

MINUTES OF THE FIFTH PRESSURE EQUIPMENT SUB-COUNCIL MEETING OF 2018

DATE: September 6, 2018

TIME: 9:00 a.m. to 1:00 p.m.

LOCATION: Safety Codes Council Office, Edmonton

PRESENT: <u>Sub-Council Members</u>

Izak Roux, Chair Mike Clancy Greg Gaudet Billy Lee Todd Loran

David Miller, Vice Chair Grant Peuramaki Jacques St-Onge

Alberta Boilers Safety Association

Mike Poehlmann, Administrator, Djordje Srnic

Alberta Municipal Affairs
Allan Hantelmann, Jon Elliott

<u>Safety Codes Council</u> Allison Karch, Gerry Baron

REGRETS: Henry Hau, Dr. Magdi Ghobrial, Marvin Kossowan, Geoff Kutz, Vice Chair,

Tony McWhannel, Nyssa Moore, Ward Wagner, John Wolff

RECORDER: Sandi Orr

2018 MEETINGS: Oct 25 (Special), Oct 26 (Planning), Dec 6

2019 MEETINGS: To be confirmed at October meeting

Prior to the start of the meeting, a tour of the Council's new office was provided. Safety and evacuation procedures were explained.

1. Meeting Opening

The Chair called the meeting to order at 9:22 a.m., and safety moments were provided relative to schools and public spaces. A round table introduction was held.

1.1. Agenda Adoption

Mike Clancy / Greg Gaudet moved that the agenda be adopted as circulated; CARRIED

1.2. Adoption of June 28, 2018

David Miller / Grant Peuramaki moved to adopt the minutes of June 28, 2018 as circulated; CARRIED

Clarification was provided regarding ongoing action items and new action items. It was suggested that the original agenda item # be added to the action list. [Karch]

2. Matters for Decision

There were no matters for decision presented.

3. Review Matters Arising/Action List

	Item	Action	Meeting	Responsible	Status/Update
1.	ASME Task	Provide updates about ASME task	Nov 24/16	Roux	Nothing new to
	Group Update	group looking at allocating risk			report
		during the design stage.			
2.	Power	Provide updates from AIPE about	Sep 7/17	Hau	Nothing new to
	Engineers	potential continuing education for			report
	Continuing	Power Engineers.			
	Education				
3.	Stress Values	Both PESR working groups to begin	Sep 7/17	Wolff / Ghobrial	Nothing new to
	for Gr. 91	discussions re. the implications of			report
	Materials	the proposed change for lowering			
		allowable stress values for Gr. 91			
		materials to identify concerns and			
		recommendations to address the			
		concerns.			
		UPDATE: Next Working Group			
		Meeting is September 10, 2018			
		and Fit for Service will be looked at			
4.	Thermal Liquid	Determine the status of Thermal	Oct 12/17	Hantelmann /	Still in progress
	Heating	Liquid Heating Systems in the		Yard	
	Systems	Pressure Equipment Exemption			
		Order.			

		LIDDATE: Uncortain of the hold up			
		UPDATE: Uncertain of the hold-up			
		but nothing has moved forward in			
		the Policy Department regarding			
		this.			
5.	Low Carbon	Continue to monitor the low-	Feb 1/18	Srnic	Continuing to be
	Steel	carbon steel project.			monitored
		UDPATE: ASME is willing to do			
		some changes. B51-2019 will have			
		a note cautioning owners about			
		the potential issues. CSA-Z245			
		Committee is aware of the issue			
		but without data from tested			
		flanges, it is hard to put product			
		specs together. An in-depth			
		discussion was held regarding the			
		cost of testing and how this would			
		impact industry.			
6.	PESC Planning	The Chair will work with the Vice	May 3/18	Roux / Council	Agenda is being
		Chairs and Council staff to plan the	, ,	Administration	developed
		Strategic Planning Session,			·
		scheduled for Oct 26/18.			
7.	AWOC	It was requested that AMA provide	Jun 28/18	Yard /	New action item
	Presentation:	a flow chart of all related	,	Hantelmann	assigned
	Outcomes &	regulations and documents for			
	Next Steps	discussion at a future meeting.			
		UPDATE: It was believed it was			
		already circulated but then			
		I = -			
		l			
		realized the flow chart was more generic and not specific to the PE discipline. The Technical Advisor			
		will follow up with Bohdan Yard.			

4. Matters for Discussion

4.1. BC Fernie Arena Incident

The item was placed on the agenda to ask the question "Should Alberta learn from this and is there reason for concern or change in the way Alberta manages refrigeration plants?"

It was reported that the BC Safety Authority did a presentation at a meeting in Quebec. It is believed that this does affect public safety; a similar incident could happen anywhere and needs to be addressed. There are four opportunities listed in the report regarding training and it was suggested this should be included in the national syllabus for the Refrigeration Operators and Mechanics. Concern was expressed that the people making the financial decisions about maintenance of refrigeration systems in community facilities such as hockey arenas and curling rinks aren't as well versed in the risks. Concern was also expressed about the lack of code training in the industry for designers.

The Administrator reported the following:

Refrigeration systems in Alberta are treated as pressure equipment

- The greatest difference between BC and Alberta is that Alberta does not regulate who can operate refrigeration plants
- It is believed that the regulatory differences between Alberta and BC had nothing to do with the incident that occurred as this was a result of behaviours rather than certification
- Ammonia is a hazardous substance that has been used for over 100 years in public occupancies with few incidents
- It is believed that the regulatory regime in Alberta does not require changes, but heightened awareness of the hazards relative to ammonia could definitely be increased, and ABSA will continue to work on communications in this regard

It was recognized that this does not have anything to do with refineries as these individuals understand the risks. However, arenas and ice rink facilities are often the centre of community activities. As the sub-council, it was suggested that further understanding of how these sorts of plants are regulated and operated would help with determining an appropriate path forward.

It was noted that CSA-B52 is referenced in both the Pressure Equipment Regulation and the Building Code and it was questioned whether further discussion is needed at the TCC level. It was questioned whether there was a need to review the recommendations pertinent to the Pressure Equipment discipline. It was suggested that further information was needed first to better understand the safety system in this regard.

It was questioned regarding what feedback would be provided if a plant of this nature was asking ABSA for direction and it was reported that they would be referred to <u>AB-275 General Requirements for Mechanical Refrigeration Systems</u> and ABSA would offer to send an SCO if it was felt necessary. Feedback was sought from OH&S when AB-275 was under development.

After an in-depth discussion, the following action items were determined:

- Alberta Municipal Affairs was requested to bring forward further information on how this is managed from an OH&S perspective. [Hantelmann]
- ABSA was requested to bring forward further information on how this is regulated in Alberta and who can operate these types of plants in comparison to other jurisdictions in order for the sub-council to gain a better understanding. [Poehlmann]

4.2. ABSA/Administrator Report

Accidents, Fires and Unsafe Conditions

Date Reported	Injuries	Fatalities	Description	Loss of Containment
2018-08-15	0	0	A leak developed in a 2" sulfuric acid transfer piping system. The leak resulted in approximately 500 kg of 98% sulfuric acid spilling to the ground.	
2018-08-10	0	0	A piece of stainless steel tubing connecting the autoclave to the condenser ruptured, releasing hot vapours and hydrogen gas above the auto ignition temperature of the mixture. A fire was the result.	

2018-07-24	0	0	A process upset resulted in a lack of flow to a heat exchanger, causing localized overheating and a flange leak. Escaped process fluid ignited, causing a fire that was quickly extinguished by operations.	Yes
2018-07-09	0	0	A pumpjack engine back-fired and discharged embers onto combustible insulation which started to burn. Process instrumentation and control equipment was damaged by the fire.	No
2018-07-09	0	0	During operation of a fired treater the firetube failed (throughwall pitting), releasing process fluid. The fluid ignited causing a fire.	Yes
2018-07-03	0	0	A de-sanding valve in a SAGD facility failed releasing process fluids.	Yes
2018-06-29	0	0	Small bore piping (tubing) in high pressure liquid oxygen service failed. A small quantity of liquid oxygen was released prior to safe shut down of the plant.	Yes
2018-06-28	0	0	Steam header through wall crack leaking steam. Weld at repad developed crack along the toe of the weld.	Yes
2018-06-27	0	0	A leak was discovered between the tube sheet and tube of a glycol boiler. The unit was safely shut down.	Yes
2018-06-22	0	0	Company inspectors discovered propane tanks being used as air receivers and had them removed from service.	No
2018-06-21	1	0	An operator was hospitalized for treatment of burns caused by steam and hot water released from a steam-out hose connection.	No
2018-06-19	1	0	A worker was treated for burns caused by a flash fire which occurred while the worker was using a wash-wand to spray water into an open pressure vessel manway to prepare the vessel for internal inspection.	No
2018-06-15	0	0	Process piping was overheated from a high temperature reaction that occurred inside the pipe.	No

Information Bulletins Issued / Revised

Notification (Information)	2018-08-31	IB18-019	IB18-019 Authority Having Jurisdiction for CSA B52
Alert	2018-08-29	IB18-018	IB18-018 Propane-Tank-Fire
Interpretation	2018-08-10	IB18-017	Design Registration and Inspection of CNG and Hydrogen Refuelling Station Piping
Alert	2018-07-26	IB18-016	Technical Safety BC releases Fernie Investigation Report
Interpretation	2018-07-25	IB18-015	<u>Historical Boilers Requirements</u>
Interpretation	2018-07-24	IB18-010-R1	Bolted Replacement Parts
Interpretation	2018-06-28	IB18-014	Pressure Equipment Repair and Alteration Requirements
Notification (Information)	2018-07-05	IB18-013	Rescind and Reissue of Pressure Tack Welder Certificate of Competency Cards

Interpretation	2018-06-27	IB18-012	<u>Interpretation – Registration of Pressure Equipment Alteration</u> <u>Design Based on Fitness for Service Assessment</u>
Interpretation	2018-06-13	IB18-011	Power Engineering Courses Satisfactory to the Administrator

AB-500 Documents Issued / Revised

AB-513 Repair Alteration Requirements – updated to address Fitness for Service

CSA Code Activities

- B52 Technical Committee meeting in Montreal, 22 August reviewed the TSBC report of the Fernie Ammonia accident.
- B51 Technical Committee meeting in Montreal, 23 August disposition of public review comments, review of previously balloted items for publication with 2019 Edition

ASME Code Committee Activities

ASME Codes and Standards

ASME Boiler Code Week was held in Washington, DC, July 30 to August 3, 2018. Items of note covered at the ASME meetings include:

- 1. Section VIII Pressure Vessels
 - a. The revision of U-2(g) is almost complete, with the last two items in the final stage of approval. The revisions to Section VIII, Division 1 will better define an acceptable approach when the Code does not provide applicable rules.

There was a Town Hall meeting on the afternoon of Thursday 2 August 2018 to discuss comments received from the public. People who provided comments were invited to the meeting to present their concerns. The concerns were mostly from manufacturers of HVAC equipment that has traditionally been "exempted" by the 6" rule. The manufacturers present expressed concern that if the exemption is eliminated from Section VIII, then regulators and customers will start demanding code-stamping of refrigeration system components that have never required stamping. It was mentioned that some of the components are built to other standards that were developed specifically to address the "gap" in the application of the Code. The nature of the concerns were generally described as "extra expense with no added safety benefit" given the reported long history of safe operation of this type of equipment.

In general, the nature of the discussion indicated there is misunderstanding about the role of the jurisdictions in determining when the ASME Code does and does not apply to an object. If not already done, Chief Inspectors may wish to review the potential impact of this Code change in their jurisdiction.

2. The Alberta Pressure Vessel Manufacturers Association (APVMA) sent a request to ASME for a Code Case requesting additional time for compliance with UG-84(h)(5) – impact testing requirements for multiple process welding procedures. The proposal was reviewed by the Code committee in May and sent to letter ballot. The SG on Toughness reviewed the results of the letter ballot in the August meeting. The ballot had one negative and it was addressed in the meeting. The item moved to the BPV VIII SC level. BPV VIII SC opened 30-day ballot on September 04, 2018.

3. Section XIII Rules for Overpressure Protection

Many comments were received on the "100% Complete Draft" of the proposed new Section XIII Overpressure Protection that was balloted earlier this year. Members of the XIII Standards Committee, and its Sub Groups are now tasked with addressing all the comments. An approval ballot is to be circulated one the draft has been updated as and where necessary to address the comments. The development project plan is to publish the book section in July 2019. Section XIII will have no formal standing with the other book sections until the standards committees responsible for those sections approve its adoption.

4.3. AMA Report

The Technical Advisor reported on the continued work with AWOC relative to the Pressure Welders Regulation.

4.4. 2019 Meeting Schedule

It was agreed that Thursdays still worked for most. It was agreed that January, May, September and December would be regular meetings and March, June and October would be special meetings to include working group sessions.

The following tentative meeting schedule was proposed:

- Thursday, January 10, 2019
- Thursday, March 14, 2019 Special
- Thursday, May 2, 2019
- Thursday, June 20, 2019 Special
- Thursday, September 5, 2019
- Thursday, October 24, 2019 Special
- Thursday, December 5, 2019

The meeting dates will be confirmed in October, 2018.

[Karch]

4.4.1. Meeting Start Time

The results from the poll were reviewed on screen and it was agreed to leave the start time at 9:00 a.m. for the time being.

4.5. Chair Election Discussion

The Chair reported that his final 3-year term as a sub-council member will end on January 31, 2019. There will be a need to elect a new Chair and all members are eligible. It was also suggested there is a need to review the working groups and their chairs at the same time. This item was deferred to the next meeting.

4.6. Council Updates

The following report was provided:

- Effective Meetings Training October 29, 2018
- Appeals Training October 30, 2018
- New Member Orientation November 20, 2018
- The Council Conference will be May 29-31, 2019 and any recommendations for speakers would be appreciated
- Gas is the feature discipline for the 2019 conference
- An overview was provided of the new format for action lists

The Chair encouraged members to take any training that they have not yet completed.

5. Meeting Finalization

5.1. Meeting and Agenda Feedback

An overview of new action items was provided.

5.2. Next Meeting

It was noted that the next meeting will be a special meeting combined with a planning session on October 25 and 26, 2018.

5.3. Meeting Adjournment

Mike Clancy / Jacques St-Onge moved that the meeting be adjourned; CARRIED

The meeting was adjourned at 1:00 p.m.

--- NEW ACTION ITEMS ---

1.2. Adoption of June 28, 2018

Clarification was provided regarding ongoing action items and new action items. It was suggested that the original agenda item # be added to the action list. [Karch]

3. Review Matters Arising/Action List

AWOC Presentation: Outcomes & Next Steps - The Technical Advisor will follow up with Bohdan Yard on a flow chart specific to PESC related regulations and documents. [Hantelmann]

4.1. BC Fernie Arena Incident

Alberta Municipal Affairs was requested to bring forward further information on how this is managed from a OH&S perspective. [Hantelmann]

ABSA was requested to bring forward further information on how this is regulated in Alberta and who can operate these types of plants in comparison to other jurisdictions in order for the subcouncil to gain a better understanding.

[Poehlmann]

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The meeting dates will be confirmed in October, 2018.

[Karch]

--- MOTIONS ---

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