

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

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JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

1.0 INTRODUCTION

This Lockout Program has been developed and endorsed by the Joint Occupational Health & Safety Committee and has also been approved and endorsed by both the Management and Union Executive Committees. The program has been devised for your protection and for the protection of all persons working at Howe Sound Pulp and Paper. This Lockout Program meets or exceeds requirements under Worksafe BC Regulations.

If the unexpected energization or startup of machinery or equipment, or the unexpected release of an energy source could cause injury, the energy source must be isolated and the hazard effectively locked out.

Serious injury or death may result if a lockout procedure is not followed in every detail. Therefore, failure to comply with this policy and associated procedures is a serious violation and will not be tolerated by the union or management.

Contractors or any other outside personnel required to work in the mill must comply with Howe Sound Pulp and Paper's Lockout Program procedures.

It is absolutely essential that the integrity of a lockout be maintained at all times. Any device, component, or equipment which is being used as an isolation point for lockout purposes and has ANY safety locks applied, shall not be removed or tampered with in any way.

Should an error be found in any type of lockout, (e.g. Personal, Equipment, Lockout Board for Confined Space or Equipment Lockout, etc) all work on the affected equipment must cease and the responsible Supervisor notified immediately. Depending on the nature of the error, (clerical or physical), the Supervisor may require the lockout to be re-done.

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2.0 RESPONSIBILITIES

The following has been endorsed by the HSPP Joint Occupational Health & Safety Committee (J.O.H.S.C.) and by both the Management and Union Executive Committees and will be rigidly enforced.

ALL EMPLOYEES WILL PRACTICE PROPER PERSONAL SAFETY LOCKOUT PROCEDURES AT ALL TIMES.

2.1 Worker Responsibilities:

Every person required to lockout must follow Lockout Program procedures precisely to prevent serious injury or death. Every worker is responsible for understanding and observing these procedures at all times.

NOTE: Lockout procedures must be followed to the letter. If an employee objects to certain procedures or believes that changes should be considered, he/she should follow process and review with their Supervisor and Safety Steward.

2.2 Supervisor Responsibilities:

- To be thoroughly acquainted with all lock out procedures.
- To follow the approved lock out procedures.
- To ensure that his/her employees are thoroughly familiar and well-trained in all lock out procedures.
- To ensure that all employees under his/her supervision understand and follow the lockout procedures to ensure that their work is performed without undue risk.
- To ensure that all employees performing lockouts under his/her supervision are not distracted or interrupted while performing those duties unless a critical situation arises.
- Making spot checks to ensure that his/her instructions are being adhered to.
- Discussing problem areas with his/her Safety Steward so as to determine a course of action to resolve the problem(s).
- Reporting specific problems to his/her Superintendent/Manager with respect to lockout procedures.

NOTE: Lockout procedures must be followed to the letter. If a Supervisor objects to certain procedures or believes that changes should be considered, he/she should follow process and review with the Lockout Sub-Committee.

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3.0 PROGRAM ADMINISTRATION

The Superintendent, Health & Safety is responsible for the overall administration of the program, which includes initiating the ongoing periodic review & updating of the Lockout Program with support from the Lockout Sub-Committee and the JOHSC.

Each Department and Area will be responsible for their own individual Lockouts and upkeep of their equipment. Any changes must follow all HSPP Lockout Program policies.

Ensuring that departmental revisions to Lockouts conform to, and are consistent with, the Lockout Program system at HSPP is the responsibility of the Area Superintendent.

The Lockout Sub-Committee may review or recommend changes to all, or parts of the HSPP Lockout Program, to make it a more viable means of protection for both employees and equipment.

The Lockout Sub-Committee will consist of no less than four (4) employees of Howe Sound Pulp and Paper, two (2) of which will be appointed by the local union J.O.H.S.C chairperson and two (2) of which will be appointed by management. Appointment of nominees will be confirmed no later than January 1 each year. One member will be designated by the local union J.O.H.S.C chairperson and one member by management, who will act as co-chairs of the Lockout Sub-committee.

The Lockout Sub-Committee is regarded as a recommending body reporting to the J.O.H.S.C. They will, on favorable review, recommend acceptance of the following:

- Revisions to the existing program and/or standardized forms,
- New Lockout Equipment and Devices

The Lockout Sub-Committee will meet every two months, or at the call of the co-chairs, to discuss items of current concern relative to the lockout system, including lockout violations. Any recommendations of the Committee, together with a report of their activities, will be forwarded to the J.O.H.S. Committee for final review and recommendations to the management team as required.

Within 18 months from the official ratification of this program document, each employee required to a perform lockout will be required to successfully complete a Lockout refresher training course.

The content and frequency of subsequent refresher training will be recommended by JOHSC, the Lockout Sub-Committee and the Safety Superintendent.

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4.0 DEFINITIONS

Energized

Connected to an energy source or contains residual or stored energy.

Energy Isolating Device

A mechanical device that physically prevents the transmission or release of energy, including, but not limited to the following:

- A manually operated electrical circuit breaker
- A manually operated electrical disconnect switch
- A hydraulic valve
- A pneumatic valve
- A line valve
- A block and similar device used to block or isolate energy

As such, control circuit type devices such as push buttons, and control switches, are NOT energy isolating devices.

Hazard Assessment

A written record of the hazards identified for the purpose of developing all lockout permits and forms.

Independent

It is the intent that each employee involved in a key box lockout board lockout would go out into the field separately. The first qualified worker would be responsible for following the isolation & lockout procedure. The second qualified worker would be responsible for following the verification and lockout procedure.

Each employee locking out verifies that each isolation point has been effectively isolated & locked out independently of their co-worker to ensure the integrity of the Lockout.

Each of the two qualified employees involved in the key box lockout attaches one of the locks from their Operations lockset to each of the isolation points identified on the lockout procedure and initials the respective box on their form.

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4.0 DEFINITIONS (cont'd)

Isolation

A procedure that ensures that the identified energy sources have been disconnected by opening and securing all associated switches, and that mechanical equipment has been rendered and secured non-operative by disconnecting, stopping, depressurizing, draining, venting or other effective means. (Example: A valve that has been closed)

Note: *In the case of electrical switchgear, a purple or blue isolation lock indicates that isolation has been effected by a qualified person. Verification must still occur to ensure that the correct switchgear has been isolated and that the switch has been locked in the correct position.*

Note: *In the case of larger lockouts when opening/closing of a large number of valves, the employee performing the isolation may request a helper. This should be considered in the planning of the work.*

Lockout

The process of placing locks on an energy isolating device or on a key box lockout board, in accordance with established procedures, ensuring that the energy isolating device and equipment being controlled cannot be operated until the locks have been removed.

Modified Lockout

If, for any reason, any energy isolation point and/or equipment has been removed from, or added to the established and approved Lockout procedure.

Personal Lockout Permit

A written record of the work to be performed and equipment to be isolated and locked in order to safely work on a piece of equipment. Limited to no more than 5 locks.

Upon completion of work, personal lockout permits with attached hazard assessments must be collected and filed by the Operating Department.

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4.0 DEFINITIONS (cont'd)

Lockout Coordinator (L.C.)

The Lockout Coordinator will always be a third person who will help to ensure the Lockout process is completed accurately and efficiently. This person is not responsible for the accuracy of the actual Lockout, but will ensure the clerical and process aspects run smoothly. The Lockout Coordinator's main duties are:

- Helps to ensure the two qualified workers complete the isolation/lockout & verification/lockout processes independently.
- Helps to ensure the correct Lockout sheets are being used and they are filled out completely and accurately by use of the Lockout Checklist.
- Passes on any deficiencies related to the lockout equipment (missing identification tags, sticky valves, etc.) to the responsible Supervisor via the Lockout Checklist.
- May help to organize locks and sheets prior to Lockout.
- May be asked to complete field audits of Lockouts as time is available and report any errors to the responsible Supervisor for appropriate follow-up.

Qualified Worker

“Qualified” means being knowledgeable of the work, the hazards involved, and the means to control the hazards, by reason of education, training, experience, or a combination thereof. The qualified person must have demonstrated competence on the lockout process and understand the hazards and controls related to the work being completed and the equipment being locked out. (See section 7.9 for signing off process)

Verification

Verification is the process of ensuring that the final physical state of the isolation and lockout is correct prior to applying the locking device that the employee is responsible for.

Note: *Isolation & Verification may also include a process which does not require locks, such as rodding out a drain valve and ensuring the drain is clear. These “checkpoints” are to be clearly noted on the lockout procedure to indicate a critical step.*

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5.0 GENERAL STANDARDS

- 5.1 Isolation and Lockout is considered a critical task. As such, workers who are performing isolation and lockout must be dedicated to that function and not tasked with additional routine duties while in the process of performing a lockout procedure.
- 5.2 All running repair procedures (e.g. working on energized equipment) must be approved by the Department Superintendent and carried out in accordance with Worksafe BC Regulations 10.12 (Refer to Appendix I).
- 5.3 Each department is responsible for carrying out an annual review of their Departmental locks, (Equipment Do Not Operate locks) & tag boards. Any locks that have been in the field for greater than one year shall have the key & tag removed from the board and the keys placed in a secure lockbox. The information on the tag relevant to the lock will be written into a permanent log book. These boards and lock boxes should be in the operational areas wherever possible.
- 5.4 Each department is responsible for keeping their Lockout Equipment in a clean and good working state. Locks will be stored in a designated and clearly identified cabinet or board & maintained to ensure the lock numbers are visible and the lock mechanisms function properly.
- 5.5 Only HSPP Standardized Hazard Assessments and Lockout Forms are to be used for any and all types of Lockouts (i.e. Personal, Keybox, Modified, Temporary) across the site.

Prior to the development of any lockout, the standardized hazard assessment form must be completed. In the case of all existing lockouts, this hazard assessment form is to be completed retroactively and reviewed against the existing lockout. See Appendix 6 for copy of hazard assessment worksheet and the lockout decision flowchart.

- 5.6 The original signed Lockout paperwork **MUST** remain at the Lockout Board at all times. This does not preclude the sheets from being checked at the board by those locking out. A separate Lockout Sheet must be printed for any persons wishing to audit the actual Lockout in the field. Removal of the original paperwork from the area will be considered a Lockout Violation.

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5.0 GENERAL STANDARDS (cont'd)

- 5.7 Hard copies of Key box lockouts must have the revision dates clearly identified & must be stored in a secure area. The review and approval date on the hard copies must be checked to ensure they are the most current version prior to use. It is the responsibility of each department to implement an effective procedure to ensure only the most recent controlled copies are used for lockouts
- 5.8 Any switch that has been designated as a Rotational Isolation & Lockout Point, (Purple Isolation lock), will have the designation “RL” added after the Location Description on the Key box Lockout Sheet. All other switches will require an electrician to perform an isolation and Lockout via a Blue Isolation Lock.
- 5.9 Each isolation point noted on the Key box Lockout Sheet should have its Operating Position noted under that column using “Open” or “Closed”.
- 5.10 If an existing keybox lockout procedure requires additional personal locks to be applied directly to isolation points in order to cover the scope of work then:
- The requirement for additional personal locks must be highlighted in yellow on the front of the existing Isolation and verification forms, and refer to the page number where the relevant information can be found, and
 - The section which describes where the locks are to be placed will also be highlighted in yellow.
- 5.11 **Temporary Keybox Lockout Board Lockouts** - If an approved lockout sheet is not available for a required lockout, a trained Operator and Supervisor, or two trained Operators, may identify the isolation points using a Lockout Hazard Analysis sheet, which will identify all of the potential energy sources, clearly list these points, and use this list to develop the temporary lockout sheet. The temporary lockout sheet must be approved (signed) by the Department Superintendent (or designated replacement) and may be used on a one-time only basis. The Department Superintendent will ensure that the necessary steps are undertaken to develop a permanent, approved lockout sheet in all cases where a temporary sheet has been used and there is the possibility it will be used again. (See 5.12)
- All temporary lockout sheets used will be filed and retained in the areas for a minimum of 30 days, as per Section 8.9. ‘Delocking Procedure’.

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5.0 GENERAL STANDARDS (cont'd)

5.12 **Modified Lockout** - Occasionally an existing lockout sheet does not adequately cover its intended purpose due to a temporary change in conditions. Typical reasons would be:

- a block valve is removed for repairs.
- unable to install a blank because the equipment or piping has been removed.
- motor control starter has been removed for repair.

In such instances, if an approved lockout sheet requires modification on a one-time only basis due to temporary change in conditions, a qualified Operator and Supervisor, or two qualified Operators, may modify the lockout to accommodate the temporary condition. Any lock-points that are not to be used will be clearly identified, along with the reason for not using them, on the Modified Lockout Form. Any substitute lock-points must also be clearly documented on this form. If the lockout is broken or a new seal is required, the new seal number must also be recorded on the form in the space provided. The Supervisor **must** sign the Modified Lockout Form. The Operator will document the change in the Operators log book.

Note: *Each person attaching his/her lock to a lockout that has been modified must ensure they read and understand the reasons for the modified lockout, as it may affect the work being done.*

Note: *This form must be printed on pink paper to highlight the fact that a modification to the normal lockout is in effect. Additionally, the "Lockout Procedure" header text at the top of Page 1 of Step 1 – Isolation and Page 1 of Step 2 – Verification must be changed to read "Modified Lockout Procedure" in pink text or highlighted in pink.*

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5.0 GENERAL STANDARDS (cont'd)

- 5.13 **New & Revised Lockouts** - The Department Superintendent is to ensure due process has taken place to develop any new lockouts, to revise existing lockouts, or to complete the required periodic audits, and that a file is maintained to support that due process has been followed.

Due process is defined as:

- All energy sources have been identified through use of the Lockout Hazard Assessment process (Documented).
 - New Lockout Procedures and Hazard Assessment have been reviewed by at least one Qualified Operator from all four crews, and that Revised Lockout Procedures have been reviewed by at least one Qualified Operator from two different crews. The Lockout Review & Approval Form must be legibly signed by everyone involved in the review. This will verify that the identified lock points are sufficient to ensure safe working conditions, based on the completed Hazard Assessment. The procedure and documentation must be approved by the Department Superintendent prior to use.
 - All departmental lockouts must be audited every 4 years. Lockouts outside of this 4 year window are not current. A minimum of two qualified Operators must complete the audit and the Lockout Review & Approval Form must be legibly signed by the auditors and the Department Superintendent prior to being re-used.
 - Blank/blind certification has been conducted as per mill policy.
 - Confined Space Isolation Principles are followed as per mill policy.
 - A Confined Space Entry Permit/record, if applicable, is complete and on the back side of the lockout form or securely attached.
 - A Confined Space Hazard Assessment has been completed and approved for all Confined Spaces prior to entry.
- 5.14 If an electrician is required to perform an electrical isolation, (Blue Isolation Lock) they will be provided with an additional copy of the Lockout Sheet to ensure they are able to locate the correct switchgear for isolation.

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5.0 GENERAL STANDARDS (cont'd)

5.15 Removal of Manhole Covers

If a lockout was required for the removal of a manhole cover, then it must be in effect when the cover is reinstalled.

- The worker assigned to open/remove the manhole cover will apply their Personal Lock(s) to the appropriate lockout point(s) in order to safely complete the work.
- Once the removal or opening of the manhole cover is complete, and the manhole cover is going to remain removed or open, that worker's Departmental Lock(s) must be applied to the appropriate lockout point(s), along with properly completed "Do Not Operate" tag(s) before the worker's Personal Lock(s) is removed.
- In addition to the above, a "Do Not Enter – Confined Space" sign must be immediately hung at the doorway.

5.16 Working On Bridge Cranes

When performing a job on a bridge crane that requires the unit to be energized (e.g., cable installation) and the crane will be left unattended, the electrical disconnect switch must be locked out as per normal lockout procedure.

- 5.17 All Isolation/Lockout Points shall be clearly identified in the field by a durable and legible label, which corresponds to the identification on the Isolation/Lockout Procedure. Where possible, the label should also identify the device name, and the device purpose as noted on the Lockout procedure.

Note: *Where labels or tags have not been applied to an isolation device, the qualified workers may proceed with the Lockout as per the written procedure, provided they can verify the isolation device in question.*

The workers must then identify the labeling deficiency to the Lockout Coordinator and ensure it is recorded on the Lockout Checklist for follow-up.

- 5.18 The HSPP Lockout Program will meet or exceed requirements from NFPA-70E and CSA-Z462, related to electrical safety.

- 5.19 All Personal, Blue Electrical, or Purple Rotational Locks MUST be stored in a "closed" or "locked" position to ensure they are under control and cannot be used by any unauthorized personnel. If a storage box is used for storage of these locks, the box MUST remain locked when not under direct control of an individual.

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6.0 TYPES OF LOCKS & APPLICATION

At Howe Sound Pulp and Paper there are eight types of lockout locks, each of which serves a different purpose. They are:

A) PERSONAL LOCKS (Issue or Loan)

Personal Locks are used for locking out equipment or for use on keybox lockout boards and are for your own personal protection. Each lock set assigned to you will be numbered and keyed alike. Your personal locks should be readily available for use at all times. Your personal locks must not be loaned to any other employee, nor is it to be used for any other purpose than locking out equipment under this program.

B) BLUE ELECTRICAL ISOLATION LOCKS

Blue Electrical Isolation locks indicate that a trained HSPP Electrician has pulled the electrical disconnect switch, checked for electrical energy isolation, and that it is ready for lockout with your Personal Lock or Operational Lock.

C) PURPLE ROTATIONAL ISOLATION LOCKS

Purple Rotational Isolation locks indicate that a trained and authorized person has pulled the electrical disconnect switch and that it is ready for lockout with your Personal Lock or Operational Lock.

D) HVAC ISOLATION LOCKS

HVAC isolation locks indicate that HSPP HVAC mechanics with appropriate training, qualifications and experience have completed their own electrical isolation and lockout for the purpose of performing any required work on the identified HVAC systems and equipment. The HVAC Mechanic will use an **HVAC ISOLATION LOCK** and their personal lock to work on this equipment according to the department Safe Work Procedures. The HVAC mechanic will only be able to lockout switchgear but not be able to do work on switchgear. For Isolation purposes, the HVAC lock shall be treated like a Blue or Purple isolation lock, as it shall be 'first on, last off'. Should circumstance arise where an HVAC lock needs to be removed, there is a spare key for the HVAC lock available in the Gatehouse and may only be signed out by a qualified HVAC Mechanic or Electrician.

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6.0 TYPES OF LOCKS & APPLICATION (cont'd)

E) RADIATION SOURCE ISOLATION LOCKS

When Radiation Sources require isolation, the area instrument mechanic, shift instrument mechanic, or other trained and authorized person will isolate and check the source and apply a Radiation Source Isolation Lock before the Operator applies the lock.

Radiation source lockout, isolation, removal, storage or when working in close proximity to radiation sources, is covered under Instrument Job Procedures. This information may be obtained through the maintenance department.

F) OPERATIONAL LOCKS (KEYBOX LOCKOUT BOARD LOCKS)

Operational Locks (Keybox Lockout Board Locks) are lock-sets consisting of numerous locks with a common key and are used when a lockout board is required. All of the locks are numbered the same. Each Department has control over the lock-sets and keys.

G) DEPARTMENT LOCKS (EQUIPMENT DO NOT OPERATE LOCKS)

Department Locks (Equipment Do Not Operate Locks) are to be used to protect the equipment when repairs are incomplete or where activation of the control device would create a hazard. The Locks will clearly indicate the area who owns them – for example:

"TMP" (+ number) for TMP DEPARTMENT

Note: *The EQUIPMENT DO NOT OPERATE LOCK is in no way to be considered a device for personal protection.*

H) FIRE DEPARTMENT LOCKS

RED Fire Department Locks are only to be used by HSPP Fire Department members for purposes of Emergency Response. Fire Command will authorize use of the locks and the crew may work under this "group lock" in an Emergency Situation Only.

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7.0 LOCKING OUT USING YOUR PERSONAL LOCKS

7.1 Before working on a piece of equipment, you **MUST** give the Operator of the equipment details of the work you are going to perform and arrange for the shutdown of the machinery. The Operator, or other trained employee, will complete a hazard assessment and personal lockout permit and then proceed to isolate the particular piece of equipment and demonstrate the location of the lockout points.

Note: Effective May 2018, personal lockouts are limited to no more than 5 locks. See Appendix 7 for form. If more than 5 locks, a keybox board lockout must be used.

7.2 When an electrical switch is involved; in the case of a rotational lockout only, and where the electrical switch is marked with a “Purple Lock OK” symbol, a **PURPLE ROTATIONAL ISOLATION LOCK** or a **BLUE ELECTRICAL ISOLATION LOCK** must first be applied by a trained and authorized person prior to the application of any other locks.

7.3 Electrical switches **NOT** marked with a “Purple Lock OK” symbol on it, must be operated only by a HSPP Electrician and a **BLUE ELECTRICAL ISOLATION LOCK** must be applied.

Note: *A BLUE ELECTRICAL ISOLATION LOCK or PURPLE ROTATIONAL ISOLATION LOCK will signify and indicate that the primary electrical source for the equipment has been isolated. See HSPP Safe Work Procedure 11130006, 480 VAC MCC Starter Rotational Lockout.*

7.4 Then place your PERSONAL LOCK(S) in the proper location(s).

7.5 You must check the field number of the equipment you are about to work on to ensure you have the right equipment and the lockout of the equipment must be verified according to HSPP accepted procedures.

Note: *If the scope of work changes during a job such that the current lockout may not cover it, you must again check with the Operator to ensure that the lockout is still appropriate, or to be shown the additional lock points. This may include anything that maintenance might have to use to do their job that might affect the lockout.*

7.6 When your work is complete remove your personal lock(s) and notify the Operator of the equipment that the equipment is ready to return to service.

Note: *Personal Locks MUST only be removed by the person whose number appears on the lock.*

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7.0 LOCKING OUT USING YOUR PERSONAL LOCKS (cont'd)

7.7 **All personal locks must be removed at the end of your shift.**

7.8 If your work on the equipment is incomplete, the equipment must be locked out with a Department Lock (Equipment Do Not Operate Lock) before your Personal Lock is removed. The Supervisor must be notified when using Department Locks - Refer to Section 10 for installation of Departmental Locks. This procedure applies to both personal lockout and lockout boards.

7.9 A current list of trained and qualified employees for lockouts within a department must be available in or near the control room(s). Those employees will be listed by name and position. Lockout training status sheets must be signed by the employee indicating competency level. Refresher training will be provided on a scheduled basis and as required to keep trained employees competent and aware of changes.

REMEMBER: A PERSONAL LOCK IS A LIFE PRESERVER. FAILURE TO USE IT, AND TO USE IT PROPERLY, CAN CAUSE DEATH OR SERIOUS INJURY.

8.0 USE OF OPERATIONAL LOCKS (KEYBOX LOCKOUT BOARD LOCKS)

The use of a lockout board will be decided by the operating department Supervisor. The procedure for the use of lockout boards is as follows:

8.1 The lockout will be done by two qualified employees, one of whom may be a Supervisor.

Note: *A current list of qualified (See definition of "qualified") employees for lockouts within an operating department must be available in or near the control room(s). Those employees will be listed by name and position. Lockout training status sheets must be signed by both the employee and area superintendent, indicating competency level.*

Note: *The operator of the equipment will complete the lockout whenever possible. In some circumstances the operator of the equipment may be unavailable to participate in the lockout of the equipment. In these cases another qualified employee will participate in the lockout.*

8.2 Each individual will count the number of locks on their operational locksets and record on the lockout form.

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- 8.3 Each individual will do the lockout independently (as per definition) and will use a different set of Operational Locks (Keybox Lockout Board Locks) provided by the department.
- 8.4 Each of the two individuals will follow their Isolation or Verification procedure and securely lock each lockout point as indicated on their individual sheet. **Each point on the lockout sheet MUST be initialed by each lockout team member as it is locked out.** The intent is to have **independent** verification of a correct & effective lockout.
- 8.5 Record on each of the lockout board lockout sheets:
- Printed names and signatures of the two people doing the lockout (names must be legible)
 - Current date
 - Review & Approved date (must be within 4 years)
 - crew letter (A, B, C, or D)
 - key box seal number
 - Lockset ID# and # of Locks in Lockset
 - # Locks required for Lockout

By signing the lockout sheets, the persons completing the lockout indicate that the lockout is correct and complete and assume responsibility for that lockout.

- 8.6 Attach the tether to the completed lockout board lockout sheets and place in the lockout board paperwork slot so it can be read through the flexible cover.
- 8.7 The key for each set of Operational Locks is placed in the lockout board key box and the key box is sealed using the numbered key box seal, provided by the department. The key numbers **MUST** be visible to any other worker locking out.
- 8.8 The equipment is now locked out. After consulting with Operations, persons working on equipment must affix their Personal Lock to the lockout board key box related to the work they are undertaking.

Note: *It is the intent that steps 8.5 through 8.7 are carried out with the Lockout Coordinator and that the completed Lockout Checklist will be included in the documentation placed into the paperwork slot.*

Note: *Before attaching your Personal Lock to the key box, confirm that you are locking the correct equipment by reading the lockout sheet, check that the key box seal is in place and that the seal number matches that on the lockout sheet.*

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8.0 USE OF OPERATIONAL LOCKS (KEYBOX LOCKOUT BOARD LOCKS) (cont'd)

8.9 KEYBOX LOCKOUT – DELOCKING PROCEDURE

Lock removal and breaking a seal on a key box lockout requires two qualified employees, one of whom may be a Supervisor. All locks must be removed from the Lockout Board prior to the seal being broken. After all the Personal Locks have been removed from the key box and the equipment is ready for delocking:

- Remove all Operational Locks relative to the lockout procedure, initialing each delock box on the sheet.
- Ensure each isolation point is returned to its normal operating position as per the written instructions. Where it is not possible to return the isolation point back to its normal operating position (as in the case of a main steam header), the changes will be noted on the lockout procedure sheet and recorded on the operator's logbook.
- Once all locks have been removed, ensure the number of locks returned matches the number of locks recorded by the initial lockout team. Record this number on the bottom of the form, along with your printed name and initials.
- Return the Operational locksets to their proper place.
- Return the completed lockout procedure to Operations Supervisor or designate for filing. If deficiencies are noted, a copy of the form should also be sent to the Safety Department.
- All completed lockout sheets will be filed and retained in the areas for a minimum of 30 days.

8.10 In the event that any delocking of the lockout board takes place, a complete lockout procedure must be carried out for the subsequent lockout of equipment:

- a. new lockout sheet
- b. a check of all lockout points
- c. new key box seal

Note for change of shift: Persons who begin the lockout or de-lock procedure should complete the procedure. If this is not possible, then the new qualified persons on shift (including the Lockout Coordinators) must meet with their relief to ensure an orderly transfer of the process.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

8.0 USE OF OPERATIONAL LOCKS (KEYBOX LOCKOUT BOARD LOCKS) (cont'd)

8.11 An employee assigned to work on equipment may ask the Operator to be shown the lockout sheet and lockout points before placing a personal lock on the lockout board key box.

8.12 The administration and enforcement of the lockout board system is the responsibility of the department concerned.

- a. Maintenance of lockout sheets will be the responsibility of the responsible Department Superintendents.
- b. Before new equipment is accepted, approved lockout sheets will be prepared, if required.
- c. In the case of required changes to already approved lockout sheets, the person responsible (Superintendent) will follow the required process for Modified Lockouts. (See Section 5.7)
- d. All Operational locksets will be kept on continuous metal rings with a clearly readable identification tag which matches the Identification number of the locks. (i.e. 15-FL-1for Lockset of 15 locks, Fiber Line, Set #1)

8.13 Loss of a lockset key.

Each lockset in use is to have only one key in use. All spare keys are to be kept at the Gatehouse. If a key is lost, the lockset is to be taken out of service for a period of one year. After one year the lockset may be returned to service with a new key or a spare key from the Gatehouse. (If the lost key is found, the lockset may be returned to service immediately.)

8.14 Loss of a lockset lock.

If a lock is lost from a numbered lockset, the lockset is to be removed from service for a period of one year. After one year, a replacement lock may be obtained to bring the numbered set up to full complement and the lockset returned to service. (If the lost lock is found, the lockset may be returned to service immediately.)

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

9.0 USE OF BLUE ELECTRICAL ISOLATION AND PURPLE ROTATIONAL ISOLATION LOCKS

These locks indicate that a trained and authorized person has pulled the electrical disconnect switch and that it is ready for lockout with your PERSONAL LOCK.

- 9.1 Electrical disconnect switches **NOT** marked with a **“Purple Lock OK”** symbol must be operated only by a HSPP electrician. The electrician performs checks to ensure that the switch is electrically isolated and places a **BLUE ELECTRICAL ISOLATION LOCK** on the switch to indicate that the switch has been checked, and notifies the Operator.

Electrical disconnect switches marked with a **“Purple Lock OK”** symbol must be operated only by a trained and authorized person. This is a rotational lockout only and is not sufficient for exposed electrical work.

- 9.2 Electrical disconnect switches marked with a **“Purple Lock OK”** symbol must be operated only by a trained and authorized person. The trained and authorized person performs checks to ensure that the switch is electrically isolated and places a **PURPLE ROTATIONAL ISOLATION LOCK** or if a HSPP electrician, a **BLUE ELECTRICAL ISOLATION LOCK** on the switch to indicate that the switch has been checked. A **PURPLE ROTATIONAL ISOLATION LOCK** will indicate that the switch has been checked for rotational lockout only.

Both of these locks and their appropriate checks provide for the isolation of the **primary** electrical energy source to the connected equipment. For work on electrical wiring and components, there are additional factors that must be taken into consideration to ensure that workers are not exposed to shock hazards. These factors include induced voltages, capacitance, damaged wiring, back feeds, and other external influences.

- 9.3 A **BLUE ELECTRICAL** or **PURPLE ROTATIONAL ISOLATION LOCK** must be applied to the electrical lockout point before any other safety locks are applied. Either the **BLUE ELECTRICAL** or the **PURPLE ROTATIONAL ISOLATION LOCK** **must be the last lock removed from the switch.**

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

9.0 USE OF BLUE ELECTRICAL ISOLATION AND PURPLE ROTATIONAL ISOLATION LOCKS (cont'd)

9.4 The employee must check the field number of the equipment about to be worked on to ensure it is the right equipment.

9.5 Exceptions to Electrical Lockout:

9.5.1 Local Visi-Disconnects

Visi-disconnects are identified as such by a red/orange lamaciod label (white letters) stating the switch is intended and approved as a local visi-disconnect.

The request for a local visi-disconnect comes from either Operations or maintenance and after a review of why the disconnect is needed, i.e., production constraints, safety, ease of maintenance, a form is completed and submitted for technical approval by the appropriate Maintenance/Engineering Superintendent.

Visi-disconnects are used by both Operations and maintenance employees. Visi-disconnects come under the same guidelines as Personal Lockout points when work is incomplete, and they can be used as a lockout board point. How to operate our visi-disconnects is covered under Electrical Job procedures.

Note: *Welding outlets are NOT visi-disconnects and cannot be used as a visi lockout point.*

Within 18 months of the ratification of this program document, each employee required to perform Rotational lockouts will be required to successfully complete a refresher training course.

The content and frequency of subsequent refresher training will be recommended by JOHSC, the Lockout Sub-Committee and the Safety Superintendent.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

10.0 DEPARTMENT LOCKS (EQUIPMENT DO NOT OPERATE LOCKS)

These locks are to be used to protect the equipment when repairs are incomplete or where activation of the control device would create a hazard.

Note: *The Department Lock is in no way to be considered a device for personal protection. Department Locks are available from your Supervisor.*

- 10.1 When a piece of equipment is to be made inoperative as above, the Supervisor in charge, or delegate, will lockout using the Department Lock (Equipment Do No Operate Lock) In either case the Supervisor or delegate will be responsible for recording the location and reason for application of the lock on the 'Equipment Do Not Operate lockout tag'. The top copy of the tag (field copy) is put with the lock at the lockout point. The second copy (control copy) is left on the appropriate department lock storage board.
- 10.2 As soon as possible after the Supervisor returns to work, they are to review the department lock storage board within their area of responsibility to ensure that the location of locks is recorded on the control lockout tag, and sign any unsigned copies of the control lockout tag(s).
- 10.3 Supervisors are responsible for the management and control of the Department Locks (Equipment Do No Operate Locks) within their area of responsibility. This includes ensuring new tags are available to accompany locks. Each department is responsible for carrying out an annual review of their Departmental Locks, Do Not Operate tags & tag boards. Any locks that have been in the field for greater than one year shall have the key and tag removed from the board and the keys placed in a secure lockbox. The information on the tag relevant to the lock will be written into a permanent log book. These boards and lock boxes should be in the operational areas wherever possible.

- Notes:**
1. *Delegate is an Operator or tradesman who reports to the Supervisor.*
 2. *The Department Lock (Equipment Do No Operate Lock) must be applied before the last Personal Lock is removed from the lock point.*

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

10.0 DEPARTMENT LOCKS (EQUIPMENT DO NOT OPERATE LOCKS) (cont'd)

- 10.4 These locks will be affixed to the appropriate points, which can be either an equipment lock point or a lock board.
- 10.5 These locks are marked as follows:
- "ES" or "ELEC" (+ number) for ELECTRICAL DEPARTMENT
 - "NEWS" (+ number) for NEWSPRINT DEPARTMENT
 - "PROD" or "PULP" (+ number) for PULPING OPERATIONS
 - "TMP" (+ number) for TMP DEPARTMENT
 - "REC" (+ number) for RECOVERY DEPARTMENT
 - "MECH" or "MD" (+ number) for MECHANICAL DEPARTMENT
 - "INST" (+ number) for INSTRUMENT DEPARTMENT
 - "ENG" (+ number) for ENGINEERING
 - "PROJECT" for PROJECT.
- 10.6 Only when the equipment is confirmed as being safe for start up will the Supervisor responsible, or delegate, obtain the key for removal of the Department Lock (Equipment Do No Operate Lock). The Supervisor, or delegate, will remove the lock and allow the Operator to start up the equipment.
- 10.7 Whenever a Department Lock (Equipment Do No Operate Lock) is applied, an 'Equipment Do Not Operate lockout tag' will accompany the lock. The top copy of the tag (field copy) is put with the lock at the lockout point. The second copy (control copy) is left at the appropriate department lock board. All reasons for the application of the lock are to be recorded on the 'Equipment Do Not Operate lockout tag'.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

11.0 REMOVAL OF PERSONAL LOCKS BY OTHER PERSONNEL

When a person leaves their Personal Lock(s) on a piece of equipment and is reported to have left the mill site, the following procedure for removal of the lock(s) shall apply:

11.1 Person can be contacted

A committee of two will be formed, composed of:

- a. employee's Supervisor or the Supervisor on duty.
- b. Safety Steward or Operator of the equipment or Shop Steward.

One of the above individuals must have contacted the employee and confirmed that removal of the lock will not expose workers or equipment to a hazardous energy source.

Both members of the committee will sign the lock removal form (printed on the envelope designed for locks).

The Supervisor or committee delegate will sign for and retrieve the master key from the Gatehouse upon presentation of the completed form/envelope.

Once the lock(s) has been removed it will be placed in the envelope, which will be delivered to the employee's Supervisor. The Supervisor will take the necessary action (i.e., initiate training, coaching) to prevent a reoccurrence of this nature, if applicable.

AFTER REMOVAL OF PERSONAL LOCKS, THE MASTER KEY MUST IMMEDIATELY BE RETURNED TO THE GATEHOUSE BY A COMMITTEE MEMBER.

11.2 Person cannot be contacted

A committee of three or four will be formed, composed of:

- a. The Supervisor of the department concerned or the Supervisor on duty.
- b. The Operator of the equipment on which the lock is located.
- c. The Safety Steward or Shop Steward.
- d. In case of electrical switchgear, the shift electrician will be included, in addition to the above.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

11.0 REMOVAL OF PERSONAL LOCKS BY OTHER PERSONNEL (cont'd)

11.2 Person cannot be contacted (cont'd)

When the committee is satisfied that it is safe to remove the lock(s), the master key will be obtained as in 11.1 above. All members of the committee are to sign the form/envelope prior to obtaining the master key.

The disposition of the removed lock(s) will be as per 11.1 above.

Note: *In the case of a Confined Space Entry – a confirmation MUST be made to ensure that the employee in question is NOT inside the Confined Space.*

11.3 Person on site requires own lock removed

Upon verbal authorization to the Gatehouse by the employee's Supervisor or the Supervisor on duty, the master key may be signed out by the employee for removal of their own lock(s) only. It is the employee's responsibility to ensure that it is his/her personal lock that is being removed.

AFTER REMOVAL OF PERSONAL LOCKS, THE MASTER KEY MUST IMMEDIATELY BE RETURNED TO THE GATEHOUSE BY A COMMITTEE MEMBER (or the employee if 11.3 applies).

In exceptional circumstances, and when all other avenues have been exhausted, should the lock be defective and the keys do not operate the lock, the employee's Supervisor and the employee may cut the lock off. The defective locks and keys should be returned to the Gatehouse.

12.0 EMERGENCY ELECTRICAL PROCEDURES

- a. In an emergency, any certified 1st, 2nd or assistant shift engineer may open or close any switch in the Power and Recovery Department. The above employees are not authorized to open doors on the switch boxes.
- b. There are special cases where the appropriate Maintenance/Engineering Superintendent may grant authority in writing to certain Operators to reset specific switches.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

13.0 FAILURE OF AN ISOLATION POINT

If an Isolation point is known to have failed, (i.e. a pump isolation valve that is leaking by), a bright green ISOLATION FAILURE Tag must be securely affixed immediately, the Area Supervisor notified, and a Safety Work Order entered into the Maintenance System without delay.

14.0 LOCKOUT AUDITS

In an effort to ensure the Lockout Program provides the necessary framework for successfully completing lockouts on site, the following auditing system will be implemented:

- A statistically relevant number of Lockouts will be audited on an ongoing basis.
- Audits will be based on a set of pre-determined criteria and scored on a standard scorecard as recommended through JOHSC.
- Departments will be responsible to ensure they meet the minimum auditing frequency established.
- All data will be reviewed externally through the Lockout sub-committee and JOHSC.
- Every Lockout failure will result in an investigation according to mill policy to determine Root Cause.
- A minimum 95% compliance rate will be required. Departments will be required to develop action plans to address any deficiencies.

The following audit frequency will be mandated for the first 6 months after this program document is officially ratified.

1. 100% auditing if 2 or fewer lockouts are being completed on any given day.
2. Minimum of 3 audits if between 3 and 7 lockouts being performed.
3. A minimum of 3 audits, or 25% of all audits (whichever is greater) for more than 8 lockouts on any given day.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

14.0 LOCKOUT AUDITS (con't)

After completing the 6 month period with a compliance rate of 95% or greater, the auditing rate will be reduced to completing 15% of the total lockouts, measured semi-annually. The same requirements as noted above will be enforced as far as required frequency.

The lockout audits MUST be representative of the work being performed, and the crews will have input as to the specific audits performed.

JOHSC may recommend changes to the auditing frequency, based on the results.

15.0 REVISION HISTORY

- Rev. 01: Clarification added to Section 5.0 Lockout Board Locks, Sub-Section 5.14 Removal of Manhole Covers. Program re-formatted into Safety Management System format. (IHSC - Oct.26/05)
- Rev. 02 Re-write of program after Internal Lockout Audit completed. Recommendations implemented.
- Rev. 03 Replaced Howe Sound Pulp & Paper Ltd. Partnership Logo & references with Howe Sound Pulp & Paper Corporation Logo.
- Rev. 04 Addition of wording to Section 6.0 (D) HVAC Isolation Locks Procedure (01/11)
- Rev. 05 Addition of wording to Section 5.0 (5.10) Temporary Keybox Lockout Board Lockouts
- Rev. 06 Updated Isolation & Lockout forms (Appendix 5) to reflect change
- Rev. 07 Addition to Section 5.0 (5.10) Keybox Lockout Board Lockouts
Renumbered (5.10) in Section 5.0 "Temporary Keybox Lockout Board Lockouts" to (5.11). Reformatting remaining numbered bullets. (Sept/11)
- Rev. 08 Addition of Note to Section 5.17
Addition of Section 5.19 – Personal Blue & Purple Locks
Revision to Section 6.0 – from 'seven' types of locks to 'eight'
Addition to Section 6.0 - (H) Fire Department Locks (Mar/12)
- Rev. 09 Addition of wording to Section 5.0 (5.12) Modified Lockout – final note
Logo changes for both Company and Union (Jan/14)
- Rev. 10 Inserted Hazard Assessment Worksheets and Personal Lockout Permit as per Recommendations 2017-02 and 2017-03.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

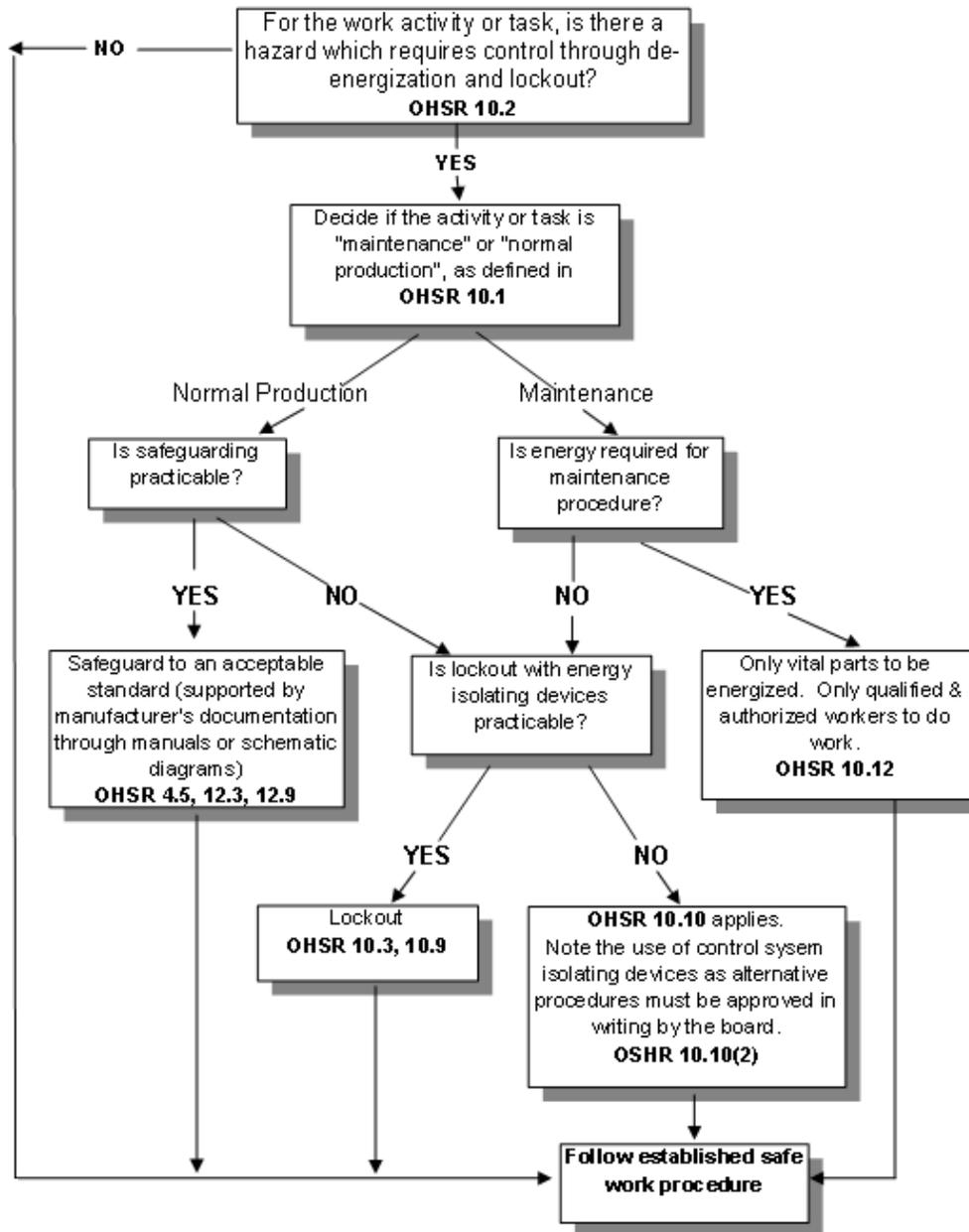
AUTHORIZED BY:

Alan Scalet, General Manager

Don Rheume, President CEP Local 1119

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 1



JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 2

MOTOR CONTROL & EQUIPMENT NUMBER AUDIT

Purpose

To ensure that the lockout point(s) for electrical equipment in the mill is the correct point(s) for isolation of the main power circuit to the electrical equipment as required by WCB Regulations and HSPP Lockout Procedures.

Audit Scope

A. New Equipment (or equipment not previously audited)

- ◆ Verification of power circuit wiring as per electrical installation standard 3I-014.12
- ◆ Verification of tagging and nameplates, equipment description and equipment number at the following locations:
 - ⇒ lockout point(s)
 - ⇒ field control stations (if used)
 - ⇒ central control station (equipment number) (if used)
 - ⇒ equipment base (equipment number)

Notes Drives that have been previously audited through existing procedures would not require auditing under this section.

B. Existing Equipment (see “Existing Equipment Audit Procedure”)

- ◆ Verification of tagging and nameplates at:
 - ⇒ lockout point(s)
 - ⇒ field control stations (if used)
 - ⇒ equipment base (equipment number)

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 2

MOTOR CONTROL & EQUIPMENT NUMBER AUDIT (con't)

Frequency

- A. New Equipment
 - ◆ At commissioning stage of any new installation or modification of the main power circuit.
- B. Existing Equipment
 - ◆ Once every two years

Guidelines

- A. Responsibility for this auditing rests with the Operations Superintendent responsible for the equipment
- B. Audit status reports which include completion date and deficiencies found will be distributed to:
 - ◆ Department file (original records and status report) (location of department file to be stated in report)
 - ◆ Central Maintenance

Note: The procedure was reviewed with Worksafe BC to ensure it meets the intent of the regulations for lockout, prior to final approval by Union and Management.

Existing Equipment Audit Procedure

The audit of existing equipment, which is the verification of tagging and nameplates, can be completed by two employees familiar with the area. The purpose of the audit is to ensure that the nameplates, tags and equipment base number at the lockout point, the field control station, and on the equipment base are correct, identical and legible.

- A. One employee to be stationed at the main power source lockout point (MCC) and the second employee at the field control station (equipment location).
- B. Employee at main power source will communicate the equipment number, the lockout point location, and the equipment description. The employee at the field control station is to verify that the exact information is contained on the field control station (or equipment) tag and record this information on the audit sheet. The employee is also to verify that the number on the equipment base is correct and legible. All correct and any incorrect or illegible information must be recorded on the audit sheet.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 3

PURPLE LOCK SYSTEM INTEGRITY CHECK

Purpose

To ensure that the Purple Lock System voltage test points are in good working order

Scope

- A. New Equipment (or equipment not previously checked)
 - ◆ Verification of voltage test point wiring and bracket mounting
 - ◆ Verification of operation of voltage test point system
 - ◆ Application of correct labels
 - ◆ Approval of Electrical Safety Branch or CSA
- B. Existing Equipment
 - ◆ Inspection of voltage test point wiring
 - ◆ Inspection of test terminal strip and mounting bracket
 - ◆ Inspection of labels

Frequency

- A. New Equipment
 - ◆ At commissioning stage of any new installation
- B. Existing Equipment
 - ◆ Once every two years

Guidelines

- A. Responsibility for this maintenance rests with the Maintenance Superintendent responsible for the equipment.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 4

HSPP STANDARD LOCKOUT FORM & PROCEDURE

The following information is required to meet the Lockout Standard for HSPP

- 1) Prior to the development of a lockout, a hazard assessment worksheet and lockout decision flowchart must be used. See Appendix 6.
- 2) The basic **Howe Sound** Lockout Form template for Step 1 and Step 2 **MUST be USED**. See Appendix 5.
- 3) Lock sheet must have a current "Reviewed and Approved" date.
- 4) Lock Sheet must have a form number. (Use the vessel service number for "confined space entry", and equipment service number for "lockout" of the equipment being worked on.) The form number **must** start with the plant area number.
- 5) The Lockout title will clearly identify the vessel or equipment and the service number being Locked Out.
- 6) The Lockset # and Number of Locks in the set will be recorded
- 7) The # of Lockout Points required will be recorded.
- 8) Lock point statements will have the following information and format:
 - a) The action to isolate will always follow the format of the describing the physical state the device will be locked in, followed by the action required to isolate. (e.g., Open & lock, Close & lock, Immobilize & lock).
 - b) Define the element to be locked.
e.g., breaker, switch, valve, visi-disconnect, clamp, blind, blank, removed spool piece, etc.
 - c) A description of the element will follow.
e.g., "scrubber recirculation pump", "on suction to make-up liquor pump", etc.
 - d) The description will then be followed by the equipment service number, valve number, blank number, or descriptor that matches the field identification.

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 4

HSPP STANDARD LOCKOUT FORM & PROCEDURE (con't)

- 9) The Location of the element, if practical, will be included.
- 10) Pipefitter's lock points, if applicable, must be listed on the form; or referenced to a separate work procedure or lockout sheet. They should be listed in a separate section. Pipefitter's lock points are not directly part of the lockout. They are required by the pipefitter while that person is installing or removing blanks or blinds for the lockout.
- 11) Procedure or check points should be listed in a separate section.
- 12) Additional resource materials such as applicable Safe Work procedures, THA's or SOP's should be included in a separate section.
- 13) The department superintendent is to ensure due process has taken place to develop the lock sheet and that a file is maintained to support that due process has been followed. (Hazard Assessment, Crew Review and Sign-Off, etc.)

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 5

HSPP STANDARD LOCKOUT FORM TEMPLATE



REVIEW / APPROVED DATE: _____ FORM # _____

LOCKOUT PROCEDURE

STEP 1 - ISOLATION

LOCKOUT DESCRIPTION: _____ Equip. # _____

Lockout Date: _____ Seal #: _____ Crew: _____

ISOLATION & LOCKOUT PERSON

Qualified Person: _____	Lockset ID: _____	# Locks In Set: _____
<small>Print Name</small>	<small>Initial</small>	
	# Lock Points: _____	# Locks Remaining: _____

Isolate & Locked (Initials)	Lock Point	Action to Isolate	Descriptions of Lock Point	Valve # Equip. #	Location	Return To Operating Position	Deflock (Initials)
	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						

ADDITIONAL RESOURCE MATERIAL (SOP'S, THA'S, SW procedures...)

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JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

HSPP STANDARD LOCKOUT FORM TEMPLATE (Step 2)



REVIEW / APPROVED DATE: _____ FORM # _____

LOCKOUT PROCEDURE

STEP 2 - VERIFICATION

LOCKOUT DESCRIPTION: _____ Equip. # _____

Lockout Date: _____ Seal #: _____ Crew: _____

VERIFICATION & LOCKOUT PERSON

Qualified Person: _____	Lockset ID: _____	# Locks In Set: _____
<small>Print Name</small>	<small>initial</small>	<small>initial</small>
	# Lock Points: _____	# Locks Remaining: _____

Verified & Locked	Lock Point	Action to Isolate	Descriptions of Lock Point	Valve # Equip. #	Location	Return To Operating Position	Delock
(Initials)							(Initials)
	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						

ADDITIONAL RESOURCE MATERIAL (SOP'S, THA'S, SW procedures...)

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JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 5

HSPP STANDARD LOCKOUT FORM TEMPLATE (Step 2, con't)



REVIEW / APPROVED DATE: _____ FORM # _____

STEP 2 - VERIFICATION

LOCKOUT DESCRIPTION: _____ Equip. # _____

Checkpoints

REMARKS: _____

DELOCKING

DATE DELOCKED: _____

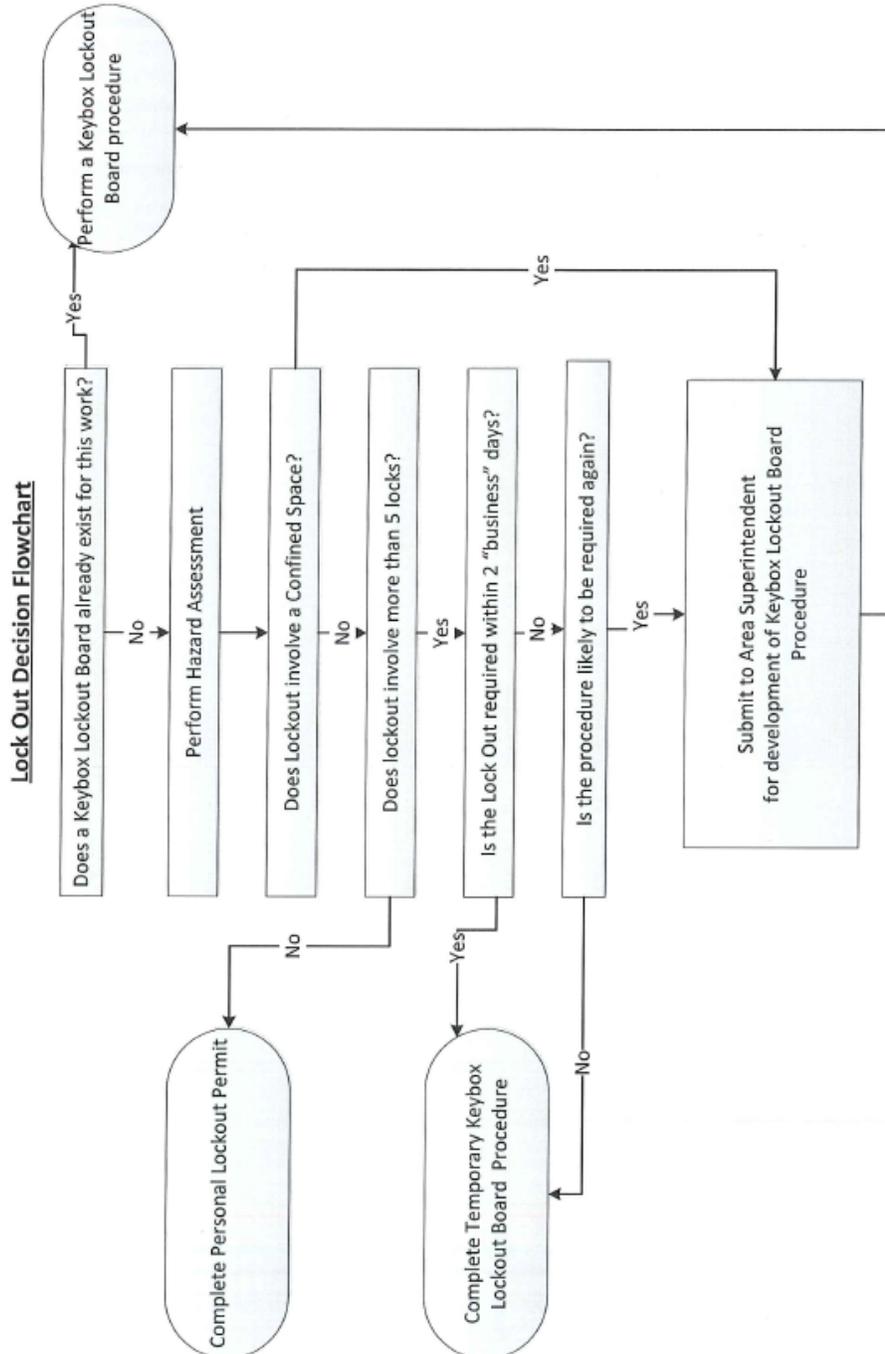
Qualified Person: _____ <small style="display: block; text-align: center; margin-top: -10px;"><i>Print Name</i></small>	_____ <small style="display: block; text-align: center; margin-top: -10px;"><i>Initial</i></small>	Lockset ID: _____ # Locks In Set: _____ After Delock-# of Locks In Set: _____
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JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 6

HAZARD ASSESSMENT WORKSHEETS



JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 6

HAZARD ASSESSMENT WORKSHEETS

HSPP LOCKOUT PROCEDURE
Hazard Assessment Work Sheet



PERSONAL LOCK OUT SECTION	Work Scope:
Equipment Number or Description:	
Date of Developer Assessment:	Development Performed by:
TEMPORARY LOCK OUT SECTION	Verified by:
Date of Verifier Assessment:	
BOARD LOCK OUT SECTION	Lock Out Procedure Number:
Department Head Scope review: Does Assessment cover the work Scope?:	
Name:	Review Date:

Identification of Lockout Points by Hazard Assessment			
1. Identify the hazard by energy type 2. Identify energy source for the hazard 3. Identify control measure			
Energy Type:	Hazard or Risk:	Energy Source	Control Measure: (Valve/Switch) (Open/Closed)
Electrical Energy: Power lines, cables, step potential, Static, Grounding, Lighting			Tag #
Mechanical Energy: Movement, pumps, conveyors, agitators			

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 6

HAZARD ASSESSMENT WORKSHEETS



HOWE SOUND
PULP & PAPER CORPORATION
A PAPER EXCELLENCE COMPANY

HSPP LOCKOUT PROCEDURE
Hazard Assessment Work Sheet

Identification of Lockout Points by Hazard Assessment			
Energy Type:	Hazard or Risk:	Energy Source	Control Measure: (Valve/Switch) (Open/Closed)
Steam Energy: Hot pipes, pressure			
Hydraulic Energy: Movement, pistons			
Thermal Energy: Fire, Infrared radiation, Cold or freezing			
Pneumatic Energy: Movement, valves			
Radiation Energy: Laser lights, X-ray, microwave sources			

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JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 6

HAZARD ASSESSMENT WORKSHEETS



HOWE SOUND
PULP & PAPER CORPORATION
A PAPER EXCELLENCE COMPANY

HSP LOCKOUT PROCEDURE
Hazard Assessment Work Sheet

Identification of Lockout Points by Hazard Assessment
1. Identify the hazard by energy type 2. Identify energy source for the hazard 3. Identify control measure

Energy Type:	Hazard or Risk:	Energy Source	Control Measure: (Valve/Switch) (Open/Closed)	Tag #
<p>Potential Energy: Stored energy, springs, pressure trapped in pipes, head pressure, plugged drains, stacked material, elevated equipment, leathers</p> <p>Chemical Energy: Corrosion, Oxidation, Asphyxiation, Poisoning, Explosion, Infection, Airborne contaminants, Toxic atmosphere</p> <p>Other:</p>				
<p>Shutdown and Flushing Requirements:</p>				

JOINT SAFETY MANAGEMENT SYSTEM LOCKOUT PROGRAM

APPENDIX 7

PERSONAL LOCKOUT PERMIT



HSPP PERSONAL LOCKOUT PERMIT

Equipment Number: _____ Department: _____

Equipment Description: _____

Developed By: _____

Development Date: _____

Job Description: _____

Isolate & Locked (Initials)	Lock Point	Action to Isolate	Descriptions of Lock Point	Valve # Equip. #	Location	Return To Operating Position	Delock (Initials)
	1						
	2						
	3						
	4						
	5						



If More than 5 locks are required, a lock out board must be used.

ADDITIONAL STEPS REQUIRED / REMARKS

➤ Verification: Steps required to confirm de-energization of equipment. Example: bump test – drain & rod.

Operator Isolation and Verification Completed By: _____

Employee Shown Isolation Points for Personal Lockout: _____

Personal Lockout Date: _____

Personal Lockout Permit with attached Hazard Assessment must be collected and filed by the Operating Department