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**Leister, Edward**

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**From:** johnny [saoirse2@rcn.com]  
**Sent:** Sunday, November 14, 2004 8:43 PM  
**To:** eleister@state.pa.us  
**Subject:** boiler license

To whom it may concern,

I did not go over your new standards, but will it affect the licensing of the operator. Right now our firm has 2 high pressure boilers 80 psi or above. One York and an O&s. We have been told by management that we do not need a license from the state or from Philadelphia which was news to me because I always believed that at that pressure you need a A engineer license. Could you clarify. Company's name is Kinder/Morgan Philadelphia on Delaware Ave. Padep has a history with them from their spills they are a chemical holding facility.

Respectfully yours,  
John M. Egan

RECEIVED  
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PHILADELPHIA LABORATORY  
REVIEW COMMISSION

11/15/2004

Comments regarding proposed PA rulemaking  
Title 34 Labor and Industry  
Part 1 Department of Labor and Industry  
Chapter 3a Boiler and Unfired Pressure Vessel Regulations

Subchapter A – General Provisions

§3a.1. Definitions

ASME Code – “Rules for Construction of Power Boilers,” 2001 edition and its published cases and interpretations issued by ASME

*Comment: As proposed, ASME Code is defined as being limited to ASME Section I – Rules for Construction of Power Boilers. ASME Code should more appropriately be defined as: “The Boiler and Pressure Vessel Code,” 2001 edition and its published cases and interpretations issued by ASME.*

§3a.3 Scope

(a) (2) Unfired pressure vessels and hot water storage vessels.

*Comment: Hot water storage vessels are not defined by the Act or the proposed regulation. Technically speaking, hot water storage vessels are a subset of unfired pressure vessels. Adding “hot water storage vessels” neither broadens nor limits the scope but could create confusion regarding intent. In other words, why are hot water storage vessels specifically named when other types of unfired pressure vessels are not specifically named?*

(c) Heat exchangers must comply with §3a.167 (relating to hot water/steam heat exchangers) when the heat exchanger operates at 16 psi or greater, and has 5 cubic feet of volume not allowing for channel or tube nest displacements.

*Comment: For technical accuracy, this should read:*

*Heat exchangers must comply with §3a.167 (relating to hot water/steam heat exchangers) when the heat exchanger operates at 16 psi or greater, and has **greater than** 5 cubic feet of volume not allowing for channel or tube nest displacements.*

(d) This chapter does not apply to: [1 -14]

*Comment: as proposed, there are two items numbered (3). This should be corrected so that there will be (15) classes of boilers or pressure vessels that are specifically excluded from the regulation.*

(d) (3) Boilers and unfired pressure vessels owned or operated by the Federal Government.

*Comment: Although verbatim with the Act, the proposed wording is significantly different from the existing regulations which state, "Boilers under Federal Jurisdiction." There are several industries that fall under federal jurisdiction where the boilers and vessels are not owned or operated by the Federal Government. For example: The mining industry falls under the jurisdiction of MSHA and natural gas transmission falls under the DOT. In the past, the PA DOLI did not include these objects. Are the proposed regulations intended to apply to MSHA and DOT facilities? If so, additional wording and/or an intent interpretation should be issued to avoid misinterpretation.*

(d) (10) Unfired pressure vessels designed to ASME Code Section VIII Division I which meet one of the following specifications: [i – iv]

*Comment: For technical accuracy, this should read:*

*Unfired pressure vessels designed to ASME Code Section VIII Division I which meet **do not exceed** one of the following specifications: [i – iv]*

(d) (11) Unfired pressure vessels with a nominal water containing capacity of up to 120 gallons containing water under pressure. These vessels include unfired pressure vessels that contain air, which is trapped in the system and where the compression of air serves only as a cushion.

*Comment: As proposed, this exception applies to both hot and cold water storage tanks. For consistency with the ASME Code and to avoid confusion, this exemption should read as follows:*

*Unfired pressure vessels containing water under pressure, including those containing air, the compression of which serves only as a cushion, when none of the following limitations are exceeded:*

- (i) a design pressure of 300 psig
- (ii) a design temperature of 210F.

§3a.4 Scope – Adoption of National Codes

*Comment: To avoid potential confusion, it would be helpful to state which version and edition of each code has been adopted. This would simply be a re-statement of information contained in §3a.1. Definitions.*

§3a.8 Reciprocity

(a) The Department may grant a reciprocal commission to an applicant who meets one of the following requirements:

- (1) The applicant holds a current National Board Commission in good standing.
- (2) The applicant is currently employed by another state or an insurance company in good standing if the applicant passes a written Department-administered examination on the act.

(b) An applicant for reciprocal commission shall submit a completed Department provided application form, a copy of the inspector's National Board commission and the required fee under §3a.2 (relating to fees) to the Department.

*Comment: As proposed, part (b) is somewhat in opposition to part (a). For example: an applicant that is employed by an insurance company is not required have a National Board commission (part a), yet to receive the commission, an applicant must submit a copy of the National Board Commission (part b). I believe the intent should be that all PA commissioned inspectors hold a National Board commission. Therefore, §3a.8 Reciprocity part (a) should read as follows:*

*The Department may grant a reciprocal commission to an applicant who meets ~~one of~~ the following requirements:*

- (1) The applicant holds a current National Board Commission in good standing, **and***
- (2) The applicant is currently employed by another state or an insurance company in good standing if the applicant passes a written Department-administered examination on the act.*

*As a side note, I question the logic of allowing an employee of another state to obtain a PA commission. Given liability and budgetary issues, I doubt that another state would be willing to lend their employees to PA to "help." Further, if such an employee were not on "loan" then the only other way that they would be doing inspections in PA is moonlighting as an independent contractor.*

## Subchapter B. Requirements for Boilers and Unfired Pressure Vessels

### §3a.24 – Boiler Controls

*Comment: As proposed, the state is adopting the 2002 edition of ASME/CSD-1 and the 2001 edition of NFPA 85. Section 3a.24 requires that the installation of boiler controls must comply with ASME CSD-1 and NFPA 85. From what date is this requirement mandatory? All boilers, regardless of date of installation? Boilers installed since 2001? Boilers installed since 2002? Boilers installed after the date of adoption of these regulations?*

### §3a.25 – Pressure reducing stations

*Comment: Pressure reducing stations are usually installed in piping systems that are outside of the scope defined in §3a.3.*

### §3a.26 – Valves and safety devices

- (a) A boiler or unfired pressure vessel may not be placed in service unless it complies with §3a.152 (relating to safety appliances)

*Comment: Section 3a.26 applies to boilers and unfired pressure vessels. §3a.152 only applies to unfired pressure vessel safety appliances. §3a.152 is in subchapter G which only applies to unfired pressure vessels installed prior to September 1, 1937.*

### §3a.35 – Ladders and Runways

*Comment: Ladders and Runways are outside of the scope defined in §3a.3.*

### §3a.36 – Clearances

*Comment: The accessibility to a boiler or pressure vessels is needed for operation, inspection and maintenance. However, a prescriptive requirement with defined minimums and maximums may be too restrictive for newer designs. §3a.36 should be amended to read:*

*§3a.36 – Clearances*

- (a) The minimum clearances around each unfired boiler or pressure vessel must be maintained to allow for the operation, inspection maintenance and repair of all pressure retaining components.*
- (b) In all cases, the minimum clearances around each unfired boiler or pressure vessel must be at least those recommended by the manufacturer.*
- (c) Local building and fire codes may contain more restrictive requirements.*

Repairs and Alterations

§3a.81 Major repairs and alterations

§3a.82 Reconstruction and repair

§3a.83 Repairs by welding

*Comment: The entirety of these three sections should be re-written to clearly differentiate between repairs and alterations, which have specific definitions in §3a.1 and specific requirements in the ANSI/NB23. Some specific comments:*

- i. §3a.81 (a) requires an “R” stamp holder to make tube replacements. This is beyond the requirements of ANSI/NB-23 and would impose a considerable increased expense to boiler owners.*
- ii. §3a.81 (c) appears to use the terms “repairs” and “alterations” interchangeably.*
- iii. §3a.81 (c) appears to prohibit “R” stamp holders who are not manufacturers from performing alterations when it may be within the authorization of their “R” stamp program.*
- iv. §3a.82 should apply to repairs and alterations. The term reconstruction is not defined in §3a.1 nor in the ANSI/NB23.*
- v. §3a.83 adds no additional requirements over those contained in ANSI/NB23 which is mandated for repairs and alterations.*

Subchapter C. Administration

§3a.93 Insurance Notification

An owner or user shall notify the Department within 30 days when insurance is written, cancelled, not renewed, or suspended on a boiler or unfired pressure vessel. The owner or user shall notify the Department within 30 days of the cause of any suspension or refusal to renew insurance on a boiler or unfired pressured vessel.

*Comment: Having the owner or user notify the department about insurance status is a significant departure from both current Pennsylvania and standard industry practice. Many boiler users are unaware of insurance changes that occur at a corporate level and many owners and insurance purchasers at the corporate level are unaware of the number and locations of boilers and pressure vessels. In today's markets, boiler and pressure vessel insurance is usually packaged with several other business coverages and is a very small part of the entire insurance program. Although not perfect, it would be logistically far better to continue to require insurance companies to report on the insurance status of the objects that they insure.*

§3a.99 Plan Approval  
item (c)

*Comment: See the comments above (§3a.36) regarding clearances and (§3a.35) regarding ladders and runways.*

Subsection D Inspections

§3a.111

The Department will conduct field inspections according to the following timetable:

*Comment: As proposed, this appears to require that the department will conduct all inspections. This should be re-worded to clarify that the department, insurance companies and owner/user inspectors are permitted to inspect boilers and pressure vessels.*

§3a.114

An owner or user shall remove a portion of the jacketing, setting wall or other form of casing or housing so an inspector may view rivet size and pitch, and other data necessary to determine the safety of a boiler or unfired pressure vessel when a portion of the jacketing, setting wall or other form of casing or housing is not visible and there is no other means to obtain this information.

*Comment: This section should be reworded to allow for inspector discretion. I recommend the following wording:*

*As required by the inspector, an owner or user shall remove a portion of the jacketing, setting wall or other form of casing or housing so an inspector may view rivet size and pitch, and other data necessary to determine the safety of a boiler or unfired pressure vessel when a portion of the jacketing, setting wall or other form of casing or housing is not visible and there is no other means to obtain this information.*

Subchapter E. Boilers installed prior to July 1, 1916, and unfired pressure vessels and power boilers installed prior to September 1, 1937

Subchapter F. Low pressure heating boilers installed prior to July 1, 1916

Subchapter G. Unfired pressure vessels installed prior to September 1, 1937

*Comment: References to ASME and other codes in these three subchapters should specifically reference the edition that applies. Since §3a.1 defined many codes as the current or near current edition, application of these standards to older objects may not be technically or economically feasible.*

Subchapter H. Special Installations

§3a.161 Modular Boilers

Comment: See comment above (§3a.36) regarding clearances

§3a.169 Fuel trains and piping systems

*Comment: Piping systems outside of the ASME Code defined boundaries are outside of the scope defined by §3a.3 (a).*

§3a.170 Swimming pool heaters

- (a) A swimming pool heater is an instantaneous water heater. The heater must meet the construction requirements of ASME Code, section IV and the control requirements of ASME/CSD1 except if exempt under § 3a.3(d) (relating to scope)
- (b) A pool heater may be piped with polyvinyl chloride material rated for the pressure and temperature of the heater after the isolation valves.

*Comments:*

- (i) *For part (a), when applying the exemption of §3a.3(d) for instantaneous water heaters, is the nominal volume of the pool considered if there are no intervening shutoff valves between the pool and the heater?*
- (ii) *For part (b), piping systems outside of the ASME Code defined boundaries are outside of the scope defined by §3a.3 (a).*