

Warning Winter is coming !

Winter is upon us shortly and in Alberta, we could be facing with severe winter condition. Every year we have incidents as a result of freezing damage. All plant owners are again cautioned to be prepared for winter operation condition.

Also, if freezing has been suspected or observed, pressure equipment involved in the incident must not be placed back in pressure service without proper inspection and integrity evaluation. The use of damaged components in pressure service can be highly hazardous and components damaged by freezing can not likely be repaired. Please review the public alert Information Bulletin No. IB09-002 (<http://www.absa.ca/IBIndex/IB09-002.pdf>).



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ABSA MANAGEMENT CHANGES

ABSA is pleased to announce the following changes to our Management team.

Mike Poehlmann, Manager of Inspections since 2003, is currently serving as Acting General Manager while Gordon Campbell remains on convalescent leave. Pending Gordon's return to work, Mike will be taking on a new role as Technical Manager. In that capacity he will assist the General Manager, the Administrator and the other technical managers on policy matters, troubleshooting, expediting, system improvements and assisting in the management transitions.

Inspections

Effective September 1, 2013, Robin Antoniuk is the manager of our Inspections Department. He is replacing Mike Poehlmann. Robin is a Professional Engineer (Metallurgical) and has been with ABSA since 1999. He initially worked in ABSA's Design Survey department before moving into the role of Field Inspector. In 2010, he became the Field Inspector Supervisor for the Northern Alberta region.

Education & Certification

Effective November 1, 2013, John Siggers will be the manager of our Education and Certification Department. He will be replacing Bill Litvinchuk who has chosen to step aside from the role but will still remain with ABSA. John is a First Class Power Engineer and he joined ABSA in 2011 as our External Training Coordinator. Prior to joining ABSA, John had worked as a Power Engineering Instructor and has performed the role of Chief Inspector with the BCSA. ❖

ANNUAL CODE UPDATE SEMINARS

ABSA will be presenting the annual Code Update Seminar in October 2013. This full day information session will detail the latest on legislation requirements and adopted Codes and Standards and how some of the changes may affect pressure equipment designers, quality control personnel and other industry members. This seminar will be of particular interest with the release of the 2013 edition of the ASME Boiler & Pressure Vessel Code as well as the pending publication of new editions to the CSA B51 and B52 Codes. Some ABSA documents (e.g. AB-525 Over Pressure Protection Requirements for Pressure Vessels and Pressure Piping) will also be reviewed.

The seminar agenda is available on our website:

<http://www.absa.ca/ECprogram/Seminars/2013%20ACU%20agenda.pdf>.

The 2013 seminars will be held as follow:
Edmonton, AB (Nisku) - October 10, 2013
Calgary, AB - October 15, 2013
Red Deer, AB - October 17, 2013

This is one of the most popular ABSA events and seating will be limited. Those wishing to attend should register as soon as possible. The Seminar Registration Form (AB-136) is available online:

<http://www.absa.ca/Forms/AB-136%20Seminar%20Registration%20Form.pdf>.

If you have any additional questions, please contact training@absa.ca. ❖

WITNESSING NDE DEMONSTRATIONS BY THE AUTHORIZED INSPECTOR

ABSA's Safety Codes Officers, as Authorized Inspectors (AI) in accordance with the requirements of the ASME Boiler and Pressure Vessel Code, have to witness the demonstration of certain nondestructive examination (NDE) procedures, (e.g. procedures for ultrasonic testing (UT), magnetic particle testing (MT), and penetrant testing (PT)). However, it is not always clear as to which NDE procedures are required to be demonstrated to the AI.

For MT and PT procedures, ASME construction Code Sections making a direct reference to ASME Section V, Paragraph T-150 which indicates the nondestructive examination (NDE) procedure shall be demonstrated to the satisfaction of the Authorized Inspector (AI) include:

- Section I specifies demonstration in Appendix A-260 for MT, and A-270 for PT.
- Section VIII, Division 1 specifies demonstration in Appendices 6 and 8 respectively for MT and PT.
- Section VIII, Division 2 specifies demonstration in Part 7, Paragraph 7.5.6.1(c) for MT, and Paragraph 7.5.7.1(c) for PT.
- Section XII specifies demonstration in Paragraphs TE-110.4 for MT and Paragraph TE-110.5 for PT. Also, the NDE is to be in accordance with Mandatory Appendix V and Appendix VI, respectively.

Specifically for the demonstration of the manual UT procedures, the construction Code Sections¹ that directly reference ASME Section V, Paragraph T-150 include:

- Section VIII, Division 1 as indicated in Paragraph UW-53 and Mandatory Appendix 12.
- Section VIII, Division 2 as indicated in Part 7, Paragraph 7.5.4.1(d).
- Section XII as indicated in Paragraph TE-110.3 and Mandatory Appendix IX.

While the MT, PT, and manual UT procedure demonstrations requirements are clearly provided for in the Code, the automated and semi-automated UT procedures, including Code Case 2235, demonstration requirements may not be as obvious. When there is no direct reference to ASME Section V, Paragraph T-150, some Manufacturers believe there is no requirement to demonstrate the UT procedure(s).

Some background information regarding automated ultrasonic testing

Section I has requirements for volumetric examination [e.g. radiographic testing (RT) or ultrasonic testing (UT)] as indicated in PW-51 and PW-52.

When UT is specified, Paragraph PW-52 requires that the examination must be completed in accordance with Section V, Article 4, Mandatory Appendix VII, "*Ultrasonic Examination Requirements for a Workmanship Based Acceptance Criteria*", which employs either automated ultrasonic testing (AUT) or semi-automated ultrasonic testing (SAUT). Section I does not specifically indicate that the AUT is to be demonstrated to the AI. However, the reference Appendix VII of Section V has, in Paragraph VII-420 that indicates the AUT procedure is to conform to the requirements of Section V, Article 4. Thereupon, Paragraph T-420 indicates the requirements of Article 4 shall be used together with Article 1.

Section VIII, Division 1, as an alternative to completing RT, Paragraph UW-51(a)(4) allows the use of UT examination AUT or SAUT in accordance with Part 7.5.5 of Section VIII, Division 2.

Section VIII, Division 2, as an alternate to completing RT; Part 7.5.5.1 allows the use of AUT or SAUT examination per the requirements of Section V, Article 4, Mandatory Appendix VIII, "*Ultrasonic Examination Requirements for a Fracture Mechanics Based Acceptance Criteria*". Section VIII, Division 2 does not specifically indicate that the AUT is to be demonstrated to the AI. But similar to Section I, the reference Appendix VIII has in Paragraph VIII-420 that the UT procedure is to conform to the requirements of Section V, Article 4. And Paragraph T-420 indicates the requirements of Article 4 shall be used together with Article 1.

Section XII currently has no alternative to completing UT in lieu of RT other than that AUT may be used through ASME Code Case 2235.

Code Case 2235-11

The only reference from the Code Case is in Paragraph (c) that indicates the AUT procedure is to conform to the requirements of Section V, Article 4. Paragraph T-420 whereby the requirements of Article 4 shall be used together with Article 1.

As a result, a request for interpretation was sent into the ASME to clarify whether a procedure demonstration to AI was required.

July 19, 2013
ASME Item: 13-297

Question: Does the reference to ASME Section V, Article 4 in paragraph 7.5.5.1 of ASME Section VIII, Division 2 require compliance with ASME Section V Article 1, Paragraph T-150 with respect to procedure demonstration to the satisfaction of the Authorized Inspector?"

Reply: Yes.

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REVISIONS TO THE IN-SERVICE INSPECTOR CERTIFICATION EXAMINATION

Following extensive industry-wide consultation, a revised Examination Body of Knowledge for the In-Service Inspector Certification Examination will take effect on October 01, 2013. The Administrator for pressure equipment safety has issued Information Bulletin IB13-009 (<http://www.absa.ca/IBIndex/ib13-009.pdf>) to establish the AB-526 as mandatory requirements under the Pressure Equipment Safety Regulation (PESR).

The Inspector Certification Examination scheduled on November 15, 2013 will be based on the revised Examination Body of Knowledge as defined in the AB-526 In-Service Pressure Equipment Inspector Certification Requirements document. The Inspector Certification Examination (ICE) scheduled for September 13, 2013 will be the last ICE based on the current requirements document AB-59, In-Service Pressure Equipment Inspector Certification Program. AB-59 will expire on September 30, 2013 being superseded by AB-526 (<http://www.absa.ca/Forms/AB-526%20ISI%20Certification%20Requirements.pdf>).

An article "*Revisions to the in-Service Inspector Certification Examination*" posted on ABSA website (www.absa.ca) provides background information and outlines some key provisions of the new certification requirements. ❖

THE NATIONAL BOARD PRESSURE EQUIPMENT INSPECTOR PROGRAM

The National Board has implemented a new inspector certification program to enhance knowledge of inspection processes associated with boilers, pressure vessels and piping. The Pressure Equipment Inspector (PEI) Program is an elective program for any individual performing or involved with inspections of pressure equipment.

This certification program recognizes either new construction or in-service inspection activities utilizing the same corresponding body of knowledge and examination requirements needed to obtain a National Board In-service or New Construction Commission respectively. Understanding this program does not authorize individuals to perform activities required by the American Society of Mechanical Engineers Boiler and Pressure Vessel Codes or the National Board Inspection Code, individuals meeting the experience, training and examination requirements outlined in NB-438, *The National Board Pressure Equipment Inspector Program*, will have a strong foundation for obtaining a National Board In-service or New Construction Commission in the future.

Individuals involved with owning, installing, maintaining, operating or repairing boilers, pressure vessels or piping are encouraged to enhance their knowledge of inspection processes to further improve pressure equipment safety. Upon successful completion of this program, an individual will be issued a Certificate and a Certification Card issued for one year and may be renewed annually. It should be noted that the National Board Pressure Equipment Inspector Certification by itself, does not confer the authority to an individual to perform Authorized Inspector functions under the ASME and the National Board AIA systems, nor for inspection function under the Safety Codes Act in Alberta. Complete details on this new certification program (NB-438) may be found on the National Board website at: www.nationalboard.org under commissions and certifications. ❖

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It should be noted that, depending on the Code of construction or Code Cases used, as well as contractual agreements for the project, the NDE procedures may also have to be demonstrated to the Owner's Inspector; and this is particularly case for the AUT procedures.

The above discussion is related to new construction requirements under the ASME Boiler and Pressure (BPV) Code. Unlike the ASME BPV Code Sections, under ASME B31.1 Power Piping and ASME B31.3 Process Piping, the NDE provider is not required to demonstrate their NDE procedures to the Authorized Inspector. The ASME B31.3 Standard Paragraph 343 indicates the employer is responsible for the certification of the procedure and have the applicable records available to the Inspector. The "Inspector", in this case, is not the Authorized Inspector, but the Owner's Inspector as referenced in Paragraph 340.3. The ASME B31.1 Standard does not make an explicit reference to procedure demonstration but Paragraph 136.1.3 does give the Owner's Inspector the right to audit the examination method.

Readers of this article are also reminded of the Information Bulletin IB11-020 (see <http://www.absa.ca/IBIndex/IB11-020.pdf>) on "Responsibility for NDE During Pressure Vessel Fabrication" ❖

¹ Section I does not make use of manual UT.

PROHIBITED ACTIVITIES DURING POWER ENGINEER EXAMINATIONS

During regular examination sittings in July and August this year, two candidates were found engaged in prohibited activities during power engineering examinations.

The candidates were disqualified from the examinations they were attempting, they forfeited examination fees and they both received penalties significantly delaying any future examination attempts.

The *Power Engineers Regulation AR 85/2003* states in Section 28(e) that the Administrator may:

“declare a candidate to have failed if the candidate undertakes a prohibited activity during an examination;”

and further in Section 28(f)

“disqualify candidate who undertakes a prohibited activity during an examination from writing another examination for a period not exceeding 12 months after the date of the examination;”

In the July examination, the candidate’s prohibited activity was *“A candidate copies, removes or attempts to remove any question or part thereof from the examination paper.”* In the August examination, the candidate’s prohibited activity was *“Formulae or other information, not authorized by the Administrator have been added to any reference material taken into the examination room.”*

All prohibited activities are clearly stated on the cover of the examination booklets. All candidates are asked to read the prohibitions and sign to acknowledge that they fully understand these grounds for disqualification, prior to starting the examination.

As part of the pressure equipment safety program delivery, ABSA is committed to maintaining the integrity of the examination and certification processes for power engineers and views any participation in prohibited activities as serious and unacceptable. ❖

CAREERS WITH ABSA

ABSA is currently looking for safety and service oriented professionals to fill key technical positions in our organization.

Safety Codes Officer (Inspector) – Edmonton, Grande Prairie, Fort McMurray

Under the authority of the Safety Codes Act, Safety Codes Officers are responsible for verifying and enhancing the safety of pressure equipment.

Power Engineering Examiner – Edmonton

Power Engineer Examiners at ABSA are responsible for the certification of power engineers which includes exam invigilation, marking, and evaluating the experience of exam candidates.

For more information on these positions please consult our website (www.absa.ca/ABSA-Info/Career.aspx).

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