

Christchurch City Council – Isolations (Lockout Tagout) Standard Operating Procedure

Background

Isolations - Lockout Tagout (LOTO) is a safety control used to ensure machinery and equipment are properly shut off and not able to be started up again before the completion of maintenance or servicing work. This Standard Operating Procedure (SOP) outlines how to safely isolate and de-energise equipment to prevent the accidental release of hazardous energy sources.

Purpose

To ensure a consistent and safe approach across all Christchurch City Council (CCC) units when applying the LOTO process. This SOP supports achieving a Zero Energy State (ZES) prior to beginning work and supports compliance with WorkSafe New Zealand guidance.

Scope

This SOP applies to all CCC departments, staff, contractors, and locations where equipment isolation is required, including when a **Permit to Work** is necessary. This includes maintenance, repair, testing, inspection, and servicing of plant, machinery, or infrastructure.

Authority

To work outside of the requirements of this procedure requires the completion of a formal risk assessment and the authorisation of the Senior Manager responsible for the Group conducting the Task. The only exception is in an emergency that requires immediate action to render assistance (if safe to do so) and/or to make the situation safe.

Responsibilities

Role	Responsibility
Managers	Ensure training, procedures, and equipment are in place. Approve deviations where required.
Supervisors/Team Leaders	Oversee implementation. Ensure isolations are planned, communicated, and monitored.
Permit Issuers	Confirm and verify isolation requirements and issue PTW.
Permit Receivers	Confirm and verify isolations are in place, operate in accordance with the PTW and oversee group lockouts.
Workers/Contractors	Apply personal locks and tags. Follow the LOTO procedure. Verify equipment is isolated.

Definitions

TERM	DEFINITION
Lockout	Physically securing an energy isolation point with a padlock and tag
Tagout	A visible warning tag stating ' Danger - Do Not Operate '
Zero energy State (ZES)	All sources of energy are fully isolated, drained, or blocked
Group Lockout	A lockbox system allowing multiple workers to attach their individual locks
Out of Service Tag	Indicates faulty or inactive equipment but does not provide personal protection

Recommended Lock and tag colour codes

Colour	Use
RED	Group Isolation Lock
BLUE	Lockbox Master Lock
YELLOW	CCC Staff Personal Lock
BLACK	Contractor Issued Lock
PURPLE	Health, Safety & Wellbeing Team
OTHER	External Contractor Personal Lock (must be registered)



Figure 1. Example of Personal Isolation Tag



Figure 2. Example of Group Isolation Tags and Lock



Figure 3. Example of Group Isolation Tags and Lockout device

Procedure steps

1. Identify the need for isolation – assess risks using formal risk assessment tools; consider all energy sources and apply hierarchy of controls.
2. Notify all affected workers that the machinery will be locked out.
3. Determine if a Permit to Work (PTW) is required.
4. Complete an isolation schedule identifying all isolation points.
5. Apply group isolation (RED locks) if multiple workers or isolation points involved.
6. Each worker applies their personal lock and tag (YELLOW or BLACK).
7. Tag must include name, date, and reason for isolation. Use only approved lockout devices.
8. Verify isolation by attempting to start the machine to confirm it's inoperable (test the lockout). Ensure this test is performed safely, keeping yourself and others clear of potential hazards.
9. Perform the task once ZES is achieved.
10. Upon task completion, remove individual locks and update isolation schedule.

11. Authorised person removes group lock once all individual locks are cleared.
12. Reinspect the area, ensure controls are off, remove tags, and only then reinstate equipment once safe.

Emergency lock removal

Only the person who applied a personal lock may remove it. In an emergency, if the worker is unavailable:

- Contact the worker to seek verbal permission (record time, date, and person granting it).
- If the worker cannot be reached, a Team Leader or Manager must authorise removal after inspecting the equipment.
- Document all actions and inform lock owner upon return.
- Master or spare keys must be kept securely, accessible only to authorised personnel.

Out of service protocol

If a worker needs to leave site before completing a task and cannot remove their lock, they must:

- Inform the site supervisor that their lock remains in place and ensure the tag clearly states their name, contact details, date, and reason. or
- Have other workers lock applied before the removal of the individuals lock.



Figure 4. Example Out of Service Tag

Training and audit

All staff and contractors must be trained in LOTO to NZQA Standard 25043 or equivalent approved system aligned to best practice before conducting isolations. Training should be refreshed every two years or following an incident. Supervisors must routinely audit compliance with the LOTO SOP and report non-conformance. Lockout procedures should be displayed or available at machinery and reviewed regularly.

Reference documents

Document	Link
WorkSafe Guidelines – Keeping workers safe when servicing machinery	https://www.worksafe.govt.nz/dmsdocument/36250-keeping-workers-safe-when-servicing-machinery/latest
Christchurch City Council – Permit to Work Procedure	Permit to Work