
Lockout/Tagout (LOTO) Annual Program Audit and Verification

1.0 Objective & Intent

The objective of this SOP is to define the mandatory annual audit and verification process for the Lockout/Tagout (LOTO) program at our cabinet and millwork manufacturing facility. This procedure ensures that all hazardous energy control procedures remain effective, up-to-date, and compliant with WorkSafeBC regulations (OHS Regulation Part 10, Section 10.1 through 10.10). The specific risk mitigated by this SOP is the catastrophic release of hazardous energy during maintenance or servicing activities, which can cause severe injury or fatality from unexpected machine start-up, electrical shock, or release of stored energy (pneumatic, hydraulic, thermal, or gravitational).

2.0 Operational Scope

This procedure applies to all maintenance personnel, safety committee members, and supervisory staff responsible for auditing and verifying the LOTO program. It covers all machinery and equipment in the facility that requires hazardous energy isolation, including but not limited to: CNC routers, edgebanders, panel saws, sanders, dust collection systems, pneumatic nailers, hydraulic presses, and overhead cranes. The audit must be conducted annually and whenever there is a significant change in equipment, processes, or personnel. All LOTO procedures, training records, and equipment-specific energy control documents are subject to this verification.

3.0 Hazard Identification & Mandatory PPE

- Electrical Shock: Contact with live circuits during isolation verification. Use a non-contact voltage tester and wear appropriate PPE.
- Unexpected Machine Start-Up: Failure of LOTO devices or incomplete isolation. Always verify zero energy state before proceeding.
- Stored Energy Release: Pneumatic, hydraulic, spring-loaded, or gravitational energy that can release after isolation. Bleed all stored energy and verify with gauges or physical checks.
- Pinch Points and Crush Hazards: Moving parts that can cause injury if energy is not properly isolated. Keep hands and body clear of all moving components.
- CSA-Approved Safety Glasses with side shields
- CSA-Approved Steel Toed Boots
- Class 00 or 0 Rubber Insulating Gloves with leather protectors (for electrical isolation verification)
- High-Visibility Safety Vest (when auditing in active production areas)
- Hearing Protection (if auditing near operating machinery)

4.0 Required Safety Equipment & Tools

- Lockout/Tagout (LOTO) Kit: Includes multiple padlocks (keyed differently, each with unique key), hasps, tags, and lockout devices for various energy sources (electrical, pneumatic, hydraulic).
- Non-Contact Voltage Tester (rated for the facility voltage, e.g., 600V CAT IV)
- Multimeter (for verifying zero voltage at disconnect points)
- Pneumatic Pressure Gauge (to verify zero pressure in air lines)

- Hydraulic Pressure Gauge (to verify zero pressure in hydraulic systems)
- Lockout/Tagout Program Documentation Binder (containing all written procedures, training records, and equipment-specific energy control procedures)
- Audit Checklist (pre-printed or digital form covering all required elements per WorkSafeBC)
- Camera or Smartphone (for documenting equipment condition, lockout points, and any deficiencies)
- Personal Protective Equipment (PPE) as listed in Section 3.0

5.0 Step-by-Step Safety Procedure

1. Notify all affected personnel (operators, maintenance, supervisors) that a LOTO program audit is in progress. Post a notice in the break room and on the production floor. Ensure no maintenance or servicing activities are initiated during the audit unless the auditor is directly observing.
2. Gather all LOTO program documentation: written energy control procedures for each piece of equipment, training records for all authorized and affected employees, and the previous year's audit report. Verify that the documentation is complete and up-to-date.
3. Select a representative sample of equipment (at least 20% of all machines, including high-risk equipment like panel saws and edgebanders) for physical verification. Ensure the sample includes equipment from different departments and with different energy types (electrical, pneumatic, hydraulic).
4. For each selected piece of equipment, review the written energy control procedure. Verify that it correctly identifies all energy sources, isolation points, and steps for lockout. Check that the procedure is posted or readily accessible near the equipment.
5. Perform a physical walk-down of the equipment with the written procedure in hand. Identify all energy isolation points (disconnects, valves, breakers) and confirm they are clearly labeled. Check that LOTO devices (padlocks, hasps, tags) are available and in good condition at each isolation point.
6. Simulate a lockout on the selected equipment following the written procedure. Apply a personal lock and tag to each isolation point. Attempt to start the equipment using the normal controls to verify that the lockout is effective. Use a non-contact voltage tester to confirm zero voltage at the machine's electrical panel. For pneumatic systems, bleed the air and verify zero pressure with a gauge. For hydraulic systems, bleed pressure and verify with a gauge. Document the results.
7. Remove the LOTO devices and return the equipment to service. Verify that the equipment operates normally after lockout removal. Document any discrepancies or failures in the lockout procedure, such as missing isolation points, incorrect labeling, or ineffective lockout devices.
8. Review training records for all authorized employees (those who perform lockout) and affected employees (those who work near locked-out equipment). Verify that training was completed within the last 12 months and that records include employee name, date, and topics covered. Check that retraining was provided when procedures changed or when an employee's duties changed.
9. Interview at least three authorized employees and three affected employees to assess their understanding of LOTO procedures. Ask them to explain the steps for locking out a specific piece of equipment, the meaning of tags, and the procedure for group lockout. Document their responses and identify any knowledge gaps.
10. Compile the audit findings into a written report. Include a summary of deficiencies found, corrective actions required, and a timeline for completion. Present the report to the Joint Health and Safety Committee and management. Update the LOTO program documentation and training materials as needed. Schedule the next annual audit for 12 months from the date of this audit.

Regulatory Disclaimer: This document is a generic safety template provided for educational and informational purposes only. It does not constitute professional engineering, legal, or regulatory compliance advice. The end-user assumes all liability for validating all safety protocols against specific machinery manufacturer manuals and local occupational health and safety regulations (e.g., WorkSafeBC, CSA standards) before deployment.