

APEGA members and permit holders are required to practise engineering and geoscience skillfully, ethically, and professionally. They must meet all prescribed requirements and follow all applicable legislation and regulations, such as the Engineering and Geoscience
Professions Act, General Regulation, Code of Ethics, and APEGA bylaws. Investigation and enforcement—followed by, when necessary, judgment based on a fair hearing of the facts—are requirements of ours in service to the public interest. For more information, please visit www.apega.ca/enforcement/discipline-decisions.

Date: November 20, 2020

Discipline Case Number: 20-009

IN THE MATTER OF A RECOMMENDED DISCIPLINE ORDER OF THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS

OF ALBERTA

Pursuant to the Engineering and Geoscience Professions Act, being Chapter E-11 of the Revised Statutes of Alberta 2000 Regarding the Conduct of [A PROFESSIONAL MEMBER] P.Eng.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta ("APEGA") has investigated the conduct of a Professional Member (the "Registrant") with respect to allegations of unprofessional conduct and/or unskilled practice pursuant to Section 44(1) of the *Engineering and Geoscience Professions Act* (the "Act").

A. Complaint

This investigation related to an allegation that the Registrant, without conducting a field inspection, provided a letter to their colleague (the "Colleague") confirming that a residential deck designed and authenticated by the Colleague did not pose a safety risk as constructed.

The Investigative Committee investigated the following allegation (the "Allegation") outlined in the Complaint:

The Registrant, without conducting a field inspection or in-depth review of a 700 sq. ft walkout deck attached to the Complainant's home, provided a letter dated November 10, 2016, to the Colleague, confirming that despite the deck not complying with the building code, there was no immediate safety risk.

B. Agreed Statement of Facts

(i) Background:



- 1. The Registrant is a Civil Engineer and has been a member of APEGA in good standing since 2012.
- 2. The Registrant is a Projector Coordinator with a permit holder in Edmonton (the "Permit Holder"). They have been employed with the Permit Holder in this capacity for the past five years.
- 3. The Colleague was a project manager with the Permit Holder. The Registrant worked on and off with the Colleague on various projects between 2015 and 2019. During the relevant time, the Colleague was jointly registered with both APEGA and the Association of Professional Engineers & Geoscientists of Saskatchewan ("APEGS").
- 4. In 2016, the Colleague sold their home in Saskatchewan and moved to Edmonton. The Registrant understood that the Colleague was engaged in a dispute with the new owner of his Saskatchewan home regarding issues with the home's wood deck structure.
- 5. At the request of the Colleague, the Registrant provided the Colleague with a "Deck/ Personal Reference" (the "Letter") intended for the new owner of the Colleague's Saskatchewan home. The Letter is the subject of the Complainant's allegation against the Registrant.
- 6. Although the Registrant drafted the Letter on the Permit Holder's letterhead, the Letter was intended to be personal in nature; the Permit Holder is not named in the complaint.
- 7. The Complainant is the new owner of the Colleague's home.

(ii) Facts Relating to the Allegation:

- 8. The Complainant purchased the Colleague's home in the summer of 2015. A significant selling feature of the home was a substantial elevated 700 square foot wood deck set into piles and attached to the back of the home (extending the full width of the back of the house).
- 9. The Complainant relied on marketing materials for the home which included a "professionally engineered 700 square foot walk out deck with beautiful sight lines of the pond".
- 10. During the sale process, the Colleague disclosed to the Complainant that the deck was not permitted; they represented, however, that the deck was "professionally engineered".
- 11. As a condition of the purchase, the Complainant required the Colleague to apply to the municipality for a building permit for the deck. The Colleague applied for the permit,



and in support of the application submitted a "Deck Detail Drawing" which they authenticated with his APEGS stamp.

- 12. A home inspector hired by the Complainant noted only minor issues with the deck railing.
- 13. The Complainant took possession of the home on September 1, 2015.
- 14. On September 2, 2015, the Complainant found an order from the municipality (the "Order of the Municipality") affixed to their garage ordering them to stop using the deck as significant deficiencies were observed by a safety codes officer.
- 15. The Complainant retained a Saskatchewan-based engineer (the "SK Engineer") to inspect the deck. On October 14, 2015, the SK Engineer advised the Complainant that due to the number of concerns with the structure they was not able to certify the deck as being suitable for its intended service:

My primary concerns are listed below:

- Moment and deflection is excessive on the 3 ply 2x10 beam.
- Moment and deflection is excessive on two of the 2 ply 2x10 beams.
- Cantilever span is excessive on the 2x8 joists.
- Cantilever span is excessive on the 2x10 joists.

I have not checked the majority of connections, but I have concerns with the less-standard connections utilized. We would need to investigate these connections more vigorously. The Colum [sic] height adjusters are on the wrong side of the columns with braces. I can't tell the pile capacity, as I don't have construction details or soil investigation data. I did not check the guardrails yet.

16. On December 2, 2015, the Complainant filed a complaint with APEGS alleging unprofessional conduct and/or unskilled practice of the profession by the Colleague. The APEGS investigation remains ongoing. APEGS retained an independent engineer (the "Independent Engineer") to review the deck. In an excerpt from their report, the Independent Engineer states:

Based on our analysis there are numerous structural wood members that do not meet the requirements of the NBCC.

The following structural components have been found to be undersized for the loading and spans shown on the plan and as constructed on site (refer to deck schematic for locations):



- 1) Beam B-1: 3 ply 2x10 SPF 2 Mf=18.6 kNm Mr=13.5 kNm 37% overstressed
- 2) Beam B-2: 2 ply 2x10 SPF 2 Mf=35.6 kNm Mr=8.99 kNm 395% overstressed
- 3) Beam B-3: 2 ply 2x10 SPF 2 Mf=11.8 kNm Mr=8.99 kNm 31% overstressed
- 4) Connection of Ledge Board to House: 2x8 SPF2

Ledger board connection requirements were not specified on the plan; however, they are a critical design item that must be properly designed and specified. Due to concealment of bolts on the interior we could not verify the type of bolts installed. Based on our experience, the bolts appeared to be lag bolts. If lag bolts were used to support the ledger, this would be considered a design deficiency as they do not have sufficient capacity to meet NBCC requirements.

- 5) Analysis of the joint spans and posts indicated that are sufficient as shown on the plan.
- 6) We did not perform any analysis on the deck railing.
- 17. On December 9, 2015, a contractor advised the Complainant that:

...this deck has a multitude of non-compliant applications of the NBC (National Building Code) and was built by someone/some firm which had a significant lack of education and knowledge of compliant structure, and basic carpentry skills. It needs to be torn down and rebuilt.

- 18. In 2016 the Complainant filed a Statement of Claim against the Colleague.
- 19. On November 10, 2016, at the request of the Colleague, the Registrant provided the Letter to the Colleague. A copy of the Letter was disclosed to the Complainant pursuant to the ongoing civil claim in Saskatchewan. The Letter, written on the Permit Holders' letterhead, stated:



Reference: [Complainant's Address]

Subject: Deck/Personal Reference

To whom it may concern,

I've had an opportunity to discuss and conduct a brief review of a deck designed/constructed by one of my coworkers, [the Colleague], at their previous residence at [Complainant's Address]

Upon discussion with [the Colleague], the deck was not designed to comply with the building code, but rather a lean design, specific to the layout of his deck, was used to maximize the aesthetic appeal while ensuring a safe working strength for typical light loading conditions, and based on common design principals [sic] in the Canadian Wood Design manual. Understanding that [the Colleague] used this structure for approximately a year by their family and friends with no problems or causes for concern; there would be no indication of immediate safety risk unless unusual or excessive loading is expected (pool, large planters, etc); at which point a more thorough analysis may be required to determine suitability as constructed.

In addition, I've worked closely with [the Colleague] for approximately two years, and find their work ethic to be honest and thorough; safety is never jeopardized in anything they do. I do not believe they would compromise safety at risk to their family or others.

Should have any questions, please contact the undersigned.

Regards,

[The Registrant]

- 20. The Registrant signed the Letter and included their P. Eng designation on the signature line.
- 21. Although the Registrant intended the Letter to be a personal reference for the Colleague, they admit that the wording of the Letter may give the reader the impression that they conducted a review of the deck and vouched for the safety of the deck as professional engineer. The Registrant acknowledges that:
 - a) They did not attend the site to inspect the deck.



- b) They have no competence with designing wood structures.
- c) They are not aware if the Colleague is competent with designing structures.
- d) They are not familiar with the National Building Code as it relates to wood structures.
- e) They are not familiar with the Canadian Wood Design Manual.
- f) They have no basis to state there was no indication of an immediate safety risk.
- 22. The Complainant has not been able to use the deck since purchasing the Colleague home in 2015.

C. Conduct

- 23. The Registrant freely and voluntarily admits that at all relevant times they were a Professional Member of APEGA and was thus bound by the *Act* and the *APEGA Code of Ethics*.
- 24. The Registrant acknowledges that the conduct described above constitutes unprofessional conduct as defined in Section 44(1) of the *Act*:

Section 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.
- 25. The Registrant also acknowledges the conduct described above breaches Rule of Conduct #1 of the *APEGA Code of Ethics*, which states:



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.

D. Recommended Orders

- 26. On the recommendation of the Investigative Committee, and by agreement of the Registrant with that recommendation, and following a discussion and review with the Discipline Committee Case Manager, the Discipline Committee hereby orders that:
 - a) The Registrant shall receive a letter of reprimand, a copy of which will be maintained in the Registrant's APEGA registration file for three years.
 - b) The Registrant shall pay a fine in the amount of \$500.00 pursuant to s 64(1)(b) of the *Act*. The fine shall be paid within 90 days of the date this Order is approved by the Discipline Committee Case Manager.
 - c) The Registrant may apply to the Director, Enforcement for an extension prior to the 90-day deadline. If the fine is not paid within 90-days or after the agreed upon extension, the Registrant shall be suspended from the practice of engineering until the fine is paid in full.
 - d) The Registrant shall disclose that they were the subject of APEGA disciplinary procedures to all other engineering regulatory bodies to which they hold membership and provide each regulator with a copy of this Order.
 - e) The Registrant will be considered a Registrant in good standing while completing the above noted sanctions.
 - f) This matter and its outcome will be published by APEGA as deemed appropriate and such publication will not name the Registrant.
- 27. Although the Investigative Committee and the Registrant understand and acknowledge that Recommended Orders should be published in a manner that identifies the Registrant by name, the parties understand that the decision to publish with or without name is discretionary. Publication without name is recommended in this case. The parties submit that publication without name is appropriate given the specific facts in this case, including the following considerations:
 - a) The admission by the Registrant of unprofessional conduct.
 - b) The Registrant's exemplary cooperation with the investigation.



- c) The Registrant's declaration to the Committee that they have learned from the situation, regrets their actions, and does not intend to repeat them in the future.
- d) The Committee's finding that although the Registrant's conduct demonstrated a lapse in judgment, it was isolated and is unlikely to be repeated in the future.
- e) By virtue of the Order of the Municipality, there is no imminent risk to public safety.

Signed,

[PROFESSIONAL MEMBER], P. Eng.

Allan Yucoco, P.L.(Eng.) Investigation Panel Chair

Christine Neff, P.Eng.Case Manager, APEGA Discipline Committee

Date: November 20, 2020