

COMPRESSED AIR SAFETY



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Section:	60	Revision Number:	01
Status:	Issued	Last Revised:	2/28/2018

1. Purpose

- a. The purpose of this safety policy and procedure is to establish procedures for the protection of **H2 Enterprises, LLC (H2)** employees working with or on compressed air equipment.

2. Background

- a. Air compressors are used for a variety of applications in **H2**. Air compressor storage tanks store excess air that is generated from the compressor, providing a convenient and readily accessible air source. Because of the air pressure within these storage tanks, potential dangers can develop if certain practices and precautions are not followed. This safety policy and program provides guidelines for the safe use of air compressor storage tanks. It lists training requirements, guidelines for locating drains and traps, and requirements for gauges and valves.

3. Responsibilities

a. Management

- i. Ensure adequate funds are available for the purchase and repair of air compressor storage tanks. Identifying and list employees affected by this safety policy and procedure
- ii. Provide training for affected employees
- iii. Ensure proper use and maintenance of air compressor storage tanks and equipment.

b. Supervisors

- i. Ensure that only those employees who have been trained to work with air compressor storage tanks are allowed to operate such equipment
- ii. Ensure that equipment needed is available and is in good working condition
- iii. Ensure damaged equipment is removed from service until repaired and tested
- iv. Provide employees with Personal Protective Equipment (PPE) necessary for their job.

4. Employees

- a. Inspect air compressor storage tanks prior to use and note any damage or defects
- b. Inspect all hoses and equipment before connecting to any compressed air system
- c. Immediately report any damages or defects to their supervisors

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- d. Empty manual drains and taps on a regularly scheduled basis

5. Safety Manager

- a. Provide prompt assistance to managers, supervisors, or others on any matter concerning this safety policy and procedure.
- b. Assist in developing required training
- c. Coordinate with Purchasing to ensure that all newly purchased air compressor storage tanks comply with current safety regulations
- d. Provide consultative service and audit assistance to ensure effective implementation of this safety policy and procedure.

6. Definitions

- a. **Air Compressor Storage Tank** - Pressurized vessel that stores air generated from an air compressor
- b. **Drain Valve** - A valve that is installed at the lowest point of an air compressor storage tank to provide for the removal of accumulated oil and water
- c. **Trap** - A device which uses venting head pressure to purge the tank from condensed water

7. Training

- a. All affected employees will be trained in:
 - i. The purpose of air compressor storage tanks
 - ii. The basic operation of air compressor storage tanks
 - iii. Maintenance requirements of drains and traps Reading gauges and operating valves
 - iv. Identifying damage and defects in the storage tanks, hoses or air driven equipment
 - v. This training must be performed upon initial employment and/or job reassignment. Periodic refresher training shall also be conducted at the discretion of the supervisor or Safety Department.

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8. Equipment

- a. Drain valves are installed at the lowest point of an air compressor storage tank to provide for the removal of accumulated oil and water. Drain valves must be opened once a week to purge water build-up unless they are automatically operated traps.
- b. Drain Traps are devices, installed on the lowest point of a storage tank, which use venting head pressure to automatically purge the tank from condensed water.
- c. Gauges and Valves - All air compressor storage tanks must be equipped with a least one safety valve and pressure gauge. No valve of any type shall be placed between the air receiver and its safety valve.
- d. Accessibility - Air compressor storage tanks must be installed such that all drains, handholes, and manholes are easily accessible. Air compressor storage tanks shall never be buried underground or located in an inaccessible place.
- e. Air Powered Equipment - Equipment and tools that use compressed air must be inspected before each use. This includes all hoses and connections. Only approved snap- type connectors are permitted on hoses. Use of hose clamps to connect fittings to hoses is not permitted. All hoses must be connected only to approved supply valve locations. Air power equipment must not be connected to any air supply unless the design pressure of the equipment meets or exceeds the supply air pressure. Temporary reducers may not be installed in any compressed air supply system without approval by the Safety Department. All air-lance/wand equipment must have an automatic hand closure valve that is positioned such that the employee holds the valve open while using the lance/wand. Goggles are required during air cleaning of facilities or equipment. Other PPE may be required based on the task and tools used.

9. Storage Tank Safety Checks

- a. All drains, handles, and manholes easily accessible
- b. Drain pipe and valve is installed on the lowest point of the air compressor storage tank
- c. Drain valve is opened and frequently drained to prevent the accumulation of excessive amounts of liquids
- d. Air compressor storage tanks have a pressure gauge
- e. Safety valves operate to prevent the internal tank pressure from exceeding 10% above the maximum allowable working pressure of the air compressor tank