

ACI, B51 and B52 Reports Meetings of August 2014 - Ottawa Submitted to:

CB&MUA AG Meeting, Wednesday February 11, 2015

I. UPDATES FROM ACI (ASSOCIATION OF CHIEF INSPECTORS) MEETING ON AUGUST 19 AND 20, 2014, held in Ottawa

- Annual ACI meeting was held on August 25 and 26, 2014 in Ottawa. Major items were summarized:
 - a. No fatality was reported from jurisdictions, except for some ammonia release incidents.
 - b. New members: Muhammad Wani from Nunavut, and Mike Poehlmann from Alberta (Ken Lau retired in Sept 2014)
 - c. Chris Selinger moves from Vice Chair to Chair and Tony Scholl has been elected as Vice Chair

Organizational

- Next meeting will be hosted in Banff, Alberta – August 17 – 18, 2015
- New Brunswick hosting the 2016 meeting but already discussing option to move meeting to week of the 2nd Monday

Topics discussed

- Discussions were held regarding topics such as power engineering, ACI relationships with Institute of Power Engineers and National Public Safety Advisory Committee, bonding and fusion, medical gas systems
- Standardization of Power Engineering Exams Committee (SOPEEC) is reviewing a standardized plant staffing model for larger refrigeration plants to further promote harmonization amongst provinces
- Confirmed to the ACI Technical Committee that they have direction to forward items from their committee directly to CSA B51 or B52 sub-committees or working groups as applicable
- ACI requested that CSA B51 Technical Committee would explore a standardized approach for welding, brazing and other joining methods (focusing on other joining methods such as bonding and fusion for procedure and joiner qualification certification).

II. ANNUAL CSAB52 TECHNICAL COMMITTEE MEETING ON AUGUST 27 IN OTTAWA HOSTED BY CNSC AND TSSA WITH THE FOLLOWING NOTES:

- New refrigerants from ASHARE 15 and ASHARE 34.
- Maintenance and inspection section, Clause 8, should be continued to keep pace with changing technologies and should provide ample guidance for the maintenance technicians.
- The Regulators reported minor ammonia leaks from various jurisdictions. They also reported no major injuries that the Technical Committee needs to consider for changes to CSA B52.
- Gino DiFebo who was not in attendance forwarded a copy of CSA B52-HB draft. It has been posted on the Members web site via the Community of Interest. The Members are to review it and provide Gino with comments. This revised HB would be part of the current 2013 edition.
- Safety Bulletin "Maximum Refrigerant Quantities per Occupied Space" was issued on December 12, 2013. The Working Group is to consider if the existing Safety Bulletins are to be (see below); and report back to the Technical Committee at the next meeting.
 - a) Incorporated into the 12th (next) edition of CSA B52;
 - b) Incorporated into the 2nd (next) edition of the CSA B52 Hand Book; or
 - c) Reissued as a CSA Express document.
- **New edition in 5 year cycle.** CSA Project Manager Oreste Simonetta reminded the Members that the publication date for the 12th edition of CSA B52 is scheduled for December 2018. He also reminded the Members that the Public Review Draft is scheduled to be release by February 2018. He reminded the Working Group leaders to contact him for any assistance that they may need.
- **CSA B52 French review** Myriam St-Georges reported that that she and Jacques Sénéchal completed the French review of CSA B52-13 and that it will be published shortly.
- The next CSA B52 Technical Committee meeting was scheduled for January 15th, 2015 at 1:00PM eastern; this will be a teleconference and WebEx meeting. I was not able to participate in this Webex conference
- On a very sad note we were advised that Mr. Lee Burgett, the chair of CSA B52 passed away on December 21, 2014. Lee's leadership and dedication to this Committee was exemplary and he was proposed to be nominated for CSA's award of Merit.

III. ANNUAL CSAB51 TECHNICAL COMMITTEE MEETING WAS HELD ON AUGUST 28 IN OTTAWA hosted by CNSC and TSSA WITH MAJOR ITEMS

- Clause 4.8.2(e) propane storage tanks (<3.2cuft, 0.09m³) 312psi, has been deleted from B51-2014, since tanks are covered by B149.5-10 - Installation code for propane fuel systems and tanks on highway vehicles.
- When transferring the information from the 09 edition to the 2014 edition, there are some errors on Table 5 Clause 12 for maximum servicing intervals on hot water boilers, heating boilers, pressure vessels. The subcommittee is currently reviewing the CSAB51-09 edition and restoring the approved.
- Central fitting registration system has been designed, but not allowed to use due to the competition issue. CSA will continue to discuss with the Competition Bureau. It was noted that the ACI/TC (subcommittee to ACI) are actively developing standard design review procedures. The Members agreed to have Cathy Turylo and Richard Barnes to follow up with Eli Szamosi of CSA Group to determine the status of the "CRN central registration system" and report at the next meeting.
- Myriam St. Georges reported that the French edition of CSA B51 is published.
- **New edition in 5 years cycle.** The Members agreed to publish the 19th edition of CSA B51 in January of 2019. The following is the timeline that is required to meet the January 2019 publication date:
 - a. subcommittees to finalize drafts for the Technical Committee review August/16
 - b. subcommittees to address final comments and any negatives from the August 2016 meeting at the August 2017;
 - c. final ballot Fall of 2017; and
 - d. draft to be made available for public review by March of 2018.
- Only one incident was reported from the jurisdiction of Alberta with no injury noted.
- A Subcommittee of CSA B51 TC is working with ABSA on the steam distribution pipelines and production lines which may be involved in high temperature service and phase change of service fluids and other technical concerns typically encountered in SAGD (Steam-Assisted Gravity Drainage) heavy oil production operations. The Subcommittee on Production is working on significant revisions to clause 14 that will see its scope evolve from steam pipelines, to high temperature pipelines, with many changes resulting to address differences between steam service pipelines, and those carrying other hot fluids.
- Last but not least for the first time in its existence the CSA B51 code has a mandatory section, Clause 12, which deals with the PRD, their installation, operation, maintenance and testing intervals. This is a personal achievement which took 8years.
- The next ACI meeting is scheduled for Monday August 17th, and Tuesday August 18th, 2015. The next CSA B51 Technical Committee meeting is scheduled for Thursday August 20th, 2014 in Banff, Alberta.

IV. CODE ADOPTION SUMMARY (status of implementation in each province)

Jurisdiction	CSAB51-14	CSAB52-14	Jurisdiction	CSAB51-14	CSAB52-14
BC	submitted	submitted	Nova Scotia	In 6 months	In 6 months
Alberta	Yes	Under review	Newfoundland	Yes	Yes
Saskatchewan	Not yet	Not yet	PEI	Auto	Auto
Manitoba	Yes	Yes	Yukon	??	??
Ontario	2015	2015	Northwest Territory	Auto	Auto
Quebec	With alternation	In processing	Nunavut	Yes	Yes
New Brunswick	??	??	CNSC	??	??

V. TSSA ADVISORY COUNCIL MEETINGS

Advisory Council meetings were held this year on May 1st and December 10th

The main focus of both these meeting was the KPMG "Boiler and Pressure Vessels Regulatory review" In the province of Ontario. If we recall KPMG was asked by the province to review the present situation and explore several avenues to improve the situation.

The whole discussion is originated from the findings of the commission which dealt with the propane fire 5 years ago and with the:

- Inspection status
- Database management
- Delegation of authority by TSSA
- Financing model etc

Priority Safety Issue (1): BPV Regulatory Compliance Initiative Update

KPMG has issued a preliminary report in early spring in 2014 and a **Final Options Report** on August 22, 2014. By no means had the findings of this report be mandatory to implement by the government. **The report could be made available to CB&MUA members on request.** Following herein I have cut and paste portion of this report for your perusal.

- A full range of options were considered throughout this engagement, and the three regulatory model options reflected in this report were selected as part of a collaborative process between KPMG, MGCS and the Technical Standards and Safety Authority ("TSSA"). Each option is examined in detail to understand key features, benefits, possible limitations, cost implications and other considerations that need to be taken into account.
- Insurance companies feel that they are complying with everything the TSSA has asked them to do, and are reluctant to take on any more responsibilities. They are open to discussions about changes to what data they provide and in which formats, within the bounds of what is commercially reasonable.
- Many owner/operators are used to relying on their insurer to handle all jurisdictional requirements.
- Insurers report that they do not pass the cost of inspection directly onto their clients; this is provided as a value added service.

- Insurers are willing in principle to provide additional data to the extent commercially reasonable and respectful of confidentiality, but are skeptical about TSSA's data analysis and governance capabilities.
- Insurers acknowledge that uninspected BPVs present some unknown risk, but do not feel they have a significant role to play in identifying them.
- Third party inspectors feel they are equally qualified and should be allowed to perform some of the same activities as TSSA inspectors, including shop inspections and initial inspections.

KPMG studied the following options:

- **Option A: TSSA/Insurer-Led**
 - Key Attribute: making the current regulation work.
- **Option B: Shift of Responsibilities to Owner/Operators**
 - a) Option B(i): Owner/Operator-Centric
 - Key Attribute: Owner/Operator is responsible for arranging inspections and providing all necessary information to TSSA.
 - b) Option B(ii): Owner/Operator-Insurer Shared Accountabilities
 - Key Attribute: Owner/Operator is responsible for arranging inspections and providing commercial data to TSSA. Insurance company provides inspection data directly to TSSA.
 - c) Option B(iii): Mixed Accountabilities
 - Key Attribute: Owner/Operator is responsible for providing all commercial data to TSSA. Insurer is responsible for arranging and conducting inspections.
- **Option C: TSSA-Centric**
 - Key Attribute: TSSA assumes responsibility for scheduling and conducting all periodic inspections, regardless of insurance status.
- **Option D: Insurer-Centric**
 - Key Attribute: Mandatory insurance of BPVs. Insurers arrange for and/ or conduct all periodic inspections and provide inspection and commercial data to TSSA.

And came back to these final proposals to the government

- A** TSSA/Insurer-Led Inspection Model with Fee for Compliance Paid at Time Based on Inspection Schedule
- B** Owner-Insurer Shared Accountability Model with Annual Fee for Proof of Compliance
- C** Mandatory Insurance with Pro Rata Fee and Annual Fee for Proof of Compliance

• **Estimated cost model**

Regulatory Model	Net Fees per Device	Net Fees	Net Cost of Effort per Device
A	\$54	\$39	\$15
B	\$54 - \$107**	\$39	\$15 - \$68**
C	\$54	\$10 (direct fee to owner/operator) \$29 (pro rata cost via insurers)	\$15

Summary of Benefits and Disadvantages

In the following section, we provide key observations in the form of benefits and disadvantages of each regulatory model option.

- **Regulatory Model A – TSSA/Insurer Led Inspection Model with Compliance Fee based on Inspection Schedule**

- *Primary Benefits*

- a) Will not require regulatory change
- b) Model A will improve financial sustainability of program (but less so than other options)
- c) Compliance efforts (and associated costs) for owner/operators lower than Model B

- *Primary Disadvantages*

- a) Shift of accountability to owner/operator from current practice. Capacity of less sophisticated owner/operators to comply is a risk as is general concern from owner/operator community
- b) Less frequent pulse check on accuracy of commercial data. Less frequent contact with owner/operator
- c) Enforcement of fee requirement likely to be perceived as a new charge; could be perceived as a lost opportunity to make more fundamental changes if a program disruption is already taking place
- d) More difficult to closely align revenues and program costs
- e) According to TSSA, Model A does not align with design attributes in other program areas and lack of coordination could fragment TSSA's approach to customer service
- f) Investment required to operationalize the ROI/ COI process. Investment may be better used as an investment in a system integrated with other TSSA activities

- **Regulatory Model B – Owner/Insurer Shared Accountability Model with Annual Compliance Fee**

- *Primary Benefits*

- a) Improves financial sustainability of program and should enable alignment of revenues and costs
- b) Places clear accountability of owner/operator for compliance while leveraging insurer inspection and data management capacity
- c) Provides an annual 'pulse' check on commercial data. Can be designed to compliment and be integrated with other TSSA activities
- d) In practice, Insurer may assume most of the information provision accountabilities (including commercial data) as part of their serviced offering, however, accountability for compliance will remain with owner/operator

- *Primary Disadvantages*

- a) Shift of accountability to owner/operator from current practice. Capacity of less sophisticated owner/operators to comply is a risk as is general concern from owner/operator community
- b) TSSA will need to increase its billing capacity to accommodate annual billing of full community of owner/operators
- c) Compliance costs (time and effort) for owner/operators may be more significant than other options depending on insurer involvement

- **Regulatory Model C – Mandatory Insurance with Insurer Pro Rata Fee and Annual Owner/Operator Compliance Fee**

- *Primary Benefits*

- a) Improves financial sustainability of program and should enable closest alignment of revenues and program costs
- b) TSSA no longer in the BPV periodic inspection business, focus shifts entirely to enforcement, QA and RIDM
- c) Annual licensing requirement still provides an annual 'pulse' check on commercial data and can be integrated with other TSSA billing system

- *Primary Disadvantages*

- a) TSSA will need to increase its billing capacity to accommodate annual billing of full community of owner/operators as well as an approach to billing insurance companies on pro rata basis.
- b) Comprehensive communication plan needed to communicate the value proposition, the cost of regulation and ensuring safety on the sector, to insurers and owner/operators.

Next steps will include exploring additional regulatory models and seeking perspective and feedback from the industry and stakeholder consultation.

Consultation will commence prior to the next council meeting (May 2015). The consultation process will be parallel to any advisory council meetings; however, those interested in participating will be contacted directly. Council will be advised of any activities in relation to the stakeholder consultation and an update will be provided at each council meeting.

Any questions arising from the KPMG report or any other recommendations around regulatory models are to be directed to Hussein Lalani, Manager at Technical Safety Unit (MGCS) at 416-326-8929 or at hussien.lalani@ontario.ca by January 2015.

Priority Safety Issue (2): Integrity of Materials and Products

The issue of counterfeit materials and products in the industry was discussed. Council shared how they deal with this issue in their respective organizations. Most companies address this issue in their procurement and quality control policies. Council agreed in principle on the benefit of a portal to help industry share information on products and suppliers that do not meet expectations, to assist other companies to address similar issues.

The Council was advised that the National Public Safety Advisory Council (NPSAC) has a working group that deals with counterfeit materials/electrical devices. D. Scriven informed he would keep the council apprised of any information of value from this NPSAC working group. Council will continue to monitor this safety issue.

Priority Safety Issue (3): Propane Tank Safety

J. Adams reported to council that propane tanks in-service were regulated under the Fuels Safety regulations and not under the BPV regulations. Therefore, periodic inspection of propane tanks are conducted in accordance with requirements specified by the Fuels Safety Program and not in accordance with the usual periodic inspection for other pressure vessels. Propane tanks were removed from the BPV regulations 15 years ago during the last regulatory review. The main concern now identified is that the inspectors conducting the current inspections of the propane tanks may not have appropriate or sufficient training and certification.

Canadian Registration Number (CRN)

Mike Adams noted that insurance companies would like to have access to the Canadian Registration Number (CRN) technical data for the boilers and pressure vessels that are being inspected. Processes have been put in place for insurers to contact TSSA to request CRN technical data.

The following hotline and email were put in place to request information for CRN:

- BPV Engineering 416.734.3299
- BPV Inspection 416.734.2729
- BPV Email: bpvcustomerservice@tssa.org

Member Topic P. Sterescu introduced an issue to TSSA and MGCS to consider regulating greenhouse operations in Ontario. He noted greenhouses have been exempt from the regulations. This item will be tabled for discussion at the next meeting.

By Paul Sterescu