

Lockout and Tagout Procedure

SAMPLE

Table of Contents

| | |
|--|----|
| Purpose | 4 |
| Scope | 4 |
| Definitions..... | 4 |
| Hazardous Energy | 4 |
| Isolation..... | 5 |
| Lockout | 5 |
| Tagout | 5 |
| Isolation Point | 5 |
| Authorised Person..... | 5 |
| Person in Control of the Work (PICW)..... | 5 |
| Personal Lock | 6 |
| Group Lockout..... | 6 |
| Zero Energy State..... | 6 |
| Roles and Responsibilities | 6 |
| Office (Gen. Director, Senior Managers) | 6 |
| Managers and Supervisors..... | 6 |
| Authorised Persons..... | 6 |
| Workers (including Contractors)..... | 7 |
| Health and Safety Representatives (HSRs)..... | 7 |
| Visitors and Other Persons at the Workplace | 7 |
| Applicable Legislation, Standards and Guidance | 7 |
| Hazardous Energy Types and Examples | 8 |
| Electrical Energy | 8 |
| Mechanical and Potential Energy | 8 |
| Hydraulic and Pneumatic Energy | 8 |
| Thermal and Chemical Energy | 8 |
| General Principles of Lockout and Tagout..... | 9 |
| Lockout and Tagout Equipment..... | 9 |
| Standard Lockout and Tagout Procedure | 10 |
| Step 1 – Plan the Work and Identify Energy Sources | 10 |

| | |
|---|----|
| Step 2 – Notify Affected Persons | 10 |
| Step 3 – Shut Down the Plant or Equipment | 10 |
| Step 4 – Isolate All Energy Sources | 11 |
| Step 5 – Apply Locks and Tags | 11 |
| Step 6 – Dissipate or Restrain Stored Energy | 11 |
| Step 7 – Verify Isolation and Zero Energy State | 12 |
| Step 8 – Perform the Work Safely | 12 |
| Step 9 – Completion of Work and Removal of Locks/Tags | 12 |
| Group Lockout and Complex Isolations | 13 |
| Group Lockout Using Lock Boxes or Hasps | 13 |
| Complex or Multi-Plant Isolations | 13 |
| Special Applications..... | 14 |
| Electrical and Solar Installation | 14 |
| Manufacturing and Production Machinery | 14 |
| Mining and Resources | 14 |
| Automotive and Mechanical Workshops..... | 14 |
| Plumbing and Gasfitting | 15 |
| Air Conditioning and Refrigeration..... | 15 |
| Tag-Out Situations..... | 15 |
| Removal of Locks and Tags When Worker is Unavailable | 15 |
| Training and Competency | 16 |
| Consultation and Communication | 16 |
| Inspections, Monitoring and Review | 16 |
| Records and Documentation | 17 |
| Example Checklists and Forms..... | 17 |
| Pre-Work LOTO Planning Checklist (Example Structure)..... | 17 |
| Isolation Register (Example Structure) | 17 |
| Lock and Tag Register (Example Structure) | 17 |

Purpose

This Lockout and Tagout (LOTO) Procedure sets out the minimum requirements for safely isolating, locking and tagging energy sources at [Company Name]. It is designed to prevent unplanned start-up, energisation or release of stored energy that could cause injury, illness, equipment damage or environmental harm.

This procedure applies to all plant, equipment, tools and systems that may expose workers or others to hazardous energy during installation, commissioning, operation, inspection, maintenance, repair, cleaning, testing, fault-finding, decommissioning or demolition.

Scope

This procedure applies to:

- All workers, including employees, contractors, labour hire personnel and apprentices engaged by [Company Name].
- All workplaces controlled by [Company Name], including fixed sites, depots, workshops, warehouses, offices and field locations.
- All plant and equipment that may contain or be connected to hazardous energy sources, including but not limited to:
 - Electrical systems (LV and HV), solar PV arrays, inverters, battery storage systems and switchboards.
 - Manufacturing and production machinery such as presses, CNC machines, conveyors, packaging lines and robotic systems.
 - Mining and resources plant, including crushers, screens, conveyors, pumps, fans and mobile plant.
 - Automotive and mechanical equipment such as hoists, vehicle lifts, engine test rigs and compressed air systems.
 - Plumbing and gasfitting systems, including gas lines, hot water systems, pumps and pressure vessels.
 - Air conditioning and refrigeration systems, including chillers, compressors, condensers and cooling towers.

This procedure must be followed whenever there is a reasonably foreseeable risk of harm from hazardous energy, regardless of the size or duration of the task.

Definitions

Hazardous Energy

Any form of energy that can cause injury or illness to a person. This includes, but is not limited to:

- **Electrical energy** – from mains supply, generators, solar PV, batteries, capacitors and static electricity.

- **Mechanical energy** – from moving parts, rotating components, flywheels, springs, belts and pulleys.
- **Potential (stored) energy** – elevated loads, suspended components, compressed springs, gravity.
- **Hydraulic energy** – pressurised liquids in hoses, cylinders and accumulators.
- **Pneumatic energy** – compressed air or gas in pipelines, receivers and cylinders.
- **Thermal energy** – hot surfaces, steam, heated fluids, refrigeration systems and cryogenic sources.
- **Chemical energy** – flammable, combustible or reactive substances, including gas and fuel lines.

Isolation

A process that physically prevents the transmission or release of hazardous energy to plant, equipment or systems. Isolation is achieved by means such as lockable switches, valves, disconnect devices, removal of hoses, or disconnection of conductors.

Lockout

The placement of a lockout device (e.g. padlock, hasp) on an isolation point to ensure the plant or equipment cannot be operated until the device is removed by the person who applied it or by an authorised person under this procedure.

Tagout

The placement of a tag on an isolation point, lockout device or plant to warn that the item must not be operated. Tags provide information but do not provide physical restraint. Tags must always be used in conjunction with lockout devices, except in limited circumstances outlined in this procedure.

Isolation Point

A device or location specifically designed to isolate energy, such as an isolator switch, circuit breaker, valve, plug and socket, blank flange, or mechanical disconnection point.

Authorised Person

A worker who has been trained, assessed as competent and formally authorised by [Company Name] to perform isolation, lockout and tagout activities.

Person in Control of the Work (PICW)

The competent person nominated by [Company Name] to coordinate and control a specific task or job requiring LOTO, such as a supervisor, leading hand or project manager.

Personal Lock

A lock issued to an individual worker for their exclusive use during isolation activities. Each personal lock must have a unique key and not be keyed alike to other personal locks.

Group Lockout

A method of isolation where multiple workers apply their personal locks to a group lock box or a lockout hasp to ensure each person is protected by the isolation.

Zero Energy State

A condition in which all hazardous energy sources have been isolated, de-energised, dissipated or restrained so that the plant or equipment cannot move, operate or release energy.

Roles and Responsibilities

Officers (e.g. Directors, Senior Managers)

- Ensure adequate resources are provided to implement this procedure, including training, lockout equipment and supervision.
- Verify that LOTO requirements are integrated into business planning, procurement and project management.
- Monitor due diligence obligations under WHS legislation in relation to hazardous energy control.

Managers and Supervisors

- Implement this procedure within their areas of control and ensure it is communicated to all workers and contractors.
- Ensure that plant and equipment are designed, selected and installed with suitable isolation points.
- Ensure authorised persons are trained, assessed as competent and listed in relevant registers.
- Confirm that appropriate LOTO equipment is available, maintained and used correctly.
- Monitor compliance with this procedure through inspections, audits and incident investigations.
- Stop work where LOTO requirements are not being followed.

Authorised Persons

- Plan and carry out isolations and LOTO in accordance with this procedure and any relevant safe work method statements (SWMS) or job safety analyses (JSAs).
- Identify all hazardous energy sources associated with the task, including secondary and stored energy.