attain a zero energy potential for the protection of personnel and equipment. It is also the intent of this policy to comply with OSHA Standard "The control of hazardous energy (lockout/tagout)", 29 CFR - 1910.147.

All manner of potential, chemical, combustion powered, electrical, hydraulic, mechanical, pneumatic energy, and any hot fluids over 120° is present in the mill. By controlling energy sources, accidents and injuries will be prevented.

Whenever the unexpected start-up of machinery, electrical equipment, or the opening of valves would endanger anyone while adjusting, repairing, unjamming, or construction work is being done on the equipment, the device shall be locked out to avoid accidental start-up.

Control of energy sources is necessary and must be verified (try test) any time an individual is exposed to potential injury by any energy source. Examples of such instances include:

1. Line breaking/repair
2. Pump repair/installation
3. Confined space entry
4. Machinery repair/installation
5. Electrical repair/installation
6. Diagnostics (inspection, testing and trouble shooting)
7. Any time a machine guard is defeated
8. Other work activities with exposure potential

SCOPE

This procedure applies to all Woodland Mill personnel, contractors and service suppliers while on company property. ***See Mobil Equipment Procedure for mobile equipment maintenance.***

REFERENCES

Document	Responsible Position	Location	Retention Time
1910.147 OSHA	Safety Manager	OSHA Website	Until Replaced
1910.261 (b)(1)	Safety Manager	OSHA Website	Until Replaced
1910.269 (d) & (m)	Safety Manager	OSHA Website	Until Replaced

RESPONSIBILITIES

Safety Manager:

- Communications, Awareness & Training

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- Ensuring the OSHA standards are followed
- Updating the lockout procedure when necessary
- Ensure that periodic audits are conducted and maintained

Area Managers and Supervisors

- Communicating changes in safety procedures
- Scheduling employees to attend training
- Providing qualified personnel to be available during lockout.
- Ensuring the correct lockout device for the area and task is selected, and used correctly
- Ensuring that proper lock out records are kept for all lockouts completed.
- Ensuring that lockout issues brought to their attention are immediately addressed.

Mill Employees, Contractors, and Service Suppliers

- Understanding and following the mill lockout procedure
- Using the lockout devices (including safety locks) correctly
- Reporting to the area supervisors or manager any noted issues or concerns while locking out

Radiation Safety Officer (RSO) / Assistant Radiation Safety Officer (ARSO)

- Maintaining and updating the Radiation Safety Policy
- Ensuring the safe operation of the nuclear devices located on site
- Ensuring that trained personnel are available to lockout nuclear devices

DEFINITIONS

Blue Lock Out Revision Form

A form used when the original lockout has been modified. The form is completed when a modification has been made to the lockout and the form is attached to the front of the original lockout list.

Designee

The operations shift foreman will act as the maintenance supervisor during the off hours.

Hazardous Substances

(A) Any substance or mixture of substances which (i) is toxic, (ii) is corrosive, (iii) is an irritant, (iv) is a strong sensitizer, (v) is flammable or combustible, or (vi) generates pressure through decomposition, heat, or other means, if such substance or mixture of substances may cause substantial personal injury or substantial illness during or as a proximate result of any customary or reasonably foreseeable handling or use.

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Lock Box:

A Lock Box can be used for any lock out**.**

Lock Out / Tag Out:

Shall pertain to the locking / tagging out of equipment in all cases where a person(s) can assume an unsafe position with respect to a system, piece of machinery or equipment that has been rendered inactive or out of service.

Maintenance Supervisor Lock:

A lock utilized by the maintenance department to prevent the unwanted operation of equipment while personal safety locks are removed

Personal Lock Out /Tag Out:

Personal lock out / tag out shall pertain to the locking / tagging out of equipment in cases where a person(s) can assume an unsafe position with respect to a system, piece of machinery or equipment that has been rendered inactive or out of service, and can be locked and tagged out by individuals by using three locks or less.

Portable Lock Boxes:

Portable lock boxes are the lock boxes used by mill employes and can be moved to the site of the lockout. These boxes require both a lockout list and a log sheet.

Satellite Lock Boxes:

Satellite lock boxes are the lock boxes used by contractors. These should have a log sheet attached.

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PROCEDURE

Lock Out

All lockouts will have documentation (a lockout list) on what was completed and tested, what was locked out and who was involved in the lockout. (See the Lockout list section for additional details.) This also pertains to personal lockouts with the lockbox being optional for this type of lockout. An operations supervisor will be responsible for setting up the lockout board. ***See Mobile Equipment Procedure for working on mobile equipment.***

1. Operations will normally apply the first lock and remove the last lock during lockout/unlock, this could be a systems equipment lock or a personal lock. Operational locks are optional outside the Pulp Operations main gate.
2. Devices such as padlocks shall be provided for locking out the source of power.
3. Electricians will take care of power source disconnects and will initial the lockout sheet for each device to indicate the disconnect has been tested and verified as zero energy except where approved decontactors are installed.
4. Operators may disconnect and lock out local disconnects using approved decontactors where provided. It is the operator's responsibility to verify zero energy after the decontactor has been opened by attempting to start the equipment (try) and reviewing the

indicator lamps where provided. It is the operator's responsibility to log the appropriate information on the logbook / log sheet.

5. Local disconnects have been installed solely to provide complete electrical disconnect for equipment that is remotely located.

Note: The local disconnects are not for maintenance work they are operational disconnects for operational activities including but not limited to clearing, cleaning, unplugging equipment.

6. Only Radiation Trained E & I Technicians will lock out all nuclear devices. If there is a vessel entry then the procedure for "Vessel" work needs to be followed. This procedure is located in the Radiation Safety Policy.

7. If personal safety locks have to be removed from a piece of equipment (either because the employee is going home or leaving the job) and the equipment is not ready to go back in service a Maintenance Supervisor Lock must be installed. Maintenance Supervisor Locks are not to be used for personal safety, they are for equipment control. It is the responsibility of the supervisor installing the lock to clearly tag the lock with the reasons for lock installation, date, signature, etc. Removal of Maintenance Supervisor Locks requires that the supervisor removing the lock verify that the equipment is ready to be placed in service.

8. All person(s) who work on any operating systems, equipment or machinery that is locked out using a lock box shall place their safety lock identified with their name on the multiple lock adapter attached to the lock box, and not to another lock. They shall review the Lockout list, and sign the logbook / log sheet for that lock box.

9. The operators shall secure, isolate, and lock out the operating systems, equipment and machinery.

10. The operational person locking out the systems, equipment or machinery will:

    - Install all safety lockout devices, i.e. chains, locks, blanks, or other devices.
    - Ensure locks on all motor starters are installed in conjunction with electricians. A mill electrician shall be the only person who may connect or disconnect the power source except decontactors.
    - In conjunction with the appropriate operating personnel, testing of the system, to ensure the correct electrical equipment is isolated, will always be performed. This will be done by testing any local and/or remote stop/start stations or control devices.

11. Operational locks will be optional during electrical troubleshooting or exclusive electrical work.

12. If unguarded equipment is to be tested (example: checking for rotation) a red barricade tape will be used to prohibit access to the area if the area is left unattended.

13. In the event the primary electrical energy source is not disconnected and locked out because of testing or relocation, a lock must be placed at another point in the system, which will secure the transfer of energy to the elements being locked out.

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Locks

1. Devices such as chains and locks for securing valves, locks and tags for securing power sources, blanks for securing the flow of materials or other devices shall be used as necessary.
2. Each lock or other device used in the lock out shall identify the operating system and the person(s) working on the system, equipment or machinery, by means of a properly completed tag, or a properly identified engraved lock.
3. Specific nuclear device locks are designated for each gauge and are located in the E & I shop.
4. When locking out single phase panels the electrical department will use specific tags in place of locks due to the weight of the locks and hasps causing problems with the lockout on these panels. The tags will carry pertinent information about the lockout.
5. Locks issued to a worker shall not be borrowed or installed by another worker.
6. Safety locks shall not be used for any other purpose except for lock out.
7. Specific cabinets have been installed at the main gate for the security and control of safety lock spare keys.
   - ✓ These cabinets shall be designated for this purpose only. One cabinet will be maintained just for the cabinet keys.
   - ✓ A master list of keys and to whom they have been issued will be maintained with these cabinets. Security will ensure that the master list is updated as changes occur. The list of personal locks will be audited annually to verify accuracy.
   - ✓ Only the security captain or lieutenant and safety manager or his designee has access to these cabinets. The security shift leader must be informed by one of these people if access is needed.
8. No safety lock spare keys will be issued without the authorization of the General Manager or his authorized representative. This authorization may be verbal.
   - ✓ Only the employee's supervisor may request and arrange issuance of any spare safety key. The supervisor is to contact the General Manager or designee. The General Manager, or an authorized representative if the General Manager is away, will contact security, either in person or by phone, to authorize the release of the key.
   - ✓ If a spare key is issued from the security cabinet to replace a lost key, the spare key will be returned to security and destroyed by the security captain or lieutenant. The destroyed key will be returned to the proper numbered slot. Another key will not be re-issued with the same number.
   - ✓ If an employee's key or a series key has been damaged and is repairable, the spare key may be issued and returned to the cabinet. If the key must be replaced, the safety manager will return the damaged key plus the spare key to security.
   - ✓ The safety manager or designee must be notified of any spare key that was issued that has not returned to security within 24 hours.

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- ✓ A record of a spare safety key issued will be maintained at the main gate.

Lock boxes

1. A lockbox can be used for any lockout / tagout.
2. The respective Departments shall maintain a suitable supply of “lock boxes”.
3. The lock box shall be a device suitable for containing the keys to all equipment safety locks utilized. It shall be of secure design, with a clear plastic hinged cover and suitable hasp for attaching safety locks.
4. The operation’s supervisor upon locking out a system, equipment or machinery shall place the key, in a suitable lock box in a designated area. One more lock shall be used to lock the lock box and those keys will be maintained by the operation representative who shall also sign (name or title) and date the logbook / log sheet.
5. The lockout list and logbooks / log sheets need to be kept together in an organized manner with the lock boxes to maintain legibility of the documents. The lock box is to be clearly labeled as to the operating system, equipment or machinery for which it is being used.
6. It shall be the responsibility of the individuals working on the system to verify that the lock box label, the lockout list, and the logbook / log sheets all list the same system, equipment or machinery.

Logbooks / log sheets

Each area where a lock box is located must have a logbook / log sheets, used specifically for one lock box only. This could be in the control room or in a location close to where the work is being performed.

Removing Locks

1. Should the worker(s) be relieved or released before the job is complete, the worker(s) will remove their lock and sign out of the logbook / log sheet, and the incoming worker(s) shall install their lock and sign the logbook / log sheet.
2. The Department lock shall be the last lock removed after all personal locks have been removed and the employees have signed out of the logbook / log sheet.
3. Each personal lock or tag must be removed at the completion of the shift. Failure to follow this procedure may result in the individual being called from home on his/her own time to remove the lock or tag, and may subject the individual to disciplinary action.
4. A personal lock or tag is not to be removed except by the person who owns and installed the lock or tag, except under the following conditions.
   - ➢ Attempt to prove that the worker is not in the mill. Prove that the worker is not exposed to any hazard by physically checking the work site, and to assure that no danger exists to any persons. After every reasonable effort has been made to

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contact the worker outside the mill site, and if the worker(s) in question cannot be contacted; the General Manager or designee must be contacted for authorization to remove the lock or tag. The individual removing the lock or tag must keep proper documentation of all activities. See the attached form for removing a lock. This documentation shall be forwarded to the safety manager for record keeping.

5. If any maintenance job is not completed by the end of the shift, then the area maintenance supervisor will place an area maintenance lock and tag on the lock box prior to the employee removing his/her personal lock. The tag on the maintenance supervisor's lock will state the condition of the equipment and/or the reason that the lock has been applied. If both mechanical and electrical work is being done on a system, equipment or machinery then both a mechanical and electrical supervisor's lock is required. The Maintenance Department will manage the Maintenance Supervisor locks off hours in case equipment needs to be locked out or unlocked during such times.

6. The locks that are installed by the operations shall not be changed at each shift change. The key shall remain in the lock box until the completion of the job. The operation locks may be removed by any competent (trained) member of the operation designated by the Department Manager, and do not have to be removed by the operating individual who installed them.

Lockout List

1. A lockout list shall be utilized for each system, equipment or machinery that is locked or tagged out. The lockout list shall list each component of the system, equipment or machinery where a safety device is attached and shall also list the identification number of all locks used in the system. The Lockout list shall also describe all power sources which have been disconnected and locked out, have been proven isolated by testing both locally or by remote stop/start stations and other control devices, which include the DCS.

2. The Departments shall review all Lockout lists for accuracy and shall make any revisions necessary as changes are made to any system, equipment or machinery.

3. A review statement will be added to all Lockout Lists. The people doing the work on the system need to sign that they "reviewed the lockout / tagout sheets and find it to be complete".

The following information will be included in every lockout list:

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Line & Equipment Opening Criteria to be answered by the Supervisor

1. Verified that the line contained no hazardous substance? Yes___ No__
2. Has the vessel, pump, line, drained completely? Yes___ No__
3. Are the drains unplugged? Yes___ No__
4. Can the position of each valve involved with this lockout be verified? Yes___ No__
5. Is each valve in the proper position? Yes ___ No__
6. After lockout, has the system cooled to reflect that it is isolated? Yes ___ No__
7. Is the temperature of the process below 120 degrees? Yes___ No__
8. Is everything concerning this lockout normal? Yes ___ No__

If the answer to any of the above questions is No, the lockout must stop and an area

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Blue Lockout Revision Form

A blue lockout revision form will be attached to the front on the lockout out sheet whenever a modification to the original lockout has been completed. *See sample form at end of this document.*

Audits (Periodic Inspections)

Audits (Periodic Inspections) will be used to ensure that lockouts are being conducted in accordance with this procedure. *See Attached Periodic Inspection Form.*

Contractors

1. A Woodland Mill employee will determine if a contractor needs to establish a satellite lock box for their employee's use.

2. If the mill determines a satellite lock box is needed the contractor's responsible representative shall lock the lock box with their lock or tag.
3. The contractor's representative is responsible for ensuring all contractor personnel working on the system have signed their satellite logbook / log sheet. He/she must also verify that all their personnel have logged out of their satellite logbook / log sheets and keys have been removed from their satellite lock box before he/she removes his/her key from the mill's lock box.

DOCUMENTATION

Documentation	Responsible Position	Location	Retention Time
Safety Procedure	Safety Coordinator	Woodland Website	Until Replaced
Training Records	Safety Coordinator	Safety Department	3 years

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Lockout Audit (Periodic Inspection) Form

Date of Audit: _____

Mill Area lockout occurred: _____

Work Covered by this lockout: _____

System or equipment locked out: _____

Employees involved in lockout:

_____

_____

1. Lockout Type: Single Lockout _____Multiple Lockout _____
2. Is the lockout sheet posted near the lockout box? Yes ____ No_____
3. Have all items on Lockout sheet been initialed as being secured? Yes ___No _____
4. Has all the necessary equipment been tested? Yes ___No ____
5. Are all required signatures in place with date? Yes ___No ____
6. Does every employee involved in the lockout have their lock on? Yes ___ No ____
7. On a multiple lockout, is the Supervisor Lock Attached? Yes ___No__
8. Are all individual and contractor locks properly identified? Yes ___No___
9. If any corrective actions needed, list below and contact supervisor to correct:

Auditor's Name: _____

Auditor's Signature: _____

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Lock Removal Form

A lock has been left on the following equipment and we have taken the steps listed below to ensure its safe removal.

Please Print:

Supervisor _____

Witness _____

Equipment Description _____

_____

_____

Name of Person who Applied Lock:

Name _____

Date _____ Time _____

INITIAL as checks are complete.

STEP I **Find Individual.**

_____ Check work area. Is equipment ready to go? Call foreman to see if individual has left Mill or been reassigned to another job.

_____ If individual has left the Mill, attempt to contact them at home.

_____ If individual is contacted or found, they must return to the Mill lock site and remove their lock.

STEP II **If Unable to Find or Contact Individual**

_____ Recheck the work area for signs of individual tools, missing parts, etc.

_____ Check dryers, confined space, locker room, parking lot, any place where individual would be at risk if equipment were started.

_____ Check with individual's coworkers.

_____ Time Clock check (when possible).

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STEP III **When all means to find and contact individual have been exhausted and lock must be removed:**

_____ Shift Supervisor will contact the Department Manager who will then contact the Director or designee for permission to remove the lock. Remove lock by cutting the metal hasp, not the lock, with a witness present. Once lock is removed, startup procedures can begin as normal. A witness should be a supervisor from another department.

STEP IV **Follow-up**

_____ Employee was notified of this action before returning to work and will receive a copy of this form after he signs it.

Lock was removed:

By _____

Witness _____

Time _____

Date _____

Employee Signature _____ _____

Supervisor Initials_____ Lock Returned to Employee_____

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IN USE LOCKOUT REVISION (blue sheet)

Lock Box	

Additional Work Order Number and Description

Add / Remove Starter Lock-outs

Equip #	Motor Description	Location		Electrician Test Breaker	Initial Lock On	Operator Test Motor	Initial Lock Off
		ER	MCC				

Add / Remove Valve Lock-outs

Lockout Point	Lockout Point Description	Location	Locked Position	Initials On	Time On	Initials Off	Time Off	Normal Position

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Add / Remove Drain Lock-outs

Lockout Point	Lockout Point Description	Location	Locked Position	Initials On	Time On	Initials Off	Time Off	Normal Position

Additional Comments

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EQUIPMENT LOCKOUT LIST *(sample)*

Equipment Description			
Equipment Number			
Date		**Time**	
Multiple Lock Number			
Number of Locks			
Lock Box			
W.O. # & Description			
Originator Name:		**Validator Name:**	
Line Breaking Permit	**Yes**	**No**	**NA**
Confined Space Entry Completed	**Yes**	**No**	**NA**

Starter Lock-outs:

WHEN TESTING MOTORS AFTER LOCKOUT, STAGE INTERLOCK BYPASS SWITCH MUST BE ACTIVATED TO MAKE SURE INTERLOCK IS NOT PREVENTING MOTOR FROM STARTING!!! ALWAYS HIT THE STOP BUTTON AFTER TRYING THE EQUIPMENT AS ANOTHER SAFETY MEASURE.

Equip #	Motor Description	Location		Electrician test breaker	Initials Lock On	Operator Test Motor	Initials Lock Off
		ER	MCC				
None							

Valve & Drain Lock-outs

Lockout Point	Lockout Point Description	Location	Locked Position	Initials On	Initials off	Normal Position

Drains: **Lockout employee must ensure that drain lines are clear and a volume that corresponds with pump or line volume has drained from the drain valve.**

Drain	Drain Point Description	Location	Position	Initials On	Initials Off

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Blanks & Spools *(if not applicable put in none)*

Blank Description	Location	Initials On	Initials Off

Forces *(if not applicable put in none)*

Point	Location	Force on	Force off

Nuclear Devices *(if not applicable put in none)*

Description	Location	Operation Lock On	Radiation Lock On	Radiation Check	Radiation Lock Off	Operation Locks Off

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ELECTRICAN'S EQUIPMENT LOCKOUT LIST *(sample)*

Equipment Description			
Equipment Number			
Date		**Time**	
Number of Locks			
W.O. # & Description			
Originator Name:	**Validator Name:**		
Confined Space Entry Completed	**Yes**	**No**	**NA**

Starter Lock-outs:

WHEN TESTING MOTORS AFTER LOCKOUT, STAGE INTERLOCK BYPASS SWITCH MUST BE ACTIVATED TO MAKE SURE INTERLOCK IS NOT PREVENTING MOTOR FROM STARTING!!!

Equip #	Motor Description	Location	Electrician test breaker	Initials Lock On	Operator Test Motor	Initials Lock Off
None						

Forces *(if not applicable put in none)*

Point	Location	Force on	Force off

Nuclear Devices *(if not applicable put in none)*

Description	Location	Operation Lock On	Radiation Lock On	Radiation Check	Radiation Lock Off	Operation Locks Off

NOTE: Return completed lockout sheets to area supervisor or area technical assistant following completion of work and lockout

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LOCK OUT / TAG OUT REVIEW

I have reviewed the lock out / tag out sheet(s). I found them to be filled out completely.

Print	Signature	Date

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