

# ABSA THE PRESSURE NEWS

Alberta Boilers Safety Association

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## Message from - ABSA's CEO

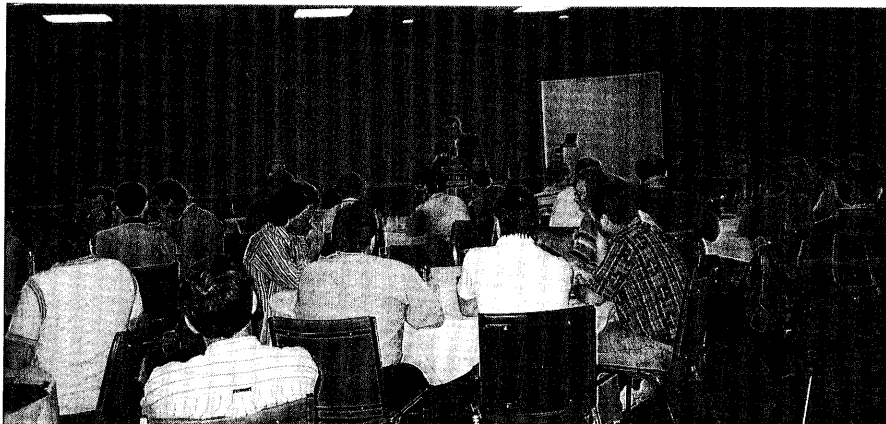
Recently I was privileged to be an observer at the annual meeting of the Association of Chief Inspectors in Vancouver. I was able to hear first hand from the other Chief Inspectors, their frustrations and challenges regarding reduced budgets, manpower restrictions, and the need to look at alternatives in program delivery and regulatory changes. Despite these difficulties, I witnessed a strong desire, commitment and willingness among the Chief Inspectors to work together to standardize pressure equipment safety and regulations. The areas which were discussed included Power Engineers' examinations and staffing requirements for power and heating plants, registry of fittings, reciprocity between provinces for design review and pressure welding testing standards.

A great deal was said during the meetings, which included meetings with the CSA B51 and B52 Standards Technical Committees, about working towards being more responsive, improving levels of public safety and services to our clients, and cost effective program delivery.

The Ontario Government recently passed an "Industry Self-Management and Safety Bill" which will allow the government to delegate certain functions previously carried out by the Ontario Government, similar to Alberta.

I believe that Alberta and Ontario have set the example of how the boilers and pressure vessels programs can deal with the challenges presented to our provincial jurisdictions and at the same time provide the public, businesses and industries with the highest possible support services needed for a safe and cost effective pressure equipment related industry.

John Verwey, CEO



Industry information meetings were recently held in Red Deer and Medicine Hat to provide updates on ABSA's programs and its role as the Delegated Administration Organization. Ed Yaremichuk, ABSA's Southern Regional Manager, is shown making his presentation.

## 100th Year of Pressure Equipment Safety in Alberta Coming Up

The Steam Boilers Ordinance was enacted by the Legislative Assembly of the Territories in 1897 thus began pressure equipment safety and the delivery of the associated programs in Alberta which was part of the Territories. In 1997, we will be celebrating the 100th year of pressure equipment safety in our province.

Various ideas are being discussed for this event next year. For a similar event, British Columbia, in conjunction with their industry, released a video tape on the development of the pressure equipment related industry in their province. We believe, with the huge pressure-equipment related industry in our province, one of the things which could be done would be to produce a centennial publication. This publication could include information about the facilities and capabilities of our pressure equipment industries, be it in the field of pressure vessel manufacturing, process plant design, chemical producing, petroleum and natural gas processing, in-situ steam injection or others. Maybe we should describe something about power engineering or pressure

welding, our standards for both are well known nationally and internationally.

Please drop us a line and help celebrate the safe pressure equipment environment we enjoyed for the last hundred years.

## Quality Control Program Authorization Manual Review and Implementation Audit

One of the program services being provided by ABSA is the authorization of organizations through quality control programs, to conduct pressure equipment safety activities permitted by the regulations under the Safety Codes Act. These activities include:

- ◇ boiler and pressure vessel fabrication,
- ◇ pressure fitting manufacturing,
- ◇ pressure piping construction,
- ◇ repairs and alterations,
- ◇ safety valve servicing,
- ◇ owner/user inspection,
- ◇ pressurized cargo transport tank retesting,
- ◇ pressure welder performance qualification retesting.

(Continued on page 3)



Members of the Association of Chief Inspectors (left to right):

D. Price, Yukon; K. Hynes, Prince Edward Island; D. Ross, New Brunswick; D. Eastman, Newfoundland; N. Surtees, Saskatchewan; M. Kobt, Quebec; A. Pringle, British Columbia; K. Lau, Alberta; W. Mault, Manitoba; C. Castle, Nova Scotia; R. Miles, Ontario; L. Roussinos (Associate Member), British Columbia.

Members not shown are: L. Chase, NWT; A. Justin, National Board; A. Pighin, Human Resources Development Canada; and W. Spekkens, Atomic Energy Control Board.

### ACI and CSA B51 and CSA B52 Meetings

The 33rd annual meeting of the Association of Canadian Chief Boiler and Pressure Vessel Inspectors (generally referred to as the Association of Chief Inspectors or ACI) was held in conjunction with Canadian Standards Association (CSA) B51 and B52 Standards Technical Committees' meetings at Vancouver on August 12-16, 1996. The meetings are held to promote uniformity of pressure equipment safety standards and applications. Among the many technical and administrative issues discussed by the ACI and CSA B51 Technical Committee, two items which may impact on the fabrication of boilers and pressure vessels are highlighted here for the interest of designers and manufacturers as well as those who are involved in new equipment fabrication including owners who order them:

#### ***ACI Policy on Reciprocal Recognition of Design Review for Vessel Design Registration***

The policy allows for reciprocal recognition of design reviews for the purpose of design registration of boilers and pressure vessels whereby the provincial or territorial Regulatory Authorities, without prejudice to the respective jurisdiction's operations, undertake to accept design submissions with the applicable fees

for registration without further design review when the designs have been previously registered by one of the other jurisdictions signatory to the policy, subject to certain provisions. This policy works in similar fashion to the one in place for the reciprocal recognition of fitting design reviews implemented almost two years ago. For readers in our province, please contact the ABSA's Design Survey and Engineering Department at 437-9100 or your nearest ABSA office for further details. For others, please contact your provincial or territorial Boilers' Branch for details and if applicable in those jurisdictions, the implementation of the policy there.

#### ***ASME Accreditation of Authorized Inspection Agencies***

American Society of Mechanical Engineers (ASME) is introducing changes to the ASME Boiler and Pressure Vessel Code to require all Authorized Inspection Agencies (AIA's) to be accredited by the ASME. This move has met with considerable objections from a majority of jurisdictions who also act as AIA's for the application of the ASME code stamps in the fabrication of boilers and pressure vessels.

Some jurisdictions are mandated by their respective legislation to perform shop inspections and if because of costs or other reasons these jurisdictions will not apply for, or failed to get ASME accreditation, it

may result in a duplication of shop inspections whereby boiler and pressure vessel fabrication will be inspected by both the jurisdictional inspectors under the law and the inspectors of the ASME accredited AIA thus further increasing the bureaucracy and inspection costs.

This ASME proposal is related to ASME code stamp authorizations only. For all companies constructing to CSA B51, AS1210, BS5500 and other national and international codes and standards, AIA's (defined either as Authorized Inspection Agencies or Authorized Inspection Authorities) are designated by the jurisdictions having authority and not accredited by any of the codes- or standards-writing bodies.

Alberta Labour Boiler and Pressure Vessel, the predecessor of ABSA, met with a majority of Alberta manufacturers holding ASME code stamp authorizations some two years ago when this proposal was first made by ASME. It is expected that ASME will mandate the AIA accreditation for all ASME code stamp fabrication by July 1, 1997. Affected organizations may contact their provincial and territorial jurisdictions or ASME directly for further information.

### Safety Relief Valves Pressure Setting and Nameplate Requirements

Alberta Regulations require that safety relief valves must be set at no higher than the maximum allowable working pressure (i.e., pressure accepted under the Canadian Registration Number CRN). This applies to the primary safety relief valves. Secondary pressure relief devices, as indicated under ASME Section VIII Division 1, paragraph UG125(3) and other ASME Code Sections, may be set at a higher pressure in accordance with the respective paragraphs of the Code.

Also, the requirement of CRN on the nameplates of safety relief valves as stated in the article "Rig Boiler Safety" applies to all new safety relief valves. For existing installations, some safety relief valves with accepted CRNs and having been in service for an extensive period of time, may not necessarily have the CRNs shown on the nameplates. It should be clarified that in these cases, these valves are acceptable for continued existing service.

(Continued from page 1)

This authorization program is typically being carried out in a two-step process; i) review and acceptance of the organization's quality control manual and ii) successful implementation audit of the activities in accordance with the manual.

To initiate the process, an organization submits to ABSA a quality control manual with a completed application form detailing the proposed activities to be undertaken in the discipline of pressure equipment safety. The manual will be reviewed by ABSA staff for compliance with the requirements of the Act and regulations and the adopted codes, standards and guidelines under which the activities will be conducted.

After the manual is reviewed and accepted, the applicant will be informed that an implementation audit will need to be carried out. The implementation audit is to ensure that the proposed activities will be carried out in conformance to the written procedures and methodology as detailed in the manual and indeed, if the program can be carried out successfully at all. Only after a successful implementation audit is conducted will the authorization be issued. It must be remembered that a letter of acceptance of the manual from ABSA must not be interpreted as an acceptance of the program to undertake the activities proposed. Also, an accepted manual may need to be revised as a result of findings from an implementation audit. Under certain special and restricted circumstances, authorization to commence a project may be given after the acceptance of the manual in order that an implementation audit may be carried out during the project.

The authorization for a corporation to undertake the proposed pressure equipment safety activities is normally given for a term of three years in accordance with the regulations and the adopted codes and standards. On or before the expiry date of this authorization, or in the case that a certificate of authorization is suspended due to non-conformance to the manual found in inspections or annual or other audits carried out by ABSA inspectors, submission of quality program manual for re-

certification is necessary. In this case, again, after the review and acceptance of the manual, an implementation audit will be needed. It should be noted that no work under the scope of Certificate of Authorization can be undertaken without a valid certificate.

An information brochure for application is available at your nearest ABSA office.

## SECTION IX CODE CHANGE

### Chemical Composition Limits for Mild Steel Electrodes

The Boiler and Pressure Vessel Committee has recently approved a revision to ASME Section IX, QW-442, chemical composition limits for mild steel electrodes. The change will likely be published later this year in the annual addenda to the code. In that case, the revision will become effective when the December 1996 Code Addenda is issued.

The revision is to the maximum limit for Carbon content of A-No.1 weld metal analysis in Table QW-442. The carbon content will be increased to 0.20 percent maximum. This will allow for the use of improved E-6010 electrode formulations.

With this revision, companies using welding procedures which specify an E-6010 electrode with an A-No.1 weld metal composition will now be able to include electrodes that may not have previously met the A-No.1 chemical composition such as Lincoln 5P+ or Hobart 60 AP.

It is important to note that there is no parallel revision to the carbon content of A-No.2 weld metal analysis. Thus, consideration must be given when QW-404.5 in ASME SECTION IX is referenced. QW-404.5 states "Qualification with A-No.1 shall qualify for A-No.2 and visa versa" but the maximum carbon content for A-No.2 is only 0.15% as per Table QW-442.

### Employment Opportunities

Visit the ABSA Internet e-mail address (<http://www.freenet.edmonton.ab.ca/absa>) for current job opportunities.

## Industry Meetings/Seminars

Owner/User QC program meetings will be held by ABSA in Edmonton on September 17 and in Calgary on September 18 from 9:00 am till 12:00 noon

Also seminars for companies who are involved in submitting designs for review and registration will be held in Edmonton on October 17 and in Calgary on October 22

For more information please contact our Edmonton or Calgary offices.

## Revisions to Pressure Relief Valve Servicing Quality Program Requirements

In order to eliminate inconsistencies between Alberta pressure relief valve servicing quality programs and National Board "VR" quality programs, the Alberta program requirements have been revised as of June 1996. Organizations maintaining Alberta certification will be asked to revise their quality program to meet the new requirements at their next certificate renewal.

The most significant new requirement reinforces the obligation of servicing organizations to ensure that their personnel are knowledgeable and qualified for the work conducted. All servicing organizations will now be required to establish a documented in-house training program. The program must establish training objectives and provide a method of evaluating training effectiveness. An annual review of the qualifications, proficiency and training needs of personnel involved in the quality program must also be documented.

Other program modifications include; the addition of a revision log to assure revision control of the quality system manual, editorial revisions to accommodate the transition from Alberta Boilers Branch to ABSA involvement, and the clarification of nonconformance requirements.

For additional information, please contact your local ABSA office.

## Non- Pressure Attachment Welds

Welding performed between pressure parts are clearly understood to be under the pressure equipment safety legislative requirements. However, when non-pressure parts are welded to pressure components, to ensure the structural integrity of the pressure equipment, the welding must also be in conformance to stringent requirements.

For attachment welds of non-pressure parts to pressure parts, the various ASME construction codes require (See ASME Section VIII, Division 1 Paragraphs UW-28 and UW-29, ASME Section I Paragraph PW-28, Paragraph 127 of ASME B31.1 and Paragraph 328 of ASME B31.3), the welding procedures and welders to be qualified in accordance with ASME Section IX. Accordingly, these attachment welds, irrespective whether the non-pressure parts are load bearing or not, are considered to be pressure welding and the weldment requires the use of a registered welding procedure and is to be made by a qualified pressure welder or machine welding operator.

Under the Safety Codes Act, Section 1(f) of the Pressure Welders' Regulations defines "pressure welding" as "welding performed on a boiler, pressure vessel, pressure piping system or fitting". Further, Sections 1.1 and 2 of the Regulations state that no person may weld on a pressure vessel, boiler, pressure piping system or fitting unless the person holds a Certificate of Competency (*Pressure Welder Certification*) issued by the Administrator (*Chief Inspector*). Section 13 of the Design, Construction, and Installation of Boilers and Pressure Vessels Regulations requires the approval and registration of the welding procedures intended for the construction, alteration or repair of any boiler, pressure vessel, fitting or pressure piping system. It is also specified that the welding procedure shall be in compliance with ASME Section IX which is also adopted as part of the regulations.

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## Have you paid your Annual Registration?

As you may know, the invoices to all pressure vessel owners for the Annual Registration of Boilers & Pressure Vessels were mailed in mid-March of this year. The return of updated information and payment has gone much quicker this year and we would like to thank our clients for their efforts to ensure our records are accurate and up to date. However, there are still a number of registration fees outstanding and interest is being calculated monthly at 2%. We remind all pressure equipment owners that any changes for 1996 registration must be faxed or mailed to the ABSA Edmonton Office prior to December 15, 1996 otherwise we will be unable to credit your account. These changes would include the sale of equipment prior to April 1, 1996 or vessels placed in "out of service" status as of April 1, 1996. Please remember to include the effective date and new owner. If you require account information, please call Katherine, Accounts Receivable at (403) 433-0281, ext. 316.

### Contents

Message from CEO .....	1
100th Year of Pressure Equipment Safety in Alberta .....	1
Quality Control Program Authorization .	1
ACI and CSA B51 & B52 Meetings .....	2
Safety Relief Valves .....	2
Section IX Code Change .....	3
Quality Program Requirements .....	3
Non-Pressure Attachment Welds .....	4
Annual Registration .....	4



## ABSA OFFICES

Edmonton - Head Office  
#200, 4208 - 97 Street  
Edmonton, Alberta T6E 5Z9  
Tel (403) 437-9100  
Fax (403) 437-7787

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

Grande Prairie  
3rd Floor, 10320 - 99 Street  
Grande Prairie, Alberta T8V 6J4  
Tel (403) 538-8004  
Fax (403) 538-5462

Lethbridge  
3rd Floor, 200 - 5 Avenue South  
Lethbridge, Alberta T1J 4C7  
Tel (403) 381-5423  
Fax (403) 382-4426

Medicine Hat  
Main Fl., 346 - 3rd Street S.E.  
Medicine Hat, Alberta T1A 0G7  
Tel (403) 529-3520  
Fax (403) 529-3623

Red Deer  
#402, 4406 Gaetz Avenue  
Red Deer, Alberta T4N 3Z6  
Tel (403) 341-6677  
Fax (403) 341-3377

St. Paul  
Room 407, 5025 - 49 Avenue  
St. Paul, Alberta T0A 3A4  
Tel (403) 645-6350  
Fax (403) 645-6352

Internet address  
<http://www.freenet.edmonton.ab.ca/absa>



Alberta Boilers Safety Association  
#200, 4208-97 Street  
Edmonton, Alberta  
T6E 5Z9

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