



# Safety Codes Council

## MINUTES OF THE THIRD GAS SUB-COUNCIL MEETING OF 2021

**DATE:** October 7, 2021

**TIME:** 9:02 a.m. to 2:25 p.m.

**LOCATION:** videoconference

**PRESENT:** **Sub-Council Members**  
Jason Helfrich, Chair  
Cody Christman  
Paul Delano  
Mark Guderjan, Vice Chair  
Roy Herrington  
Tran Mah-Paulson  
Chuck Lemke  
James Maddocks, *until 11:30 a.m.*  
Marcel Mandin  
Larry Miller  
Randy Saunders  
Mike Turek  
Dale Walls

**Safety Codes Council**  
Allison Karch, Kathryn Derkach  
Michael Lalonde, Kris Schmaltz (item 4.3)

**Alberta Municipal Affairs**  
Sidney Manning, Claude Valliere, Tom Knull, Perry Wager

**REGRETS:** Ron Beaudette, Darcy Toner, Jeff Skeith

**GUESTS:** Laura Pysyk and Patrick Bain, ATCO

**RECORDER:** Kathryn Derkach

**2021 MEETINGS:** December 9

## **1. Meeting Opening**

The Chair called the meeting to order at 9:02 a.m. A round table introduction was held and the primary duty was read.

### **1.1. Agenda Adoption**

**Roy Herrington/Cody Christman moved that the agenda be adopted, as circulated; CARRIED**

### **1.2. Adoption of the April 22 Minutes**

**Mike Turek/Roy Herrington moved to adopt the minutes of the April 22, 2021 meeting, as circulated; CARRIED**

## **2. Matters for Decision**

### **2.1. Appointment of Chris Sherbanuk to the B149.5/B109 Working Group**

This nominee currently sits on the working group as a guest bringing knowledge that is not currently in the group.

**Marcel Mandin/Mike Turek moved to appoint Chris Sherbanuk to the B149.5/B109 Working Group; CARRIED**

### **2.2. Combination Heating STANDATA**

**Mark Guderjan/Cody Christman moved to support the issuance of the Combination Heating STANDATA; CARRIED**

The Administrator will bring back a clean draft at the next GSC meeting, pending PSC review.  
[Manning]

### **2.3. Closed Session**

**Cody Christman/Dale Walls moved to go into closed session; CARRIED**

**Cody Christman/Paul Delano moved to come out of closed session; CARRIED**

#### **2.3.1. Appointment of Curtis Bellows OR Kevin Bella to represent Small Gas Utilities**

**Dale Walls/Paul Delano moved to the Board appointment of Curtis Bellows to the Gas Sub-Council to represent Small Gas Utilities for a term ending January 31, 2025, effective February 1, 2022; CARRIED**

#### **2.3.2. Matrix Review**

Item deferred to December meeting.

#### **2.3.3. Skills Matrix Review**

Item deferred to December meeting.

### 3. Review Matters Arising/Action List

	Item	Action	Date Initiated	Responsible	Status/Update
1.	Combination Heating STANDATA	Provide updates on B214, which may impact the content of the STANDATA and/or whether it is required.	Sept 15/16	Manning	This STANDATA will be reviewed by the PSC and brought back to the GSC.
2.	CAN/BNQ 1784-000	Code recommended for adoption by GSC on Nov 15/18; AMA to provide updates on adoption as available.	Nov 15/18	AMA	There is now a proposal within the regulation department within MA. BNQ has been discussed as being considered for adoption under regulation in the spring.  This item will be updated to: BNQ 1784 and CSA B149.6.
3.	Cylinders Below Grade at Construction Sites	A draft code change request will be put together	Feb 12/20	Guderjan / Miller	Draft code change request was discussed at the April 2021 meeting; see motion below.
4.	Bonding Requirements in CSA B149.1-20	Share this clarification with the Electrical Sub-Council	Apr 22/21	Council Staff	Provided to ESC at their June 2021 meeting. The document has been well received and is available for anyone. It was noted that this could become a safety tips sheet. See motion below.  Item can be removed from action list.

#### Item 3: Cylinders Below Grade at Construction Sites

The document has been updated based on the comments from the April meeting, and included on the member portal. The Administrator has reviewed and will support this when it comes up at the CSA B149.2 Code Committee.

**Chuck Lemke/Dale Walls moved to send this document to the CSA technical committee of the B149.2 on behalf of the Gas Sub-Council; CARRIED.**

**Item 4: Bonding Requirements in CSA B149.1-20**

A question was raised about providing notice to industry about the bonding requirements in CSA B149.1 and documentation that was viewed by the GSC at a previous meeting, which Municipal Affairs uses to respond to inquiries about this topic. It was clarified that the development of the drawings in the document came from SCOs, and the document was taken to sub-councils and national committees with no indication that this issue needs further action. Members felt broader clarification for electrical, gas and plumbing SCOs around this issue would be beneficial.

**Roy Herrington/Mike Turek moved to recommend that Municipal Affairs create a STANDATA about Bonding Requirements in CSA B149.1-20; CARRIED**

**4. Matters for Discussion**

**4.1. ATCO Hydrogen Blending Project Presentation**

Laura Pysyk and Patrick Bain from ATCO presented on the Fort Saskatchewan Blending Project. The presentation is included in the portal for future reference.

An overview of hydrogen was given:

- What hydrogen is, how it is created and how it compares to natural gas.
- Blue hydrogen is the most common and economical hydrogen to produce.
- Alberta has the infrastructure to produce blue hydrogen more cheaply than any other jurisdiction in the world.
- Hydrogen is becoming more popular around the world, with some blended systems already existing and many more being announced.
- If the system is gas-tight, it will also be hydrogen-tight.
- The majority of ATCO's leak detection equipment can be used to detect blended gasses. Because carbon monoxide detectors can have a cross sensitivity with hydrogen, ATCO is conducting a full review of CO detectors.

The Fort Saskatchewan Blending Project

- 5% hydrogen blend will be going to about 2,000 customers in Q3 2022.
- Hydrogen will be produced via electrolysis at ATCO's Gate 5 facility and injected into the system.
- Appliances and piping of all homes and businesses in the project zone will be inspected prior to commissioning.
- Goals of this project include working through technical and regulatory steps needed to successfully blend hydrogen including:
  - Design and construction of hydrogen assets
  - Build trust with the public
  - Demonstrate suitability of existing assets
  - Change internal process and procedures

- Training and competency establishment
  - Regulator changes.
- Combusting 5% blended natural gas does not result in any noticeable change to the look, sound or smell of the flame. The heat value is about 3% less meaning a slight increase in volume is consumed. Extensive research and testing has found that hydrogen blends up to 20% do not affect typical appliances.
- ATCO is working on items surrounding:
  - Work procedure and design guide updates
  - Leak detection
  - Training and competencies
  - Appliance testing and inspections
  - Risk assessment
- ATCO has partnered on research and development with several institutions and organizations worldwide. Time and effort is being spent on supplementing, addressing conflicts and filling gaps in the work for Alberta applications.
- ATCO is focusing on distribution pressure plastic piping and house pressure customer piping where there is no impact to the integrity of the pipelines.
- CSA Z662 does not explicitly cover hydrogen; however it does require an engineering assessment which ensures pipelines are safe and reliable for hydrogen service. ATCO will be conducting a review of CSA B149.1. CAN/BNQ 1784-000 Canadian Hydrogen Installation Code is under recommendation for adoption in Alberta; however it does not cover utility pipeline distribution and transmission and does not apply to blended gasses.

After the presentation, the following was discussed:

- It is expected that the pilot project will start in Q3 2022 with 5% hydrogen blend for 2000 customers. A year after that, ATCO will narrow that footprint down to a smaller amount of customers to increase the blend towards 20%.
- Alberta is a bit further behind the rest of the world when it comes to government policy and regulation changes.
- ATCO will be producing their own hydrogen on-site utilizing a modular electrolyzer. The total costs of operation make this the most cost effective for the small scale needed. As usage grows, other options for production will be reviewed.
- At this time there is no focus on hydrogen-powered vehicles.

#### **4.2. Proposed Revisions to 14-BCV-007 Interior Stairways for Roof Access**

This draft STANDATA came from the Building Sub-Council and addresses most of the requirements for the National Building Code Alberta Edition. The Building Administrator has added an excerpt from B149 for information. The question of how to ensure building SCOs know about the gas requirements was raised.

The draft will be brought to the next meeting for further review. [Council Administration]

#### **4.3 Gas SCO Certification Scope Update**

Kris Schmaltz and Michael Lalonde from the Safety Codes Council gave an update on Gas SCO certification qualifications.

- Current gas certification qualification requirements include B149.2 but do not mention B108.1 and B108.2 which creates a gap within the Gas SCO's scope.

- Installations governed by B108 are within Gas Group A SCOs' scope but installations in Alberta have a very low frequency.
- The Council is looking to add detail to the scope of practice to clarify that if a Gas Group A SCO comes across an installation that falls under B108, it is within scope for them to inspect.
- For training for new Gas Group A SCOs, focus will remain on CSA B149.1 and CSA B149.2 but a list of supports will be provided to assist SCOs if/when they come across these B108 installations.
- At this point, the Council is looking to clarify what is in the Group A SCO's scope.

The following was discussed:

- There may be other codes that fall into this same situation, including B149.1, B149.2 and B149.3 with Part 3 not being included in the scope for Gas Group A SCOs.
- It was noted that if the sub-council identifies other gaps, please let the Administrator of Certification know.
- It was suggested this conversation is bigger than these specific codes.
- As new codes are added, the question of training will need to be discussed.
- B108 and B109 are unique compared to other codes.
- It's important to remember that an SCO does not do the work, they monitor for compliance.
- When discussing an SCO requiring more training in B108, the cost of developing training for both the SCO and the municipality must be considered.

Roy Herrington, Larry Miller, Mark Guderjan and Jason Helfrich volunteered to sit on the advisory group being formed to provide advice to the Administrator of Certification.

#### **4.4. 20 lb Cylinder Requalification Requirements**

The Administrator reported that discussions around 20 lb cylinders have come up more frequently as companies are looking at the requirements from Transport Canada to be able requalify 20 lb cylinders. As industry becomes more capable of prescriptive requirements, some business are opting not to requalify cylinders and as a result people are disposing of containers but not properly. The cost of buying a new 20 lb cylinder is cheaper than requalification, which also leads to people throwing them out, thus creating issues for landfills. Different propane industry representatives are dealing with the issue differently: some are trying to charge for end of life 20 lb containers, some requalify, others are facing abandoned containers, while others are being dropped at eco centers and being worked back into industry. The sub-council has been asked to clarify the issue and consider their role during the transition time, with a focus on how industry can encourage different ways of doing things.

Transport Canada increased enforcement in regulation of containers including the requirement for the owner of the container to have and keep a copy of the paperwork for requalification. It is believed this requirement makes sense for large tanks, but not for 20 lb cylinders. As a result of this change, a number of requalification facilities decided not to requalify 20 lb tanks anymore. The Canadian Propane Association challenged the requirement and was successful, but many companies had already stopped their 20 lb requalification programs by that point.

It was noted that the costs of 30 lb and 40 lb containers is much higher, so there isn't the same volume of containers. The bulk of the issues are with the 20 lb container which is more affordable and therefore more widely used.

Issues have also been identified with purchasing a recycled tank that was not properly recertified with new valves. It was noted that many companies are more concerned with the look of the tank rather than the actual recertification.

There is an opportunity to reach out to the Provincial and Territorial Policy Advisory Committee to help bring this issue to national committees. The Administrator is looking for a white paper that will identify the issues and risks with the Transport Canada stance, as well as the costs, industry impact and environmental effect.

Jason Helfrich and Marcel Mandin volunteered to work on the white paper. [Helfrich/Mandin]

#### **4.5. Joint Documents between Pressure Equipment and Gas**

There are currently four documents that involve the pressure equipment (ABSA) and gas disciplines. Typically the process for such documents is for the Gas Sub-Council and Pressure Equipment Sub-Council to each review, along with review by the Gas and Pressure Equipment Administrators, before they're approved and posted. In one such STANDATA there were content changes that weren't thoroughly vetted and ABSA is currently looking at adding clarification language to better help industry. The sub-council was reminded that STANDATA are living documents and can be edited at any time. This item was presented for information and awareness only.

#### **4.6. Working Group Reports**

There are a few working groups that use the same appendixes and have similarities, it was deemed appropriate to merge working groups.

**Mark Guderjan/Dale Walls moved to merge the B149.1.20 and Hydrogen Stations working groups; CARRIED**

**Cody Christman/Marcel Mandin moved to merge the B149.2.20 and CSA B108 working groups; CARRIED**

**Roy Herrington/Randy Saunders moved to merge the B149.3 and B149.6 working groups; CARRIED**

The B149.5 and B109 working group will remain as is.

##### **4.6.1. CSA-B149.1.20**

Nothing to report.

##### **4.6.2. CSA-B149.2.20**

There will be a meeting once the 3 column documents are drafted.

##### **4.6.3. CSA-B149.3.20**

A working group chair is needed.

#### **4.6.4. CSA-B149.5.20/B109-21**

The following was reported:

- B109 is complete and published.
- There is an opportunity to review current B109 3 column document and make recommendations for adoption in September 2022.

#### **4.6.5. CSA-B108-21**

A working group chair is needed.

#### **4.6.6. CSA-B149.6**

The following was discussed:

- Adding the Hydrogen code may make sense to this group.
- The recommendation from sub-council has already been made so there is no additional work requirements at this time.

#### **4.6.7. Single Family Dwelling (Joint WG w/ESC)**

The working group report has been reviewed by the GSC and ESC but the group would like to meet and review before the final report is brought back.

#### **4.7. AMOS Report**

Nothing to report.

#### **4.8. Administrator/AMA Report**

The Administrator reported:

- AMA is anticipating it will continue to play a central role in the application of B108.1 and B108.2 as there are very few anticipated installations. There is no significant natural gas vehicle fuel training being considered for safety codes officers in the gas discipline.
- B109.1/B109.2 completed development.
  - published August 2021
  - regulation management of B108/B109 split codes
  - Adoption anticipated for September 2022.
  - Enforced by Alberta Municipal Affairs similar to B149.5
- Gasfitter working group developed in association with PTAC/NPSAC
  - advisory committee
  - intended to reduce barriers for trade and labour mobility
- Fraudulently certified fireplaces in Alberta update
  - There have been 497 fireplaces that have been requalified by Standards Council of Canada.
  - Out of that, 17 have failed for various reasons.
- Carrier furnace investigation report issued by BC safety Authority
  - No recall with Health Canada.
  - [https://www.technicalsaftybc.ca/sites/default/files/2021-09/Technical\\_Safety\\_BC\\_-\\_Investigation\\_Report\\_Failure\\_of\\_Gas\\_Furnaces.pdf](https://www.technicalsaftybc.ca/sites/default/files/2021-09/Technical_Safety_BC_-_Investigation_Report_Failure_of_Gas_Furnaces.pdf)



- IGAC report to include
  - AGM -June 7/8, 2021
  - Certified engines
  - code adoption table
  - CETA update
  - hydrogen and hydrogen blends
  - gas features on electric vaporizers
  - bonding gas systems
  - reference standards (international, national including jurisdictional variances)
  - uncertified products
- Sub-council members are encouraged to talk to their nominating organizations about hydrogen blends to let them know it's coming and start the conversation about how industry is going to deal with it.

#### 4.4. Council Updates

A written report was included in the portal and updates were provided on:

- Sharing documents related to sub-council work
  - Do not share anything marked CONFIDENTIAL/ SUB-COUNCIL USE ONLY, etc. or draft minutes.
  - Feel free to share final minutes, quarterly reports, draft STANDATA or other draft documents from Municipal Affairs and any other documents not marked as confidential.
- Meeting location – virtual vs in-person
  - Staff have been asked by Council leadership to review our meeting location with a focus on cost savings.
  - Sub-Council chairs were consulted about their experience chairing virtual vs in-person meetings.
  - The Council Executive Leadership have approved a hybrid of virtual and in-person meetings which will start in 2022.
  - It is anticipated that the April/May and September/October sub-council meetings will be held in person, if appropriate to do so.
- Annual General Meeting – October 29, 2021
  - Virtual afternoon event including a volunteer appreciation program.
- Council office anticipated to reopen on December 6, 2021
  - Staff may continue to work from home on some days.
- Sub-Council Member survey being sent out soon.
- Professional Development
  - New Member Orientation: Tuesday, November 9, 9:00 am – 12:30 pm
  - Effective Meetings Workshop: Wednesday October 20 and Thursday October 22, 8:30 am – 12:30 pm (must attend both days)
  - Appeals Training Workshop: Wednesday October 27 and Thursday October 28, 8:30 am – 12:30 pm (must attend both days)

- To register for any of these trainings, please contact Gerry at [gerry.letendre@safetycodes.ab.ca](mailto:gerry.letendre@safetycodes.ab.ca)

#### **4.9.1. 2022-2023 Meeting Dates**

- Please see draft schedule document in the Member Portal and let Council staff know of any that may conflict with industry events
- Will be finalized in December.

### **5. Meeting Finalization**

#### **5.1. Round Table**

Nothing to report.

#### **5.2. Next Meeting**

The next meeting was reconfirmed for December 9, 2021 virtually at 9:00 a.m.

#### **5.3. Meeting Adjournment**

The meeting was adjourned at 2:25 p.m.

– NEW ACTION ITEMS –

**2.2. Combination Heating STANDATA**

The Administrator will bring back a clean draft at the next GSC meeting, pending PSC review. [Manning]

**4.2. Proposed Revisions to 14-BCV-007 Interior Stairways for Roof Access**

The draft will be brought to the next meeting for further review. [Council Administration]

**4.4 20 lb Cylinder Requalification Requirements**

Jason Helfrich and Marcel Mandin volunteered to work on the white paper. [Helfrich/Mandin]

**– MOTIONS –**

**1.1. Agenda Adoption**

Roy Herrington/Cody Christman moved that the agenda be adopted, as circulated; CARRIED

**1.2. Adoption of the April 22 Minutes**

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**3.3. Cylinders Below Grade at Construction Sites**

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**4.6. Working Group Reports**

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– WORKING GROUP MEMBER LISTS –

<b>WORKING GROUP</b>	<b>WORKING GROUP MEMBERS (<u>Chair</u>)</b>
CSA-B149.1-20 – Natural gas and propane installation code  Hydrogen Fueling Stations	<b><u>Chuck Lemke</u></b> Jeff Skeith; Mike Turek; Paul Delano; Ron Beaudette <b><u>Mark Guderjan</u></b> Larry Miller
CSA-B149.2-20 – Propane storage and handling code CSA-B108-18 – Natural gas fueling stations installation code	<b><u>Jason Helfrich</u></b> Jeff Skeith, Mike Turek, Ron Beaudette, Marcel Mandin, Paul Delano
CSA-B149.3-20 – Code for the field approval of fuel-related components on appliances and equipment CSA-B149.6-20 Biogas and Landfill Gas Code	<b><u>Paul Delano</u></b> James Maddocks; Dale Walls; Roy Herrington, Mark Guderjan
CSA-B149.5-20 – Installation code for propane fuel systems and tanks on highway vehicles CSA-B109-21 – Natural gas for vehicles installation code	<b><u>Marcel Mandin</u></b> Jason Helfrich; Chris Sherbanuk
Single Family Dwelling <i>(Joint with ESC)</i>	GSC: <b><u>Roy Herrington</u></b> , Mark Guderjan, Larry Miller ESC: Bert DeBruin, Barry Voogd