

# Equipment LOTO Determination Process

Version 1.1: 051223

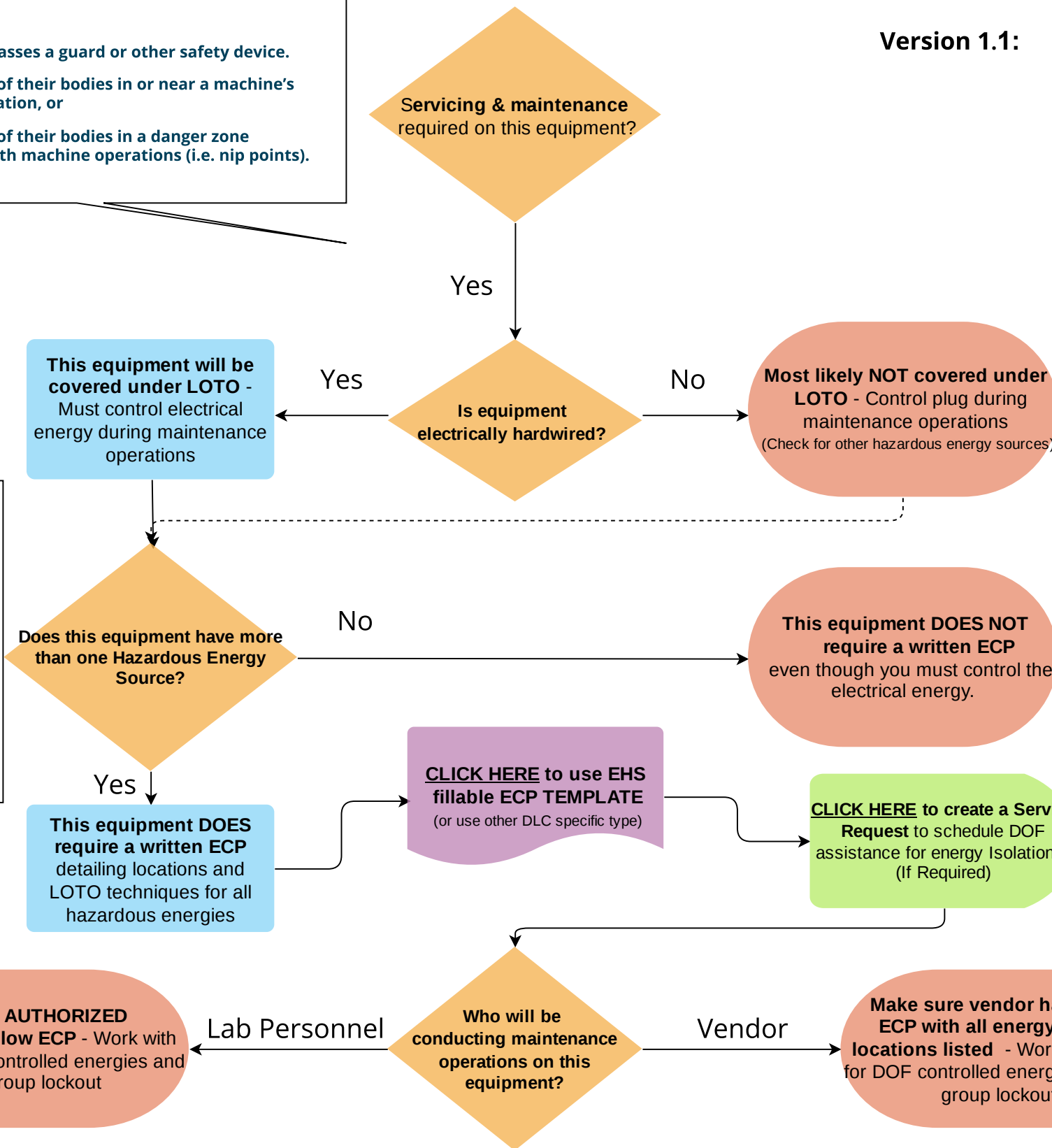
As outlined in the OSHA Standard, LOTO requirements apply to any servicing or maintaining of equipment where the authorized person:

- Removes or bypasses a guard or other safety device.
- Places any part of their bodies in or near a machine's point of operation, or
- Places any part of their bodies in a danger zone associated with machine operations (i.e. nip points).

**What is THE COMPosition of Hazardous Energy**

When thinking about the composition of hazardous energy, use the acronym **THE COMP** to help you recall all of the different energy types.

- T**hermal
- H**ydraulic
- E**lectrical
- C**hemical
- O**ther Energy
- M**echanical
- P**neumatic



**CLICK HERE** for Control of Hazardous Energy Responsibility Matrix

DLC Researcher Owned equipment	Examples	DLC Researcher or Lab Group Action Required	Facility Manager Action required	Department of Facilities Action required
Plug in tools and equipment	Benchtop machine tools and lab equipment	LOTO Awareness training, disconnect plug and control	None	None
Hard Wired (single isolation point under DLC control) e.g., local disconnect	Researcher built systems, machine tools	LOTO Authorized training, no ECP required if single source. Switch off and lockout isolation point.	Facilitate work by contractors	None
Hard Wired (multiple isolation points under DLC and DOF control) e.g., local disconnect and steam line	Autoclave (vendor maintained)	LOTO Authorized training, DLC owned ECP, LOTO of DLC owned equipment	Coordinate with DOF	DOF will identify energy sources (electrical/steam/other) for the ECP. LOTO of DOF equipment only
Single isolation point at DOF electrical panel	Researcher equipment, hard wired with no local disconnect	LOTO Authorized training. Add lock to DOF LOTO device	Role is DLC dependent, may be responsible for oversight, and/or coordination with DOF	LOTO of electrical panel
Hard Wired (multiple isolation points under DLC control)	Gas bunker maintenance	LOTO Authorized training, ECP required	Role is DLC dependent, may be responsible for oversight, and/or coordination with DOF	Verify and apply lock to DLC LOTO device
Hard Wired (multiple isolation points)	NW12 Reactor shutdown	LOTO Authorized training, ECPs required, proper equipment	DLC dependent, may be responsible for oversight, and/or coordination with DOF	Review DLC ECP. Verify appropriate shutdown procedures
Facilities equipment	HVAC, exhaust fans, compressors	Receive notification secured equipment/chemicals if needed	Coordination between DOF and DLC, potential approval of shutdown	DOF ECP, training

More information can be found on our webpage <https://ehs.mit.edu/workplace-safety-program/lotol/>

An accessible document for this flow chart is available by clicking the following link: <https://bit.ly/mitehs-loto-determination-doc>