



2015 marks 20 years for ABSA, the pressure equipment safety authority. On April 1st, 1995, the Province of Alberta delegated authority to ABSA for the administration of all pressure equipment safety programs. About 50 staff moved from the Alberta Boilers Branch and formed the core of ABSA, to carry on and further develop the programs established by the Alberta Boilers Branch during its 100 years of operations. Over the past 20 years, our pressure equipment safety programs, with strong support and robust stakeholder working relationships, have evolved to take advantage of best practices that are recognized in Alberta and beyond.

We are planning to celebrate this 20 year milestone in May with receptions in Calgary on May 25th and in Edmonton on May 26th. We hope you can join us on one of those dates. We will keep you posted through our website as plans firm.

We are proud of our staff, our reputation and our industry partners. We consider the last 20 years a significant shared success. We take this opportunity to acknowledge our partners at Alberta Municipal Affairs, the Safety Codes Council and the Industry for your contributions to pressure equipment safety in Alberta.

Together we will carry on the legacy that has been established over the last 120 years. We can take pride in the strong relationships that we have developed to ensure that pressure equipment is constructed and operated in a manner that protects public safety. Many believe that Alberta has set the example of how pressure equipment safety programs can deal with the challenges presented to provide the public, businesses and industries with high quality, safe and cost effective support services.

We want to assure you of ABSA's continued cooperation, working with you to protect the health and safety of our families, friends and neighbours.

Thank you for your confidence in us over the last 20 years. Together, let's continue to make a positive difference in pressure equipment safety. ❖

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RETURN TO ABSA'S BUILDING

ABSA's Head Office staff and operations have returned to 9410 – 20 Avenue effective March 02, 2015. In June 2014, ABSA's Edmonton office relocated to a temporary location to allow for expansion of the building.

The building now has additional space to accommodate staff and program needs. The examination room was doubled in size which will allow for an increased number of examination candidates at Edmonton sittings. There is also more parking available for visitors.

Edmonton examinations will continue in a hotel through the April sittings and will return to the ABSA office starting with the May examinations. Please carefully review your confirmation letter for the correct location. Seminars will return to the ABSA building in September. ❖

DESIGN SURVEY PROCESS IMPROVEMENTS

The number of design submissions has increased by 45% since 2010. In 2014, we received a record number of 10,500 submissions which had been climbing steadily over the last 5 years. More than 50% of the submitted designs have deficiencies and cannot be accepted the first time around. This sends them into a loop that involves putting the review on hold, resubmission, and repeated reviews until registration requirements are met. The process is inefficient and frustrating for both the submitter and Design Survey.

ABSA is actively working on improvements to design review processes in order to improve efficiency, reduce frustration, and decrease the turnaround time on design registrations:

1. More design surveyors are being hired – three new design surveyors started training in December 2014, and we are adding three more design surveyors in March.
2. For certain piping submissions, once we ensure that all required documents are submitted and have the required P.Eng. stamp and signature, we will register the design.
3. Design surveyors will use an 'audit' process to expedite design reviews for submissions from companies with a history of designs having few deficiencies.
4. Companies with a history of high deficiencies will see submissions rejected sooner.
5. Dedicated positions have been added to respond to general inquiries from clients.
6. We will continue to look for and implement improvements to the process for reviewing and registering designs.
7. We will accept designs registered by other jurisdictions provided that we receive the proper documentation.
8. We have added more administrative support staff.
9. ABSA technical staff have been seconded from the Inspections Department on a temporary basis to help with design reviews and registration.
10. Guidelines are being applied that will direct the ABSA review to higher risk items.

Design submitters can help:

A check list has been added to the AB-31 application so submitters can confirm that all requirements have been addressed. Please make sure that your submission is complete. Deficient information could lead to immediate rejection. Please help us to help you. ❖

MATERIAL TEST REPORTS FOR CATEGORY H FITTINGS

In accordance with CSA B51, Category "H" fittings may include:

- a) small pressure vessels,
- b) an assembly of components (including piping components), and
- c) condenser coils and evaporator coils as defined in CSA B52, as well as air heater coils.

For Category H pressure fittings designed and constructed in accordance with ASME Section VIII Div. 1, it is required that the MTR's (Material Test Reports) for the materials used in the construction include both physical tests and chemical analysis, and conform to ASME Section II requirements of the same edition of the code as indicated on the construction drawings. It is the responsibility of the fitting manufacturer, exercised through the quality control inspector, to verify that the MTR is correct. This requirement is normally satisfied by having the quality control inspector stamp, sign and date the MTR. ABSA auditors will typically verify that this has been done, during the auditing process. ❖

RECENT INCIDENTS INVOLVING FREEZING IN PRESSURE EQUIPMENT

This is a reminder that it is important for owners to review their systems and implement an effective pressure equipment winterization program to prevent damage to pressure equipment caused by freezing. The next few months of warm weather is the time to accomplish this.

Freezing of liquids in pressure equipment can damage pressure components which can be highly hazardous. Freezing can also lead to overpressure of pressure equipment which can lead to much more serious incidents.

Through the winter months of November through January, ABSA received 17 incident notifications of which 7 involved freezing. Fortunately, no personnel were harmed.

In 3 of the incidents, freezing in piping isolated the pressure relief valve and caused overpressure of the associated pressure equipment. In another 3 incidents, freezing in the piping caused rupture of the pipes. In the other incident, coolers were frozen during a shutdown because of inadequate draining. The causes included: tracing not energized; lack of tracing; and inadequate isolation and draining. ❖

OWNER'S INSPECTOR FOR PRESSURE PIPING

The Owner's Inspector plays an important role in the fabrication of B31.3 process piping. ASME B31.3 distinguishes the responsibilities and activities for inspection and examination. The owner's Inspector is responsible for inspection and the fabricator is responsible for examination:

<p>340.2 Responsibility for Inspection <i>It is the owner's responsibility, exercised through the owner's Inspector, to verify that all required examinations and testing have been completed and to inspect the piping to the extent necessary to be satisfied that it conforms to all applicable examination requirements of the Code and of the engineering design.</i></p>	<p>341 EXAMINATION 341.1 General <i>Examination applies to quality control functions performed by the manufacturer (for components only), fabricator, or erector. Reference in this Code to an examiner is to a person who performs quality control examinations.</i></p>
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In Alberta, evidence of fulfillment of these responsibilities is documented on the completed *Pressure Piping Construction and Test Data Report (AB-83)*. The AB-83 includes a "certificate of compliance" portion that must be signed off by the fabricator's designated representative. The AB-83 also has a "certificate of inspection" portion that must be signed off by the owner's Inspector.

Pressure Piping Fabricated for Stock

Concerns have been raised by industry stakeholders respecting the fulfillment of the owner's responsibility for inspection of pressure piping that was built for stock and sale at a later date. In this case, the end user's "owner's Inspector" would have had no involvement during construction of the stock pressure piping. The following is intended to provide guidance on due diligence respecting inspection and acceptance of pressure piping that was built for stock.

ASME B31.3 stipulates that the owner's Inspector cannot be an employee of the fabricator unless the owner is the fabricator. A fabricator who is fabricating pressure piping for stock may be considered the owner. In this case, the fabricator has the added responsibility of designating an appropriately qualified inspector to perform the verifications and inspections of owner's inspector as specified in B31.3. For stock pressure piping, the designated owner's Inspector could be an employee of the fabricator or a 3rd party inspector who meets the qualification requirements of ASME B31.3 paragraph 340.4. This owner's inspector must sign off on the AB-83 "Certificate of Inspection".

The end user who buys the stock piping skid must receive a completed AB-83 with the piping. The end user would have to maintain the AB-83 on file for at least 5 years. The end user has the responsibility for due diligence in accepting the piping as meeting the PESR and determining that it is suitable for the intended service. But in this case, the end user would not need to have an owner's Inspector, employed by the end user, to sign off on the data report.

Pressure Piping Fabricated for an End User

If an end user has contracted the fabrication of pressure piping, the end user, and not the contracted fabricator, is the owner responsible for inspection under B31.3. If the primary contractor subcontracts the fabrication of piping, the end user is still considered to be the "owner".

In all cases, it is important for the contractor to ensure that the owner's Inspector has the appropriate notification and access for "inspection" of the piping and to certify the "Certificate of Inspection" on the AB-83. The end user must exercise due diligence in ensuring that appropriate controls are established in the contract to address the requirements. ❖

STEAM TESTING OF UV-STAMPED VALVES IN STEAM SERVICES

While the requirements of AB-524 became mandatory on January 1, 2014, a deferral process was established to permit owners that have a steam setting compliance plan, in accordance with ABSA document AB-524a, to continue the practice of setting "UV"-stamped pressure relief valves using steam to air correction factors supplied to the owner by the valve manufacturer. This implementation deferral of steam testing, specific to UV-stamped valves, was established to allow more time for owners and valve servicing organizations to develop sufficient steam testing capacity.

A recent survey of the availability of the steam testing facilities in Alberta indicates that a number of steam-test facilities that are under construction will not be operational until the end of summer 2015.

The Administrator has issued Information Bulletin IB15-003 to extend the steam setting deferral to December 31, 2015, by which time it is expected that the steam testing facilities under construction will be in operation. ❖

POWER ENGINEERING ELECTRONIC MULTIPLE-CHOICE EXAMINATIONS

ABSA is pleased to offer multiple-choice examinations in paper format or an electronic version. Candidates will be able to write all multiple-choice examinations on an ABSA laptop or iPad at our regular Edmonton examination sittings. At the examination sitting, you will receive instructions guiding you to log on, answer all questions electronically and then, once finished, you will find out instantly if you have passed or failed. Feedback from your examination will be sent to your email address.

ABSA will be selecting a few people to write electronically during April and May and hope to launch the full program by June. At this time, this option will only be available to candidates writing in Edmonton. ❖

CHIEF POWER ENGINEERS EDUCATION CONFERENCE

On September 22, 2015, an educational conference designed for Chief Power Engineers will be held in Edmonton at the "Four Points by Sheraton Edmonton Gateway Hotel". A committee made up of chief power engineers and ABSA was formed to organize an annual Chief Power Engineers Education Conference. The topics under review by the committee are:

- ◆ Qualifying experience for power engineers
- ◆ Introducing the new Plant Registry
- ◆ Understanding the AB-528, "Requirements for Reduced Supervision of Power Plants, Thermal Liquid Heating Systems and Heating Plants"
- ◆ Preparing for an ABSA audit
- ◆ Fired Process Heater Operator's Certificate of Competency
- ◆ The purpose of temporary certifications
- ◆ How are examination questions developed and marked
- ◆ Chief and shift power engineers duties and responsibilities
- ◆ Standardization of boiler plants across Canada
- ◆ Other Topics
 - ◇ Electronic examinations
 - ◇ Electronic logbooks
 - ◇ Chief Power Engineer versus Chief Inspector

An effort will be made by the committee to contact all of the chiefs or persons in charge of power plants, thermal liquid heating systems and heating plants to inform them of this educational conference. Stay tuned to www.absa.ca for additional information.

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CAUTION

Previous issues of The Pressure News may contain information which is outdated or no longer valid. Please be cautious when using information from old articles.

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