



# Safety Codes Council

## MINUTES OF THE THIRD GAS SUB-COUNCIL MEETING OF 2022

**DATE:** September 29, 2022

**TIME:** 9:02 a.m. to 3:00 p.m.

**LOCATION:** Safety Codes Council Office

**PRESENT:** *Sub-Council Members*

Mark Guderjan, Chair  
Ron Beaudette  
Kris Topp  
Roy Herrington  
Darcy Toner  
James Maddocks (virtually)  
Tim Dykes  
Larry Miller  
Randy Saunders  
Aaron Blake  
Leigh Adams  
Dale Walls  
Cory Huppie

*Safety Codes Council*

Allison Karch, Kathryn Derkach

*Alberta Municipal Affairs*

Sidney Manning, Perry Wager (virtually)

**REGRETS:** Cody Christman, Jason Helfrich, Tran Mah-Paulson, Curtis Bellows

**GUESTS:** Justin Trupp (virtually)

Jay Dhanjal, Krzysztof Dobrzanski, Mayank Patel (Gas Liquids Engineering, virtually, for item 4.2)

**RECORDER:** Kathryn Derkach

**2022 MEETINGS:** December 1

## **1. Meeting Opening**

The Chair called the meeting to order at 9:02 a.m. A round table introduction was held, and members were reminded that their primary duty is to act in the interest of safety in the built environment for the benefit of all Albertans.

### **1.1 Agenda Adoption**

**Roy Herrington / Darcy Toner moved that the agenda be adopted, as circulated; CARRIED**

### **1.2 Adoption of the May 26, 2022 Minutes**

**Ron Beaudette / Larry Miller moved to adopt the minutes of the May 26, 2022 meeting, as circulated; CARRIED**

## **2. Matters for Decision**

### **2.1. Closed Session**

**Roy Herrington / Leigh Adams moved to enter into closed session; CARRIED**

**Roy Herrington / Darcy Toner moved to exit closed session; CARRIED**

#### **2.1.1. Matrix Review**

**Roy Herrington / Ron Beaudette moved that the Gas Sub-Council has reviewed its matrix and finds it appropriate without changes; CARRIED**

#### **2.1.2. Skills Matrix Review**

**Roy Herrington / Leigh Adams moved that the Gas Sub-Council has reviewed its skills matrix and finds it appropriate without changes; CARRIED**

#### **2.1.3. Vice Chair Election**

The Chair called for nominations. Roy Herrington put his name forward. Two further calls were made with no further nominations being brought forward. **Roy Herrington was appointed Vice Chair of the GSC, by acclamation.**

#### **2.1.4. Nomination of Chris McInroy or Ken Roskell to represent Mechanical Contractors**

**Dale Walls / Aaron Blake moved to recommend to the Board appointment of Chris McInroy to the Gas Sub-Council to represent Mechanical Contractors for a term ending January 31, 2026, effective February 1, 2023; CARRIED**

### 3. Review Matters Arising/Action List

	Item	Action	Date Initiated	Responsible	Status/Update
1.	BNQ 1784.000 Canadian Hydrogen Installation Code	BNQ 1784.000 CHIC recommended for adoption by GSC on Nov 15/18; AMA to provide updates on adoption as available.	Nov 15/18	AMA	See item 4.1. on agenda
2.	CSA B149.6	GSC motion to support adoption of CSA B149.6 was made April 23, 2020. AMA will provide updates on adoption as available.	Apr 23/20	AMA	Ongoing.
3.	Cylinders Below Grade at Construction Sites	Motion made Oct 7/21 to forward the code change request to CSA B149.2 Committee; seeking updates from Mark Guderjan, Administrator, or Jason Helfrich when available.	Feb 12/20	Guderjan / Manning / Helfrich	Mark Guderjan will adjust presentation based on feedback and another presentation will take place after that.  There is no urgency as this code change request will be for the 2025 code. Oct. 25 is the next meeting of B149.2 technical committee.
4.	20lb Cylinder Requalification Requirements	Jason Helfrich and Marcel Mandin volunteered to work on the white paper.	Oct 7/21	Helfrich/ Manning	Due to the pandemic and supply chain issues, the urgency of this issue has slowed. The Canadian Propane Association will monitor the situation and may bring back to the sub-council if required.  Remove from action list.
5.	Single Family Dwelling Definition	Council staff will circulate the proposed definition to other sub-councils for a proposed agenda discussion item.	Feb 3/22	Council Admin/ Herrington	See item 4.3.5. on agenda
6.	Draft Flow Chart for Fuel Gas Pressure Piping in Plants	Members were asked to review and provide feedback on how helpful this document is.	Feb 3/22	All	A draft flow chart was reviewed on screen. It was noted that this chart won't fit all sites perfectly and is intended to help facilities figure out what discussions need to take place. The Pressure Equipment

					<p>Sub-Council has also reviewed and provided comments.</p> <p>The Administrator will take comments into consideration and bring an updated flow chart to the next meeting.</p>
7.	19-BCV-019 Interior Stairways for Roof Access to HVAC Equipment	Provide updates on the recommendation that the Building Administrator include information regarding access to appliances from CSA B149.1 in the 19-BCV-019 Interior Stairways for Roof Access to HVAC Equipment STANDATA	May 26, 2022	Karch	<p>It was previously reported that the Paramourncy clause in the Building Code Regulation means that gas code requirements are overridden by building code requirements. However, because the clauses in the Gas code are not duplicated within the Building code, the paramourncy clause does not apply. If the GSC would like this information included for the building discipline STANDATA, the sub-council would have to develop something for Municipal Affairs to consider. Roy Herrington will review further and report back at the next meeting. [Herrington]</p>

**4. Matters for Discussion**

**4.1. Gas Code Regulation Amendments to Adopt BNQ 1784-000 2007 Edition**

The Assistant Deputy Minister at Municipal Affairs sent a letter to the Council requesting input on a proposed amendment to the Gas Code Regulation to adopt the 2007 edition of the BNQ 1784-000 Canadian Hydrogen Installation Code.

The GSC had previously reviewed this code in 2018 and made a motion to recommend adoption. After Council staffed reviewed the recommendation, it was decided that a letter could be sent back to Municipal Affairs with the previously-made recommendation and waiving the 90-day review period. Copies of both letters are in the member portal for members to review.

The code review working group is currently reviewing the 2022 edition and the sub-council will be able to make any further recommendations at that time.

## 4.2. Hydrogen Presentation

Representatives from Gas Liquids Engineering were in attendance to present about hydrogen. Highlights from the presentation included:

- An overview of what hydrogen is and the different 'colours' of hydrogen.
- High level information about replacing natural gas with hydrogen.
- Hydrogen storage options, including tanks and underground salt caverns.
- Permeability and leakage from potential storage options and in pipes.
- Mechanical compression and the types of compressors available.
- Mechanisms of hydrogen embrittlement.
- Material selections and designs of piping.
- Various initiatives in Alberta around hydrogen.

The following was discussed:

- It was noted that methane was found not to be the most effective way of heating.
- It was questioned at what pressure is the permeability of carbon steel no longer a factor. This is dependant on pressure and temperature and typically wouldn't be an issue in residential or light commercial buildings. It may become an issue if appliances start to take a mix of over 20% hydrogen.
- Most, if not all, residential appliances would need to be replaced if the blend of hydrogen increases past 20%.
- The pilot program in Fort Saskatchewan is expected to begin in a few weeks.
- A copy of this presentation will be posted in the member portal.

## 4.3. Working Group Reports

### 4.3.1. CSA B149.1 / BNQ 1784 Canadian Hydrogen Installation Code

It was reported that work continues on the review of the code.

#### 4.3.1.1. New working group chair needed

With the current chair of the working group leaving the sub-council, a new working group chair is needed.

The Chair called for nominations. Dale Walls put his name forward. Two further calls were made with no further nominations being brought forward. **Dale Walls was appointed Chair of the CSA B149.1 / BNQ 1784 Canadian Hydrogen Installation Code, by acclamation.**

It was noted that Larry Miller can assist with chair duties as required.

### 4.3.2. CSA B149.2 / CSA B108.1 & CSA B108.2

The 3 column documents are available for review.

### 4.3.3. CSA B149.3 / CSA B149.6

A meeting is set for October 27.

### 4.3.4. CSA B149.5 / CSA B109.1 & CSA B109.2

3 column documents for the B149.5 are expected soon.

#### **4.3.5. Single Family Residential Dwelling Definition**

The working group met with members from the Building and Plumbing Sub-Councils. It was reported that the building and plumbing disciplines generally do not experience issues related to the current definition in the Permit Regulation. Given there is no longer an anticipated timeline for amendments to the Permit Regulation, there is no time pressure investigate the issue.

The following was discussed:

- There is inconsistency in how municipalities approach this definition. It was noted that while inconsistency can cause issues for contractors who work in numerous areas, it may not be possible to completely eliminate variation because the safety codes system in Alberta empowers accredited municipalities to manage permit and inspection activities as they see fit, within the minimum standards set out by the terms of their accreditation.
- More focused discussion is needed in order to define the issue, including safety risks and impacts to the day-to-day operations of municipalities.
- Once issues are clearly defined, they may be best addressed through means other than revisions to the Permit Regulation, such as Information Bulletins.
- The group needs to focus on defining the issue before next steps can be determined.

##### **4.3.5.1. Addition of BSC to Joint Working Group**

The Building Sub-Council passed a motion to be included in the joint working group. No objections were noted by GSC members, and the working group will now include BSC members.

#### **4.4. Burial of Containers**

The Administrator previously brought this topic to the GSC as part of the Administrator report and is requesting input from the sub-council on next steps.

The burial of propane containers was previously prohibited in Alberta through policy that no longer exists. Currently, burial of containers is not included in SCO training because it was not practiced in Alberta, but it is allowed in the national code. With policy changes at Municipal Affairs and the Safety Codes Council, there appears to be a gap in SCO training that has not caught up with these changes.

While there is no sense of urgency to get this back into training, Municipal Affairs has been approached by people whose only option is to bury a tank for various reasons. Permits are still required for these containers. The Administrator anticipates this to be an issue more in urban settings because there often isn't enough space to place containers above ground while complying with clearances required by the code.

The Gas Sub-Council is supportive of the change to include the burial of containers in SCO training. The Administrator will reach out to the training department at the Council to move this issue forward.

#### **4.5. Stationary Gas Engine Variance**

The Administrator would like to expand the scope of the Stationary Gas Engines 20-GCV-01 STANDATA to include 'agricultural irrigation' in the application. Currently, the variance is specific to stationary engines at oil and gas sites. Some AHJs have been deeming engines for agricultural irrigation as stationary engines that need to be permitted and field approved, so the Administrator suggested this variance be extended to these applications as well.

The Administrator will also bring this to AMOS for feedback.

The Gas Sub-Council supports the inclusion of 'agricultural irrigation' in the application of this variance.

#### **4.6. Compliance within Utilities**

The Administrator reminded the sub-council that Section 18(1) of the Permit Regulation states that a supply of gas shall not be provided unless a permit is issued. Municipal Affairs has received reports of customers trying to find utility providers that will provide propane or natural gas without a permit. The Administrator is advising utilities that if they are providing gas without evidence of a permit, they are in contravention of the Safety Codes Act.

The following was discussed:

- This is an area that needs more enforcement, especially with propane because there are many suppliers competing for business. It is believed there may be many propane installations that are not under a permit.
- It is an ongoing problem with temporary heat and builders who don't understand that they do need a permit, even for temporary heat. The City of Edmonton has been trying to engage larger propane companies in regards to temporary heat. Improving relationships with builders may help this issue.
- It may be helpful to share about incidents that take place because of a lack of compliance.
- It would be good to get the fire discipline involved in these discussions. When there is an issue that needs to be investigated, a gas report should be done, but because the fire discipline is first on scene to investigate, things are often cleaned up or changed before a gas report can be done.

This discussion is about raising the issue and getting the message out to other industry groups like AMOS, rural gas utilities, and the propane industry. Members are asked to take this back to industry for further discussion and feedback. [All]

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

There will be an online meeting in November.

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

A written report was included on the portal and The Administrator reported on the following:

- New gas code amendment regulations
  - Code adoption Notice B109.1 and B109.2 in September 2022
  - Amendment for reference to "Kings Printer"
  - Next steps to develop proposal to adopt BNQ 1784 CHIC and B149.6

- Secondary permits for Gas Co-ops. Restricted gas ticket for secondary services update.
- Agricultural gas engine Variance expansion
- Updated STANDATA including template
  - Shipping Containers STANDATA drafts
- Gasfitter reconciliation working group developed in association with PTAC/NPSAC
  - Under this draft, it says provinces in Canada will adopt this code. Alberta is already doing what is being proposed.
  - Different classifications across the country will remain, but it may cause some confusion with classifications. Each province has guidelines to help understand equivalencies.
- Hydrogen and natural gas blends
  - Cross ministry and national/international discussions on Hydrogen and Blends
  - Blended and 100% Hydrogen Communities
  - Hydrogen standards for certified equipment
  - Hydrogen Fueling stations and Highway transport

#### **4.9. Council Updates**

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

- Members were reminded of the recent update to the Council’s communications policy which now is applicable to members.
- The Council’s AGM and volunteer appreciation event is being held in Edmonton on October 21, 2022.
  - Council staff will arrange hotel rooms—please include your hotel needs in the registration form if applicable.
- Member Training dates—two virtual half-day sessions for each course, you must attend both days to complete the course:
  - Appeals Training: November 15 & 16, 2022
  - Effective Meetings: October 31 & November 1, 2022
  - Contact gerry.letendre@safetycodes.ab.ca to register.
- Clarification was provided about the approach to in-person and virtual sub-council meetings.
  - The Council’s overall approach is a hybrid of some meetings held in person and some held virtually.
  - All members are asked to make an effort to attend in-person meetings in person, but there will be the option to attend virtually if they’re not able to attend because of illness, etc.
- Please notify Council staff as soon as possible of any contact info changes for yourself or your nominating organization.

#### **4.10. Proposed Draft STANDATA Regarding Shipping Containers**

The Shipping Containers joint working group between BSC and FSC prepared a written report and a proposed draft STANDATA that were included in the portal. This proposed draft STANDATA has been supported by both sub-councils and sent to the Building and Fire Administrators. It was suggested that to heighten the profile of the STANDATA, it also be joint



with other disciplines. The intent is to publish the STANDATA after the next editions of the NBC(AE) and NFC(AE) are published.

It was noted that this doesn't apply to shipping containers that are remodeled into homes or other buildings such as hotels because there is professional involvement in those projects.

The sub-council was asked to send any comments to Council staff.

[All]

## **5. Meeting Finalization**

### **5.1. Round Table**

- The BNQ 2007 code is free to those who ask.
- Because of the automatic adoption of the next code in the spring, the working group should meet in December and a GSC meeting held the week of February 13 in case any issues arise that need to be addressed prior to the automatic adoption.

### **5.2. Next Meeting**

The next meeting was reconfirmed for December 1, 2022, virtually at 9:00 a.m.

### **5.3. Meeting Adjournment**

**Kris Topp / Ron Beaudette moved to adjourn the meeting; CARRIED**

The meeting was adjourned at 3:00 p.m.

– NEW ACTION ITEMS –

**3.7. 19-BCV-019 Interior Stairways for Roof Access to HVAC Equipment**

If the GSC would like this information included for the building discipline STANDATA, the sub-council would have to develop something for Municipal Affairs to consider. Roy Herrington will review further and report back at the next meeting. [Herrington]

**4.6. Compliance within Utilities**

Members are asked to take this back to industry for further discussion and feedback. [All]

**4.10. Proposed Draft STANDATA Regarding Shipping Containers**

The sub-council was asked to send any comments to Council staff. [All]

**– MOTIONS –**

**1.1 Agenda Adoption**

**Roy Herrington / Darcy Toner moved that the agenda be adopted, as circulated; CARRIED**

**1.2 Adoption of the May 26, 2022 Minutes**

**Ron Beaudette / Larry Miller moved to adopt the minutes of the May 26, 2022 meeting, as circulated; CARRIED**

**2.1. Closed Session**

**Roy Herrington / Leigh Adams moved to enter into closed session; CARRIED**

**Roy Herrington / Darcy Toner moved to exit closed session; CARRIED**

**2.1.1. Matrix Review**

**Roy Herrington / Ron Beaudette moved that the Gas Sub-Council has reviewed the its matrix and finds it appropriate without change; CARRIED**

**2.1.2. Skills Matrix Review**

**Roy Herrington / Leigh Adams moved that the Gas Sub-Council has reviewed its skills matrix and finds it appropriate without change; CARRIED**

**2.1.3. Vice Chair Election**

**Roy Herrington was appointed Vice Chair of the GSC, by acclamation.**

**2.1.4. Nomination of Chris McInroy or Ken Roskell to represent Mechanical Contractors**

**Dale Walls / Aaron Blake moved to recommend to the Board appointment of Chris McInroy to the Gas Sub-Council to represent Mechanical Contractors for a term ending January 31, 2026, effective February 1, 2023; CARRIED**

**4.3.1.1. New working group chair needed**

**Dale Walls was appointed Chair of the CSA B149.1 / BNQ 1784 Canadian Hydrogen Installation Code, by acclamation.**

**5.3. Meeting Adjournment**

**Kris Topp / Ron Beaudette moved to adjourn the meeting; CARRIED**

**– WORKING GROUP MEMBER LISTS –**

<b>WORKING GROUP</b>	<b>WORKING GROUP MEMBERS (<u>Chair</u>)</b>
CSA-B149.1 – Natural gas and propane installation code  BNQ 1784.000 Hydrogen Installations	<b><u>Dale Walls</u></b> Ron Beaudette, Curtis Bellows, Mark Guderjan, Tran Mah-Paulson, Larry Miller, Dale Walls
CSA-B149.2 – Propane storage and handling code CSA-B108.1 - Compressed natural gas refuelling stations installation code CSA-B108.2 – Liquefied natural gas refuelling stations installation code	<b><u>Jason Helfrich</u></b> Ron Beaudette, Mike Turek
CSA-B149.3 – Code for the field approval of fuel-related components on appliances and equipment CSA-B149.6 Biogas and Landfill Gas Code	<b><u>Dale Walls</u></b> Mark Guderjan, Roy Herrington, James Maddocks, Kris Topp, Justin Trupp
CSA-B149.5 – Installation code for propane fuel systems and tanks on highway vehicles CSA-B109.1 - Compressed natural gas vehicle installation code CSA-B109.2 – Liquefied natural gas vehicle installation code	<b><u>Jason Helfrich</u></b> Leigh Adams, Aaron Blake, Chris Sherbanuk
Single Family Dwelling <i>(Joint with ESC and BSC)</i>	GSC: <b><u>Roy Herrington</u></b> , Mark Guderjan, Larry Miller ESC: Bert DeBruin, Barry Voogd