



STATE OF TENNESSEE
DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
BOARD OF BOILER RULES

ANDREW JOHNSON TOWER, 3RD FLOOR
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MINUTES

**QUARTERLY MEETING OF THE STATE OF TENNESSEE,
BOARD OF BOILER RULES, 9:00 A.M., JULY 10, 2007
ANDREW JOHNSON TOWER, 1st FLOOR CONFERENCE ROOM
710 JAMES ROBERTSON PARKWAY, NASHVILLE**

- I. CALL TO ORDER – (7) – Chairman Lunn called the meeting to order at 9:00 a.m.
 - II. INTRODUCTIONS AND ANNOUNCEMENTS – (12) – Board member present: Eddie Lunn; Dr Domenic Canonico; Dr. Glen Johnson; Edwin Vance; Wayne Hiter; and Brian Morelock. Department staff present: Martin Toth; Gary Cookston; Sydné Ewell; Eslie Rogers; Carlene Bennett. Guest present: Tom Moore; Stacy Bryson; Paul Fortunato; Dan Kenney; Rick Dawson; David A. Sliger; Brian Blair; Wren Mills; Lisa Roberts; Joe Tleimat; Jeff Grover; Gary Buettner; James Morrow; Brad Eddington; Mike Alley.
 - III. CONFLICT OF INTEREST REPORTS – ASSISTANT ADMINISTER GARY COOKSTON WOULD LIKE TO ADDRESS THE BOARD IN REFERENCE TO CONFLICT OF INTEREST STATEMENTS – (39) – Written conflict of interest disclosure statements were completed by Board members. Also each Board member will verbally disclose agenda items for which they have a conflict before each business item.
 - (46) - Mr. Cookston outlined the differences between the annual conflict of interest acknowledgement and the conflict of interest disclosure signed at each meeting. He encouraged Board members to respond to request for these items from the Board Secretary because auditors periodically ask that this information to be provided for their review.
 - (84) – Dr. Canonico stated that whenever Board members are not allowed to participate in discussion due to a conflict of interest, a lot of expertise and experience is lost. He agreed that voting on an item where there is a conflict of interest shouldn't be allowed but feels that participation in discussion should be allowed.
 - IV. ADOPTION OF THE AGENDA - (101) – Dr. Johnson made a motion to adopt the agenda and the motion was seconded by Dr. Canonico. The vote was taken and the motion carried unanimously.
 - V. APPROVAL OF THE MINUTES FOR THE MEETING OF MARCH 7, 2007 – (107) – Dr. Canonico made a motion to approve the minutes as written and the motion was seconded by Brian Morelock. The vote was taken and the motion carried unanimously.
 - VI. CHIEF'S REPORT – (114) – Given by Chief Toth and attached to these minutes.
 - VII. OLD BUSINESS
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Item 07-06 – (192) - The Young Technical Services Group has submitted Rule Interpretation BI07-06 requesting the Board to give an interpretation on the continued service of boilers and pressure vessels that were installed and operated prior to the creation or adoption of Rule 0800-3-3. – Brian Blair of Young Technical Services Group was in attendance to address the Board. Mr. Morelock asked in regards to *Inquiry and Reply (3)* of the Rule Interpretation, how these non-standard objects would be marked so that the Inspector will know that they are now considered a “TN Special”. He was concerned that with the number of vessels that the Inspectors have to look at, it would be a cumbersome task for them to have some sort of sheet or cross reference to determine which vessels are non-standard TN Specials. He feels the vessel should be stamped because it would be easier, especially if it becomes in need of repair or alterations because the procedure is a lot different for a TN Special. Chief Toth informed the group that there is a place available on the Boiler Computer System to designate these vessels as a TN Special. Also discussed was the possibility of stamping them as a TN Special with a TN Registration Number. Dr. Canonico asked the difference between *Inquiry (2)* and *Inquiry (3)*. It was agreed that *Inquiry (2)* is to identify what non-standard is and to state for the record that they will be categorized as “Special” versus non-standard. Also, it denotes they were exempt prior to June 1, 1995. A motion to approve was made by Mr. Morelock and the motion was seconded by Dr. Canonico. The vote was taken and carried unanimously.

VIII. NEW BUSINESS

Item 07-11 – (290) - Review a request and documentation from Rohm and Haas Chemicals LLC, 730 Dale Ave., Knoxville, TN, for a variance to Boiler Attendant Rule, Paragraph 0800-3-3-.04(22). – Tom Moore, Manager, Environmental Health and Safety Department, Rohm and Haas Chemicals LLC Knoxville Plant and who also manages the Utilities Department which is responsible for the boilers under his management was present to address the Board. Dan Kenney, Utilities Supervisor, who supervises a group of operators that deal with boilers plus other environmental and utility related facilities, was also present to answer questions.

- Dr. Canonico questioned page four (4) of the Boiler System Operating Manual, heading of “Normal Duties”, fifth bullet point which says: “At the end of a shift, Utilities Operators must conduct a “shift turnover discussion” to ensure the oncoming Operator is aware of the status boiler operation and any potential issues”, this shift turnover discussion is with whom? Mr. Kenney said this is a typical pass down report between outgoing and oncoming operators, but there is always an operator on duty.
- Chief Toth pointed to page four (4) under “Emergency Duties”, second bullet point, second paragraph which says: “If the Utilities Operator is unable to respond within the critical time of ten (10) minutes due to unforeseen circumstances, the Utilities Operator must attempt to contact the individuals...” Chief Toth asked if this was referring to the Lab Analyst. If the Utilities Operator is unable to respond, how are they going to contact someone else? Chief Toth said it would be expected that if they were not able to get back to the boiler room then they would call the Lab Analyst and request a shutdown. Chief Toth also noted that ten (10) minutes seemed like a very long time to have an alarm; the first thing is to make sure the boiler is down. Just because the Lab Analyst hits the plunger, doesn’t necessarily mean that the boiler is down. Chief Toth is concerned with the Operator not being able to attend the boiler but then be given the responsibility to contact someone else. The norm is that a remote monitor, that individual in this case would be the Lab Analyst, would be the one to communicate through the list if they have not received a response back from the Operator. If there is a critical alarm then the boiler should be shut down immediately and then figure out why there is an alarm. Rohm and Hass representatives said they would revise the manual and Chief Toth offered his assistance. Chief Toth also pointed out that on the Boiler Data Sheet it shows the B&W as a firetube and the Hurst as a watertube, which should be

- reversed. He asked Mr. Kenney to explain Attachment 7, A7-1, first sentence under “Training” which states: “All Utilities Operators must be certified through a Plant training program permitted to operate a boiler without a certified Utilities Operator present.” Mr. Kenney said the Utilities Operators must go through a certification process in order to “solo”.
- Mr. Morelock said on page four (4) and five (5) it talks about the Utilities Operator checking alarms at remote locations but suggested adding verbiage as to how the Lab Analyst participates in that check. Usually they must reset some switches before the Utilities Operator can restart the boiler. Mr. Morelock also pointed out that the serial number on the B&W boiler is incorrect and on page one (1) there references a plant layout as figure three (3), it is assumed that it should be figure four (4) but there isn't a figure four (4) in the manual. Also, there is nothing in the manual that states specifically who has the responsibility for keeping the variance manual current and that needs to be addressed.
 - (489) – James Morrow, United Steelworkers Union President employed with Rohm Haas addressed the Board to say that in his opinion and that of his membership and the community, this facility should not be given a variance for remote boiler monitoring. This facility is located at the junction of Interstate 75 and Interstate 40 and in the event of a critical boiler failure it could potentially lockdown southeast commerce. Also in the event of failure Neyland Stadium, which is very close to the facility, might have to be evacuated. There are homes in the area and apartment complexes being built approximate 150 yards from the facility. The final product of the plant is very safe, similar to water but the raw materials are very dangerous and that these tanks are near the boiler house. He stated there had been issues with the boilers in the past and the Union asked Plant Manager, Mr. Fortunato, for an outside consultant or review to satisfy members but that request had been denied. He asked that Rohm Haas Chemical LLC variance request be denied.
 - (610) – Brad Eddington, Mechanical Engineer and Boiler Operator since 2000 with Rohm Haas also addressed the Board stating that over the last few years there had been several boiler issues, some minor and some major, most due to construction flaws. Because of these past issues he feels the boilers require attention of a fulltime attendant to make sure it goes through its proper sequences.
 - (706) – Mike Alley, Utility Operator and twelve year employed with Rohm Haas addressed the Board saying that his current job is a very demanding one and monitoring the boiler should not be added to his duties. Currently he is responsible for refrigerated water, discharge, wastewater, and air system quality for the plant. Sometimes he is dressed out in an acid suit with gloves, face mask and respirator. In the event of a thunderstorm or power outage he is extremely busy getting systems working and could be detained on the other side of the plant. His current duties are just as important as the boiler duties and no matter which duty is neglected there would be a negative environmental impact. In his opinion the combination of his other duties, the safety aspect, and the process history all adds up to a situation that makes this not an ideal situation for an unmanned boiler. He stated that past management looked at remote monitoring and decided against it, deeming it unsafe.
 - Dr. Canonico asked if they felt the operation was safer today than it would be if the variance was granted and if so why. The response was “yes” because a person who is solely responsible for the boiler can sometimes pickup on minute changes in the boiler. Dr. Canonico said he is not interested in companies who ask to implement remote monitoring thinking it will reduce manpower. By the same token he is not interested if the membership is against remote monitoring because it would reduce the number of employees either. He stated for the record that safety was the primary issue for the Board.
 - Dr. Johnson commented that the Board would never want to approve anything that was unsafe, no matter where it was located. Most variances involve remote operators with other duties such as plant security or night watchman. He stated that the specific job duties in this instance may make this different from other

variances in the past. Dr. Johnson also asked whether remote monitoring boilers had greater failure than those with full time boiler attendants. He asked that data be provided to the Board, if available, to help answer that question. Chief Toth said he would attempt to get that information from the National Board before the next meeting.

- Chief Toth commented that he isn't concerned about remote monitoring. His biggest concern is that all operating procedures are followed such as testing the system, testing the controls and testing safety devices. When these test are abandoned that is when problems occur. Chief Toth said he was impressed with Rohm Haas training of their employees and commended them on it. James Morrow stated that there is an economic push from the top level of Rohm Haas to reduce training from twelve (12) weeks to four (4) weeks. In negotiation a compromise was reached setting it for nine (9) weeks.
- Chairman Lunn felt this is an issue that the Board had never faced before in this kind of decision. The variance request had been on hand and reviewed for six (6) weeks and felt it would be prudent for the Board to review a formal report of the opposing view since they were all hearing this information for the first time. He asked this report be submitted to Chief Toth by August 15th so that it may be added to the agenda for the September 12th meeting.
- A motion was made by Ed Vance to postpone a decision on this variance pending an opposing view report and the motion was seconded by Dr. Canonico. The vote was taken and carried with Chairman Lunn abstaining.

Item 07-12 - (1526) - Review a request and documentation from Russell Stover Candies, Inc., 1976 Chocolate Drive, Cookeville, TN, for a variance to Boiler Attendant Rule, Paragraph 0800-3-3-.04(22). This is a review of revisions to a December 2005 Board approved variance. - Chairman Lunn verbally expressed a conflict of interest with this agenda item and announced his intention of abstaining from discussion and voting. Gary Buettner was on hand to address the Board. The variance approved in December, 2005 was constructed around two shifts and twelve hundred (1200) employees when the site was used to produce candy. Today the site is used as a shipping and distribution point with 12 employees. They are asking for two changes in the previous variance. Neither change is procedural; they are a shift in responsibilities and location. Mr. Morelock stated that they may want to put an example of the training log in the manual and on page ten (10), Emergency Procedures should be denoted by a colored sheet of paper or tab so that in the event of an emergency it can be located quickly. Chief Toth wanted to know who was monitoring the boiler on third shift and Mr. Buettner said Security was handling that. Chief Toth was concerned that there was no boiler attendant on site. Mr. Buettner said Security was trained in water level, pressure, and testing the system to make sure there is an alarm when water level drops but are not trained in restarting the boiler, they must call a boiler operator to do that. He said a shutdown situation is not as critical as when they were producing candy. The boiler today is used for building heat, humidity control, and for hot water in the sinks. A motion to approve this variance was made by Mr. Morelock. The motion was seconded by Dr. Canonico. The vote was taken and carried with Chairman Lunn abstaining.

Item 07-13 - (1722) - Review an application and documentation from Minnotte Manufacturing Corporation, Pittsburg, PA, for a license to engage in erection, repair and alterations on boilers and pressure vessels in Tennessee. - No verbal conflict of interest was disclosed by any Board member on this item. A motion to approve was made by Dr. Johnson and the motion was seconded by Ed Vance. The vote was taken and carried unanimously.

Item 07-14 - (1722) - Review an application and documentation from Aker Kvaerner Chemetics, Toronto, Ontario, Canada, for a license to engage in repairs and alterations on boilers and pressure vessels in Tennessee. - No verbal conflict of interest was

disclosed by any Board member on this item. A motion to approve was made by Dr. Johnson and the motion was seconded by Ed Vance. The vote was taken and carried unanimously.

Item 07-15 – (1722) - Review an application and documentation from JTH Engineering, LLC, Kingsport, TN for a license to engage in erection, repair and alterations on boilers and pressure vessels in Tennessee. – No verbal conflict of interest was disclosed by any Board member on this item. A motion to approve was made by Dr. Johnson and the motion was seconded by Ed Vance. The vote was taken and carried unanimously.

Item 07-16 – (1722) - Review an application and documentation from Silvan Industries, Inc., Marinette, WI, for a license to engage in erection, repair and alterations on boilers and pressure vessels in Tennessee. – No verbal conflict of interest was disclosed by any Board member on this item. A motion to approve was made by Dr. Johnson and the motion was seconded by Ed Vance. The vote was taken and carried unanimously.

Item 07-17 – (1722) - Review an application and documentation from H&M Industrial, Jackson, TN, for a license to engage in erection, repair and alterations on boilers and pressure vessels in Tennessee. – No verbal conflict of interest was disclosed by any Board member on this item. A motion to approve was made by Dr. Johnson and the motion was seconded by Ed Vance. The vote was taken and carried unanimously.

Item 07-18 – (1777) - Chief Martin Toth will make a presentation of the upcoming 2006 addenda of the National Board Inspection Code (NBIC). – Chief Toth covered the 2004 Edition, 2006 Addenda with an issue date of December 31, 2006 and an effective date of July 1, 2007. A general outline of the topics covered is as follows:

- Mandatory Enforcement
 - Statutory Requirements
 - Rule Requirements
 - Board Case or Interpretations
- Multiple Editorial and Administrative changes that are not significant
- Number of Substance Changes that could effect Tennessee Rule or Policies
 - Owner/User Inspection Organization Accreditation
 - Quality System Outline
 - Restamping
 - Description of Firetube Boilers
 - Inspection of Liquid Ammonia Vessels
 - Routine Repairs
 - Technical Inquires
 - Authorized Inspection Agency Definition
 - Metrication of the NBIC
 - Equipment Certification

Item 07-19 – (2162) - Ms. Wren Mills, Engineering Director, Valero Refining Inc., Memphis, TN and Brian Blair, Young Technical Services, Memphis, TN are requesting the Board review the operation of twelve (12) Fired Process Heaters currently in service at the Memphis Refinery. A presentation will be made to explain the details of the Fired Process Heaters in question. – No verbal conflict of interest was disclosed by any Board member on this item. Addressing the Board was Brian Blair, Young Technical Services; Wren Mills, Valero; Jeff Grover, APTECH Engineering; Joe Tleimat, Valero; and Lisa Roberts, Valero. This group is looking for guidance and interpretation on classification of these vessels because in one section of ASME there is a statement that says fired process tubular heaters (FPTH) are not included in the scope, however, there is another statement where it says that pretty much anything that you want to build may be built. The oldest of the FPTHs have been in operation since 1969, while some of the newest units were constructed as recently as 2003. The insurance inspector found these units in operation and found them not to be registered. They were given a temporary

certificate until the Board makes a decision on whether they can be designated as TN Specials and be included in Valero's RBI program. These units are engineered, designed, and fabricated in accordance with American Petroleum Institute (API) 560 which is the overall standard and API 530 which gives details of the tube design. Dr. Canonico suggested postponing this item until the September or December meeting because there are a number of units which have different materials in them. He felt it would be interesting to see some of the calculations, if they are available, and what materials were selected and at what temperatures they have been operated on a heater by heater basis. Dr. Johnson asked and Mr. Blair confirmed that the fluid in the units keeps moving and that there is no recirculation taking place. Chief Toth said only the units built after June 1, 1995 are the ones in questions. Dr. Johnson pointed out that API is a legitimate parallel professional organization, these units have been designed to their requirements and they have been operated safely for many, many years. Eslye Rogers asked what happens when time comes to replace these vessels. Chief Toth said he would like to work toward creating a Board Case or Interpretation that would cover how something of this nature would be handled in the future. It would be treated as the rules states for TN Specials, in this case, either it is built to the ASME Code or it's built to API and brought before the Board prior to construction. A motion was made by Dr. Johnson and seconded by Mr. Hiter to approve these twelve (12) vessels as TN Specials contingent on Chief Toth's review and approval of the documentation and records of these units. Chief Toth's review shall be presented to the Board at the September 12th meeting. If Chief Toth approves these units as TN Specials then these units will be allowed to be included in Valero's RBI program. The vote was taken and carried unanimously.

Item 07-20 – Eastman Chemical Company, Kingsport, TN is requesting that one (1) unfired pressure vessel, DC-C-01 DMCD Recycle Reactor, currently located at their San Roque, Spain facility, be relocated to their Kingsport, TN facility, be categorized as a TN Special, and allowed to be registered and operated in Tennessee. This vessel was designed, fabricated, inspected, and tested per ASME Section VIII, Division 1, but not ASME Code stamped. – Mr. Morelock expressed a conflict of interest with this agenda item and announced his intention of abstaining from discussion and voting. David Sliger of Eastman Chemical Company was on hand to present this request to the Board. Chief Toth stated that he would like to check on past precedents of this happening. He said that in the past Don Tanner with the National Board had been concerned about European vessels entering the United States because Europe doesn't acknowledge ASME. Dr. Canonico made a motion to postpone until the December Board meeting to give Eastman time to provide precedent. Mr. Vance seconded the motion. The motion carried with Dr. Johnson and Mr. Morelock abstaining.

IX. RULE CASES & INTERPRETATIONS

Item 07-21 – Chief Inspector Toth has submitted Rule Case BC07-21 requesting the Board to give a ruling on the allowance for the replacement of registered high and low pressure boilers to be charged a permit inspection fee of fifty dollars (\$50), versus the fees set in Rule 0800-3-3-.09(10). – No verbal conflict of interest was expressed by any Board member on this item. A motion to approve was made by Mr. Hiter and seconded by Mr. Vance. The vote was taken and carried unanimously.

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- X. THERE WAS ONE (1) APPLICANT THAT SAT FOR THE NATIONAL BOARD COMMISSION EXAMINATION ON JUNE 6th and 7th.
 - XI. THE NEXT BOARD OF BOILER RULES MEETING IS SCHEDULED FOR 9:00 A.M. (EST) ON WEDNESDAY, SEPTEMBER 12, 2007 IN KINGSFORT, TN IN CONJUNCTION WITH THE TENNESSEE BOILER SAFETY FALL CONFERENCE.

XII. ADJOURNMENT – A motion was made by Mr. Hiter to adjourn which was seconded by Ed Vance. The motion carried unanimously and the meeting adjourned at 1:28 p.m.