# **Now!** 2014 No. 2

# Incident Reports and the importance of safety

The term "incident," for the purposes of the report and the article, is best described as an occurrence or failure resulting from one of the causes listed in the Incident Report. While an incident may not be a catastrophic failure, it is still considered to be an occurrence that results from a deficiency in mechanical operation, materials, human performance, or a combination thereof.

A two-pronged approach to prevention of boiler and pressure vessel incidents (and thus injuries and deaths) is observed. First, if failures recorded in the Incident Reports can be linked to the "off" year of a two-year inspection cycle, there is a clearly documented reason for annual inspections. Also, the installation of continually more complicated vessels may warrant review by the jurisdiction to increase its surveillance.

Within the object categories, there are several common causes of failure. Low water condition, operator error, and poor maintenance are the leading causes of failures. These vie for top position, nudging each other in and out of first place depending upon the year. Still, they remain the foremost reasons for incidents.

Turning this statistic around depends on operator training and partly upon the continued dissemination of safety information by various means available from the jurisdictions to the owners. Even in the category of unfired pressure vessels, where low water condition is not applicable, operator error and poor maintenance is the leading cause of incidents. The message is clear: the numbers reflect the need for properly trained, qualified operators. Boilers and pressure vessels can be safely operated and maintained only by individuals with the appropriate skills and training. **- Dave Erhardt** 

The following data is provided by and can be located on the National Board Association of Boiler and Pressure Vessel Inspectors website: http://www.nationalboard.org/ Index.aspx?pageID=385

#### Based on 2002-2008 OSHA Data

The new National Board Incident Report (which was launched in 2012) provides documented statistics

of pressure equipment accidents that have occurred across the United States. The data is collected from the Occupational Safety and Health Administration's (OSHA) public website database, "Fatality and Catastrophe Investigation Summaries."

OSHA's resources were chosen due to its decades-long, credible reports of on-the-job accidents. The Incident Report is a look back at accidents that have already occurred. Analysis of accident data can reveal causes and trends in pressure equipment incidents and can provide insight that may be valuable in preventing future accidents. As new data is added each year, Incident Report statistics will provide greater analysis of the kind of pressure equipment accidents that have taken place.

#### How the Report Is Compiled

National Board extracts reports from OSHA's database using industry-specific keywords to customize the results. Each customized report generated by OSHA is then reviewed by National Board staff. Only incidents that are identified as applicable to the boiler and pressure vessel industry are added to the Incident Report statistics. Before OSHA reports are cleared and posted to its database, each summary undergoes a thorough investigation, revision, and screening process by OSHA, which can delay posting up to 5 years. For those reasons, the National Board has elected to research summaries that are greater than five years old. National Board began with years 2002-2007, and then on an annual basis will add the next year's data to the National Board Incident Report.

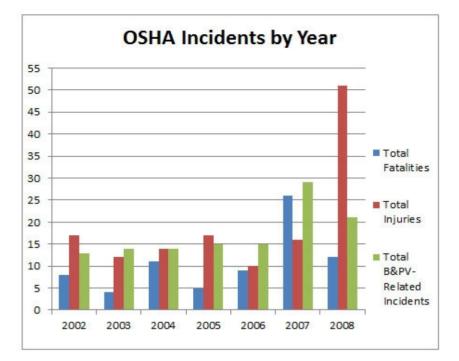
#### 2013 Report Information

The 2013 Incident Report includes OSHA summaries that have been updated and cleared by OSHA as of 12/31/2013 for occurrences through 12/31/2008. The 2008 OSHA summaries are the newest set of data National Board has reviewed and added to the Incident Report. Compared to the initial findings in the 2012 Incident Report (published in the winter 2013 BULLETIN) refreshed data between 2002 and 2007 did not show

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significant changes. The new data comes from boiler and pressure vessel-related accidents that occurred in 2008. This data reveals that incidents continue to occur for many reasons and cause property damage, injuries, and fatalities. (Click on the following "OSHA Incidents" links to read each detailed report.) Owners, inspectors, installers, operators, and repair organizations must continue to learn, understand, and apply safety rules and regulations to prevent or minimize the number of incidents that occur annually.

In a graph provided by the National Board Association of Boiler and Pressure Vessel Inspectors, the number of OSHA incidents are clearly defined.



# **ARISE welcomes David Massy**

Massey will be responsible for maintaining and administering the company's comprehensive safety program and verifying that ARISE is in compliance with site safety programs.

**RISE Boiler Inspection and Insurance Company RRG** has always held itself to the highest standard for compliance to regulatory inspection and safety standards. This standard is a necessity in order for ARISE to provide the quality service necessary to NABO Members with their inspection needs. Compliance with our safety procedures as well as member's site safety procedures is a must. In keeping with this standard we are proud to announce the hiring of David L. P. Massy as Safety Manager. David has 38 years' experience in insurance and risk management in both private

and public sectors. As Safety Manager he will be responsible for maintaining and administering the company's comprehensive safety program and verifying that ARISE is in compliance with site safety programs where applicable. Full compliance with applicable State laws, federal OSHA regulations pertaining to employee health and safety are strongly emphasized in the program.

We are confident David will be a great asset to ARISE and all NABO Members.



Massy

Peetz and Jones awarded appointments

n January of this year, Arise Sr. Inspection Specialist, Darryl Peetz was appointed to serve as Member of the BPV Committee on Welding, Grazing and Fusing (IX). The term came into effect in December of 2013 and will continue through June



of 2018. In a letter received by Peetz from G.M. Eisenberg, Director of Pressure Technology Codes and Standards, Eisenberg expressed the committee's pleasure at having Peetz on board.

Wayne Jones, Chief Inspector for Arise was also reappointed for another three-year term to the National Board's Repair/Alteration Committee.

These appointments provide a valuable resource for all NABO members. By continued participation on committees. Arise maintains a close working relationship with code and jurisdictional authorities.



Jones

#### Peetz

### **Remembering maintenance needs this Autumn**

# Fall weather is the perfect time to be mindful of heating systems

s fall, then winter quickly approaches, we need to be mindful of our building's heating systems. Routine care and maintenance needs to be scheduled an completed to ensure proper operation of this critical equipment. We, at ABIIC are commit-

ted to the safe and efficient operation of your boilers and pressure vessels. Our expert staff stands ready to service our policy holders requiring jurisdictional inspection services. Please call 1-800-989-7574 or email at inspections@ariseinc.com to schedule service.



Got an important message for your fellow NABO members? Have an announcement that you'd like to share? Send your submissions for the *NABO NOW!* newsletter to Dave.Erhardt@ariseinc.com

# NY Thermal Inc. Recalls to Repair Gas-Fired Hot Water Boilers Due to Carbon Monoxide Hazard

The U.S. Consumer Product Safety Commission, in cooperation with the firm named below, today announced a voluntary recall of the following consumer product. Consumers should contact the firm to arrange for a free repair.

Name of product: NTI Trinity Gas-Fired Hot Water Boilers

Units: About 4,800

**Distributor:** NY Thermal Inc., of Sussex, New Brunswick, Canada

**Hazard:** Acidic liquid in a drain line can cause a fitting in the boiler to leak, posing a risk of carbon monoxide (CO) poisoning to consumers.

**Incidents/Injuries:** NY Thermal Inc. has received one report outside of the United States of a leaking fitting resulting in a CO alarm activation. No injuries have been reported.

**Description:** The recall includes NTI Trinity gas-fired hot water boilers with model numbers Ti100, Ti150, Ti200 and Ti400. The boilers were manufactured between November 28, 2005 and January 8, 2007. The Ti100, Ti150 and Ti200 are wall-mounted units, and the Ti400 rests on the floor. The boilers are gray in color and "NTI" appears on the front cover. The model number and date of manufacture are located on the ID label inside the front cover of the boiler.

**Sold by:** Plumbing and heating contractors nationwide from November 2005 through February 2007 for between \$3,000 and 8,500, depending on the model.

#### Manufactured in: Canada

**Remedy:** Consumers should immediately contact the firm for instructions and to arrange for a free repair. **Consumer Contact:** For more information, contact NY Thermal Inc. at (800) 688-2575 between 7 a.m. and 4 p.m. ET Monday through Friday, or visit the firm's Web site at <u>www.nythermal.com</u>.

The U.S. Consumer Product Safety Commission is charged with protecting the public from unreasonable risks of injury or death associated with the use of thousands of types of consumer products under the agency's jurisdiction. Deaths, injuries, and property damage from consumer product incidents cost the nation more than \$1 trillion annually. CPSC is committed to protecting consumers and families from products that pose a fire, electrical, chemical or mechanical hazard. CPSC's work to help ensure the safety of consumer products - such as toys, cribs, power tools, cigarette lighters and household chemicals -- contributed to a decline in the rate of deaths and injuries associated with consumer products over the past 40 years.

Federal law bars any person from selling products subject to a publicly-announced voluntary recall by a manufacturer or a mandatory recall ordered by the Commission.

To report a dangerous product or a product-related injury go online to <u>www.SaferProducts.gov</u> or call CPSC's Hotline at (800) 638-2772 or teletypewriter at (301) 595-7054 for the hearing impaired. Consumers can obtain news release and recall information at www.cpsc.gov, on Twitter @<u>USCPSC</u> or by subscribing to CPSC's <u>free e-mail newsletters</u>.

"NTI" appears on the front cover.



The model number and date of manufacture are located on the ID label inside the front cover of the boiler.





# Weil-McLain Recalls Ultra Series Boilers Due to Risk of Fire, Explosion

### A crack can develop in a cap used to seal the manifold of the Ultra Series 80, 105, 155 and 230 MBH boiler. This poses a risk of fire and explosion.

Consumers should stop using this product unless otherwise instructed. It is illegal to resell or attempt to resell a recalled consumer product.

Recall date: June 10, 2014 Recall number: 14-203

Name of product: Weil-McLain Ultra models 80, 105, 155 and 230 MBH Ultra Series Boilers

**Hazard:** A cap on the boiler's manifold can crack and release gas into the home, posing a risk of fire and explosion.

**Consumer Contact:** Weil-McLain toll-free at (888) 770-7139 from 7 a.m. to 6 p.m. CT Monday through Friday or online at www.weil-mclain.com and click on "Product Safety Recalls" for more information.

**Units:** About 7,900 in the United States and 540 in Canada

**Description:** This recall involves Weil-McLain Ultra models 80, 105, 155 and 230 MBH gas-fired boilers used for space heating. The boilers have a serial number range between CP 6557046 and CP 6955985. Model and serial numbers are located on a bar-coded label affixed to the lower right side of the boiler, behind the removable front panel. The boilers have a Weil-McLain logo plate affixed to the front, a pewter/ flat black cover and are either freestanding or wallmounted.

**Incidents/Injuries:** The firm has received 11 reports of manifold caps cracking. No fires or injuries have been reported.

**Remedy:** Consumers should immediately stop using the recalled boilers, turn off the gas supply to the boilers and contact Weil-McLain to schedule a free inspection and repair.

**Distributed by:** Plumbing and heating wholesale distributors, plumbers and contactors nationwide from June 2012 through March 2014 for about \$4,200 to \$6,200.

Distributor: Weil-McLain, of Michigan City, Ind.

#### Manufactured in: United States

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## TAC LLC Recalls "Erie Boiler Boss" Boiler Controls for Scald Hazard

### TAC LLC Recalls "Erie Boiler Boss" Boiler Controls for Scald Hazard

WASHINGTON, D.C. - The U.S. Consumer Product Safety Commission, in cooperation with the firm named below, today announced a voluntary recall of the following consumer product.

**Name of product:** "Erie Boiler Boss" Operating and Reset Controls

Units: About 850

**Manufacturer:** TAC LLC, of Loves Park, Ill. (formerly Invensys Building Systems)

**Hazard:** These boiler controls can fail, causing water temperature to rise to the high temperature limit. Should the high temperature thermostat or external safety limit devices also fail, consumers could suffer scalds from unexpectedly hot water during use or system piping damage can result.

Incidents/Injuries: TAC is aware of 17 incidents where the boiler control reportedly failed. One incident of system pipe damage has been reported. No injuries have been reported.

Description: The recall includes all Erie Boiler Boss 2400 Operating Controls and Erie Boiler Boss 1200 Boiler Reset Controls. The controls are typically used to cycle the domestic or hydronic water system burner. The control is mounted in an enclosure mounted on or near the boiler. The recalled controls have a nameplate on the front of the enclosure with the system name and model number. A numerical LED display will be part of the nameplate. Affected BB2400 carton labels on uninstalled products will have date codes prior to 0523. Affected BB1200 carton labels on uninstalled controls will have date codes prior to 0647. No date code is stamped on installed products.

**Sold at:** TAC wholesalers, independent field offices and original equipment manufacturers nationwide. The controls for the 2400 model was sold from February 1998 through June 2005, and the controls for the 1200 model was sold from July 1999 through November 2006 for between \$550 and \$650. Manufactured in: United States

Remedy: Consumers should contact TAC to receive instructions on how to participate in the recall and obtain a free replacement control.

Consumer Contact: Contact TAC toll-free at (866) 692-1110 between 8 a.m. and 4:30 p.m. CT Monday

through Friday, or visit the firm's Web site at <u>www.tac.com.</u>

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OSS System 1200

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These boiler controls can fail, causing water temperature to rise to the high temperature limit. 2013 National Board Violation Findings

The National Board Annual Violation Tracking Report identifies specific violations (per device type) commonly found on five types of pressure equipment during jurisdiction-required inspections. The following data reflects the reporting period of 1/1/2013 – 12/31/2013 as reported by participating member jurisdictions.

The Violation Tracking Report indicates problem areas and trends related to boiler and pressure vessel operations, installation, maintenance, and repair. The data also identifies problems before adverse conditions occur. This report serves as an important source of documentation for jurisdictional officials, providing statistical data to support the continued funding of inspection programs.

This data listed below is published by the National Board OF Boiler and Pressure Vessel Inspectors. For a complete detailed report go to the National Board of Boiler and Pressure Vessel Inspectors site www.nationalboard.org and refer to the Bulletin Tab.

Type of Pressure Equipment	Total Number of Inspections	Total Number of Violations	Percent of Violations
High Pressure/ High Temperature Boilers (S)(M)(E)	64,198	4,517	7.0%
Low-Pressure Steam Boilers (H)	51,274	8,334	16.3%
Hot Water Heating/Supply Boilers (H)	264,086	33,158	12.6%
Pressure Vessels (U)(UM)	217,518	7,770	3.6%
Potable Water Heaters (HLW)	45,531	4,484	9.8%
Totals	642,607	58,263	9.1%

# What's New...

- Georgia pressure vessels are now requiring inspections every three years.
- Tennessee remains without a Chief and Joint Reviews require both the State and the National Board participation.
- The Chief of the State of Indiana recently retired, The National Board is now handling the Joint Reviews.
- The National Board is now doing all Joint Reviews in Oklahoma, until the State gets qualified Team Leaders. The search for said leaders is underway.
- Cliff Dautrich has been appointed as the Chief Inspector for the State of North Carolina.



### **NABO** Activities

### 2014

November 2014

**Power-Gen Conference** 

### 2015

November 2015

**Power-Gen Conference** 

The 2014 National Board Synopsis of Boiler and Pressure Vessel Laws, Rules and Regulations are now available in a new format online. The Synopsis web page features a dropdown menu so users can select a specific jurisdiction and review detailed information regarding the current laws, rules, and regulations of that jurisdiction. Each online report also includes the prevailing requirements, detailed contact information, and the regulatory history for each jurisdiction. The below link will access the new online feature

http://www.nationalboard.org/ViewAllSynopses.aspx

