

STANDARD OPERATING PROCEDURE

Compressed Air Leak Detection and Repair

How to use this document: Operations and maintenance (O&M) best practices can save money on energy and maintenance costs and improve reliability, safety, and return on investment. These best practices focus on *writing things down, making things routine, and having what you need*. In other words, these practices include documenting energy-efficient methods for equipment and systems operations in standard operating procedures; incorporating these methods into maintenance routines, checklists, and schedules; and having necessary tools, supplies, and replacement parts on hand. These practices can help operations, maintenance, and facilities managers and staff realize and sustain energy savings.

Use or adapt this sample document at your own facility or workplace to build support for, plan, or implement the energy-saving O&M best practice described.

DO NOT use this equipment unless you have been trained and assessed to a competent level in its safe use and operation, and have been given permission to use this equipment.



Safety glasses must be worn at all times when using compressed air.



Hearing protection must be worn where noise levels are in excess of the 85 dB(A) occupational exposure limit.

This standard work practice outlines personnel responsibilities and the use of leak tags. Air leak tags will be provided to plants or departments to be used by qualified personnel to identify air leaks for future repairs by Maintenance Dept.

Responsibilities

Managers

1. Train personnel on proper identification of air leaks, including completing air leak tags.
2. Train relevant personnel on repairs of simple leaks.
3. Assign personnel to repair simple air leaks.
4. Review completed air leak tag stubs prior to sending to maintenance to create work orders.
5. Initiate a work order for leaks that production personnel are unable to repair.

6. Initiate immediate repair calls for large air leak repairs, as necessary.
7. Verify necessary parts are correctly stocked.
8. Validate that repairs are completed.
9. Estimate savings as appropriate.

Production Personnel

- a. Identify and tag air leaks at the start of each shift through visual, aural, and air flow feel inspections.
- b. Adequately complete air leak tags.
- c. Return air leak tag stubs to managers.
- d. Complete simple air leak repairs and remove the tags, if assigned by managers.
- e. Advise managers if unable to complete repairs.

Maintenance Personnel

- a. Complete air leak detection surveys quarterly using ultrasonic leak detectors.
Tag identified air leaks.
- b. Create air leak work orders using air leak tag stubs from managers.
- c. Make air leak tag work orders available for fill-in work.
- d. Distribute work orders to the correct supervisors.
- e. Plan any work order that is expected to exceed \$_____ labor & materials limit established in the air leak job plan.
- f. Create follow up work orders if cost exceeds \$_____ labor & materials limit.
- g. Repair and close air leak work orders and remove air leak tags when repairs are complete.