

## IN THIS ISSUE:

<i>New Year Holiday Message</i> .....	1
<i>Use of the ASME Code 2017 Edition</i> .....	2
<i>Refrigeration System Safety In Alberta</i> .....	2
<i>Update to Previous Design Survey Status</i> .....	2
<i>Summary of Accident Reports</i> ....	3
<i>2017 SOPEEC Annual General Meeting</i> .....	3
<i>2017 ACPEEC Highlights</i> .....	3
<i>ABSA Fee Schedule Announcement</i> .....	4
<i>Online Registration of ABSA Seminars</i> .....	4
<i>The 2018 IPEIA Conference</i> .....	4

Our best wishes for a  
happy holiday  
season and a new  
year with health and  
prosperity.



## NEW YEAR HOLIDAY MESSAGE

Once again, we are pleased to report that ABSA staff had a very safe year in terms of workplace safety, with no lost time incidents. From an industry perspective, there were a few more incidents and unsafe conditions reported as compared to last year. More importantly, there were fewer injuries, and no major accidents involving fatalities or serious injuries in Alberta this year that were caused by the failure of pressure equipment. This is largely due to the efforts of industry's safety focus when it comes to the safe design, installation, operation and maintenance of pressure equipment, with ABSA playing a role by promoting pressure equipment safety through its program delivery.

As we look back, the last year continued to present a number of economic challenges in Alberta. Economic uncertainty resulted in the first quarter experiencing very low activity levels – in fact, design and fabrication activities were at an 18-year low. The second quarter saw the beginning of a soft recovery, particularly in design and fabrication activities, which carried on to the end of the year. Now, at year's end, uncertainty continues. ABSA has positioned itself with a complement of professional, experienced and dedicated staff, and the uptick in activity has prompted us to begin cautiously recruiting to ensure we have the capacity to meet future demand. Financially, ABSA's revenues and expenses were again on budget this year. Reserves at year end met the Board's targets for financial health, and the independent external auditor gave ABSA a clean financial audit again this year.

In addition to a knowledgeable and skilled staff, ABSA is very fortunate to have a dedicated and committed Board of Directors. Management and staff very much appreciate their strategic guidance. With our stable, well-experienced workforce, strong support from our Board, Alberta Municipal Affairs and the Safety Codes Council, ABSA is well-positioned to deliver its mandate.

On behalf of ABSA's Board of Directors, and management and staff at ABSA, I would like to take this opportunity to wish you all the best for the holiday season as you share it with family and friends, and for a prosperous and safe new year.

Mike Poehlmann  
General Manager

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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.

## USE OF THE ASME CODE 2017 EDITION

The 2017 Edition of the ASME Boiler and Pressure Vessel Code was published on July 1, 2017. The ASME Code is declared in force “as amended or replaced from time to time” by the Alberta Pressure Equipment Safety Regulation. Alberta’s Safety Codes Act prescribes that when a code is adopted in this manner, the new edition of the code is to come into force “on the first day of the month following the expiry of 12 months after the date on which the amendment or replacement is published”. When the rule prescribed by law is considered, in Alberta, the new 2017 Edition will come into force on August 1, 2018.

According to the rules given in the ASME Code, a new edition may optionally be used immediately, but its use becomes mandatory six months after publication; therefore in accordance with the ASME rule, the 2017 Edition is mandatory on January 1, 2018.

It is a longstanding practice in Alberta for industry to follow the earlier implementation rules established in the ASME Code. This avoids concerns about the Alberta pressure equipment industry being out of step with the global market regarding code edition. Accordingly, the 2017 Edition of the ASME Code may be used in accordance with the ASME implementation schedule for pressure equipment constructed for use in Alberta. ❖

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## REFRIGERATION SYSTEM SAFETY IN ALBERTA

Anhydrous ammonia is a refrigerant commonly used in ice arenas, dairy and food production plants, cold storage warehouses, and facilities that process fish, poultry, and meat. While it has proven to be a cost-effective, efficient, and reliable refrigerant with respect to its desirable thermodynamic properties, it is also highly toxic and can cause severe injury or death if personnel are exposed to high concentrations. Owners and operators of facilities using ammonia refrigeration systems must be aware of the hazards involved and of specific precautions that must be taken to reduce the risk of injury to people working near this type of equipment.

The Pressure Equipment Safety Regulation declares that the CSA B52 Mechanical Refrigeration Code is in force in Alberta with respect to pressure equipment. CSA B52 therefore establishes some of the mandatory safety requirements that are applicable to these systems, such as design registration for pressure parts, inspection during construction and installation, and some required installation considerations such as signage, ventilation fans, and vapor sensors. Owners are required to ensure their installations comply with these requirements and remain in good condition, and that personnel who may be exposed to hazards are provided with the necessary personal protective equipment.

In November, ABSA published Information Bulletin IB17-022 which discusses the CSA B52 Mechanical Refrigeration Code. It notes that CSA B52 imposes rules that fall within the scope of Safety Codes Act disciplines other than pressure equipment, and that those other disciplines must also be involved in the installation of refrigeration systems. A copy of this Information Bulletin [IB17-022](#) is available on our website. ❖

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## UPDATE TO PREVIOUS DESIGN SURVEY STATUS

Three years ago, in 2014, Design Survey had a backlog of over 2,000 submissions with an average initial response time greater than 25 working days. Since then, we have taken several steps to improve the situation: we’ve undertaken a change in department structure, we have hired more design surveyors, created and applied review guidelines, and created checklists to help submitters ensure they address the items that are sometimes overlooked.

By September of 2015, the backlog had been eliminated and the average initial response time was less than the targeted 15 working days. Around that time, we began to develop the concept of audit-based design acceptance, which eventually developed into today’s Quality Plan program. More than 700 designs have been registered under this program since its inception, and in July of this year two free information sessions on this initiative were given to interested industry parties. The participants were receptive to the idea of implementing the approach in their organizations in an effort to expedite the registration of their submitted designs.

Although we saw a moderate drop in the number submissions in 2016, in the last six months of 2017 we’ve seen a substantial increase. With a current average of more than 700 submissions received per month, we are pleased to report that the backlog remains at zero and that we are continuing to meet service delivery targets. ❖

## SUMMARY OF ACCIDENT REPORTS

ABSA's mandate is to administer the Safety Codes Act and associated regulations, and to deliver safety programs as they relate to pressure equipment. Our ultimate quality objective is to prevent injury to people and damage to property arising from the operation of pressure equipment. When incidents do occur, a proper and thorough investigation can help us and our stakeholders to learn from past mistakes, decreasing the likelihood of a repeated accident, and increasing the achieved level of public safety. Some of the major accidents which caused injury to personnel this year included:

- During maintenance of an ammonia system, a worker inadvertently caused an isolation valve to partially open, releasing ammonia. Two workers were injured as a result of contact with the released ammonia.
- A process fluid leak created a vapour cloud which ignited and caused a fire. One worker was treated for burns.
- A non-metallic pipe failed during operation, releasing acid which contacted two operators.
- Buried piping was damaged by construction activities, causing a hydrocarbon leak that resulted in an explosion, injuring one worker.

Equipment owners are reminded that Alberta law requires that unsafe conditions and accidents be reported to the Administrator in a timely fashion. ABSA provides a summary list of reported pressure equipment accidents and incidents on our website – you can find it at [www.absa.ca](http://www.absa.ca) by selecting 'Accident Reporting' in the 'Looking for...' menu, and then choosing 'Summary of Accident Reports'. ❖

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## 2017 SOPEEC ANNUAL GENERAL MEETING

The Standardization of Power Engineer Examinations Committee (SOPEEC) held their annual general meeting in Montreal, Quebec, in June of 2017. Some of the items that may be of interest include:

- The revised 4<sup>th</sup> Class power engineering examinations will be available throughout Canada (in all SOPEEC jurisdictions) starting November 1, 2017. (The new syllabus has been adopted in Alberta as of November 1. Until October 31, 2020, candidates have the option of writing an exam based on either the old or the new syllabus.)
- SOPEEC is interested in harmonizing the steam traction engine operator's syllabus and associated examination, for use by jurisdictions that regulate the operation of steam traction engines. ABSA has volunteered to lead this harmonization initiative.
- A new standardized examination is being developed to qualify entry-level operators of refrigeration systems, such as those found in ice arenas. (ABSA does not administer a refrigeration operator certification program, but this examination will be made available to candidates who are interested in it.)
- As instructed by the Association of Chief Inspectors, SOPEEC is currently developing multiple choice examinations for 1<sup>st</sup> Class and 2<sup>nd</sup> Class power engineering examinations.

SOPEEC's next annual general meeting will be held in June 2018, in Saskatoon. ❖

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## 2017 ALBERTA CHIEF POWER ENGINEER EDUCATION CONFERENCE HIGHLIGHTS

On September 26, the 3<sup>rd</sup> annual Alberta Chief Power Engineers Education Conference (ACPEEC) was held at the Delta Hotel in Edmonton. The conference started out with around 40 participants attending a specially-organized hospitality event the evening before, providing excellent opportunities for conversation and networking. Approximately 180 people attended the main event, where ten specially-selected educational topics were presented by subject-matter experts, along with an open-forum discussion session, "Open Mic with Mike," allowing questions and discussion with Mike Poehlmann, ABSA's Chief Inspector and Administrator in the pressure equipment discipline.

Attendees expressed their appreciation of the 13 generous sponsors who helped to offset conference expenses. Feedback from those in attendance was positive, and many excellent suggestions were given for next year's discussion topics. The planning committee has already decided to use the same venue for the 2018 conference, and will be announcing a date in the near future. ❖

## ABSA FEE SCHEDULE ANNOUNCEMENT

ABSA is not planning any changes to the fee schedule for 2018. Our current fee schedule is posted on our website at [www.absa.ca](http://www.absa.ca) under the heading 'Fee Schedule'.

ABSA is a self-sustaining not-for-profit organization. We recover our costs through revenues generated by fees charged to customers, and we place a high importance on ensuring value for cost. Fees are necessary to ensure the operational effectiveness and sustainability of our organization, and we are committed to giving you our best effort with regard to the effective delivery of pressure equipment safety programs in Alberta. ❖

## ONLINE REGISTRATION OF ABSA SEMINARS

We are pleased to announce that there is now an online registration system available for our seminars. It is no longer required to download a registration form, fill it out, submit it in hard copy, and then wait for confirmation of the registration. When an applicant registers online, they are given instant acknowledgement, along with confirmation of the seminar's time and location.

To register for a seminar, please visit our website at [www.absa.ca](http://www.absa.ca) and click the 'Seminars' menu heading, then follow the 'Online Seminar Registration' link. You can alternatively navigate directly to <https://seminars.absa.ca/>, where you can register online by following the instructions. ❖

## THE 2018 IPEIA CONFERENCE

The International Pressure Equipment Integrity Association (IPEIA) was organized by the Alberta Boiler Safety Association (ABSA) and SAIT over 20 years ago. It is now a not-for-profit organization managed by industry volunteers. The conference attracts 600 specialists in pressure vessel integrity such as inspectors, engineers, academics, and manufacturers with expertise in the oil, gas, power generation, chemical, and forestry industries. IPEIA is dedicated to improving safety for industry people, the public, and the environment through pressure equipment integrity management. IPEIA involves young people in our industry and shares knowledge garnered over years of service.

The 22<sup>nd</sup> conference will be held at the Banff Center on March 7-9, 2018. IPEIA features over 40 presentations on pressure equipment integrity by Canadian and international specialists. Information on codes, standards, inspection technologies, software, case studies, and similar topics will be presented. A 90-booth exhibition showcases integrity-related products and services on the latest technologies, techniques, and best practices.

Registration is now open and more information is available at [www.ipeia.com](http://www.ipeia.com).

Additionally, ABSA will be presenting three seminars as pre-conference training at the 2018 IPEIA Conference. The AB-528 *Requirements for Reduced Supervision of Pressure Plants* is a half day seminar, scheduled for Monday, March 5<sup>th</sup>. The AB-525 *Overpressure Protection Seminar* is a one day seminar, also scheduled for Monday, March 5<sup>th</sup>. The third seminar is the two day *Repair and Alteration* seminar, scheduled for March 5<sup>th</sup> & 6<sup>th</sup>. Industry members who would like to attend are encouraged to register early, as seating is limited. ❖

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