ABSA
the pressure equipment safety authority

THE PRESSURE NEWS

Volume 16, Issue 1, March 2011

IN THIS ISSUE:

PUBLIC CONSULTATION ON THE POWER ENGINEERS REGULATION AR 85/2003

Government of Alberta

Alberta Municipal Affairs is conducting a consultation on the Power Engineers Regulation. To participate in the survey please go to our website at:

http://www.municipalaffairs.alberta.ca/am_boilers_and_pressure_vessels.cfm

The survey will be available from February 15 to April 4, 2011.

Alberta

ABSA encourages all stakeholders with concerns or suggestions for improvement to the current regulation to participate in the public consultation. In addition to the link in the notice above, there is also a link to this consultation document on ABSA's homepage under "Current Information".

To view or print the current Power Engineers Regulation click here. ❖

The August 31, 2011 *DEADLINE* for writing the old First Class power engineering examinations is fast approaching

If you are pursuing certification under the old First Class Syllabus, you are again reminded that you have until **August 31, 2011** to complete your certification.

As previously reported, the Revised First Class Syllabus was implemented September 1, 2006 with a 5 year grace period whereby on **August 31, 2011**, the old First Class Syllabus will be removed and examination candidates who fail to earn their certificates under the old Syllabus before that time, must start all over with the Revised First Class Syllabus.

Also, as explained in detail previously, because of the significant revision to the syllabus, examination results are not transferable from the old Syllabus to the Revised Syllabus.

Candidates writing under the old First Class Syllabus are again urged to review their circumstances very carefully with respect to their ability to complete that certification by **August 31, 2011**.

See www.absa.ca or www.sopeec.org for more information. If you have any concerns or questions please contact the SOPEEC Coordinator at yeung@absa.ca or by phone at (780) 433-0281 ext. 3318. ❖

WILD BIRDS CAUSES CODE VIOLATION TO SAFETY VALVE DISCHARGE PIPING

During a scheduled Power Boiler inspection, an ABSA Safety Codes Officer found that the safety valves discharge piping had heavy gauge screen welded to the end of the pipe. The owner stated that the screen was added to prevent wild birds from nesting in the discharge piping. However, by adding this screen this acted as a restriction to the capacity of the discharge pipe which violates the 2010 ASME Section 1 Code (Power Boilers). In paragraph PG71.3 it states that "when a discharge pipe is used the cross-sectional area shall be not less than the full area of the valve outlet."

The SCO requested that the screen be removed and the client took immediate corrective action and replaced the screen with a plastic cap. The plastic cap acts as a guard and does not restrict the flow to the discharge piping.

On the subject of safety valve discharge, it is important to note that the ASME Codes Section I and Section IV do not allow isolation valves stating that: "No valve of any description shall be placed between the required pressure relief valve or valves and the boiler, nor on the discharge pipe between the pressure relief valve and the atmosphere." ❖

NATIONAL BOARD REGISTRATION OF BOILERS AND PRESSURE VESSELS CONSTRUCTED TO CSA B51 CODE

Registration of boilers and pressure vessels, built to CSA B-51, with the National Board has been a possibility for some time already due to a document titled "Criteria for Registration" which was developed by the National Board at the request of the jurisdiction members.

Since the development of the criteria, some jurisdictions have amended their laws and rules to allow the use of boilers and pressure vessels built to various standards so long as registration with the National Board was completed.

Questions have been asked of the National Board regarding the implementation of the application process leading to authorization to register boilers and pressure vessels built to CSA B-51.

The process leading to authorization to register CSA B-51 boilers and pressure vessels begins with the manufacturer submitting an application to the National Board. Once the application package has been received by the National Board, a joint review of the manufacturer's quality program can be scheduled. The purpose of the joint review is to determine if the applicant has a written quality system and has the ability to implement the program that complies with the elements required by the criteria document. This joint review will be conducted by the National Board, along with the Authorized Inspection Agency which, in Alberta, will be ABSA. Assuming no discrepancies are discovered during the review, authorization to register will be granted to the applicant.

Registration of boilers and pressure vessels is a process which includes specific duties assigned to the Authorized Inspector. These duties are usually beyond those included in the construction standard. The registration is documented by the filing of the manufacturer's data report with the National Board. This filing will ensure the availability of the data report forever. The data report is available to the registrant at no cost. There is a nominal cost of filing the data report with the National Board based on size of the boiler or pressure vessel.

Filing the data report with the National Board may help to promote the export of boilers and pressure vessels built to CSA B51 through indicating that the equipment is in full compliance with CSA B51, the reinforcement that the National Board is party to the registration process and that the data report will be maintained and always be available. ❖

NATIONAL BOARD—80TH GENERAL MEETING

The 80th annual Meeting of the National Board will be held in Las Vegas, Nevada in conjunction with the ASME International Boiler and Pressure Vessel Code Committee meetings. The theme of this year's conference is "Safety - Consider the Alternative" and the conference will be held on May 9-13, 201.

For further information, please visit the "infoLink!" Page on the National Board Web site www.nationalboard.org, or contact the National Board directly at:

Tel (614) 888-8320
Fax (614) 888-0750

EXTERNAL TRAINING NEWS

We are pleased to inform you that we have completed our 2012 External Training Seminar Schedule and it is now posted on our ABSA website. With this new schedule, it will provide an opportunity for our stakeholders to plan ahead and, better still, make reservations for these popular seminars far in advance.

Our variety of topics for Seminars have grown from two a few years ago, to a total of eight, not counting our specific in-house customized training Seminars.

Three new seminars are being planned for 2011 and the first one we are ready to launch is "Design Registration" that is scheduled to start April 28 & 29, 2011 at our Edmonton office. The other two seminars that are currently being worked on is the "Power Engineers Regulation" and "Repairs and Alterations".
Details of all seminars are described on our website.

We have been widening out in the delivery of our public seminars to Calgary and are currently looking at the possibility of other areas within Alberta to deliver our program. The new seminars are part of our effort to achieve our Mission in assisting our "… stakeholders to ensure that pressure equipment is designed, constructed and operated in a manner that protects public safety."

The 2011 calendar that has been posted is attracting the interest of our clients giving them a choice of 66 days out of a possible 247 to schedule for seminars.

From a recent Pressure Piping Seminar held at our head office in Edmonton, we are pleased to have some excellent feedback from those in attendance. A sample of responses to our feedback questions included:

How would this Seminar benefit other people who are in a similar profession as you?

> *"This would assist employees who are trying to do their job properly."*
> ***Sharon Clausen***
> *QC Manager*
>
> *"This Seminar is perfect for both veteran and new people in this field. The information provided is over and above what I have taken before. It covers all aspects of this type of QMS.*
> ***Todd McLean***
> *Quality Control Manger*
>
> *"The Safety Act and related codes put tremendous responsibility on to the Owner and Users. The Seminar provides both details on the codes and ABSA's expectations of owners, users and manufacturers."*
> ***Tony McWhannel***
> *Engineering & Maintenance Manger*

What have you learned? How can you apply this new knowledge to your current duties at work?

> *"How to register the manufacturers equipment the right way. How to appropriately track material & equipment. How to implement & manage a Quality Management System. How to review & understand the codes & regulations. How ASME fits in with ABSA…"*
> ***Shane Lazaro***
> *Quality Control & Maintenance Manager*
>
> *"ABSA relationship with the Safety Codes Act, CSA B-51 and B31 Codes. Along with additional knowledge to improve (my companies business). This knowledge will assist in our continue system of improvement & accountability in all company departments."*
> ***Peter Mahowich***
> *Project Manager-President*

We would like to thank the above seminar participants for allowing us to quote their responses in this article. We should note that all of our seminar participants are given an opportunity to express themselves as to the program delivery and benefits. We value the feedback and are always looking for improvement. ❖

An ABSA brochure is published and highlights all the current seminars and new seminars that will be coming in the fall/winter of 2011/2012. This brochure is attached with this newsletter.

FACTS ABOUT SMALL BOILER OPERATION

The following real life questions and answers will provide quick guidelines to facility owners, contractors, engineers, plumbers, operators and boiler rental companies with respect to the requirements of the Pressure Equipment Safety Regulation (PESR) and Power Engineers Regulation (PER) relative to smaller boilers and heating plants. Please contact your area Safety Codes Officer (SCO) if further information is required.

Q1 *I have installed five Cast Iron Sectional (CIS) hot water boilers in my new facility. The boilers are not steam producers. Would the boilers require initial inspection and registration prior to start-up?*

A1 Yes, contact your area SCO for an initial inspection and information on what is required for registration. A certificate of inspection permit will be issued for each boiler inspected. Note: A boiler that has a volume not exceeding 42.5 litres (1.5 ft^3) is exempt from an initial inspection (See Section 33(2)(a) of PESR)

Q2 The facility mentioned in Q1 is a heating plant with a total heating surface of 163 square meters (1760 square feet). What level of Power Engineer Certificate is required to operate the facility?

A2 A minimum of a 5th Class Power Engineer or Building Operator "B" (See Section 4(2) and Table 4 of PER). Table 4 of PER provides for heating plants from 750 kW to 3000 kW to be operated under the general supervision of a 5th Class Power Engineer or a Building Operator “B” certificate holder. Note, Section 29(1)(a) of the PER provides the conversion of 1 square meter of boiler heating surface = 10 kW.

Q3 What level of supervision is required for the above Facility? (Q2)

A3 General Supervision rules with a minimum of two checks per day, no less than 7 hours apart. (See Section 4(3)(b)(c) of PER). There is provision to suspend the General Supervision for up to 96 hours when the facility is unoccupied (See Section 4(4) of PER).

Q4 The pressure relief valves (PRV) on the boilers in the heating plant are being replaced every two years. Do we still need to do the manual test of the PRV monthly?

A4 Yes, in order to ensure the operational integrity of the PRV (Also see Table 1 on PRV servicing interval in ABSA Document AB-506, “Inspection and Servicing Requirements for Pressure Equipment”)

Q5 What is the minimum level of certification required to operate a dry cleaner boiler?

A5 A Special Boiler Operator (SBO) Certificate of Competency (See Section 2(5) of PER.

Q6 I am taking over a dry cleaning business within a week and I do not hold a SBO certification. What are my options for operating the boiler in compliance with legislation?

A6 The boiler must be operated by the holder of a Special Boiler Operator Certificate of Competency. You can contact ABSA and make a request for temporary certification. An ABSA Safety Codes Officer (SCO) may visit your facility and administer an oral examination to determine if you have the knowledge to safely operate the boiler. If you satisfy the SCO on your knowledge of safe boiler operation, you may be granted a temporary SBO certificate for up to six months. This temporary certificate will allow you to operate the boiler and provide time to challenge the written examination which you must pass to receive a standard SBO certificate.

Q7 How do I obtain a standard SBO certificate?

A7 You will receive a standard SBO certificate after passing the written SBO examination following application to ABSA’s Education and Certification Department. Your application should be submitted a minimum of 21 days prior to the examination date.

Q8 *What is the passing mark for a SBO certification examination?*

A8 65%. The SBO exam consists of 50 multiple-choice questions. ❖

ABSA Board of Directors

ABSA is looking for a person to fill an upcoming position on our Board of Directors.

The vacancy is for a member to represent Manufacturing and as such the successful candidate, in addition to working with the other board members to provide good governance to ABSA, will also bring personal insight to the Board from the pressure equipment manufacturing sector.

The ideal representative will have previous board experience and possess senior or executive management experience related to the manufacturing of pressure equipment in the Province.

Our Board provides guidance and direction to ABSA's activities and programs to ensure public safety regarding the operation of pressure equipment. The Board consists of senior representatives of various facets of the pressure equipment industry.

ABSA Board members serve a three-year term with the option to serve an additional three-year term. This term would begin July 1st, 2011. Board members receive an honorarium in recognition for service and are entitled to reimbursement for travel expenses.

If you, or someone you know, meets the criteria we invite resumes to be sent to:

Jared Uditsky, Human Resources Manager
ABSA the pressure equipment safety authority
9410 20 Avenue, Edmonton, AB T6N 0A4
Ph: 780-437-9100 Ext 3315; Fax: 780-437-7787; Email: hr@absa.ca

Closing date for applications for the above position is **April 15, 2011**. ❖

Information Bulletin IB11-003
DIRECTIVE
Piping Submission Form AB-96 Updated

Form AB-096, "*General Engineering Requirements for Design and Construction of Pressure Piping Systems"*, has been updated and posted on the ABSA website under the Design Registration menu item. The updated form now requires a list of documents that are submitted, permit to practice number, and P.Eng. stamp. Please refer to Information Bulletin IB11-003 for further detail.

A supplementary document AB-096a, "*Guide for Completing Form AB-96"*, has been created to provide detailed instructions assisting the users to complete the form AB-096. This can also be found on the ABSA website under the Design Registration menu item.

The updated AB-096 form and the new AB-096a guide has been available on the ABSA website since mid-February and we encourage submitters of piping systems for registration to use this updated form. We will provide a transition period to the use of the updated AB-096 which will be made mandatory **April 1, 2011**. ❖

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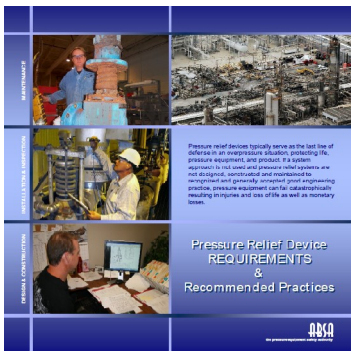
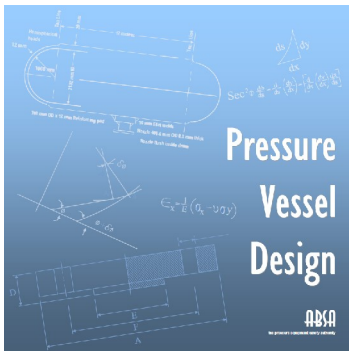
the pressure equipment safety authority

Seminars

As the pressure equipment safety authority, ABSA is committed to helping individuals and industry meet their training needs in pressure equipment safety. Please subscribe to our e-news and e-information service for the latest training news. Seminars that ABSA conducts on a regular basis are:





Coming in the fall/winter of 2011/2012

Power Engineers Regulation Seminar

Repairs and Alterations Seminar

Contact Information:
9410 20 Avenue, Edmonton, AB T6N 0A4
(780) 433-0281 Ext 3323
training@absa.ca
www.absa.ca

Pressure Equipment Safety Legislation (PESL) (2 days)

This seminar is intended to provide an overview of the Alberta legislation and the related codes and standards governing pressure equipment safety. The seminar addresses the full life-cycle of pressure equipment including engineering, fabrication, installation, in-service integrity management (operation, maintenance and reliability) and repair and alteration.

The seminar will consist of a lecture supported by a slide presentation and reference study materials.

The fee for this seminar is $680 plus GST.

Pressure Piping Fabrication Requirements and Quality Control (2 days)

This seminar presents the requirements of the Safety Codes Act, Regulations and applicable ASME codes with respect to pressure piping systems and provides awareness and guidance for the effective implementation of a Quality Management System to promote the construction of safe piping systems.

The seminar will consist of a lecture supported by a slide presentation, reference and study materials and practical exercises.

The fee for this seminar is $1020 plus GST.

Pressure Vessel Design (1 day)

This seminar will address some of the engineering fundamentals for pressure vessel design. The seminar will examine the responsibility of respective parties and the scope and limitations using the ASME Section VIII Div. 1 Code as an example. Subjects reviewed will include material selection, design factors and establishment of allowable stress values, opening reinforcement, flanges and other pressure vessel design considerations. The seminar will also address ASME Section VIII Div. 2 including the basis of the Division and its use in Alberta. The seminar will include a review of common problems and deficiencies to allow participants to gain a better understanding of pressure vessel technology.

The seminar will consist of a lecture supported by a slide presentation and reference study materials.

The fee for this seminar is $460 plus GST.

Pressure Relief Device Requirements & Recommended Practices (2 days)

This seminar will present the requirements of the Safety Codes Act, Pressure Equipment Safety Regulation, CSA B51 code and ASME Section I, IV and VIII codes. The seminar will address selection and sizing, installation, operation, inspection and servicing of pressure relief valves.

The seminar will consist of a lecture supported by a slide presentation, reference and study materials and practical exercises.

The fee for this seminar is $920 plus GST.

Quality Systems & Inspection for Pressure Equipment Construction (3 days)

This seminar will present the quality system and inspection requirements for pressure equipment construction under the Safety Codes Act, Pressure Equipment Safety Regulation, and CSA B51 code. The seminar will also address quality concepts and design of a quality manual for the construction of pressure equipment (with a focus on ASME Section VIII Div. 1). Quality system elements will be reviewed in detail and in relation to the relevant ASME Section VIII Div. 1 code requirements. Specific topics of presentation will include Safety Codes Act, CRNs, NDE, PWHT, MTR s (including verification of reports and charts); inspection controls and responsibilities; control of quality documents; and completion of Construction Data Report Forms.

This seminar will be capped off with a large one day workshop which will encompass the entire construction cycle of a piece of pressure equipment fabricated to the ASME Section VIII Division 1. The workshop will include inspection of a typical pressure vessel along with creating a final turnover package. The first two days will be aimed at creating the technical basis to complete this final one-day workshop. The seminar will consist of a lecture supported by a slide presentation, valuable reference and study materials and many practical exercises. Practical exercises include the use of pre-fabricated pressure vessels.

This course will **NOT**, however, review the ASME Code requirements in detail.
A general overview of ASME Section VIII Div. 1 is given while participating in the hands-on Modules.

The fee for this seminar is $1,380 plus GST.

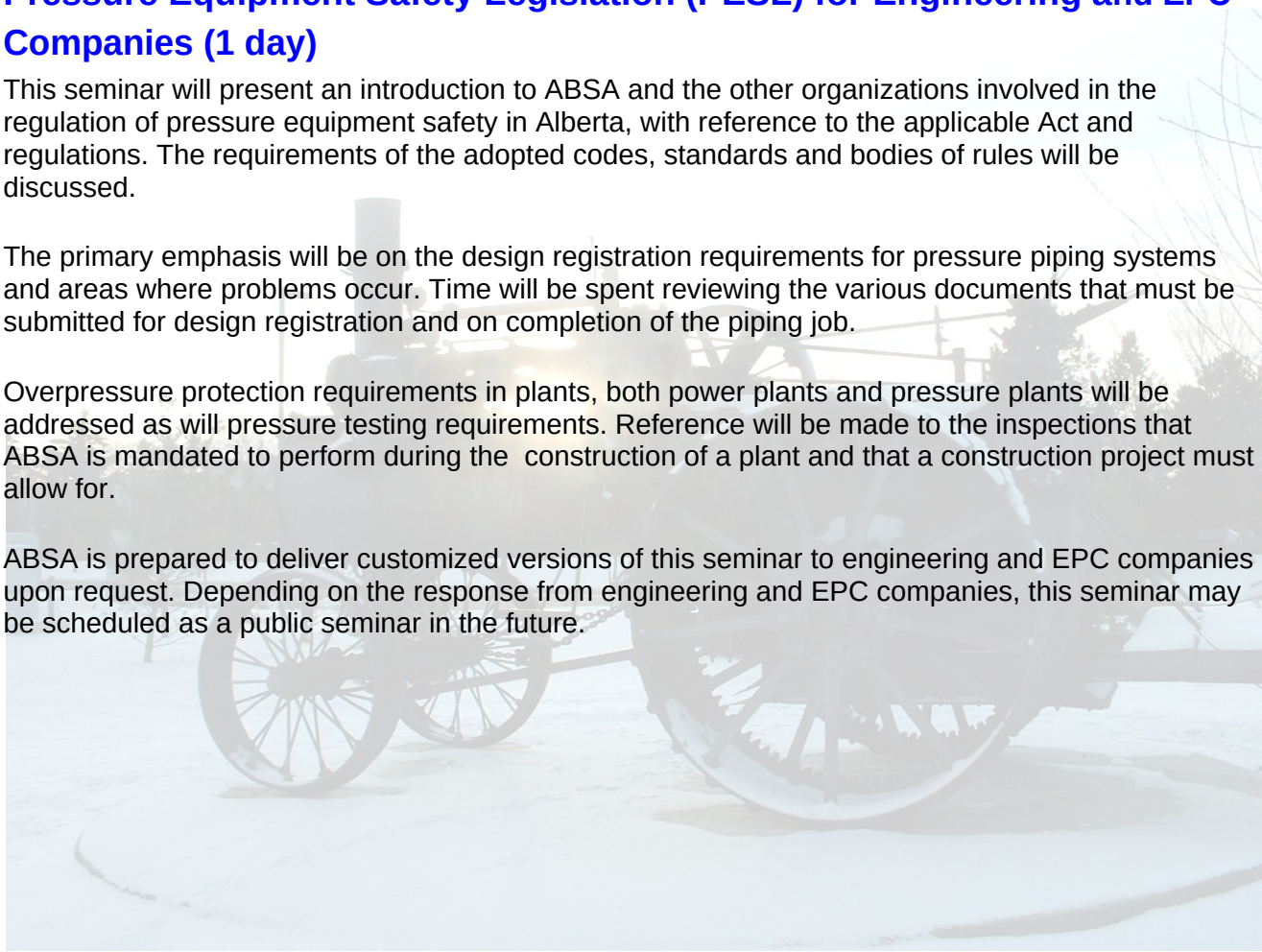
Pressure Equipment Safety Legislation (PESL) for Engineering and EPC Companies (1 day)

This seminar will present an introduction to ABSA and the other organizations involved in the regulation of pressure equipment safety in Alberta, with reference to the applicable Act and regulations. The requirements of the adopted codes, standards and bodies of rules will be discussed.

The primary emphasis will be on the design registration requirements for pressure piping systems and areas where problems occur. Time will be spent reviewing the various documents that must be submitted for design registration and on completion of the piping job.

Overpressure protection requirements in plants, both power plants and pressure plants will be addressed as will pressure testing requirements. Reference will be made to the inspections that ABSA is mandated to perform during the construction of a plant and that a construction project must allow for.

ABSA is prepared to deliver customized versions of this seminar to engineering and EPC companies upon request. Depending on the response from engineering and EPC companies, this seminar may be scheduled as a public seminar in the future.



Design Registration (2 days)

ABSA has developed a modular Design Registration seminar that addresses the design registration requirements for all types of pressure equipment. The modular format is intended to provide a flexible delivery of the seminar subject matters depending on the specific needs of the seminar audience.

Each seminar module will consist of a lecture supported by a slide presentation, reference and study materials and a workshop incorporating practical exercises related directly to the submission of designs for the registration of specific types of equipment.

The launch of this seminar is expected in the spring of 2011.

The fee for this seminar is $920 plus GST.

Annual Code Update (1 day)

The Annual Code Update Seminar provides an overview of the effects of the Code changes on Designers, Quality Control Inspectors, and other users of the Codes. This seminar is presented in late summer. Watch our website and the pressure news for the schedule and pricing.

In- House and Customized Training

On request, ABSA will conduct an in-house seminar at your company's location when there are sufficient candidates. This will reduce the cost of sending a number of employees to Edmonton for the seminar.

We will attempt to offer customized training in areas identified by stakeholders. We will be conducting industry training surveys and are looking forward to hearing of any needs you may have.

Please register for any of these seminars using the AB-136 form posted on the website **www.absa.ca**.

2011 Schedule

Pressure Equipment Safety Legislation

February 2 & 3	Edmonton
February 28 & March 1	IPEIA, Banff
March 29 & 30	Edmonton
April 26 & 27	Calgary
June 21 & 22	Edmonton
September 7 & 8	Edmonton
November 2 & 3	Edmonton

Pressure Piping Fabrication Requirements and Quality Control

January 19 & 20	Edmonton
February 28 & March 1	IPEIA, Banff
March 22 & 23	Edmonton
April 6 & 7	Edmonton
May 4 & 5	Edmonton
May 18 & 19	Calgary
June 15 & 16	Edmonton
September 21 & 22	Edmonton
October 12 & 13	Edmonton
November 8 & 9	Edmonton

Quality Systems & Inspection for Pressure Equipment Construction

March 8, 9 & 10	Edmonton
November 22, 23 & 24	Edmonton
May 24, 25 & 26	Calgary
September 27, 28 & 29	Edmonton

Pressure Vessel Design

March 7	Edmonton
September 2	Calgary

Pressure Relief Device Requirements & Recommended Practices

February 28 & March 1	IPEIA, Banff
June 2 & 3	Calgary
September 1 & 2	Edmonton

Design Registration

April 28 & 29	Edmonton
June 28 & 29	Edmonton
Nov 30 & Dec 1	Edmonton
Sep 7 & 8	Calgary

Annual Code Update

October 4	Nisku
October 6	Calgary