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*Wishing you a happy
holiday season
and
a wonderful,
prosperous new year.*

ABSA is committed to pressure equipment safety. With its growing industry, Alberta has significant exposure to pressure equipment and ABSA is proud of the excellent safety record we share with designers, builders, operators and owners of pressure equipment here in our province.

The oil and gas economy has placed a lot of pressure on both the industry and ABSA and we recognize that everyone is working hard to ensure that Albertans are protected. This has been a record year for activity at ABSA and we appreciate the extra effort from our staff as we endeavor to ensure that we have sufficient knowledgeable and competent human resources for the future.

Staff at ABSA appreciate the excellent leadership we receive from our Board of Directors. Gerald Seib stepped down from the Board at the end of June 2005 after completing the maximum service of two three-year terms. Mr. Seib joined the Board in 1999 representing pressure equipment manufacturers on ABSA's five-member board. He served the Board as Secretary/Treasurer for a number of years. We would like to take this opportunity to thank Gerald for his significant contribution and valued leadership.

In July 2005, Don McFarlane joined the Board. Mr. McFarlane is the President and General Manager of Cessco Fabrication & Engineering Ltd., a custom heavy steel fabrication and machining facility located in Edmonton. Don has been involved in the pressure equipment industry for over 20 years and brings a wealth of managerial experience, and knowledge of our business.

Don joined Yves Tremblay, Vice President, Syntech Enerflex; Owen Baker, Chief Inspector, Keyera; Warren Fraleigh, Business Manager and Secretary Treasurer for the Boilermakers Local Lodge 146; and Dr. Brian Larson, President and Chief Executive Officer for Lakeland College.

We also consider it a privilege to have worked with Denis St. Arnaud, Assistant Deputy Minister, Municipal Affairs and his capable staff on a number of initiatives that impact on pressure equipment safety in the province.

It is my opinion that ABSA staff have once again demonstrated their capability in the area of pressure equipment safety and are well positioned to meet the challenges that lie ahead in 2006.

On behalf of the Board and all the 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.

Gordon Campbell
General Manager



FEE CHANGE ANNOUNCEMENT

Due to rising costs of providing pressure equipment safety services, the fees for most services provided by ABSA will increase by 5% on April 1, 2006. Details of the specific fee changes can be found at the ABSA website at www.absa.ca. For any questions or concerns please contact Allan at 780-433-0281 Ext. 305. ❖

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THE MENACE IN OUR BASEMENT

Every home has a water heater. These units are often taken for granted and neglected. Hot water heaters are in fact boilers. The burner or electrical heating element is adding energy to the water. Although a majority of water heaters are exempt from the Safety Codes Act based on their heating surface or diameter, the potential for a major accident is there because of the amount of stored energy involved.

With the recent failure of a domestic water heater, which left two people homeless but luckily unharmed, it is time to remind everyone who has a water heater that they should test the water heater's pressure relief valve (PRV). This procedure is simple and could save life!

The PRV is usually found on the side of the tank, near the top, on a gas fired water heater and on the top of the tank or in the hot water outlet on an electric water heater. About once a year, test the pressure relief valve by opening the valve manually using the lifting lever on the PRV. Ensure that no one will be scalded by the hot water released from the PRV. If the PRV does not discharge water when you open it, then the PRV must be replaced immediately. If the PRV does not re-close tightly, try opening it again to flush out any sediment. If the PRV continues to leak, it must be replaced. You must not plug the PRV and should not operate the heater with a leaking PRV for a long period of time.

If you are replacing the PRV, shut off the water to the heater and de-pressure the heater. Ensure that the replacement PRV is of the appropriate type, capacity and set pressure for the water heater. Check the manufacturer's instructions on maintenance of pressure relief valves. The PRV is for your protection. In the case of over pressure, this valve is to automatically release the pressure preventing the tank from exploding.

The manufacturer's instructions are a good source of information for safe operation, to extend the life and to maintain efficiency of your heater. ❖

ASME CODE CASE 2523 – USE OF MEASUREMENT UNITS

ASME has approved Code Case 2523 with respect to use of measurement systems in the manufacture of boilers and pressure vessels. As does the Code itself, the Code Case requires consistent use of a single measurement system, but allows for a mix of measurement systems when it is not practical or not feasible to apply a single measurement system.

When the 2004 edition of the ASME Code was published, the Code could be interpreted as rigidly requiring the use of one single measurement system (be it the SI or the US Customary (Imperial) system), throughout the design and manufacturing process. At times, this is not practical or feasible. A case in point would be when SI units are used throughout the design and manufacturing process, but the plate material called up in the design is only available in US Customary units. The 2004 Code edition resulted in a number of expressed concerns from the regulatory and manufacturing sector. ABSA provided input and comments to the ASME on this matter and are happy to note that the ASME Code Committee has taken the immediate action on this matter and approved the use of Code Case 2523. We also understand that relevant revisions to the ASME Code are being reviewed for possible publication in the near future. A copy of the Code Case will be posted on ABSA's website (www.absa.ca) once it is officially published.

In applying the Code Case, users must comply with all its provisions. It should be noted that it is also the intent that users cannot take advantage of measurement system conversions to override minimum requirements of the Code. For example, if the Code requires 10 mm as the minimum weld size in the SI and 3/8" in the US Customary system, the use of the SI in the overall design except that the weld sizes are called out as 3/8" minimum will not be allowed. In such a case, it can not be deemed impractical or infeasible to consistently use only the SI in the design.

Although both MPa and kPa are units of pressure measurement in the SI, CSA B51 Clause 5.1.4 requires whole numbers (no decimals) be shown on the nameplates; therefore, it would be more suitable to mark the MAWP in kPa instead of MPa. Consistent use of kPa for pressure ratings will minimize the likelihood of misreading a nameplate. Also, although provision is made in the Code Case for the use of so-called local customary units, only SI and the Imperial (US Customary) units will be allowed for pressure equipment installed in Alberta. Accordingly, use of such units as "bar" or "kg/cm²" will not generally* be acceptable for use in Alberta.

*CSA B51 Part 2 uses bar as its standard unit of pressure for CNG and hydrogen fuel cylinders. ❖

INFORMATION BULLETIN No. IB05-007

Interpretation to Section 4(3)(b) and 4(4) of the Power Engineers Regulation (AR 85/2003)

This interpretation was issued on December 16, 2005 to define when a building may be considered unoccupied when applying the suspension of general supervision of a heating plant or modifying the general supervision when a building is occupied for just part of the day on weekends and holidays. This interpretation aims to provide for the safety of persons and property in schools and office buildings during weekends and holiday periods.

INFORMATION BULLETIN No. IB05-008

Variance to Section 5(1) of the Design, Construction and Installation of Boilers and Pressure Vessels Regulations (AR 227/1975)

Following the Variance issued 1997 and announced in the Pressure News of Volume 2, Issue 3, June 1997, a variance was issued on December 16, 2005 to clarify the intermediate value and straight-line interpolation in Section 2(2)(c) of the Design, Construction and Installation of Boilers and Pressure Vessels Regulations. Section 2(2)(c) provides an exemption from the requirements for an inspection/certification permit. A pressure vessel pressure-volume curve for this exemption is now provided. ❖

USE OF SPLIT REINFORCEMENT PADS IN NOZZLE REINFORCEMENT

Following the issuance the Directive IB05-004 Rev.1 by the Administrator on this topic, Bruce McWhirter, Manager of Engineering and Design Survey of ABSA wrote to the ASME Code Committee with a request for interpretation with respect to the requirements under the ASME Code on the use of split repads. An interpretation has been received from ASME as follows:

Question: "Does Section VIII Division 1 have rules for the weld joints of multi-segmental reinforcing elements?";
Reply : "No, see U-2(g)".

There is an implication here that it is not sufficient to simply ignore the presence of butt welds within reinforcing pads; they must be addressed. We are pleased to note that the interpretation is consistent with the Directive issued and the discussion paper IB05-005 which is also posted on the ABSA website as <http://www.absa.ca/IBIndex/IB05-005.pdf>. We understand that the ASME Code Committee will be reviewing this matter further and may eventually provide rules in the Code on the use of split reinforcement pads. ❖

RIGIDITY ANALYSIS FOR FLANGE DESIGNS

The 2005 Addenda of Section VIII Division 1 and Division 2 of the ASME Code introduced mandatory rigidity analysis for flanges of all diameters if the flanges are custom-designed flanges to Appendix 2 of Section VIII Division 1 or Appendix 3 of Section VIII Division 2. The rigidity analysis is to be conducted for both the bolt-up and operating conditions.

The newly introduced requirements are consistent with, but broader in scope than, the provisions under ABSA Information Bulletins IB99-001 and IB01-005 which were provisions endorsed by the Alberta Boilers and Pressure Vessels Technical Council and issued as Directives by the Administrator. We would like to note that the 2005 Addenda become mandatory for vessels ordered on or after January 1, 2006, or for any vessels ordered earlier than that for which the Manufacturer uses the 2005 Addenda. The Directive issued by the Administrator will be phased out once the 2005 Addenda becomes mandatory. ❖

WELDING EXAMINER AND TESTING ORGANIZATION

The Pressure Welders Regulation (Alberta Regulation 169/2002) which came into force on October 1, 2002 introduced the new Welding Examiner certification. A Welding Examiner Certificate of Competency allows the holder to conduct performance qualification tests only on behalf of an authorized testing organization, while employed by the organization.

An authorized testing organization is permitted to conduct renewal and additional performance qualification testing of Pressure Welders and Machine Welding Operators. An organization must satisfy all the requirements per Section 21 of the Pressure Welders Regulation to obtain a Certificate of Authorization from ABSA. One of the requirements is that the testing organization must employ a person holding a valid Welding Examiner Certificate of Competency to conduct the performance qualification testing. ❖

10th Annual International Pressure Equipment Integrity Association Conference

February 1-3, 2006
at Banff, Alberta

International Pressure Equipment Integrity Association (IPEIA) is a continuation of National Pressure Equipment Conference (NPEC).

Please visit IPEIA's web site for more information regarding the conference:

<http://www.ipeia.com>

SPECIAL THANKS FOR PEOPLE PROVIDING VALUABLE TRAINING SURVEY COMMENTS

A total of 325 people participated in an online training survey which was posted on ABSA's Web site for 3 months. Thirty pages of valuable comments and suggestions were collected! The survey information will be used to develop a plan for industry training to be provided by ABSA in the future.

The range of comments varies from overview of application procedures, ABSA requirements, Act and Regulations training seminars to online courses, discussion forum and new certifications.

ABSA is now following up on some of the inquiries, understanding and interpreting the priorities and developing short term and long term action plans to address the industry's training needs. To obtain email notification on our latest training news, subscribe to our new, free e-news and e-information service. ❖

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