

Boiler Safety Carbon Monoxide Public Workshop

Meeting Minutes

December 8, 2016

Opening

The Boiler Safety Carbon Monoxide Public Workshop was called to order at 1:10 pm on December 8, 2016 in DNREC's Lukens Drive Office in New Castle, DE by Alex Rittberg.

Present

Alex Rittberg, Jenn Vavala, Randy Rado, Sara Golladay, John Esch, David Warburton, Bob Phillips, Doyle Tiller, Ken Belmont, John Rudd, Douglas Hershmen, Mel Sipes, Charles May, Mike Connors, Dan McBride, Dan Simpson, John McClister, Charles Stephan, Scott Kidner, Hadey Salem, Paul Marrino. Participating by phone were Eric Goldberg and Ken Stoller,

Minutes

- Alex Rittberg led discussions and gave a PowerPoint Presentation that can be found at the following link: :

<http://www.dnrec.delaware.gov/BoilerSafety/Pages/Default.aspx>

Preventative Maintenance Discussion

- A concern was raised that there may be a potential conflict with DNREC's proposed preventative maintenance schedule versus the manufacturers preventative maintenance requirements found in the equipment's installation and operations manual.
- John Esch stated that not all manufacturer installation and maintenance instructions are equivalent to the ASME codes and that ASME focuses specifically on how the boilers and pressure vessels are built verse their operation and maintenance. Mr. Esch further stated that the National Board Boiler Inspection Code focuses on operation and maintenance.
- Alex Rittberg suggested that in those cases where there is a conflict that the regulations state the more stringent standard apply.
- Alex Rittberg also stated that DNREC would consider adding language to the regulations that would allow a facility to submit a facility specific preventive maintenance plan to DNREC for approval rather than follow

the prescribed list of required preventive maintenance tasks listed in the draft regulations.

- The Fire Marshal's Office recommended removing the word "fire" from 6.12.3.0 since fire protection equipment is covered under a separate jurisdiction.
- A participant asked, "How many boilers are subject to inspection requirements in the State of Delaware? Alex Rittberg answered, "close to 10,000 just for boilers."
- Several participants expressed concerns over conducting daily preventive maintenance checks. These concerns included:
 - If only one person is present at the facility, and they call out, then the facility would be in violation
 - Daily requirements would be too much for one person to do
 - What about weekends? – some places are not staffed on weekends
 - It was suggested that conducting the checks once a month by someone who knew what they were looking at would be adequate to ensure public safety.
 - Others stated that having someone walk through once a day, especially at a large well manned facility was not unreasonable.
- Alex Rittberg stated the DNREC would consider changing the frequency of the daily preventative maintenance checks to monthly.
- A concern was raised that there needed to be further clarification on whether DNREC intended the annual preventative maintenance requirements described in 6.12.2 be performed by a licensed technician versus qualified technician? It was suggested that DNREC define the term, "qualified technician" in draft regulations.
- A concern was raised over whether the preventative maintenance checks needed to be completed during the off season when the boiler was not operating? Alex Rittberg stated that the intent was to have the daily preventative maintenance checks occur only while the boiler was operating.
- A general question came up as to what size boilers and water heaters will the new requirements apply to? John Esch and Alex Rittberg referenced the Definition of a Boiler on page 3 of the draft regulations. A question was asked whether the defined term "Building requiring a carbon monoxide detector in the Boiler Room" include hospitals and churches.
 - A comment was made that they should be included because the person felt it was a fairness issue, and suggested they be added to the definition. Alex Rittberg stated that DNREC would consider

adding language to the definition specifying hospitals and churches.

- Alex Rittberg clarified that the Preventive Maintenance requirements apply to all boiler systems no matter their location.
- There was general consensus that preventative maintenance will result in less replacement costs and that proper maintenance will lengthen life of equipment.
- Would preventative maintenance inspections be in addition to the current bi-annual inspections? – Alex Rittberg clarified that the preventive maintenance would be in addition to the required boiler inspection that is conducted by the Commissioned Inspector once every two years.
- Does the county have any inspection requirements?
 - Mike Connors of New Castle County stated that New Castle County relied on the State for overseeing the Boiler Safety Program. Alex Rittberg stated that it was the same for Kent and Sussex and that since jurisdiction is at the State level local governments cannot have jurisdiction over the program if state laws and regulations exist unless the Town or local government has over a million residents which none of Delaware do.

Operator Training Program

- Alex Rittberg then asked the question, should boiler operators be certified by the State?
 - Someone stated that this would be difficult to manage because there is a lot of turnover in the industry and suggested training online, and maybe offer a course through Del Tech
- Alex Rittberg stated that DNREC would not pursue establishing a formal boiler owner/operator certification program, but instead will focus on establishing an online training program.

Carbon Monoxide Detector Requirements

- Someone asked, what is the cost for installing a system? Alex Rittberg referred to the slide in his presentation.
- John Esch stated that this system can be used on any boiler that has a relay that is used to turn the system on and off.
- Alex Rittberg then discussed Carbon Monoxide Detector Rules that exist in Pennsylvania, Maryland, and New Jersey.
- A concern was raised that some water heaters may have an issue in that there is no practicable way of turning them off.

- A concern was also raised about requiring hard wiring that allows the carbon monoxide detector to shut down the boiler and notify the owner. It was stated that this is more complicated with larger buildings that may be part of a campus. A suggestion was made to allow sensors that may already be part of an existing system rather than a stand-alone carbon monoxide detector. Someone then asked how do sensors work, and Doyle Tiller answered that it depends on the manufacturer.
- Concerns were then expressed about calibrating the carbon monoxide detector or sensor.
- Doyle Tiller explained that the older the sensor gets, the higher the risk of failure and that the frequency of the calibration depends on manufacturer and probably should be done annually.
- A question was asked who was on the Council on Boiler Safety and a handout was distributed with the current members listed.
- A question was asked, “Is there any requirement on how to vent the room once the detector goes off? Alex Rittberg stated that there weren’t any requirements in the draft regulations that addressed that issue. Alex Rittberg also stated that DNREC would consider adding general requirements relating to response procedures if a harmful level of carbon monoxide is detected. It was then asked if the Department could publish guidance on mitigating a carbon monoxide hazard. Alex Rittberg stated that he preferred putting general procedures in the regulations so they could be enforced if not followed.
- Someone then asked, “Who determines the harmful level to shut down the system?” Alex Rittberg stated DNREC has proposed 100 ppm as the level to use that would require shutdown of the boiler and mitigation because it was below a level that would cause adverse health effects and was listed as the maximum level that could be found in run cycle of a vented appliance. Alex Rittberg referred to a handout describing Carbon Monoxide levels.

Other new requirements

- Concerns were brought up requiring the amount of photographs that would be required to be taken by an inspector. It was suggested that rather than waste cyber storage space that DNREC only require photographs be taken if a problem is identified. Additional concerns were also expressed about inspectors not being allowed to take photographs of intellectual property or proprietary pieces of equipment.
- Alex Rittberg stated that DNREC would consider changing the draft regulation to only require that photographs be taken when deficiencies are

noted and stated that the Department had procedures in which a business could claim that equipment is proprietary.

- Additional concerns were raised that the Boiler Inspector wasn't the right person to monitor for Carbon Monoxide and that it's really outside the scope of their qualifications and that a Certified Safety Specialist be responsible for detecting/monitoring Carbon Monoxide levels. Also it was expressed that insurance companies do not provide carbon monoxide detectors to their inspectors.
- With regard to the discussion question should boiler inspectors be documenting other hazards if they are present such as Asbestos? There was general feedback that no, they should not, and that it was the responsibility of each employer to prescribe Health and Safety procedures for their employees.
- Enforcement: Alex Rittberg explained that the DNREC Boiler Safety Program's enforcement authorities are limited and that as written DNREC could not enforce against an insurance company that failed to perform an inspection. Alex Rittberg further explained that DNREC intended to add a definition of a person and then use that definition to expand its enforcement authorities so the Department could better enforce against contractors and insurance companies that fail to follow the rules and regulations. Alex Rittberg explained that the enforcement procedures found in 7 Delaware Code Chapter 60 would be followed which ensure that DNREC gives the respondent proper notice of the violations and the right to file an appeal.

Path Forward

- Alex Rittberg referenced the slide in his presentation and stated that the path forward is highly dependent of whether the legislation is supported. Alex Rittberg explained the changes to the regulations may not go forward until after June 30th 2017, to allow the legislature to consider the draft bill.

Adjournment

- Meeting was adjourned at 3pm by Alex Rittberg.
- Minutes submitted by: Jennifer Vavala