INTRODUCTION

CAL OSHA (8 CCR 2320.1, 2527.1, 2530.4, 3314) requires employers to provide written procedures for isolation of prime movers, machinery and equipment from mechanical, hydraulic, pneumatic, chemical, electrical, thermal or other energy sources. Danger tags and locks are used identify and isolate equipment that may cause injury or damage if operated during installation or maintenance. Anyone who operates a valve, switch or device with a danger tag attached or removes another person’s lock is subject to immediate removal from the job site and subsequent disciplinary action. Any deviation from lock-out / tag -out procedures must be approved in advance by CSUB departmental and contract supervisors.

SCOPE

All electrical, mechanical, hydraulic, and pneumatic systems, including secondary power supplies, shall be isolated before work begins. All electrical lines, regardless of voltage, must be locked and tagged. Plumbing lines, which could cause engulfment in a confined space, must be blocked and bled before work in the area begins. There are no high pressure steam lines on the CSUB campus.

Contract project managers must be provided a copy of the CSUB lock-out procedures at the beginning of each job. Contractors are responsible for providing locks and tags to their employees and for complying with University procedures.

REQUIREMENTS FOR LOCK-OUT DEVICES

Lock-out devices must not be used for any other purposes.

Locks should be standardized on the basis of color, shape and/or size.

Devices must have a place for identification of the individual who applied it.

Locks must be substantial enough to prevent early or accidental removal.

REQUIREMENTS FOR TAG-OUT DEVICES

A clear warning, such as DO NOT OPERATE, DO NOT START or DO NOT CLOSE, shall be stated on the tag.
The name of the employee who applied the tag must be printed on it. Only one individual may sign a danger tag.

Tags are not reusable, and must have a minimum test strength of 50 pounds.

**LOCK OUT PROCEDURES**

Energy isolation locks and danger tags are to be applied only by employees who are authorized to perform work on specific equipment and trained to identify the effected area and isolate hazardous energy sources.

All University and contract employees working in the effected area must be notified before locks or tags are applied.

Turn off the equipment.

Apply at least one danger tag that identifies the operation and prohibits use of the equipment at the point of lock-out.

Locks must be applied by every member of a work team. A multiple lock hasp should be used when more than one lock is applied.

A qualified employee must remove fuses or heating elements from electrical devices.

Test, using a properly rated voltage sensing device, to make sure that the correct device is de-energized and isolated from voltage back feed. Check the voltage sensing device against a known hot circuit to make sure it is functioning properly.

Machines, equipment, or prime movers not readily adaptable to lockable controls shall be in compliance with this program when labeled with danger tags. One additional safety measure, such as removal of a valve handle or fuses should be employed when using only tags for isolation.

If equipment must be capable of movement during performance of a specific task, tools with extension handles will be supplied to protect employees from injury that could be caused by the moving parts.

**TEMPORARY REMOVAL OF LOCKS/TAGS FOR TESTING**

Remove all unnecessary tools from the work area.

Make certain that all CSUB and contract personnel are clear of the equipment.

Reapply locks and tags as soon as the test is completed.
REMOVAL OF LOCKS AND TAGS

Each individual must remove their own locks and tags.

The employee who is in charge of the work must remove his/her lock and the tag only after all other locks have been removed from a power source.

Persons who remove tags are responsible for satisfactory completion of the work, reinstallation of mechanical guards and notifying others that the equipment is back in service.

If a lock or tag appears to have been abandoned, all reasonable efforts will be made to contact the individual responsible for that lock or tag so they can return to campus to remove it. The Facilities Director and the Facilities Trades Supervisor are authorized to remove locks or tags belonging to any CSUB or contract employee after verifying that it is safe to do so. The IETC and Computer Repair Center Supervisors are authorized to remove locks of CSUB staff working under their supervision after verifying that it is safe to do so. If the managers responsible for abandoned lock removal are unavailable, abandoned locks and tags will be left in place unless emergency circumstances exist. In the event of an emergency, the manager in charge of Facilities Management or the Safety and Risk Manager will work with departmental staff to assure safety if the removal of abandoned locks or tags is necessary.

INSPECTIONS

Supervisors must conduct yearly inspections to ensure that proper energy control procedures are being followed. The inspection must include a review of each authorized employee’s responsibilities under this program.

Energy control inspections must be documented by recording the date, the identity of the equipment to which the procedures were applied, the names of the employees performing the work and the name of the inspector. Inspection records should be filed in the department.