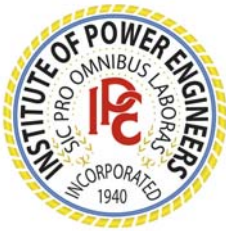


IPE VANCOUVER BRANCH



Issue 4

December 31, 2009

SAFETY CONCERNS— DECEMBER 2009

Have you read my article dated November 23, 2009, **“HOW DID BOILER AND PRESSURE VESSEL SAFETY COME TO BE AS IT IS TODAY?”**

For a free copy just e mail asmith24@shaw.ca

As A Canadian Or A Power Engineer, Are You Interested In Your Safety?

Have you considered exploring your provincial Safety Authority website? I have looked at the British Columbia and the Ontario Safety Authorities websites for information on the boiler explosion at the British Columbia Institute of Technology and the one at the Ottawa plant in October 2009. I found nothing related to either boiler explosion on these websites. I then searched GOOGLE and found a few pictures and written articles with reference to the Ottawa boiler explosion. I could not believe the content of these

pictures. The picture showed a group of men sitting on a riverbank with a picturesque hill scene on the other side of the river. Another picture showed people standing in groups with a perfect building in the background. Not one represented the boiler explosion that killed one person and severely injured several others. Not one picture showed a damaged boiler, auxiliaries, or building. These pictures mislead the public. Pure and simple, is the Safety Authority denying the public the information and prohibiting them from knowing the dangers that exist today. These pictures are of no educational value and do not contribute to improving boiler safety. What was the intent of these pictures? Do they indicate safety was the number one priority or are they having a picnic to celebrate?

If you find damaged boiler pictures related to these two

boiler explosions on Safety Authority websites, please e-mail me, as a picture for educational value is worth a thousand words.

IS THE BRITISH COLUMBIA SAFETY AUTHORITY'S NUMBER ONE PRIORITY, SAFETY? DOES IT HAVE A HIDDEN AGENDA WHEN PROPOSING TO ELIMINATE SECTION 65 FROM THE BOILER ACT AND REGULATIONS?

Previously, it was a common practice that every Canadian citizen had the opportunity to read, look, and learn from the pictures of the damaged boiler, its auxiliaries, the damaged building, and the work place. **Safety** of the people working in the plant and the general public used to be the number one priority. Today the Safety Authorities for Boilers (BOMBS) across Canada say they are changing the Act and Regulations to improve safety, and at the same time they propose to eliminate Section 65, #3

Next page...

Inside this issue:

Safety Concerns 2009	1
Happy New Year	1
Sub-branches	4

Special points of interest:

- Safety Concerns
- Sub-branches outside the big cities
- Happy New Year from National Director!

Check the website, www.ipevancouver.ca for an update on the Professionalism Committee's Action Plan. Do not hesitate to call the Area Director for B.C. for more information.

You can call Eric at **604-880-7472**,
esteinson@hotmail.com

HAPPY NEW YEAR TO ALL MEMBERS!

2009 was an interesting year for the Vancouver Branch of the IPE. We held a focus group to determine ways to increase member-

ship. A number of initiatives have sprung from that session. We are looking forward to many improvements in the new year. One

of them is communication. I hope all members enjoy a happy and prosperous 2010! Eric Steinson, PE Area Director for B.C.



which says, "Elimination of prescribed requirements for BC Safety Authority Boiler Safety Officers". The following is a quote from the BC Safety Authority **response** to questions asked by Power Engineers about the elimination of Section 65. "The intent is to allow BC Safety Authority to hire more safety officers. Only **appropriately qualified** staff will be permitted to perform site inspections which will continue to be required even if a plant is mainly on an audit regime. For example, a trained auditor will not be allowed to inspect a plant unless the auditor is also **technically qualified** to do so". In my opinion an audit has very little to do with the condition of the ("bomb's") boiler's internal condition. What does **technically qualified mean?**

Quote: "Unless the auditor is also technically qualified to do so".

British Columbia Institute of Technology educates thousands of technically qualified students each year and not one qualifies to be a Boiler Safety Officer.

At the same time, the Safety Authority is indicating the Power Engineer is not qualified to inspect boilers, even though Canada **has had** the highest safety standards on the North American continent. Then who is qualified?

I hold a technically qualified Radio and Television Service license. Is the Safety Authority saying that makes me technically qualified to be a Safety Officer (Inspector)? In reality, with only these qualifications, I do not qualify and I know it. However, with my experience as a First Class Power Engineer, my maintenance experience, and additional NBIC / ASME qualifications, I would qualify to be a Boiler Safety Officer. As a Chief Engineer for many years at various power plants, my safety record was the number one economic asset for my employers. Also I give much credit and thanks to the qualified Safety Officers..

How Long Will It Take The Boiler Safety Authorities In Canada To Maintain, Improve Boiler Safety, And Make It The Number One Priority?

For education purposes I have attached a six page report and nineteen pictures of the Tennessee Boiler explosion. Please note the accident occurred on June 18, 2007 and this report was written on July 9, 2007. It took the state of Tennessee only nineteen days to prepare this report. How long will it take the Canadian Safety Authority's to place the two boiler incidents or the boiler explosion pictures on their websites?

WILL FUTURE CANADIAN BOILER EXPLOSION REPORTS LOOK LIKE TENNESSEE'S?

In the fourth paragraph of the Tennessee Boiler Explosion report under "**SYNOPSIS**" it states the following: "There were a number of factors that contributed to the accident: lack of standard training and boiler operation procedures, inadequate boiler attendance and record keeping, inadequate and improper boiler maintenance, and inoperative and improper operating controls and safety devices". The following comments refer to each of the above stated facts.

A. "**Lack of standard training and boiler operation procedures**"

When you were employed, did you receive your training from a qualified Power Engineer using up to date operation procedures? Will new employees receive proper training with up to date operation procedures? During the past eight or nine years this standard in British Columbia has deteriorated to the point where in some plants unqualified people are training others. One can almost say the blind are leading the blind.

B. "**Inadequate boiler attendance and record keeping**"

It has come to my attention that some plants do not have power engineers on all shifts, some plants have the chief engineer working shifts, in some plants the Safety Authority gave permission to employ engineers that are not qualified, and some plants are spread out in total area so that it is impossible for one qualified engineer to be at two places at a given time. Is this striving for better safety? Need I say more!! How can anyone working in these conditions keep proper records and put safety as the number one priority?

C. "**Inadequate and improper boiler maintenance**"

The Tennessee boiler with automatic controls was built in 2000. Similar boilers are located in British Columbia and are thirty to fifty years old. The Tennessee boiler was still considered new and was only seven years old when it exploded. Was this boiler properly maintained? Was the safety inspector qualified? Did they do the necessary inspections? Did the inspector not recognize this boiler was a medium size bomb waiting to explode? I have been informed that many companies contract out the maintenance of their boilers. Some of these contractors are employing the absolute minimum number of qualified maintenance personnel or engineers, which makes it impossible for the qualified Power Engineer to carry out the proper maintenance at the various plants at the same time. Since 1999/2000, the Safety Authorities across Canada have changed the Act and Regulations to minimize the qualifications and effectiveness of Power Engineers, and therefore are responsible for the inefficiencies occurring in some plants. **IS SAFETY THEIR FIRST PRIORITY?**

D. "**Inoperative and improper operating controls and safety devices**"

Are your boiler/boilers (bombs) being maintained properly? If not please start to educate your employer by showing them the following pictures.

This medium size boiler approximately 6 ft. high, 12 ft. long was propelled through a roll-up door with a heavy steel commercial frame. The boiler came to rest one-hundred feet from its original location.



Note the final location of the boiler after the explosion. The furnace tube's thick metal plate was torn and bent. Note the hole created by the boiler, through the roll up door on the west wall. Pictures show damage to some of the auxiliary equipment. The thirty (30) foot hole in the outer wall of the plant was created when the boiler's rear door was hurled through the concrete block wall. The rear boiler door, which weighs almost as much as two small cars, was propelled one hundred feet and settled down in the ditch. Shows the damaged bridge and walkway over the ditch. Shows the boiler steam line and smoke stack still hanging in mid air, and the collapsed internal south wall.

The Canadian Safety Authorities appear to approve unattended boilers when equipped with duplicate automatic controls. The above pictures from the Tennessee explosion prove that automatic devices will not prevent boiler explosions.

On a closing note, I want to share a comment which I received in response to my November 23, 2009 article.

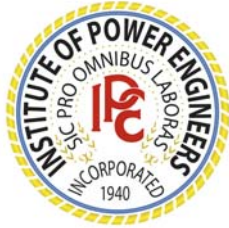
"HOW SOON PEOPLE FORGET". "Most people would never guess that the largest single accident in North America was and still is a boiler explosion, that of the SS Sultan River Boat, in 1865 with estimated 1800 deaths".

I do believe history can repeat itself. If you have any comments with respect to your safety going down the slippery slope; please pass them to me. Your name will be kept confidential.

For an eight minute presentation on this particular explosion, click on 'A Boiler Explosion' at www.ipevancouver.ca/information.

Sincerely,

Arthur Smith, PE, Past Area Director, Alternate Area Director, For: The British Columbia Institute of Power Engineers.



December 30, 2009

In a few days all Power Engineers will be able to celebrate the 70 years the Institute of Power Engineers has dedicated to maintaining the safety standards in Canada. During this period of time we are proud to recognize our forefathers who were responsible for Canada's excellence in safety, benefitting the power engineer, the public and both equipment and property.

2009 was an exciting year for the British Columbia Institute of Power Engineers. The committees such as professionalism, employment, corporate membership, education are progressing on target. We are enthused with the new website, and newsletter which will be propelled by a new, larger database of recipients.

Our five year plan is to develop sub branches throughout British Columbia. I am happy to inform you, the Institute of Power Engineers is well represented by members in sixty one British Columbia communities. I would be pleased to add your town or city to the suggested list of target communities below. We have developed a simple five step plan to assist in organizing a sub branch in your area. The only requirement for your area is to have five members that can hold office. This plan can be implemented by email or phone, but if required we will be pleased to visit.

Armstrong	Houston	Prince George
Campbell River	Kamloops	Prince Rupert
Chetwynd	Kelowna	Quesnel
Chilliwack	Kitimat	Sechelt
Dawson Creek	Nanaimo	Terrace
Ft St. John	Nelson	Trail
Ft Nelson	North Vancouver	Vernon
Golden	Powell River	Williams Lake

We welcome you to participate in our professional organization that is dedicated to **safety and training**. For any further information please contact me. asmith24@shaw.ca

Sincerely,

Arthur Smith, PE