

Date: October 16, 2017

Case No.: 17-012-RDO

IN THE MATTER OF THE ENGINEERING AND GEOSCIENCE PROFESSIONS ACT, AND IN THE MATTER OF THE CONDUCT OF STEPHEN PETROVICH, P.ENG.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has conducted an investigation into the conduct of Stephen Petrovich, P.Eng. (the “Member”), with respect to a complaint initiated by [Complainant A] (the “Complainant”), dated May 30, 2016.

A. THE COMPLAINT

This complaint is regarding two adjacent homes located in southwest Calgary, Alberta. An excavation to repair a damaged sewer line was conducted at the front of the Complainant’s home in the fall of 2013, which allegedly caused damage to the neighbour’s foundation.

The Complainant’s neighbour witnessed the excavation that bordered the property line and noted the soils of the excavation site had significantly settled and appeared similar to a sinkhole. The neighbour also noted cracks in their foundation wall and attached sunroom. The neighbour sought an engineering opinion to assist with her concerns and retained Stephen Petrovich, P.Eng., (the Member) from [Company A].

The Complainant alleged that the Member engaged in unprofessional conduct and/or unskilled practice arising from the Member’s inspections and subsequent reports. The reports directly attributed the neighbour’s foundation concerns to the Complainant’s excavation. The Complainant further alleges that the reports were based on visual inspections only and did not entail any engineering work to substantiate the findings.

The findings documented in the reports led to a costly civil suit that was launched by the neighbour against the Complainant that was ultimately unsuccessful.

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

1. Whether the Member engaged in unprofessional conduct or unskilled practice when he authored an inspection report, dated April 29, 2014, and a

follow-up inspection report dated September 16, 2015, in which the Member:

- a. Conducted an inspection and made determinations and recommendations regarding cracks in a concrete foundation wall based only on a visual inspection and testimony of the neighbour.
 - b. Based on the visual inspection, determined the neighbour’s foundation problems were caused by the Complainant’s excavation to repair the sewer line.
 - c. Formed conclusions that did not accurately consider the soil conditions and the zone of influence.
 - d. Did not consider and/or provide other possible reasons or causes as to why the neighbour’s foundation or sunroom incurred cracks or settlement.
 - e. Inappropriately referenced the settled soils of the excavated area as a “sink hole” when it was an area that incurred normal settlement as a result of uncompacted fill that was put back into the excavated hole.
 - f. Provided a non-standard recommendation for residential properties to remove native fill from the excavation and replace it with engineered gravel.
2. That the Member’s permit holding company, [Company A], was not registered with APEGA at the time his first report was issued and as such was not in compliance with APEGA’s permit requirements.

B. AGREED STATEMENT OF FACTS

Background

3. In the spring of 2014 the Member was retained by [Neighbour B], the Complainant’s neighbour (the

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- “Client”), to provide an inspection regarding cracks she observed in the home’s basement foundation wall and on the stucco wall of their attached sunroom.
4. The Member was informed by the Client that an excavation took place at the front of the Complainant’s yard and it was located near the property line of the neighbor.
 5. The Client informed the Member that the area excavated was 10 feet deep and 3-feet away from the front corner of her home.
 6. The Member learned the excavation was needed to repair a damaged sewer pipe on the Complainant’s property shortly after the floods had swept through the Calgary area in June 2013.
 7. As the sewer repair did not resolve all the sewer issues, an additional repair was required in October 2013.
 8. Based on the information provided to him by his Client, the Member determined, upon visual review, it was reasonable to conclude that the excavation would have created stress on the foundation of the Client’s home.
 9. In his report dated April 29, 2014, the Member indicated:
 - a. There was significant settling of the (Client’s) home, specifically the northeast corner.
 - b. The settlement was due to a large-diameter but shallow sinkhole created by the Complainant’s excavation.
 - c. The sinkhole was clearly due to the improper backfill and lack of compaction at the excavation site.
 - d. The excavation contributed to the cracking seen in the basement of the Client’s home and to the sinking of the northeast corner of the front sunroom.
 - e. The lack of compaction of the sinkhole is why the fill is settling and not supporting the concrete foundation walls of both homes.
 - f. Repairs to the Client’s home are needed as a result of the improper excavation that was completed by the neighbour.
 - g. The Member recommended repairs for mitigation of the sinkhole.
 10. A follow-up inspection report was completed by the Member dated September 16, 2014. The site visit consisted of a visual inspection only. The report indicated:
 - a. The sinkhole is expanding.
 - b. There are signs of continued cracking in the Client’s basement walls.
 - c. The stress to the foundation walls is due to the movement in the soils from the original 2013 excavation.
 - d. It is clear that unmanaged water from the Complainant’s roof is creating the sinkhole and compacting the fill.
 - e. The roof water will continue to move the fines in the soil from the sinkhole to the front of the street. Erosion of the grade below will continue to compromise both adjacent front porches and the foundation walls of both homes.
 - f. The Member recommended repairs.
 11. On October 3, 2014, the Client filed a Civil Claim against the Complainant for damages to their home as a result of the Complainant’s excavation. The Client relied on the Member’s reports, which confirmed the damages and their cause.
 12. In defence of the Civil Claim, the Complainant retained [Company C] in the spring of 2015 to inspect and provide their assessment of the neighbour’s allegations. A site visit was completed and a report, dated June 12, 2015, produced. The findings of the report contradicted the Member’s findings, stating:

“Based on the information gathered during this assessment, a settlement analysis due to excavation using current methods indicated that the noted excavation should and would not cause any settlement to the Plaintiff’s (Client’s) House.”
 13. Realizing he was being sued, the Complainant retained [Company C] a second time on December 14, 2015, this time to conduct a geotechnical investigation of the soils located in his front yard.
 - a. A test hole was drilled to 7.6 metres and soil samples were obtained.
 - b. One soil sample taken at a depth of 2.3 metres was taken for lab testing.

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- c. Silty clay was encountered below the topsoil and extended to 3.7 metres below the ground surface.
 - d. [Company C] also installed a standpipe to monitor the groundwater level at the site. The level was found to be dry to depth of 5.2 metres.
14. [Company C]'s investigation concluded:
- a. The settlement of the excavation was, "not a 'sink hole' and should not cause any adverse effects to the footings of the Plaintiff's (Client's) house."
 - b. Based on the soils found, there "...would be no loss of soils by groundwater movement in the upper 3.4 metres of the soil and would not cause the settlement of the Plaintiff's (Client's) house."
 - c. Further, the excavation was not deep enough and was too far away from the Client's home to be in the zone of influence.
15. On December 9, 2015, the Complainant also retained [Company D], who reviewed the settlement that had occurred in the front yard of the Complainant's home. They concluded:
- "...the settlement that has occurred at the location of the sewer repair or 'sinkhole' has had no effect on the settlement of the porch... nor on the cracks in the foundation walls..."
16. On May 11, 2016, the written decision regarding the Civil Claim was signed by the provincial judge, ruling in favour of the Complainant and awarding costs.
17. On May 30, 2016, the Complainant submitted the Complaint to APEGA.
18. The Complaint was referred to the Investigative Committee, and a Panel was appointed to investigate the Complaint.

Panel Findings

19. The Panel conducted an investigation, and issued its report on May 17, 2017. The Panel concluded that there was sufficient evidence to refer the following two matters to hearing:
- a. The Member issued two reports as a professional engineer, providing professional

- opinions that were to be relied upon by the public; however, these reports were not based on sound engineering principles, specifically:
 - i. There were no soils tests conducted.
 - ii. No reference to the type of soil that was present at the site.
 - iii. No groundwater tests were completed.
 - iv. No confirmation of the exact location of the excavation was determined.
 - v. A lack of reference to the zone of influence and the probability of the excavation to affect the Neighbour's home.
 - vi. Information known to the Member only by the word of his Client was presented in the report as factual information, apparently confirmed by the Member.

- b. The Member was practising engineering through [Company A] without having a valid Permit to Practice.
 - i. A review of [Company A]'s Permit to Practice revealed that [Company A] joined APEGA as a valid Permit Holder on September 1, 2014. This was after the Member's report was printed on [Company A] letterhead (dated April 29, 2014).
 - ii. A Member providing engineering services through a corporate entity is required to obtain a permit to practice.
 - iii. Section 2(1) of the *Engineering and Geoscience Professions Act* (the "Act") states that: "Except as otherwise provided in this Act, no individual, corporation, partnership or other entity, except a professional engineer, a licensee so authorized in the licensee's license, a permit holder so authorized in its permit or a certificate holder so authorized in the certificate holder's certificate, shall engage in the practice of engineering."

C. CONDUCT

20. The Member freely and voluntarily admits that:
- a. The report dated April 29, 2014, did not adequately contain engineering work to justify and support its conclusions and recommendations.

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- b. The report dated September 16, 2015, did not adequately contain engineering work to justify and support its conclusions and recommendations.
- c. [Company A] engaged in the practice of engineering without having a permit to practice, in contravention of s. 2(1) of the *Act*. The Member acknowledges that he ought to have applied for a permit to practice prior to engaging his services under the corporate name and that the failure to do so constitutes “unprofessional conduct” pursuant to s. 44 (1) (b) of the *Act* and pursuant to Rule of Conduct #4 of the *Code of Ethics*, which states that “professional engineers and geoscientists shall comply with applicable statutes, regulations and bylaws in their professional practices.”

- d. The Member acknowledges that the conduct described above constitutes unprofessional conduct as defined in the *Act*:

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;
- e) Displays a lack of knowledge of or lack of skills or judgment in the carrying out any duty or obligation undertaken in the practice of the profession,

whether or not that conduct is disgraceful or dishonourable, constitutes either unskilled practice of the profession, or unprofessional conduct, whichever the Discipline Committee or the Appeal Board finds.

- e. The Member also acknowledges that the conduct described above contravenes Section

44(1)(b) Rule of Conduct #3 and #4 of the *Code of Ethics*:

- 3** Professional engineers and geoscientists shall conduct themselves with integrity, honesty, fairness and objectivity in their professional activities.
- 4** Professional engineers and geoscientists shall comply with applicable statutes, regulations and bylaws in their professional practice.

D. RECOMMENDED ORDERS

21. On the recommendation of the Investigative Committee, and by agreement of Stephen Petrovich, P.Eng., and following a discussion and review with the Discipline Committee’s Case manager, the Discipline Committee hereby orders that:
1. Stephen Petrovich shall receive a letter of reprimand to appear in the Member’s APEGA file;
 2. Stephen Petrovich is to write a letter of apology to the complainant within 30 days of being informed that the Recommended Discipline Order has been approved;
 3. Stephen Petrovich shall pay a fine in the amount of \$3,000 within 30 days of being informed that the Recommended Discipline Order has been approved;
 4. If orders are not completed within the 30 days, the Member and the Permit Holding company will be suspended from practice until completion of such orders;
 5. The details of this matter will be published on APEGA’s website and/or in *The PEG* magazine with names.

Signed,

STEPHEN PETROVICH, P.ENG.

KEVIN WILLIS, P.ENG.

Panel Chair, APEGA Investigative Committee

JOHN VAN DER PUT, P.ENG.

Case Manager, APEGA Discipline Committee

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