



**MINUTES OF THE  
FIRST GAS SUB-COUNCIL MEETING OF 2024**

**DATE:** March 7, 2024

**TIME:** 9:01 a.m. to 11:07 a.m.

**LOCATION:** Videoconference

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

Mark Guderjan, Chair

Chris McInroy

Jason Helfrich

Darcy Toner

Curtis Bellows

James Maddocks

Tim Dykes

Larry Miller

Muhammad Ishaq

Aaron Blake

Leigh Adams

Cory Huppie

Dale Walls

**Safety Codes Council**

Allison Karch, Jennifer Johnson, Rob Bennett

**Alberta Municipal Affairs**

Sidney Manning, Claude Valliere, Perry Wager, Ljubomir Dupalo, Jody Thrush

**REGRETS:** Tran Mah-Paulson, Kris Topp, Roy Herrington

**GUESTS:** Stephen Carlson, Engineered Air

**RECORDER:** Allison Karch

**2024 MEETINGS:** May 23

## 1. Meeting Opening

The Chair called the meeting to order at 9:01 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

**Darcy Toner/ Dale Walls moved that the agenda be adopted, as circulated; CARRIED**

### 1.2 Adoption of the December 7, 2023, Minutes

**Cory Huppe / Larry Miller moved to adopt the minutes of the December 7, 2023, meeting, as circulated; CARRIED**

## 2. Matters for Decision

None identified.

## 3. Review Matters Arising/Action List

	Item	Action	Date Initiated	Responsible	Status/Update
1.	19-BCV-019 Interior Stairways for Roof Access to HVAC Equipment	Possible code change request to the National Building Code to incorporate the roof access provisions that are in CSA B149.1  Wording will be included in the next NBC(AE) that will require buildings to provide roof access in accordance with the walkways and guardrails rules in CSA B149.1 if HVAC is installed on the roof, but ladders are still being discussed.	May 26/22	Chang/ Manning	National Building Code – Alberta Edition has been published with references to the requirements in the gas code so builders are aware to help avoid surprise issues about access to gas-fire equipment. Closed; remove.
2.	Pollutants from Gas Stoves	This topic will be discussed at the June meeting of the Gas Advisory Council. The Administrator will bring back an update.	Mar 23/23	Manning	Gas advisory council will meet in June 2024 and more info may be brought back from that meeting.

## 4. Matters for Discussion

### 4.1. 200 psi Tanks STANDATA

This item was brought forward for information. The existing STANDATA that allows acceptance of these tanks is being revised to indicate that in October 2025 these containers will no longer be allowed to be filled. The existing contents can be used, but once empty they cannot be requalified or refilled. Since most of these tanks in the province are 70+ years old, it's believed there will not be significant opposition. This approach has been agreed upon by ABSA and Municipal Affairs. The revised STANDATA is currently under legal and communications review and is expected to be issued shortly.

This topic is also being discussed with Canadian Propane Association. If more information arises about the number of tanks in Alberta or issues across Canada, this position can be reconsidered. The draft STANDATA may be shared, and the Administrator will consider any further feedback that is brought forward from industry.

### 4.2. Website Updates and B108 Notice

The Municipal Affairs website content about gas codes has been updated to reflect the currently adopted codes, along with accurate links.

### 4.3. Hydrogen Presentation

The Administrator shared a presentation that has also been presented to the Fire Sub-Council. Highlights include the following:

- In Canada, natural gas is defined as up to 5% hydrogen. The rest of the world is accepting up to 20% as natural gas, and it's reasonable to expect this will happen in Canada in the future. Unclear definitions of 5-20% blends is causing issues.
- The gas code regulation identifies hydrogen as a manufactured gas.
- Technical changes and considerations of hydrogen blends were outlined.
- Moving to 100% hydrogen has many challenges and items that need to be in place; as we move towards decarbonization, hydrogen becomes critical as there isn't enough electricity to meet energy demands.
- 20-95% hydrogen blends are not being considered at this time.
- Alberta developing the first show home running on 100% hydrogen in Strathcona County; it's expected to be showing by end of 2024 and homes for occupancy to be ready in 2025. This development is expected to have capacity for 1500 homes.
- A key challenge is that Canada doesn't have appliance certification standards for 100% hydrogen. European standards could be leveraged.
- Hydrogen carriers such as ammonia could also play a role.
- The Alberta Hydrogen Roadmap is intended to consider many things: upstream and downstream issues, transportation, handling, regulating, and the impact on carbon.
- Hydrogen Strategy for Canada was published in 2020 and is being supported by other documents. The Standards Council of Canada is very active in updating and supporting this strategy.
- Propane is very different; its definition is restrictive, and more steps would need to be taken to blend it with hydrogen.
- Hydrogen fueling stations require coordination between various authorities.
- A question was asked about plans to capture waste hydrogen from other industrial processes. It was reported that all possibilities are being explored and entrepreneurs are

active in this area. There are a number of different technologies to mine or capture hydrogen more sustainably. There is also more pressure to stop flaring off gasses of all kinds and capture and use them instead, but economical viability remains an issue.

- Vehicle conversions to hydrogen were discussed, including large busses in Edmonton that run on hydrogen and diesel. The potential for catastrophic incidents is being mitigated by not allowing hydrogen to remain in the vehicles when they're inside a building.
- The Canadian Hydrogen Installation Code is a young code and relies heavily on referencing other standards, which can create challenges.
- It's felt that dimethyl ether, methanol, and ammonia could be taking standards development organizations' focus away from hydrogen.

#### **4.4. Working Group Reports**

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

The following was discussed:

- B149.1 2025 edition is undergoing public review shortly.
- The latest draft three-column document for the B149.1 is available to members.
- The scope of B149.1 may be changed to include other fuels, potentially hydrogen.
- Three committees of the Canadian Hydrogen Installation Code continue to be active, and the "dirty worker" group is also broken into sub-groups.

##### **4.2.2. CSA B149.2 / CSA B108.1 & CSA B108.2**

The following was discussed:

- B149.2 2025 edition is currently under public review now, which will finish at the end of March.
- The latest draft three-column document for the B149.2 is available to members.
- The latest draft three-column document for B108.1 and B108.2 are available to members.
- B108.1 and B108.2 have been published, but CSA doing more work based on public review comments and these codes will be updated some time this year.
- CSA B51 has undergone a major overhaul, and requirements for compressed natural gas containers will go into B108.

##### **4.2.3. CSA B149.3 / CSA B149.6**

The following was discussed:

- The latest draft three-column document for the B149.3 is available to members. The scope of B149.3 may be clarified to include other fuels, potentially hydrogen.

##### **4.2.4. CSA B149.5 / CSA B109.1 & CSA B109.2**

The following was discussed:

- The latest draft three-column document for the B149.5 is available to members. This code will be revised further and have another public review session.
- CSA is expected to start drafting the next edition of B109.1 and B109.2 by the end of April.

#### **4.3. AMOS Report**

The next AMOS meeting will be in April and will feature a presentation about press connect fittings.

#### 4.4. Administrator/AMA Report

The Administrator reported:

- B149's 2025 cycle completed development as of November 2023
  - anticipate dates for public consultation, French language translation and editorial early in 2024
- B108's December 2023 balloted by the inter-provincial and territorial gas advisory Council (IGAC) and CSA B149.5 Installation code for propane fuel systems and containers on motor vehicles (public review closed November 20, 2023).
  - Notice - <https://open.alberta.ca/publications/notice-gas-codes-in-force-january-2025>
- Gasfitter reconciliation implementation continues.
- STANDATA review for Plants, 200 PSI propane containers, relief valve notice <https://open.alberta.ca/dataset/15342b6f-3b59-4c96-b631-56342da4bb8b/resource/f6f3ec99-064f-4a78-b242-53c12304cb8c/download/ma-standata-gas-notice-servicing-intervals-for-pressure-relief-valves.pdf>
- reviewing the application of large diameter (2 ½ - 4 NPS) press connect fittings through development of a province wide variance until the 2025 B149.1 comes into force. The variance STANDATA is expected to be published in the next few months.
  - B149.1 Clause 6.9.2 - piping of NPS 2 ½ inch and over shall have welded pipe joints. This will be changed in the 2025 edition.
  - As long as they are certified, they meet the regulation, and the STANDATA will allow them to be accepted as an alternative under the code.

#### 4.5. Council Updates

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

- The AGM will be held on June 21<sup>st</sup>, with a virtual option based on member feedback.
- Member appreciation and recognition activities are changing. Members have been sent a survey to help establish a more meaningful, personalized recognition program, and a What We Heard report will be shared with members in the coming months.
- The Council Summit will be held October 2-4, 2024, in Nisku. The Council is currently looking for speakers; please see the website (link) for more information and to apply to be a speaker.

## 5. Meeting Finalization

### 5.1. Round Table

- Discussions are being held at SAIT to prepare for the potential for adopting hydrogen into the curriculum.
- Municipal Affairs is active in CSA B401 series regarding facilities for maintenance of converted vehicles. This topic may come forward as a building discipline issue. GSC may consider whether they would like to be involved, perhaps in cross-discipline discussions with the Building Sub-Council.
- A question was asked about the fuel gas piping STANDATA and it was reported there is currently no timeline for it.

- The Sheet Metal Contractors Association of Alberta is investigating the new edition of the National Building Code – Alberta Edition and what it means for sheet metal contractors.

### **5.2. Next Meeting**

The next meeting was reconfirmed for May 23, 2024, at the Council office at 9:00 a.m. There will be a virtual option for those who aren't able to attend in person.

### **5.3. Meeting Adjournment**

**Dale Walls / Chris McInroy moved to adjourn the meeting; CARRIED**

The meeting was adjourned at 11:07 a.m.

**– MOTIONS –**

**1.1 Agenda Adoption**

**Darcy Toner/ Dale Walls moved that the agenda be adopted, as circulated; CARRIED**

**1.2 Adoption of the December 7, 2023, Minutes**

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**5.3. Meeting Adjournment**

**Dale Walls / Chris McInroy moved to adjourn the meeting; CARRIED**

**– WORKING GROUP MEMBER LISTS –**

<b>WORKING GROUP</b>	<b>WORKING GROUP MEMBERS (Chair)</b>
CSA-B149.1 – Natural gas and propane installation code  BNQ 1784.000 Hydrogen Installations	<u><b>Dale Walls</b></u> Ron Beaudette, Curtis Bellows, Mark Guderjan, Tran Mah-Paulson, Larry Miller, James Maddocks, Tim Dykes, Cory Huppie, Muhammad Ishaq
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	<u><b>Jason Helfrich</b></u> Ron Beaudette, Mike Turek, Cory Huppie, Larry Miller
CSA-B149.3 – Code for the field approval of fuel-related components on appliances and equipment CSA-B149.6 Biogas and Landfill Gas Code	<u><b>Dale Walls</b></u> Mark Guderjan, Roy Herrington, James Maddocks, Kris Topp, Justin Trupp, Muhammad Ishaq
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	<u><b>Jason Helfrich</b></u> Leigh Adams, Aaron Blake, Chris Sherbanuk, Tim Dykes