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YEAR-END MESSAGE

Once again, we are pleased to report that ABSA staff had a very safe year in terms of injuries to employees. As we look back on last year, it is a pleasure to note that we have the lowest number of accidents and unsafe conditions reported for over five years. As importantly, there were no major pressure equipment accidents involving fatalities or serious injuries in Alberta this year that were caused by the failure of the pressure boundary. This is largely due to the effort of industry with ABSA playing a role in the delivery of pressure equipment safety programs promoting pressure equipment safety in the province.

This was a year of steady activity at ABSA. Certification of power engineers and welders, and design registration has increased significantly, while activity in audits and inspections has leveled off. Seminar delivery activity also increased this year. Financially, ABSA's 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. ABSA's fees will see a 2.8% increase in 2013. This is the first fee increase since January 2009. With a very solid financial footing and a stable seasoned workforce, ABSA is well positioned to deliver its mandate and meet the challenges that changes resulting from the current global economic uncertainty may present.

In addition to a knowledgeable and skilled staff, ABSA is very fortunate to have a dedicated and committed Board of Directors. In May, 2012 Mark Demchuk was invited to join ABSA's Board of Directors. Mr. Demchuk is President of Business Services of Cenovus Energy. He joined John Eil, President of ATCO Power; Dr. Gordon Nixon, Vice President Academic of SAIT Polytechnic; Tony Robinson, Operations Manager, Production and Processing at Enerflex Ltd.; and Dale Myggland, Owner of BRIAS Inc. who is the Minister's Appointee. Mark replaced Dave Rushford as the Industry sector representative on the Board. We would like to take this opportunity to thank Dave for his significant contributions and valued leadership over 6 years.

As we come to the end of the year, the Board and all the staff at ABSA wish you all the best for the holiday season as you share it with family and friends. Our wish is that your new year will be safe and filled with happiness, joy, health and prosperity. ❖



We wish you a happy holiday season
And
A prosperous New Year

ABSA FEE SCHEDULE ANNOUNCEMENT

Due to rising costs of providing pressure equipment safety services, the fees for most services provided by ABSA, including pressure vessel annual registration fees, will increase by 2.8% on January 1st, 2013. Please check the Fee Schedule on ABSA's website for further details. This fee increase will allow ABSA to maintain public safety and provide its mandated services as delegated to us under the Boilers Delegated Administration Regulation.

This will be the first fee increase since January 1st, 2009. According to the Fee Schedule approved by the Minister, fees may be adjusted by ABSA's Board of Directors provided increases do not exceed the increase in the Consumer Price Index (CPI) for the Province of Alberta as published by Statistics Canada since the last fee increase. Fee increases above the CPI ceiling require the approval of the Minister.

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 of ABSA and we are committed to giving you our best effort with regard to the effective delivery of pressure equipment safety programs in Alberta. ❖

ABSA GENERAL MANAGER

Many of our stakeholders, customers and industry partners have been inquiring about the status of Gordon Campbell, ABSA's General Manager. Gordon was injured in an motor vehicle accident while on vacation in July 2012. Gordon remains on convalescent leave, and his recovery is progressing very well. ABSA's Board of Directors appointed Mike Poehlmann, ABSA's Manager of Inspections, to the position Acting General Manager on November 1, 2012 to take on the General Manager's role on a full-time basis until Gordon is able to resume his responsibilities. ❖

ABSA BOARD OF DIRECTORS

ABSA is looking for a pressure equipment industry professional to fill an upcoming position on our Board of Directors. Our Board provides guidance and direction to ABSA's activities and programs to ensure pressure equipment safety for industry and the public in Alberta. The Board consists of senior representatives of various facets of the pressure equipment industry. Previous governance experience either working with or serving on a Board would be a definite asset. ABSA Board members serve a three-year term with the option to serve an additional three-year term afterward. Board members receive an honorarium in recognition for service and are entitled to reimbursement for travel expenses.

Member Representing Utilities:

This position will provide guidance and insight into the pressure equipment safety aspects associated with energy generation and utilities in the province of Alberta. The ideal representative will possess senior or executive management and administration experience in an electric power generation or utilities organization operating in Alberta.

To apply for this position please send a resume and cover letter to:

Jared Uditsky, Human Resources Manager

ABSA the pressure equipment safety authority

9410 20 Avenue, Edmonton, AB T6N 0A4

Ph: (780)-437-9100 x3315, Fax: (780)-437-7787, Email: hr@absa.ca

Closing date for applications for the above positions is January 15, 2013. ❖

API EXAMINATIONS – CHANGES IN DELIVERY

We wish to advise that December 5, 2012 was the last American Petroleum Institute (API) certification examination in Edmonton proctored by ABSA staff.

For many years now, ABSA has proctored API examinations in Edmonton on a semi-annual basis. API notified ABSA of the intention to change the delivery method for API examinations commencing after the end of 2012. With the change of its mode of examination delivery from paper-and-pencil to computer-based, ABSA's help will no longer be necessary. API will hold their examinations in specially equipped computer centers provided by an examination administration company.

ABSA takes pride in our support to the pressure equipment industry and in the quality of service we provided for API and its candidates. We trust that the planned changes in delivery will continue to work effectively for those seeking API certification. ❖

FREEZING DAMAGE

With the cold weather upon us, ABSA staff members have been drawing the industry's attention to the serious nature of freezing damage. There were a number of articles published in The Pressure News previously. Below are the links to a couple of the articles that were published in 2010:

1. Page 5 of the December 2010 newsletter (<http://www.absa.ca/newsletter/2010-v15-iss4.pdf>)
2. Page 4 of the March 2010 newsletter (<http://www.absa.ca/newsletter/2010-v15-iss1.pdf>) ❖

INCIDENT REVIEW

A review of forty-four incidents reported to ABSA in the past 10 months revealed, similar to past findings, the following root causes:

- Inadequate maintenance procedures
- Inadequate operating procedures
- Inadequate inspection procedures

These findings again emphasize the need to review and re-validate procedures for maintenance, operation and inspection of pressure equipment on a regular basis. They also highlight the need to affirm that personnel have been properly trained and their competency verified with respect to those procedures. This can be particularly important when personnel are performing non-routine tasks. For example, if the plant has not been shut down for maintenance recently, it would be beneficial to review the procedures and practices necessary to bring the plant down and make it safe for inspection and maintenance work.

Operating response procedures must also be reviewed and, where necessary, revised. The extent of damage in some of the incidents investigated might have been reduced if there had been a faster response to upset conditions and alarms.

Along with reviewing procedures and training, the instrumentation used to monitor and control processes and to detect leaks and fires must be properly maintained. A system for managing change is required to ensure the continued suitability of instrument systems when process conditions change from the original design parameters.

Under the Alberta Safety Codes Act, the owner is responsible for ensuring that pressure equipment meets the requirements of the Act and regulations, that is it maintained properly, and that any process or activity is done in a safe manner. ❖

CUSTOM-DESIGNED FLANGES IN PIPING SYSTEMS

The majority of the flanges used in piping systems are standard ASME B16.5 and ASME B16.47 flanges. However, custom-designed flanges are also often used.

Flanges are considered as "custom-designed" when they are either outside the size/dimension ranges of ASME B16.5 and ASME B16.47 standards, or the material specification is not listed in the standards and therefore pressure-temperature rating is not provided. Another reason for custom designed flanges may be when the style/configuration is not covered by the standards, e.g. slip-on flanges outside the size range of ASME B16.5 or, as is the case with B16.47, slip-on flanges are not addressed at all.

Flanges not made in accordance with the Specifications and Standards listed in the applicable piping codes (e.g. ASME B31.3 or ASME B31.1), must be designed in accordance with ASME Section VIII, Division 1, (see: B31.3 Paragraph 304.5.1(b); B31.1 Paragraph 104.5.1)

In ABSA's *The Pressure News* Volume 10, Issue 4, December 2005, there is an article that highlights the mandatory rigidity analysis for flanges introduced by the ASME Code. It should be noted that this requirement is not only limited to custom-designed flanges used on pressure vessels but also applies to custom-designed flanges used in piping systems that are subject to the Safety Codes Act and Regulations.

Custom-designed flanges, like all the other fittings used in a piping system, are required to have registration in accordance with CSA B51-09 Clause 4.2.1. Owners who use unregistered fittings in piping systems that are subject to the Safety Codes Act & Regulations are in violation of Section 5 of the Act (RSA2000 Chapter S-1). ❖

ILLEGAL POSTING POWER ENGINEERING CERTIFICATION EXAMINATIONS

ABSA has received many phone calls and emails from power engineers concerned about public safety. The concern is that people may be advertising purportedly power engineering certification examination questions and answers for sale; and as a result, some individuals may be able to attain certification without having the appropriate knowledge.

Persons wishing to obtain power engineering certification must demonstrate both practical knowledge and experience, and must also reach a minimum academic level. Obtaining a certification by cheating on the examinations could lead to persons working as certified power engineers without the necessary competency, exposing the public and workers to an unsafe environment. Certified power engineers are responsible for the safety in the operation of pressure equipment that are located in public, business, educational, and industrial type occupancies. Obtaining power engineering certification without meeting the academic requirements seriously jeopardizes public safety and the value of power engineering certification.

ABSA is taking action against individuals found selling, sharing and acquiring power engineering certification examination (SOPEEC/ABSA) questions. These individuals may be subject to cancellation of passed examinations, cancellation of certification and legal action. ABSA encourages power engineers and others to stop those who are trying to provide or obtain examination questions and undermining public safety. ❖

EXTERNAL TRAINING NEWS

Online Design Registration Seminar

To better serve pressure equipment safety and clients everywhere, ABSA is proud to announce the introduction of eLearning training courses. These courses can be taken by anyone anywhere in the world with Internet access. The first eLearning course "Introduction to Design Registration" is targeted for those who are involved with the registration of designs of pressure equipment for use in Alberta, Canada. This course is a prerequisite prior to taking the other four design registration courses.

On completion of this course, candidates are invited to take any or all of the other four courses on design registration that are specific to their needs.

For more information, including how a company may purchase a block of training and other details, please access the ABSA website link: <http://www.absa.ca/ECprogram/Seminars/TrainingNews.aspx>. ❖

ASME CODE CASE 2714 USE OF ASME CODE STAMPS AND NEW ASME PRODUCT CERTIFICATION MARK

Replacing the 28 separate ASME Code Stamps (e.g., P, V, H, U, UV,... etc), the ASME introduced a single ASME Product Certification Mark July 1, 2011 (see article in The Pressure News June 2011). With revisions to the ASME Boiler and Pressure Code, all ASME authorized Manufacturers are to use the new ASME Mark beginning January 1, 2012.

To transition the changeover, ASME Code Case 2714 was approved allowing Manufacturers to continue the use of existing ASME Code Stamps till December 31, 2012. And it would be mandatory for Manufacturers to apply the new ASME Mark beginning January 1, 2013.

We understand that the expiry date of ASME Code Case 2714 is being extended to December 31, 2013 in order to allow for completion of the new ASME Mark implementation. Please check with the ASME or with your Authorized Inspectors for further details if necessary. ❖

LOGBOOKS (DIARY OF A BOILER)

Owners of hot water boilers, and low and high pressure steam boilers, often fail to understand that a good proper operational boiler log book is a regulatory requirement. No boiler is 'too small' to *not* have a log book!

Ideally a log book should have one day per page (dated) or sequentially numbered pages to ensure continuity. If a new book is used for each year, the old books must be stored in a place readily accessible, where they will be safe from the elements, for future reference. The books will provide a good resource for people involved in the operation and maintenance of the boiler. In addition, a safety codes officer may request a review of the log book during an inspection visit.

A boiler log book helps to determine operating trends such as energy usage, cost, performance under outside ambient conditions, time of year started or shut down, recording of gauge measurements like temperatures, pressures, and as well, to record any odd or abnormal conditions experienced or witnessed.

The book should also serve as an official record of what tests were done on the boiler such as pressure relief valve tests and low water trip tests and how often these are performed. If the boiler water is treated, the changes and additions should also be recorded. These records are very important where the boiler is either legally allowed to be left unattended, or where many people are involved in the operation and maintenance of the boiler(s).

Log books, used over a period of time, even over many years, can assist in keeping a historical record of the boiler(s) and will be extremely useful to the owners and operators; especially with changes to operators, maintenance personnel or ownership.

A good log book can also assist in diagnosing problems, and providing information as to what maintenance work has been performed. This is not unlike how your car has scheduled maintenance checks based on their kilometers; a boiler has certain maintenance requirements based on both hours of operation, as well as the history of how that boiler functions in the conditions under which it operates.

When maintenance is performed on the boiler, a brief summary of who performed that work, what was done, and why the work was needed is good information for yourself and others like the maintenance and operating people.

Having a proper operational logbook will focus attention on the often-overlooked boiler plant, thereby addressing small problems before they become large ones and overall will not only assist in keeping your costs down, but more importantly, promote public safety. ❖

ALTERNATIVE ULTRASONIC METHOD IN LIEU OF RADIOGRAPHIC EXAMINATION

In the past, a vessel Manufacturer had the option of using automatic or semi-automatic ultrasonic examination (AUT) for 13mm in weld thickness or greater in lieu of radiography by following Code Case 2235-9. While this Code Case has not been rescinded and may still be used, AUT has now been included in the 2010 Edition, 2011 Addenda of ASME Section VIII Div. I in Paragraph UW-51(a)(4). This paragraph directs the Manufacturer to ASME Section VIII Div. 2, Paragraph 7.5.5. for AUT requirements and acceptance criteria.

Paragraph 7.5.5 requires that when using AUT, there must be a written procedure conforming to ASME Section V, Article 4, Mandatory Appendix VIII – Ultrasonic Examination Requirements for Fracture Based Acceptance Criteria. This procedure must be qualified by using a demonstration block with specific known flaws as required by ASME Section V, Article 4, Mandatory Appendix IX – Procedure Qualification Requirements For Flaws Sizing and Categorization. Depending on the type of AUT examination, the NDE contractor must also meet the requirements of ASME Section V, Article 4, Mandatory Appendix III – Time of Flight Diffraction (TOFD) Technique or Mandatory Appendix V – Phased Array E-Scan and S-Scan Linear Examination Techniques.

While the qualification of the procedure shall be demonstrated to the Manufacturer for different thicknesses, weld joint configuration, etc., in Alberta, the procedure must also be demonstrated once to an ABSA Authorized Inspector Supervisor using any thickness, weld joint configuration, etc. and documented on an NDE contractor's demonstration letter.

As a final note, in accordance with ASME Code provisions, the vessel nameplate stamping is not to include the letters "UT", only RT-1, 2, 3 or 4 shall be indicated regardless the amount of AUT that was used in lieu of radiography. The Manufacturer's Data Report must specify the extent of AUT. The Manufacturer using AUT must also have a copy of the ASME Section VIII Div. 2 Code available when using provisions of Paragraph UW-51(a)(4). ❖

REGISTRATION OF DATA REPORTS WITH THE NATIONAL BOARD

Some Alberta manufacturers register their manufacturer's data reports with the National Board of Boiler and Pressure Vessel Inspectors. In those cases, consideration should be given to using the National Board's Electronic Data Transfer (EDT) system. The EDT system is an interactive document management system that simplifies and expedites the process of registering manufacturer's data reports with the National Board through the internet.

Once a manufacturer is authorized to register with the National Board, the system provides a simple step by step process to electronically complete and sign the latest acceptable ASME data report by the manufacturer's representative. The manufacturer can then transmit the data report to the Authorized Inspector for review and electronic signature. The manufacturer will then transmit the completed data report to the National Board for registration.

We understand there are a number of advantages for manufacturers using the EDT system when registering data reports with the National Board:

- **Cost Savings;** no need to purchase software, save paper and postage, and more importantly, the filing fees are discounted
- **Increased productivity;** manufacturer's information is automatically inserted, capability for using templates, electronic prompting eliminates need for corrections
- **Access to reports;** manufacturers may retrieve their own data reports 24/7 at no charge and retrieval can be achieved through a variety of ways, e.g. registration number, PO/WO number, serial number, drawing number ,.etc.
- **Forms;** the ASME forms are automatically updated to accommodate the latest Code changes
- **Support;** NB staff are available to create a positive on line experience with one-on-one assistance

We also understand that there is no requirement for how many items a manufacturer fabricates to use the EDT system to register data reports with the National Board.

Since EDT went live in 1999, the number of manufacturers using the system has increased steadily. To date, more than 9.1 million registered data reports have been electronically transmitted to the National Board. For further information, you may wish to visit the National Board web site for more information. www.nationalboard.org. ❖

ABSA 2013 Holidays

New Year Day - Tuesday, January 1
 Family Day - Monday, February 18
 Good Friday - Friday, March 29
 Victoria Day - Monday, May 20
 Canada Day - Monday, July 1
 Heritage Day/Civic Holiday - Monday, August 5
 Labour Day - Monday, September 2
 Thanksgiving Day - Monday, October 14
 Christmas Day - Wednesday, December 25
 Boxing Day - Thursday, December 26

ABSA offices will remain opened on Remembrance Day.

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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ABSA OFFICES

Edmonton - Head Office

9410 - 20 Avenue
 Edmonton, Alberta T6N 0A4
 Tel (780) 437-9100
 Fax (780) 437-7787

Calgary

Tower 3, Suite 590
 1212 - 31st Avenue N.E.
 Calgary, Alberta T2E 7S8
 Tel (403) 291-7070
 Fax (403) 291-4545

Grande Prairie

#203, 10109 - 97th Avenue
 Grande Prairie, Alberta T8V 0N5
 Tel (780) 538-9922
 Fax (780) 538-9400

Lethbridge

#300, 515 - 7th Street South
 Lethbridge, Alberta T1J 2G8
 Tel (403) 394-1011
 Fax (403) 327-2483

Fort McMurray

39C Suncor Industrial Campus
 160 MacKenzie Boulevard
 Fort McMurray, Alberta T9H 4B8
 Tel (780) 714-3067
 Fax (780) 714-2380

Medicine Hat

#103, 346 - 3rd Street S.E.
 Medicine Hat, Alberta T1A 0G7
 Tel (403) 529-3514
 Fax (403) 529-3632

Internet address

<http://www.absa.ca>

Red Deer

#304, 4406 Gaetz Avenue
 Red Deer, Alberta T4N 3Z6
 Tel (403) 341-6677
 Fax (403) 341-3377