

RISK MANAGEMENT BULLETIN

BOILER AND PRESSURE VESSEL INSPECTION REQUIREMENTS

If Risk Management is your organization's insurance "company" or insurance resource then please be sure to report the location of all boilers and pressure vessels you know of or you think need to be inspected so that the required inspections can be ordered and done in compliance with Maine's laws and rules.

This bulletin briefly covers some of the topics addressed in the law and rules; however, they should be reviewed to ensure all requirements are complied with.

Maine law requires all nonexempt boilers and pressure vessels be registered and inspected in a manner determined by the Board of Boilers and Pressure Vessels. The Chief Boiler Inspector for the State of Maine is charged with the enforcement responsibilities of the Board. Here is some general information to assist you with understanding the State's and the Board's requirements.

Maine Law 32 MRSA 15102: Exemptions: lists boilers and pressure vessels that are exempt from the requirements of the Board. Any boiler or pressure vessel not exempt is required to comply with the requirements of the Board. In this bulletin we will try to list some of the various types of equipment that are required to be registered and inspected on a routine basis. If you are in doubt as to whether or not a boiler or pressure vessel needs inspection, you are encouraged to call the Board office for advice.

Contact Chief Boiler Inspector, John Burpee at 207-624-8546, or
Boiler & Pressure Vessel Inspector, Andrew "Greg" Frazier at 207-592-0226, or
Boiler Inspector, Thomas Aylesbury at 207-215-6536

All high pressure boilers require an annual certificate inspection. A high pressure steam boiler operates at a steam (vapor) pressure greater than 15 pounds per square inch gage (psig). A high pressure hot water (liquid) boiler operates at a temperature higher than 250 degrees F., and a pressure higher than 160 psig.

All low pressure boilers, whether steam or hot water, that are used in a process or industrial environment for other than space heating purposes require an annual inspection and routine internal inspections. Low pressure boilers used to heat schools or municipal owned buildings require annual operational inspection and routine internal inspection.

Water heaters not exempted by 32 MRSA 15102; require inspections if located in a school or municipal owned buildings. Certain low pressure boilers and water heaters may be exempt from the annual inspection requirements per 32 MRSA 15102, but must be initially inspected during installation and comply with the States adopted installation codes and requirements.

The pressure vessel inspection requirements have been in effect since July 15, 1998. Pressure vessels require a certificate inspection once every three years by operational

testing of safety devices and if not an internal inspection the inspector must verify vessel body thickness by some other means. This is to ensure pressure vessel integrity.

In Title 32 MRSA: 15102 of the Maine Laws and Rules there are various exemptions for Pressure Vessels; it is easier to actually reference these in the Laws and Rules than to list them. Much like boilers, pressure vessels located in federal and small residential buildings are exempt. Additionally, vessels in stamped Department of Transportation containers are also exempt. The most typical pressure vessels encountered are air compressor air receivers (tanks) or hot water storage tanks larger than 120 gallons. The Chief Boiler Inspector estimates that as of late 2006 there were at least 20,000 objects yet to be registered within the State of Maine.

These rules mean that just about any school, garage, workshop, laboratory, laundry, testing facility, facility where people live or reside, manufacturing facility, and the like has a boiler or pressure vessel that requires inspection. Title 32 MRSA 15120 of Maine law states that Authorized inspectors shall inspect the boilers and pressure vessels insured by their respective insurance companies.

**A list of typical Pressure Vessels which may require inspection in the State of Maine
(this list is not all inclusive)**

Agitator Tank	Digesters	Nitrogen Tank
Air After cooler	Distillation Vessels	Oxygen Tank
Air Dryer	Dryer Roll	Process Vessel
Air Intercooler	Dye Kier	Propane Tank
Air Oil Separator	Evaporator Tank	Refrigerant Receiver
Air Separator	Expansion Tank	Retort
Air Tank	Feed Water Heater	Steam Chest
Ammonia Receiver	Filter Tank	Steam Cooker
Autoclave or Sterilizer	Heat Exchanger	Steam Kettle
Blow down Tank	Hot water Tank	Textile Cylinder Dryer
CO2 Tank	Hydraulic Accumulator	Vacuum Tank
Coil Water Heaters	Hydrogen Tank	Vulcanizer
Condensate Return Tank	Hydro-pneumatic Tank	Water Softener
Corrugator Roll	Isostatic Press Cylinder	Yankee Dryer
DA Tank or Deaerator Tank	Jacketed Reactor	
	Jacketed Steam Vessel	
	LNG Tank	