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To: All Deputy State Directors, Support Services  
From: Safety Manager, Bureau Land Management  
Subject: Air Tanks and Air Receivers

Pressure vessels, such as air compressor air receivers (tanks) or portable air tanks, can be extremely dangerous. There have been numerous instances where inadequate maintenance on air compressors have led to fires and damaged or over-pressured portable air tanks have led to fatalities or serious injuries to the individual filling the tank.

29 CFR 1910.169(b) and ASME B19.1 have specific requirements for draining accumulated fluids from receivers (tanks) "frequently and at such intervals as to prevent the accumulation ..." Further, all "...safety valves shall be tested frequently and at regular intervals to determine if they are in good operating condition."

In addition to the requirements in the above standards, all BLM air compressors and portable tanks, and use thereof, should conform to the following:

**Air receivers (tanks) on air compressors.**

Establish an inspection and maintenance schedule and maintain a log with the dates and results of the maintenance and inspections. Without this type of log, drainage, inspection, and maintenance are haphazard at best and non-existent at worst. A sample periodic inspection log and compressor system checklist are attached.

Based on the results of risk assessment, establish a maintenance, drainage, and inspection schedule (quarterly is probably adequate for dry climates, but monthly would be better for higher humidity). Carefully record maintenance results in the log. Keep the log near the compressor.

Check and follow the manufacturer's recommendations for hydrostatic or pressure testing the receiver. Follow local jurisdiction requirements or manufacturers recommended testing schedule and paint the next test due date on the receiver. Maintain a record of all tests. **PAINT** or stencil the next required recertification date on the tank. Don't use metal stamps that indent the metal of the tank, as that can damage and weaken the tank or serve as a focal point for corrosion.

Follow manufacturers recommendations for maximum pressure adjustments. Note that air compressor systems are usually capable of producing much higher pressures than tools or air lines are rated to handle. Always ensure that pressure is regulated to match the tools and/or accessories that will be used on the system.

**Portable Air Tanks.** These are portable pressure tanks that can be filled at a maintenance shop, gas station, or other air compressor. They are normally used to inflate low or flat tires in the field.

Absolutely no "home-made" or "shop-made" tanks should ever be used. Utilizing used Freon tanks is especially dangerous.

All portable air tanks must have an over pressure device, either a pop-off valve or a frangible disk.

All portable air tanks must have a pressure gauge and have the maximum allowable working pressure painted or stenciled on the tank.

Inspect and drain portable air tanks periodically. If the tank does not have a separate bleed valve, remove the air outlet fitting and manually drain any accumulated fluid. Maintain a log.

Inspect and review all portable air tanks presently on-hand. If the date of purchase cannot be determined, or if the tank does not appear to be in good condition, replace the tank.

Prior to each use, portable air tanks should be visually inspected for damage, corrosion, improperly functioning valves, expired disposal date, or other potential safety problems. Special emphasis should be given to sharp indentations that would serve as stress points or could be corroded internally. If there is any question as to the safety or serviceability of a portable air tank, it should be disposed of immediately.

Do not use a portable air tank longer than 5 years. Prior to placing a new tank in service, **PAINT** the disposal date on the tank. Don't use metal stamps as that can damage and weaken the tank. While it is possible to pressure test and re-certify a portable pressure tank, it is usually more economical to simply dispose of a portable tank at the end of 5 years and replace it with a new one.

Where possible, pressurize (air up) portable tanks remotely. In the event of a catastrophic failure, an individual leaning over an air tank is almost guaranteed to receive a serious or possibly fatal injury.

In doing a risk assessment on portable air tanks, as a minimum, consider the following:

- local conditions (humidity, etc.)
- the way the tank is transported (secured in a rack or just thrown into the back of a P/U)
- the maximum allowable pressure in the tank

When disposing of portable air tanks, depressurize the tank, remove all fittings, then cut a hole in the tank or cut the entire end from the tank.

Nothing in this IB is meant to contradict requirements of local jurisdictions. For instance, if the local jurisdiction requires mandatory re-certification (hydro or pressure test by an approved laboratory) every 3 years, instead of the 5 years recommended in this IB, follow the requirements specified by the local jurisdiction. Further, if the manufacturer recommends more restrictive maintenance than is specified in this IB, follow the manufacturers recommendations.

For further information contact Bruce Prater, Bureau Safety Manager, 303-236-2530.

Signed by:  
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1 Attachment  
1 - Air Tanks (1p)

Distribution:  
State Safety Managers  
State Engineers