

# APEGA Discipline Committee Order

Date: May 1, 2014 Case No.: 14-003-SO

## IN THE MATTER OF THE ENGINEERING AND GEOSCIENCE PROFESSIONS ACT AND IN THE MATTER OF THE CONDUCT OF [PROFESSIONAL ENGINEER A]

Editor's Note: *The PEG* publishes all APEGA Discipline Committee decisions that include findings against Members. Names and other identifying information are included unless the decision recommends otherwise. Decisions are published almost verbatim; they are reproductions of regulatory records and therefore subject to only minor editing.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has conducted an investigation into the conduct of [Professional Engineer A] (the "Member") with respect to allegations of unskilled practice and unprofessional conduct, relating to inadequate drawings created by the Member for the construction of an addition to a fire hall for [Alberta Municipality A].

### A. COMPLAINTS

1. The Member has engaged in unprofessional conduct that was detrimental to the best interests of the public and placed the public at risk, contrary to Section 44(1)(a) of the *Engineering and Geoscience Professions Act* ("Act") and Rule of Conduct #1 of the APEGA *Code of Ethics* ("Code"), in that he designed an addition to [Alberta Municipality A] fire hall and failed to design that addition as a post-disaster building, as defined in Part 4 of the Alberta Building Code, instead relying on Part 9 of the Alberta Building Code.
2. The Member has engaged in unskilled practice that displayed a lack of knowledge and competency, contrary to Section 44(1)(d) of the Act and Rule of Conduct #2 of the Code, in that he was unaware that the fire hall addition should

have been designed pursuant to Part 4, and not Part 9, of the Alberta Building Code.

### B. AGREED STATEMENT OF FACTS

As a result of the investigation, it is agreed by and between the Investigative Committee and the Member that:

3. At all relevant times the Member was a professional member of APEGA and bound by the Act and the Code.
4. The Member holds a Civil Engineering degree from [University A]. The Member is currently employed with his own engineering firm, [Company A], located in [Alberta Municipality B].
5. The Member and his firm were retained by [Alberta Municipality A] to provide a set of plans for an addition to the [Alberta Municipality A] fire hall. The Member provided the requested plans bearing his stamp.
6. An individual working for [Alberta Municipality A] provided those plans to a former colleague of the Member, [Professional Engineer B], and expressed concern that the drawings were inadequate for the intended purpose of providing a quotation. The plans appeared to lack sufficient detail.
7. [Professional Engineer B] reviewed the plans stamped by the Member and noted several deficiencies in the design. Specifically [Professional Engineer B] identified that the plans did not include mention of snow drift caused by higher new construction adjacent to the existing building, did not include live or dead loads used for the design, did not mention the Importance Category for the building, did not include climatic data, did not include specifications for construction materials and did not include comments or connection

details regarding the new addition and connection to the existing building. As a result of those deficiencies [Professional Engineer B] reported the matter to APEGA for investigation.

8. An Investigative Panel conducted an interview of the Member. During that interview the Member freely acknowledged that:
  - a) He was not aware that the fire hall addition should have been designed pursuant to the requirements for post-disaster buildings, as described in Part 4 of the Alberta Building Code. The Member had instead designed the addition pursuant to Part 9 of the Alberta Building Code. He admitted that was an error.
 

A fire hall is a public structure dedicated to public safety, as described in Part 4 of the Alberta Building Code. A post-disaster building means a building that is essential to the provision of services in the event of a disaster, and is therefore subject to more rigorous design requirements, such as increased importance factors.
  - b) The fire hall design did not, in fact, meet the requirements of a post-disaster building. The Member was presented with STANDATA 06-BCI-020 Post-Disaster Housing, Emergency Response Vehicles and Personnel, which outlines, defines and clarifies post-disaster buildings. Parts 4.1.7.1 and 4.1.6.2 of the Alberta Building Code indicate that the importance factors for post-disaster buildings increase from 1.0 to 1.25, effectively increasing wind and snow loads by 25%.
 

The Member designed a tall wall for the fire hall. The wall was designed with 2x8 dimensional lumber. With

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the required 25% increase of the wind and snow load the wall studs were adequately designed, however window columns, garage door headers and garage door columns, which were part of the tall wall, were inadequately designed.

- 9.** In further response, the Member has fully cooperated with the APEGA investigation and:
- a) Admitted that the fire hall design was not his best work, and taken steps to improve his practices by hiring additional engineers to assist him and implementing a peer-checking process for his work;
  - b) Taken full responsibility for his actions and expressed remorse for his unskilled and unprofessional conduct; and
  - c) Has provided the Investigative Panel with additional samples of his structural design work, which the Panel found to be adequate.

**C. CONDUCT**

The Member freely and voluntarily admits that his conduct constitutes unprofessional and unskilled conduct, and that the Complaints set out above are admitted and proven. The Member has therefore engaged in unprofessional conduct that was detrimental to the best interests of the public and placed the public at risk, contrary to Section 44(1)(a) of the Act, and Rule of Conduct #1 of the Code, in that he designed

an addition to the [Alberta Municipality A] fire hall and failed to design that addition as a post-disaster building, as defined in Part 4 of the Alberta Building Code, instead relying on Part 9 of the Alberta Building Code.

The Member has further engaged in unskilled practice that displayed a lack of knowledge and competency, contrary to Section 44(1)(d) of the Act and Rule of Conduct #2 of the Code, in that he was unaware that the fire hall addition should have been designed pursuant to Part 4, and not Part 9, of the Alberta Building Code.

Section 44(1) of the Act states:

44(1) Any conduct of a professional member, licensee, permit holder, certificate holder or member-in-training that in the opinion of the Discipline Committee or the Appeal Board

- (a) is detrimental to the best interests of the public;
- (b) contravenes a code of ethics of the profession as established under the regulations;
- (c) harms or tends to harm the standing of the profession generally;
- (d) displays a lack of knowledge of or lack of skill or judgment in the practice of the profession, or;
- (e) displays a lack of knowledge of or lack of skill or judgment in the carrying out of any duty or obligation undertaken in the practice of the profession

whether or not that conduct is disgraceful or dishonorable, constitutes either unskilled practice of the profession or

unprofessional conduct, whichever the Discipline Committee or the Appeal Board finds.

Rules # 1 and # 2 of the APEGA Code of Ethics state:

- 1.** Professional engineers and geoscientists shall, in their areas of practice, hold paramount the health, safety and welfare of the public and have regard for the environment;
- 2.** Professional engineers and geoscientists shall undertake only work that they are competent to perform by virtue of their training and experience.

**D. ORDERS**

On the recommendations of the Investigative Committee, and by agreement of the Member with those recommendations, following a discussion and review with the Discipline Committee Case Manager, the Discipline Committee hereby orders that:

- 1.** The Member shall receive a letter of reprimand;
- 2.** The Member shall successfully complete an Alberta Building Code 2006 or 2012 course, acceptable to the Investigative Panel; and
- 3.** The details of this case be published in the *PEG* magazine, without names.

*Approved this 1st day of May, 2014*

**TIM CARTMELL, P.ENG.**  
*Case Manager*