

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: May 11, 2022

Discipline Case Number: 22-005

IN THE MATTER OF THE ENGINEERING AND GEOSCIENCE PROFESSIONS ACT AND IN THE MATTER OF THE CONDUCT OF MARUF KHONDKER, P.ENG.

Pursuant to the Engineering and Geoscience Professions Act, being Chapter E-11 of the Revised Statutes of Alberta 2000 Regarding the Conduct of MARUF KHONDKER, P.Eng.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has conducted an investigation into the conduct of Mr. Maruf Khondker, P. Eng. (The Registrant) with respect to a complaint initiated by [Name withheld] (the Complainant) dated July 21, 2020 (the Complaint).

A. THE COMPLAINT

The Complainant alleged that the Registrant engaged in unprofessional conduct and/or unskilled practice by providing National Energy Code for Buildings (NECB) 2011 and Sec. 9.36 Alberta Building Code (ABC) energy performance modeling services on two (2) commercial projects in Calgary, Alberta between November 2018 and April 2019 (the Projects for the Complainant's company [Name Withheld]. The models contained errors and were not in compliance with the aforementioned codes. It was further alleged the Registrant provided these engineering services through his company, SONIC Engineering Inc. ("SONICE") which did not possess an APEGA Permit to Practice.

The Investigative Committee conducted an investigation with respect to the following allegations outlined in the Complaint:

Allegation #1

Whether the Registrant's company SONICE provided engineering services (energy modeling) for the projects without an APEGA Permit to Practice. The Registrant is the Principal/Owner of SONICE.



Allegation #2

Whether the Registrant lacked the skills to perform energy performance modelling, evidenced by errors in the models he prepared for the projects.

B. AGREED STATEMENT OF FACTS

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

(i) Background:

- 1. The Registrant holds a Bachelor of Science degree in mechanical engineering (Rajashahi University of Engineering and Technology, 1993);
- 2. The Registrant holds a Master's degree in Mechanical Engineering (Concordia University, 2010);
- 3. At all relevant times the Registrant was an APEGA Professional Member and was thus bound by the Engineering and Geoscience Professions Act and the APEGA Code of Ethics.
- 4. The Registrant has had no prior finding of unprofessional conduct and / or unskilled practice.
- 5. The Registrant cooperated with the investigation.

(ii) Facts Relating to Allegation:

- 6. The Registrant is the principal owner (and sole employee) of his company, SONICE, which was incorporated in the Province of Alberta on October 20, 2017. The SONICE website represented SONICE as a Calgary based consulting firm offering energy performance modeling for commercial, institutional, and multi-family residential buildings in compliance with the NECB and Section 9.36 of the ABC. The website also displayed the APEGA logo and stated that the "outcome of any modeling" would be stamped using the APEGA stamp.
- 7. The Registrant was retained by the Complainant to provide energy performance modelling for the Projects. Fee proposals for the Projects (in addition to invoicing and email communications) were submitted by the Registrant as the principal for SONICE.



- 8. On June 28, 2020, the Registrant informed the Complainant by email that SONICE would no longer be providing energy modeling services. The Registrant terminated his business relationship, claiming that he did not feel comfortable working without a formal contract.
- 9. The Registrant believed that SONICE did not require an APEGA Permit to Practice because he considered himself an independent contractor and in the past any clients he worked for possessed a valid APEGA Permit to Practice. At the relevant time, the Registrant stated he was covered under a 3rd party client, [Name Withheld]. It should be noted that [Name Withheld] had no involvement in this complaint.
- 10. Pursuant to Section 24(1) of the EGPA, however, any company that engages in the practice of engineering or geoscience in Alberta as part of its business must possess a Permit to Practice with APEGA.
- 11. SONICE's requirement to possess a Permit to Practice was confirmed by the manager of APEGA's Compliance Department, who confirmed that despite the Registrant's assumptions outlined in Par. 9 above, the Registrant should have applied for an APEGA Permit to Practice at the time SONICE was incorporated.
- 12. After terminating his services with the Complainant, the Registrant posted on SONICE's website that they were no longer engaged in energy modelling work. The SONICE website is no longer in service and SONICE cancelled its incorporation on June 19, 2021; accordingly, no referral was made to the APEGA Compliance Department.

(iii) Facts Relating to Allegation:

- 13. The Complainant alleged that the Registrant did not have the skills required to engage in the practice of energy performance modelling for the Projects (both NECB and Section 9.36 of the Alberta Building Code).
- 14. The Complainant asserted the Registrant's energy modeling drawings and calculations for the Projects demonstrated a lack of skill in the practice of the profession:
 - a. The R value of the wall as depicted in the architect's drawing was ".27" whereas in the model it is ".1";
 - b. The Registrant used a 3x higher R value as proposed by the architect; when the R value is so great there will be less heat transfer through the wall; 3x lower than is what is actually occurring:



- c. When a value is inserted in the model it shows this wall is superior to any of the walls on the model;
- d. Regardless of the data being input, the model can incorrectly result in showing the model is compliant;
- 15. The Registrant failed to indicate the "U" value in the model and stated the "U" value was not available. The "R" value is clearly stated on the Architectural drawing; an engineer technically capable in this area of practice should know that the U value is the reciprocal of the R value.

C. CONDUCT

- 16. The Registrant freely and voluntarily admits that at all relevant times the Registrant was an APEGA Professional Member and was thus bound by the *Engineering and Geoscience Professions Act* and the *APEGA Code of Ethics*.
- 17. The Registrant acknowledges that the conduct described above constitutes unprofessional conduct and unskilled practice as defined in Section 44(1) of the *Act*.

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 a lack of skill or judgment in the practice of the profession or;
- (e) displays a lack of knowledge 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.

- 18. The Registrant further acknowledges that the conduct described above with respect to Allegation 1 breaches Rule of Conduct #4:
 - "4. Professional engineers and geoscientists shall comply with applicable statutes, regulations and bylaws in their professional practices"
- 19. The Registrant further acknowledges that the conduct described above with respect to Allegation 2 breaches Rule of Conduct #2:
 - "2. Professional engineers and geoscientists shall undertake only work that they are competent to perform by virtue of their training and experience".

D. RECOMMENDED ORDERS

- 20. 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 be reprimanded for his conduct and this order shall serve as the reprimand.
 - b) The Registrant shall provide the Director, Enforcement, within six (6) months of the date this order is approved by the Discipline Committee Case Manager, proof of successful completion (passing grade) of a course in energy modelling, to be determined by the Director, Enforcement, such as the CIET Building Energy Modelling Professionals Tools, Software and Compliance course offered by the Canadian Institute for Energy Training ("CIET") CIET Building Energy Modelling Professional Tools, Software and Compliance CIET (cietcanada.com). The noted course shall be completed at the Registrant's expense.
 - c) The Registrant shall pay a fine in the amount of \$500.00. The fine is a debt owing to APEGA and shall be paid within ninety (90) days of the date this Order is approved by the Discipline Committee Case Manager.



- d) The Registrant shall provide the Director, Enforcement, within six (6) months of the date this order is approved by the Discipline Committee Case Manager, proof of successful completion of the APEGA Permit to Practice Seminar (Permit to Practice Seminars | APEGA)
- e) The Registrant shall provide written confirmation to the Director, Enforcement, within thirty (30) days of being notified that the Recommended Order has been approved by the Discipline Committee Case Manager, that he has reviewed the following APEGA publication, and that the Registrant will comply with the requirements therein:
 - APEGA Guideline for Ethical Practice (Version 2.2, 2013): Sec 4.2
 Rule 2 Competence and Knowledge.
- f) The Registrant may apply to the Director, Enforcement for an extension on the requirements noted above in Paragraph 20 (b), (c), (d), and (e) prior to the specified deadlines. If such an application is made, the Registrant shall provide the Director, Enforcement, the reason for the request, a proposal to vary the schedule, and any other documentation requested by the Director, Enforcement.
- g) If the Registrant fails to provide the Director, Enforcement with proof that he has completed the requirements noted above in Paragraph 20 (b), (c), (d) and (e) within the timelines specified, the Registrant shall be suspended from the practice of engineering until the Registrant has provided the Director, Enforcement with proof of successful completion. If the requirements are not completed within six (6) months of the suspension date, the Registrant shall be cancelled. In the event the Registrant is cancelled he will be bound by APEGA's reinstatement policy.
- h) This matter and its outcome will be published by APEGA as deemed appropriate and such publication will name the Registrant.



IN WITNESS WHEREOF the undersigned agrees with the Agreed Statement of Facts and Acknowledgement of Unprofessional Conduct in its entirety.

Signed,

MR. MARUF KHONDKER, P.Eng.

MR. IAN BUTTERWORTH, P.Eng. Panel Chair, APEGA Investigative Committee

MR. CHRIS GOULARD, P.Eng. FEC, FGC (Hon) Case Manager, APEGA Discipline Committee

Date: May 11, 2022