INDIANA

TOOLKIT

Pollution prevention guidance for businesses.

Pollution Prevention & Air Compressor Leaks

☑ Checklist

This checklist serves as a resource for implementing the best management practices for identifying and addressing air compressor leaks. Implementing these management practices will preserve an air compressor's system life, increase efficiency and productivity, save money, and improve environmental impact.

STEP 1: Identifying if and where leaks are present

Choose 1 or more of the following methods before performing a test (be sure to shut down production);

Perform Leak Time Test to calculate Total Leak Percentage

- ☐ Calculate the time (minutes) it takes to load compressor (T1)
- ☐ Calculate the time (minutes) it takes to unload compressor (T2)
- ☐ Total Leak Percentage = [(T1 * 100)] / [(T1 + T2)]

Listen

- ☐ Eliminate any surrounding noise
- ☐ Turn on compressor
- ☐ Listen for hisses or whistles along the system

Soapy water

- ☐ Lather soap onto hands or put in spray bottle
- ☐ Apply soapy water along system's pipes and hoses
- ☐ Turn on compressor
- ☐ Look for expanding soap bubbles to locate air leaks

Note: Smaller leaks may not be evident using this method.

Ultrasonic leak detection

- ☐ Turn on compressor
- ☐ Wave wand along system
- ☐ Using headphones, listen for high-frequency signals that indicate leaks

STEP 2: Tag and log leaks

- ☐ Identify priority leaks
- ☐ Address the largest and most costly leaks first

STEP 3: Repair leaks

- ☐ Tighten any lose connectors, couplings, seals, gaskets, or valves
- ☐ Replace worn, ill-fitting or damaged parts with new, well-fitting replacements

STEP 4: Regular maintenance

- ☐ Schedule periodic checks for leaks

The actions outlined do not replace or ensure compliance with regulatory standards set by the Indiana Department of Environmental Management (IDEM). If regulatory or compliance assistance is needed, refer to IDEM's **Compliance and Technical Assistance Program (CTAP)**.

Resources

IDEM's Compliance and Technical Assistance Program (CTAP) is a free and confidential service available to all Indiana businesses and regulated entities for on-site and remote assistance. Contact **CTAP** at **(317) 232-8172** or use the **CTAP online Portal** at https://portal.idem.IN.gov/ctap/ to submit a request for confidential regulatory and technical assistance. For more information, visit idem.IN.gov/CTAP.

CTAP is available to assist in identifying and locating leaks with an ultrasonic leak detection test.

For more information and resources on air compressor leaks and pollution prevention strategies, visit idem.IN.gov/prevention. Or sign up for CTAP related emails at on.IN.gov/IDEMsubscribe.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EST. 1986