Lockout-Tagout (LOTO) is a safety procedure used in industrial settings to ensure that machines are properly shut off and not able to be turned on again until maintenance or repair work is completed. The following is a general Lockout-Tagout Standard Operating Procedure that can be customized to fit specific workplace needs:

**1. PREPARATION AND PLANNING:**
   a. Identify the equipment or system that requires Lock-out Tag-out procedures. This can include any system that has the potential for an accidental release of energy.
   b. Gather necessary information about the equipment, including its energy sources, potential hazards, and isolation points.
   c. Identify and communicate the scope of the lockout/tagout procedure with all relevant personnel involved.

**2. EQUIPMENT SHUTDOWN:**
   a. Notify all affected employees about the upcoming equipment shutdown.
   b. Safely shut down the equipment following standard operating procedures for each system.
   c. Ensure that all valves, switches, and controls are in the “off” position and that energy sources are isolated or disconnected.

**3. LOCKOUT TAGOUT:**
   a. Obtain appropriate lockout devices, tags, and personal protective equipment (PPE) for the task.
   b. Each authorized employee involved in the Lock-out Tag-out procedure must affix their personal lock-out device or tag to the energy isolation device(s) used to secure the equipment. This should prevent accidental re-energization.
   c. Follow established procedures to lockout or block energy sources, such as electrical circuit breakers, gas shut-off valves, and liquid supply lines. Use lockout devices that are specifically designed for each energy source.
   d. Apply tags to clearly indicate that the equipment is locked out and must not be operated. Include information such as the person’s name, contact information, date, and reason for the Lockout Tagout.

**4. VERIFICATION:**
   a. Verify that all energy sources are effectively isolated by attempting to operate or start the equipment.
   b. Test electrical systems with appropriate voltage detectors or other approved testing devices to confirm no electrical energy is present.
   c. For gas and liquid systems, use appropriate instruments to verify the absence of pressure of flow before proceeding.

**5. MAINTENANCE OR SERVICING:**
   a. Perform maintenance or servicing tasks as required while the equipment is in a locked and tagged out state.
   b. Use caution and follow established procedures to avoid contact with or exposure to stored energy or hazardous substances.

**6. EQUIPMENT RESTORATION:**
   a. After completing the maintenance or servicing tasks, ensure that all tools and equipment are removed from the area.
   b. Notify all affected employees that the maintenance or servicing activities are complete, and that the equipment is ready for restoration.
   c. Before removing lockout devices and tags, conduct a final check to ensure that all personnel are clear of the equipment and that it is safe to restore energy.
   d. Remove lockout devices and tags only by the employees who initially applied them.

**7. POST LOCKOUT TAGOUT:**
   a. Restore energy to the equipment following appropriate procedures, ensuring that all personnel are clear of the area.
   b. Verify the proper operation of the equipment and confirm that it is functioning as intended.
   c. Communicate to all affected employees that the equipment has been restored and is available for use.