Board of Boiler Rules Meeting Minutes
September 10, 2013
Department of Labor & Industries, Tacoma, WA

Board Members:
Robert Olson, Chair
Terry Chapin
Leslie Grimm
Larry Trenda
Tim Barker
Tony Oda, Secretary

Other Attendees:
David Sumpter, State of Washington
Stephan Osterbur, State of Washington
Calista Shoblom, State of Washington
Larry Leet, City of Seattle
Ray Powell, REC*
Ron Jostol, Mechanical Sales*
Larry Andrews, Andrews Mechanical, Inc
Greg Hauser, Seattle Tunnel Partners*
Juan Garnero, Seattle Tunnel Partners*
Shinji Ogaki, Hitachizosen *
Kenji Imai, Hitachizosen USA*

* Attended Study Session only
** Attended Board Meeting only

Due to the limited items on the agenda, the study session and Board of Boiler Rules meeting were combined into a one day split session.

The Board of Boiler Rules Study Session was held on September 10, 2013 from 10:04 a.m. to 11:45 a.m.

The Board of Boiler Rules meeting was called to order by the Chair on September 10, 2013, at 12:02 p.m. Introductions were made by the board members and guests attending the meeting.

Agenda Item 1.
The meeting agenda was reviewed and approved as written.

Agenda Item 2.
The minutes from the May 22, 2013, meeting were reviewed and approved as written.

Agenda Item 3.
WA State Special Request – Greg Hauser, Seattle Tunneling Partners
Greg Hauser, Seattle Tunneling Partners is seeking a state special on seven pressure vessels that are not registered with the National Board, so their project can proceed. On July 18, 2013, State Inspector, Steve Osterbur conducted an inspection on all the required pressure vessels located on the Seattle Tunnel Partners tunnel boring machine. During Steve’s inspection, he noted that on seven pressure vessels, although built to the ASME Boiler/Pressure Vessel Code, were not National Board registered as required by WAC 296-104-021 of the state of Washington Boiler and Unfired Pressure Vessel Law. All seven vessels were built in 2012, to the 2010 Edition/2011 Addenda of the ASME Section VIII, Division 1, Pressure Vessel Code.
Greg’s group, which was comprised of Juan Garnero, Shinji Ogaki, Kenji Imai and himself, presented ASME Manufacturer Data Reports, photos of the nameplates and drawings/specifications that verified all ASME construction and testing requirements had been met by the ASME certified organizations that built these seven pressure vessels. Data Reports also exhibited signoff by the Authorized Inspector of the Authorized Inspection Agency of Record.

The board inquired if these ASME organizations had the capability to register vessels with the National Board, Greg’s answer was yes, and the request/requirement for National Board registration was lost somewhere in the ordering process of these vessels.

Tim Barker asked if the state had an ability to keep these data reports on file. Tony Oda stated that data reports are not kept, because all vessel information is stored in Jurisdiction Online, and as long as a state number is legible, the state can retrieve vessel information. Also, the entire vessel packages will be part of the permanent record for this board meeting.

After a limited discussion by the board, a vote was called for by the Chairperson, Rob Olson. The board then voted 4-0 to approve the requested state special for all seven vessels. Tony Oda will write a letter to Greg Hauser documenting the board’s approval of the state specials. As a final condition of this special, in accordance with WAC 296-104-140, Steve Osterbur will physically add an “S” on to the existing state numbers on the seven vessels, signifying their status as state specials.

Agenda Item 4.
WAC 296-104-010 Administration - New definition for Jacketed Steam Kettle
The department would like the Board of Boiler Rules to adopt a new definition for ‘Jacketed Steam Kettle” to WAC 296-104-010 definitions. The state of WA boiler program has always mandated inspection of jacketed steam kettles because of the inherent safety hazards. Typically, due to the nature of the use of these vessels, the operators are always in close proximity during operation. Serious accidents and injuries have happened due to failure of the pressured jacket. The boiler program has operated more than 20 years with a “verbal” directive that these vessels are inspected and the “shadow” area of the vessel, height X width, be used to calculate the inspection fees. This “verbal” directive was challenged in the past, but the boiler program’s AG’s reaffirmed its validity by stating that a commonly known and accepted industry wide verbal directive had the same effect as a written rule. The department would like to eliminate this anomaly, by providing a written definition so there will be no confusion on our intent to inspect these vessels.

It was discussed that this definition should state the total capacity, volume of bowl and jacket. Tony will take recommendations on the volume size and inspection frequencies and rewrite the definition. Rob requested that inspection intervals be removed from this definition and be placed in WAC 296-104-100, which covers all inspection frequency requirements.
Larry Andrews and the Board discussed Hydronic Kettles, this is an item that is not specifically addressed in the Code. The board inquired if there are manufacturers who can make these vessels to code? The answer is yes, but there are also non-code built vessels available on the open market, and in some instances, being installed in the state. The board asked for more evidence of the number of these vessels in service and the impact of requiring Code built items on stakeholders.

Tony will do more research on this type of vessel and report back to the board. Larry Andrews stated that even if the board decides not to regulate hydronic kettles, he would like to see at least, installation of a safety relief valve on these hydronic kettles become a requirement.

**Agenda Item 5.**

**WAC 296-104-316 Installation - Revision to Safety Pressure Relief Devices**

A year ago, the department decided to combine all of the requirements for safety relief devices in one WAC. WAC 296-104-235 was eliminated, because it addressed safety devices on non-Code items, making it unusable. The usable verbiage from WAC 296-104-235 was moved to the revised WAC 296-104-316, to make this one WAC where all requirements for safety valves are found. Unfortunately, during this process, the requirement for ASME safety relief valves to have a trial levers to facilitate testing was left off the revision. This WAC change corrects this error.

The department understands that it is not safe or prudent to have a trial lever on some vessels as the product may be hazardous, toxic or not practical for release if a trial lever was activated. The department will do further research on both the ASME Code and NBIC safety valve requirements, to find a Code reference requiring the trial lever. The department will submit a revised version of the WAC at the next board meeting.

**Agenda Item 6.**

**WAC 296-104-251 Installation – Proposal of New WAC for Liquid Carbon Dioxide Storage Vessel Installation Requirements.**

The department would like the boiler board to consider adding a new WAC 296-104-251, which would address the installation requirements for Liquid Carbon Dioxide (CO2) Storage Vessels. Due to the numerous fatalities and near misses regarding the operation of CO2 vessels nationwide, especially in the restaurant industry where these systems are necessary for the sale of carbonated drinks. The danger of CO2 poisoning has become a national safety issue which has gained full support of the MacDonald’s corporation, the National Board, Insurance Companies, Fire Marshall Offices, and major CO2 suppliers. On the state level, our state inspectors have found numerous violations on tubing/piping (process and safety device discharge lines), clamps, rupture discs pressure and capacity ratings, and CO2 alarm monitoring devices. State Inspector, David Sumpter gave testimony about the risk and dangers of CO2 tanks.

Presently, Inspectors have been advised to use this standard as a guideline for inspection of CO2 tanks. Following this standard is working out well in some instances, but they are running into facilities that agree the requirements make sense but until it is in the law they will not comply. The department strongly feels this is an area of safety, (enforcing this standard) that needs to be
addressed and since the CO2 industry is already on board and supports it, opposition should be minimum. Since this will be a newly adopted standard, compliance will not be retroactive for existing locations, although voluntary compliance will be encouraged.

Larry Leet recommended the department speak with DOSH regarding this safety issue and report back with their feedback.

Leslie Grimm asked if we would be getting into the building inspector's jurisdiction and if the requirement for a CO2 monitor is already in the building code. Leslie thought we were getting away from the core function of the boiler inspector. She doesn’t want the department getting diluted away from inspecting vessels. The board also requested the department speak with the AG's office about the implications of extending the Inspector's jurisdiction beyond the pressure vessel to the tubing and other attached appurtenances. Tim Barker was concerned about us extending our authority.

Rob said that if the proposed WAC 296-104-251 is adopted, a definition of a CO2 tank would have to be added to WAC 296-104-010.

The board would also like to hear from someone with the fire marshal's office on this matter.

Lastly, the board requests more testimony from stakeholders as to the negative impact (Cost of compliance) to their businesses. The department will report back with their progress at the next meeting.

**Agenda Item 7.**
**Review State Exam Questions**
The State Boiler Exam requires an update due to the 21 WAC changes incorporated after the Governor's moratorium on WAC changes, was lifted. The 128 exam questions have been reviewed by Leslie, Rob and Larry for deletion, and revision of exam question content, to insure compatibility with the current version of our state boiler laws. Tim has abstained from participation due to conflict of interest (he has Inspectors taking the exam). Terry also abstained from the review process because he potentially may be an Inspector in the future. Rob stated he may have reviewed using a prior version of the law book. He will go back to make sure he didn’t miss anything. The department will collate all revisions/comments and review each question for accuracy. The department also noted that not all RCW's and WAC's have an exam question. The department will be working on correcting this. They will report their progress at the next board meeting.

**Agenda Item 8.**
**Department Notes:**
**Study Session and Board Meeting Combined into One Day**
Tony Oda mentioned that the one day meetings seem to be working out fine, except for the submitted WAC revision process. At two day meetings, new WAC revisions are discussed with the board during the study session and minor changes could be completed overnight and
discussed the next day, and possibly be voted on. This is not an option if the study session and board meeting are combined in a one day event. Rob said that's a good point, so in the future, before we decide on a one day combination meeting we need to determine what the necessity is, and how to best accomplish the goal of completing all the work in the most timely and efficient manner. This may mean a two day meeting even with a short agenda. State specials could run two days, also. Board members should keep their schedules clear in case a problem arises and the meeting would need to be extended to the next day, or leave the meeting as a two day event as originally scheduled.

Meeting adjourned at 12:36 p.m.