

STATE OF TENNESSEE DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT BOARD OF BOILER RULES 220 FRENCH LANDING DRIVE NASHVILLE, TENNESSEE 37243 (615) 741-2123

MINUTES

QUARTERLY MEETING OF THE STATE OF TENNESSEE BOARD OF BOILER RULES, 9:00 A.M. (CST), MARCH 11, 2009 1ST FLOOR TOSHA CONFERENCE ROOM 220 FRENCH LANDING DRIVE NASHVILLE, TENNESSEE

- I. CALL TO ORDER (5) Chairman Lunn called the meeting to order at 9:00 a.m. (CST).
- II. INTRODUCTIONS AND ANNOUNCEMENTS (37) Board members present: Eddie Lunn; Eugene Robinson; Dr. Domenic Canonico; Dr. Glen Johnson; Brian Morelock; and Ed Vance. Department of Labor & Workforce Development employees in attendance: Arthur Franklin, Jr.; Gary W. Cookston; Sydné Ewell; Neil Jackson; Deborah Rhone; Eslie Rogers; Sam Chapman; Dan Bailey; and Carlene Bennett. Guests present: Dave Baughman; Fred Carder; Tom Karres; Mel Pruitt; Steve Richardson; Charlie King; John Newby; Tom Webster; Blake Neville; Chris Soper; Jerry Forsythe; and DeWayne Bingham.

(12) - Assistant Administrator Cookston announced that in the event of a natural disaster or emergency, building security guards would direct attendees to a safe place inside the building or ask them to evacuate to the parking lot toward the Rosa Parks side of the building.

(20) - Mr. Cookston also announced the Conflict of Interest Policy had been changed to allow Board members to participate in discussion on agenda items where a conflict may exist, but it still would not permit them to vote on those items. Commissioner Neeley approved the change in Policy with an effective date of February 2, 2009.

III. CONFLICT OF INTEREST REPORTS - (55) - Conflict of interest statements were completed by Board members. Chairman Lunn asked Board members to verbally disclose any conflict of interest with agenda items prior to discussion.

- IV. ADOPTION OF THE AGENDA (66) Dr. Canonico made a motion to adopt the agenda. Ed Vance seconded the motion. The vote was taken and the motion carried.
- V. APPROVAL OF THE MINUTES OF THE DECEMBER 3, 2008 MEETING (70) Dr. Johnson asked that the last sentence on page six (6) that continues onto page seven (7) be stricken. Brian Morelock made a motion to approve the minutes with the revision requested. Ed Vance seconded the motion. The vote was taken and the motion carried.
- VI. INTERIM CHIEF'S REPORT (83) Interim Chief Rogers' report covered the period from October to December of 2008.
 - 2,432 state inspections and 5,742 inspections by insurance agencies.
 - 286 delinquents for state inspectors and 700 delinquents for insurance agencies.
 - 75 violations found and 23 uncorrected code violations.
 - 7 quality control reviews performed.
 - 2 boiler variance inspections performed.
 - In December, there was one (1) person sitting for the National Board Commission examination. Unfortunately, he did not pass the test.

Seven (7) reinspections of variances were performed since the last meeting. Out of those seven (7): three (3) owners failed and one (1) owner had limited knowledge of variance guidelines and procedures.

VII. OLD BUSINESS - (136) - None.

VIII. NEW BUSINESS -

Item 09-01 - (138) - Review a request and documentation from RR Donnelley, 801 Steam Plant Road, Gallatin, TN, for a variance to Boiler Attendant Rule, Paragraph 0800-03-03-.04(22). Chairman Lunn verbally expressed a conflict of interest with this agenda item. Jerry Forsythe, Vice President of Manufacturing; DeWayne Bingham, Lead Boiler Attendant; and John Newby, EHS Specialist presented this item to the Board. As an update: RR Donnelley requested a variance at the December, 2008 meeting; the Board requested minor modifications; changes were made and submitted to Interim Chief Rogers; Neil Jackson performed his inspection; RR Donnelley passed inspection but is continuing to operate under the twenty (20) minute rule. The Company is now asking for a proposed change due to a capital project. At this time, there are two (2) monitoring stations. The primary one is in the boiler room and the secondary one is in the guard station at the front of the building. It manned twenty-four (24) hours per day/seven (7) days per week. When an alarm is received at the guard station, the boiler attendant is contacted via two (2) way radio to address the alarm. The first proposed change is to move the remote monitoring station from

the guard station to the solvent recovery control room in another part of the plant, closer to the boiler room. The second proposed change is to have an automatic alarm alert via two (2) way radio and pagers to the two (2) boiler attendants who are in the plant any time the boiler is in operation. Interim Chief Rogers asked if the new remote monitoring station would be manned twenty-four (24) hours per day/seven (7) days per week. Mr. Forsythe said it would not but the two (2) boiler attendants would be in that area a lot through the day and they would certainly abide by the four (4) hour rule. Interim Chief Rogers asked that the manual be revised to state that. Eugene Robinson had some editorial changes: page seven (7), second paragraph, separate the words "per day" and add the word "which" before "includes boiler attendant responsibilities"; page eight (8), third paragraph, change "administrates" to "administers"; page thirteen (13), Appendix A says "MAX. OUTPUT, PPH: 60,000" but the steam distribution diagram on page five (5) indicates "70,000". Dr. Canonico pointed out that on page six (6) of the Guidelines, question thirty-one (31) wasn't marked even though it made reference to "Appendix D". He also requested that on page four (4), Current Systems Description, paragraph four (4), the first sentence read: "The highpressure boiler(s) will..." Dr. Canonico wondered why in the description on page nine (9), Emergency Duties, number two (2), the boiler wouldn't shut down automatically. Mr. Forsythe said if the boiler is creating the emergency situation, then it would shut down automatically but in this case it is referring to an emergency situation like a natural disaster where the boiler must be shut down manually. Brian Morelock said that in the previous manual there were very clear descriptions of the remote monitoring personnel duties and the boiler attendant duties. In this revision, page eight (8), the duties of the solvent recovery control room boiler personnel should be clarified because they aren't adequately outlined. He suggested that they look back through the previous version of the manual because there was a lot of detail in it that isn't in the revised version. Interim Chief Rogers said if the Board approved the variance modifications; the facility will need to pass reinspection once the changes are made. He said a letter would be sent allowing the Company to operate under the four (4) hour rule since their December variance passed inspection. Dr. Canonico made a motion to approve the variance modifications. Ed Vance seconded the motion. The vote was taken and the motion carried with Chairman Lunn abstaining.

Item 09-02 - (449) - Review a request and documentation from J.M. Huber Corporation, Cambria Road, Etowah, TN for a variance to Boiler Attendant Rule, Paragraph 0800-03-03-.04(22). Chairman Lunn verbally expressed a conflict of interest with this agenda item. Fred Carder and Tom Karres presented this item to the Board. Since the December audit, the Company has been operating under the twenty (20) minute rule. Approval is being requested for a variance linked to a proposed capital expenditure project. Interim Chief Rogers stated that after reviewing the manual, he would not approve it as written. Eugene Robinson asked what Neil Jackson found when he visited the site. Mr. Jackson said upon his initial call to the plant, the person listed in the manual as the main contact was no longer with the Company. He talked with Mr. Carder and Mr. Karres and

neither was aware of a variance program or manual. The Company experienced a time where there was tremendous personnel turnover and the variance information was not passed on to the personnel. The Company operates two (2) high pressure boilers: number four (#4) being the primary boiler and number three (#3) being the backup boiler. The remote monitoring station will be in the OC Lab and be manned twenty-four (24) hours per day/seven (7) days per week while the boilers are in operation. Any time there is an automatic shutdown alarm there will be an audible/visible alarm and trained QC Lab personnel will immediately contact, via two (2) way radios, the boiler operator. If there is an emergency shut down alarm and the boiler does not shutdown, the QC Lab personnel will have the ability to shut down the boiler with an emergency shutdown switch. Once the shutdown issue is addressed, the boiler operator must communicate with QC Lab personnel who must push a start permissive switch to allow the restart of the boiler. Brian Morelock asked them to label the distance between the QC Lab and the boiler that is on page four (4) and include it in the description on page one (1). He also said that while page one (1) and page seven (7) do include description details of the monitoring system, typically there will be appendices with alarm codes and information right out of the Honeywell system manual. That information should be added for the benefit of the operators and personnel using the manual. He noted that there is quite a lot of information listed for the remote monitoring personnel but nothing specifically outlining the duties of the boiler attendant giving a clear picture of the daily duties. The manual needs to state how the training will be recorded and kept. Also, an example of a boiler monitoring log should be included. Eugene Robinson asked if the automatic shutdowns were hard or soft lockouts. Mr. Carder said they were hard lockouts hardwired into the Honeywell 7800 Series. Mr. Robinson asked about the low water cutoff test mentioned on page eleven (11) where a button would be pushed, an alarm in the OC Lab would sound, but the boiler would not shut down. Mr. Carder said this is a standard way of blowing down the boiler water columns every shift. They hit the mushroom head button and blow down the water columns so that they don't get the low level cutoff. This procedure would be performed twice a day in order to sound the alarm for the purpose of checking the communication system to the remote operating system as well as checking the communication system between the remote operator and the boiler operator via the radio. Mr. Robinson asked that emergency contact phone numbers be added beside job titles listed on page twelve (12), item three (3). Mr. Morelock pointed out that page thirteen (13) is part of the manual and should not be on colored paper, only page fourteen (14), Emergency Procedures, should be on colored paper. Interim Chief Rogers said that the personnel listed on page twelve (12), item three (3) should be shown on the organizational chart on page ten (10). Dr. Johnson made a motion to approve the variance contingent upon field inspection. Ed Vance seconded the motion. The vote was taken and the motion carried with Chairman Lunn abstaining and Dr. Canonico voting no.

Item 09-03 - (910) - Review a request and documentation from Maury Regional Medical Center, 1226 Medical Center Drive, Columbia, TN for a variance to

Boiler Attendant Rule, Paragraph 0800-03-03-.04(22). Chairman Lunn verbally expressed a conflict of interest with this agenda item. Blake Neville and Tom Webster presented this item to the Board. Maury Regional Medical Center currently has a variance for their system that has been in operation for the last sixteen (16) years. This variance request is for a new microprocessor based system which will replace the old system. Dr. Canonico asked what happens if there is a power outage. Mr. Webster said the system goes down and the boilers shut off. They have emergency backup generators but there is a seven (7) or eight (8) second delay before they come online. By that time, the boiler would be offline and require restarting. Brian Morelock noted that the call list in the manual was extensive. He suggested that the list could be simplified by listing a phone number that could be used to notify an individual quickly. Mr. Webster said a roster of names and phone numbers are posted for reference. Mr. Neville said that Maury Regional was the first boiler variance in the state to use a microprocessor control. The Board at that time was concerned about how it would operate. One year after the variance was granted, a meeting was held at the hospital. The group toured the facility and asked a lot of questions. Everyone was impressed with the reliability. Mr. Morelock made a motion to approve the variance. Dr. Johnson seconded the motion. The vote was taken and the motion carried with Chairman Lunn abstaining.

Item 09-04 - (1118) - Review a request and documentation from MARS Incorporated, 3500 Peerless Road, Cleveland, TN for a variance to Boiler Attendant Rule, Paragraph 0800-03-03-.04(22). Chairman Lunn and Eugene Robinson verbally expressed a conflict of interest with this agenda item. Blake Neville and Mel Pruitt presented this item to the Board. The variance request is for boiler number two (#2) only which is the largest of the three (3) boilers and it will operate twenty-four (24) hours per day/seven (7) days per week. Any time the primary boiler is down the other two (2) boilers, number one (#1) and number three (#3), may be operated twenty-four (24) hours per day/seven (7) days per week to make up the load but they will be operated under the twenty (20) minute rule. When there is an alarm, the boiler operator is notified via a pager or cell phone. He will acknowledge the alarm with a personal identification number (PIN) number and then respond to address the issue. There will be a panel outside the boiler room with a kill switch so that the boiler operator can shut down the boiler before entering. In the event the boiler operator isn't reachable, there is an emergency call list. The technicians who are qualified boiler attendants are utility technicians and utility senior technicians. Brian Morelock noted that there will be no remote monitoring personnel. The boiler attendant will receive notification of an alarm via cell phone or pager. They will enter a PIN or go to the panel outside the boiler room to initiate the shutdown of the boiler. They will be acting as both the remote monitoring personnel and boiler attendant. Mr. Pruitt said these persons are not currently being asked to do anything outside the Utilities Department. Interim Chief Rogers asked the location of phone/pager numbers for the emergency call list mentioned on page nine (9). Mr. Pruitt said the system would have the contact numbers and would dial them automatically. Mr.

Morelock asked how many boiler attendants are on site per shift and Mr. Pruitt replied only one (1). He said it appeared that person would have a lot of responsibility since they will be the remote monitoring personnel checking the primary boiler every four (4) hours; potentially responsible for the twenty (20) minute rule for any other boiler operating; plus various other duties. Interim Chief Rogers said the front of the manual says MARS, Incorporated but the status of the boilers is listed as Master Foods USA. He wanted to know which Company name was correct. Mr. Pruitt said from this point forward it will be MARS, Incorporated. Ed Vance made a motion to approve the variance contingent upon modifications requested and upon inspection. Dr. Canonico seconded the motion. The vote was taken and the motion carried with Chairman Lunn and Eugene Robinson abstaining.

Item 09-05 - (1412) - Valero Refinery, Memphis, TN will present an annual report of their accepted Risk Based Inspection (RBI) program to the Board. Chris Soper presented this item to the Board. The report is for the twelve (12) month period from September, 2007 through August, 2008. During that time, they had six hundred and sixty-two (662) pieces of equipment. That total does not include boilers, only unfired pressure vessels. These pieces of equipment are broken down further into eleven hundred and forty (1140) subcomponents. During this twelve (12) month period, seventy-nine (79) equipment inspections were performed covering one hundred and thirty-nine (139) subcomponents. The risk comparison from 2007 to 2008 is as follows:

<u>Category</u>	2008	2007
Very High	5	7
High	112	107
Medium	503	491
Low	520	454

The Company performed inspections of all "very high" risk items; added fire process heaters to the program; and reduced the overall risk through its inspection program. The Company gives inspection and corrosion data to APTECH Engineering Services, Inc. who provides the risk rank matrix. The annual report was informational only. Board approval was not needed.

Item 09-06 - (1857) - Proposed changes in variance guidelines to the Boiler Attendant Rule, Paragraph 0800-03-03-.04(22). Chairman Lunn verbally expressed a conflict of interest with this agenda item. There is a growing problem with the procedure for maintaining Boiler Attendant Rule variances granted by the Board. Currently, there is no process for reviewing variances to confirm continued compliance. It was proposed that every three (3) years entities would be required to submit a renewal request and undergo a variance review to ensure compliance in order for the variance to continue. Interim Chief Rogers indicated that all variances issued prior to March 11, 2009 could be reinspected before June 2, 2010 and after that date all variances would be subject to the three (3) year term

renewal process; there would be no "grandfather" aspect to the variance process. Neil Jackson, Quality Review Team Leader who is currently performing most variance inspections submitted a list outling issues that should be addressed during the review of the Boiler Attendant Variance program; this list is attached to and made part of these minutes. Chairman Lunn stated that the current variance program evolved over the last twenty (20) years and with the advances in technology the program needs to be thoroughly reviewed and updated. Dave Baughman of Allied Boiler Supply suggested that Rule 0800-03-03-.04(22) also be reviewed. Chairman Lunn agreed that at some point a review of the Rule would be prudent but that the main focus at this time would be the variance guidelines. Interim Chief Rogers asked if the State of Tennessee had ever considered a boiler operator license and whether or not that idea might be entertained at this time. Chairman Lunn said that the Board would be open to any discussion that could enhance the safety of boiler operation. Brian Morelock made a motion to call a special meeting. Eugene Robinson seconded the motion. Chairman Lunn scheduled a special called meeting for 9:00 a.m. (CST), Wednesday, April 15, 2009. He announced it would be an all day working meeting with the only agenda topic being proposed changes in variance guidelines to the Boiler Attendant Rule. The vote was taken and the motion carried with Chairman Lunn abstaining.

- IX. RULE CASES & INTERPRETATIONS (2743) There were no Rule Cases & Interpretations.
- X. (2745) One (1) applicant sat for the National Board Commission examination on March 4th and 5th.
- XI. (2749) The next quarterly Board of Boiler Rules meeting is scheduled for Tuesday, June 16, 2009 at 9:00 a.m. (CST) in the TOSHA Conference Room, First Floor, 220 French Landing Drive, Nashville, Tennessee.
- XII. ADJOURNMENT (2772) Chairman Lunn adjourned the quarterly Board of Boiler Rules meeting.

Variance's Concerns

- The revised Systems Operation Manual for Variances are Emailed, they need to be hard copied to present to the Tenn. Board of Boiler Rules. Note the Guidelines Rev. 5 Art. II, this places the variance program in violation.
- 2. When new personnel are placed in charge, the whole variance program is not pasted on for knowledge and control.
- 3. The Systems Operation Manual needs to have the physical address of the Boiler(s) location and the Mailing address also if they are different.
- 4. There needs to be a phone number of a contact at the physical location of the Boiler. (when I get a cell number to call alot of the time I don't get a call back)
- 5. When the Engineering company writes the Systems Operation Manuals they control the program. It is the intent of the variance rule that the owner have knowledge and control of the manual.
- 6. If at the time of a revisit and the variance is not in control at the time of a re-visit than it should be revoked, the 20 min. rule requirement placed in force. A time limit established for a re-visit when they have notified the state that they are in incompliance with a current System Operation Manual.
- 7. There is a definite need for re-visiting older Variance programs that are over the three years established in the rules.
- 8. Mr. Lunn's email memo dated 11/24/2008 for a Motion on Variance requests: "It is the responsibility of the variance holder to request a renewal of the grant 180 days prior to its expiration." Add in the wording that the request be made also 180 days for any revision to the program to allow a scheduled visit to be established.
- 9. The "Guidelines for Computerized Remote Monitoring of Boiler Systems" item number 17 of the need for a simplified diagram of the power piping system; This diagram should be for the feed water piping as well as the main steam piping that is within the code boundaries.
- 10. The Guidelines Introduction states a copy of Checklist provided by the applicant shall be provided to the Variance Inspector for use at the implementation inspection, these are not being provided to the inspector.