If machinery or equipment could unexpectedly active or if the release of an energy source could cause injury, the energy source must be isolated and controlled. UBC De-Energization and Lockout Program outlines the roles and responsibilities and the Occupational Health and Safety regulatory requirements.

This de-energization and lockout safe work procedure (SWP) must be in place and followed for each machinery, equipment or process and be reviewed by trained and authorized employees who will perform de-energization and lockout.

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| **MACHINERY/EQUIPMENT SPECIFIC INFORMATION** | | | | | |
| **DEPARMENT** |  | | **ROOM NUMBER** |  | |
| **BUILDING** |  | | |  |  |
| **MACHINERY/EQUIPMENT NAME**  **Include photos, if possible** |  | | | **MACHINERY/**  **EQUIPMENT**  **NUMBER** |  |
| **REQUIRED WORK:**  **List ALL applicable work activities for when lockout is applied** |  | | | | |
| **HAZARDOUS ENERGY SOURCE**  **Select ALL the hazardous energy source(s) that need to be controlled** | Electrical | | | | |
| Kinetic | | | | |
| Potential: | Mechanical Potential Energy  Hydraulic Potential Energy  Pneumatic Potential Energy  Gravitational Potential Energy | | | |
| Thermal | | | | |
| Chemical | | | | |
| Radiation | | | | |
| **ENERGY ISOLATING DEVICE(S)/LOCKOUT POINT(S)**  **List all energy-isolating device(s) that need to be locked out and their locations.**  **Include photos, if possible** |  | | | | |
| **EQUIPMENT REQUIRED FOR LOCKOUT** | Personal Locks  Scissor or Multi-Lock Hasps  Personal Lockout tags  Electrical Lockout devices (e.g. circuit breaker, electrical plug)  Cable lockout devices  Valve lockout devices (e.g. gate valves, ball valves, plug valves, butterfly valves)  Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |
| **PRE-LOCKOUT PROCEDURE** | | | | | |
| **Describe detailed procedures to be followed prior to applying lockout** | Prior to de-energization and lockout, ensure:   * every employee is trained in de-energization and lockout and has reviewed this safe work procedure * all lockout equipment is available and in good working condition * this safe work procedure is made readily available. | | | | |
| **LOCKOUT PROCEDURE** | | | | | |
| **Describe detailed procedures to be followed as to how to perform lockout** | The authorized employee(s) will:   1. Identify the machinery or equipment that needs to be locked out 2. Shut off the machinery or equipment in accordance with manufacturer’s instructions. 3. Identify and de-energize all hazardous energy sources. Remove any stored energy still in the system, as per manufacturer’s instructions. 4. Each apply a personal lock and personal tag to the energy isolating device for each hazardous energy source. 5. Verify/test the effectiveness of the de-energization and lockout process after lockout devices have been applied, by attempting to operate the machinery or equipment and confirming it does not operate. Make sure all affected employees are clear of the machinery or equipment prior to verifying/testing. 6. The machinery or equipment is now de-energized and locked out and maintenance work may proceed.   ***\*\*\*NOTE: Elaborate on the above steps so that it is specific to the machinery or equipment that needs to be locked out.*** | | | | |
| **LOCKOUT REMOVAL PROCEDURE** | | | | | |
| **Describe detailed procedures to be followed when work is complete and lock is to be removed.** | Upon completion of maintenance work, the authorized employee(s) will:   1. Ensure all affected employees are clear of the machinery or equipment and in a safe location, prior to removing lockout. 2. Ensure all tools and maintenance equipment has been removed from the area. 3. Confirm the machinery or equipment has been inspected and is ready to return to service. 4. Verify the controls are in a neutral or “off” position and that the machinery or equipment is safe to be restarted. 5. Each remove their personal lock and personal tag. 6. Start the machinery or equipment according to normal operating procedures. 7. Notify affected employees that maintenance is complete and operation may resume.   ***\*\*\*NOTE: Elaborate on the above steps so that it is specific to the machinery or equipment that needs to be locked out.*** | | | | |

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| **THIS SAFE WORK PROCEDURE WAS DEVELOPED BY:** | | |
|  |  |  |
| **NAME (PLEASE PRINT)** | **SIGNATURE** | **DATE** |