



**RECOMMENDED ORDER
to the
DISCIPLINE COMMITTEE**

IN THE MATTER OF THE ENGINEERING,
AND GEOSCIENCE PROFESSIONS ACT,

AND

IN THE MATTER OF THE CONDUCT OF
Steven Petrovich, P.Eng.
#74710

Investigation Case: 20-26

**APEGA
Recommended Order
to the
Discipline Committee**

In the matter of the Engineering and Geoscience Professions Act

and

**In the matter of the conduct of
Steven Petrovich, P.Eng. #74710**

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has conducted an investigation into the conduct of Mr. Steven Petrovich, P.Eng. (the "Registrant") with respect to a complaint submitted by [REDACTED] (the "Complainant") dated July 6, 2020, (the "Complaint").

I. The Complaint:

The Complainant alleged that the Registrant engaged in unprofessional conduct and/or unskilled practice arising from his involvement as a structural engineer who provided an authenticated foundation plan drawing for the construction of a Structural Insulated Panel (SIP) residential home.

At the request of the builder, the original foundation of the home was changed from using only concrete piles and pad footings, to include the use of helical screw piles to support the exterior SIP walls.

The Registrant was retained by the screw pile manufacturer to design the screw piles. Despite his attempts to acquire the design loads for the foundation, the Registrant was unable to obtain the information from the structural engineer of record. To issue the screw pile design, the Registrant took it upon himself to calculate the applied loads using the house plan drawings.

The Registrant claimed the house plan drawings had enough details to verify the tributary areas to calculate the applied loads on the screw piles.

When concerns arose with the construction of the SIP home, the homeowner and his insurance company retained the services of two engineering firms to assess the home. Both engineering firms determined that, amongst other deficiencies, the Registrant's foundation plan drawing did not comply with the requirements as set out in the Alberta Building Code, 2014 edition (the "Code"), as it contained concerning specifications and information which did not comply with the Code.

Further, as the foundation plan drawing was authenticated, there were concerns that it failed to comply with APEGA's Authentication Standard¹ (the "Standard") that was in effect at the relevant time.

¹APEGA's *Practice Standard for Authenticating Professional Documents v3.1, January 2013.*

Allegation:

The Investigative Committee completed an investigation with respect to the following allegation:

Whether the Registrant's authenticated foundation plan drawing failed to meet the acceptable standard of engineering practice in Alberta.

II. Agreed Statement of Facts:

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

A. Background:

1. At all relevant times the Registrant was an APEGA professional member and was thus bound by the *Engineering and Geoscience Professions Act* and APEGA's Code of Ethics.
2. At all relevant times, the Registrant's company, SMP-Services Corp. (#12834) held a valid APEGA Permit to Practice and was thus bound by the *Engineering and Geoscience Professions Act* and APEGA's Code of Ethics.
3. Prior to the conclusion of the investigation, the Registrant entered into a Voluntary Undertaking ("VU") with APEGA on or about October 21, 2021.
4. The VU stipulated that the Registrant shall not engage in the practice of geotechnical engineering (the "restricted practice") in Alberta, pending the conclusion of the APEGA investigation.
5. The Registrant stated that he:
 - a. Acknowledged that he does not have the background and training to work as a fully qualified geotechnical engineer.
 - b. Will not be pursuing the training to attain those qualifications.
 - c. Will engage others who are qualified in geotechnical engineering to provide geotechnical services for the structural work that he engages in.

B. Scope:

6. The Registrant was retained by [REDACTED] to design a screw pile foundation, and to provide an inspection report for the installation of those piles for the SIP home.
7. The Registrant was not engaged as the structural or the geotechnical engineer of record (the "EOR") for the construction of the home.
8. On May 23, 2019, the Registrant authenticated the "Foundation Plan A9" drawing (the "Drawing") that was used for the installation of the screw piles.

C. Facts Related to the Allegation:

9. The construction of the SIP home was to be completed in compliance with Part 4 of the Code and within the requirements as set out by [REDACTED] the Authority Having Jurisdiction.
10. The Registrant was provided a house plan drawing created by a design and drafting company and used that as the template for his screw pile design.

11. As he was not provided with the EOR's structural drawings, the Registrant proceeded to design the screw piles without them.
12. The Registrant completed his screw pile design utilizing his own calculations and authenticated the Drawing for the purpose of providing Postech with the information required to complete the installation of screw piles.
13. The Registrant clearly expressed on the Drawing that:
 - i. It was for the screw pile design only;
 - ii. The soils were assumed; and
 - iii. The foundation design engineer shall review and approve the pile locations.

Authentication Deficiencies:

14. When the Registrant authenticated the Drawing, he acknowledged that the document met professional standards and accepted responsibility for it by stamping, signing, and dating the document.²
15. The stamp and signature signify that the Registrant accepted responsibility for all the contents of the work included in the authenticated document.³
16. If it was not possible to sufficiently limit or specify the conditions under which a drawing can be used, the Standard states a drawing should be left unauthenticated.⁴
17. Without the Registrant clearly marking on the Drawing its restricted purpose, the Drawing on its own was not completed in compliance with the Standard.

Drawing Deficiencies:

18. The Registrant modified a foundation plan drawing created by others.⁵
19. The Registrant determined loading values without the EOR's structural calculations or drawings. This is not in alignment with the standard practice of engineering in Alberta.
20. The Registrant made additions to the house plan drawings without deleting information that no longer applied. This led to confusion with the Drawing. For example:
 - i. The Drawing contained notes for the concrete pile connection details which were part of the original pile design. However, the concrete piles were being replaced by screw piles and the notes for the concrete pile connection details were no longer applicable.
 - ii. Without any background information about the Drawing, and if it was to be taken literally, it is specifying that screw piles are to be embedded into concrete piles which was not the intent.
21. The Drawing contained a unique combination of concrete piles, concrete foundation pads and screw piles that had not been reviewed and approved by the EOR.
22. The Drawing had no detail specifying how the screw piles would provide continuous support to the base of the SIP walls. There were no beam details

² APEGA Practice Standard for Authenticating Professional Documents v3.1, January 2013, Section 4.1.

³ APEGA Practice Standard for Authenticating Professional Documents v3.1, January 2013, Section 1.

⁴ APEGA Practice Standard for Authenticating Professional Documents v3.1, January 2013, Section 3.4.

⁵ APEGA Practice Standard for Authenticating Professional Documents v3.1, January 2013, Section 2.1.

included.

23. There were no relevant connection details to show how the screw piles were to attach to the SIP walls.

Alberta Building Code (2014) Deficiencies:

24. The Drawing did not contain pile design loads which are required by Division C, s. 2.2.4.6 of the Code.
25. The type and condition of the soil was not provided as per s. 2.2.4.6 of the Code, instead the Registrant provided an assumption.
26. The Drawing contained torque specifications that exceeded the limitations as outlined in Table 3.1 of the Canadian Construction Materials Centre (CCMC) for Postech screw piles.

Due Diligence:

27. More care should have been taken in documenting the revised house plan drawing to clearly identify the boundary of professional responsibility between the original and revised Drawing.
28. The Registrant ought to have communicated with the EOR, prior to authenticating the screw pile compliance inspection report, to verify soil conditions, loads, pile placement and connection details. This would have addressed the Registrant's disclaimers and caveats that he had noted on the Drawing.
29. Disclaimers and Caveats: The Registrant clearly expressed limitations with his Drawing (#10 above), however the Drawing lacked clarity and could not be relied upon as is and should not have been authenticated.
30. The document failed to meet the requirements of the work as expressed by codes, standards, and APEGA's authentication requirements.
31. The Registrant's authenticated foundation plan drawing failed to meet the acceptable standard of engineering practice in Alberta.

III. Conduct:

• **Section 44(1) of the Act:**

32. The Registrant freely and voluntarily admits that the conduct as described above constitutes unprofessional conduct and unskilled practice as defined in Section 44(1) of the Act.
33. The Registrant acknowledges that the conduct described above is conduct that is detrimental to the best interests of the public, contravenes the Code of Ethics as established under the regulations, harms or tends to harm the standing of the profession, and displays a lack of skill in the carrying out of his duties as required by the profession, contrary to Section 44(1) (a), (b), and (e) of the Act as defined below:

Section 44(1) of 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 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.

APEGA Code of Ethics:

34. Further, the Registrant acknowledges and admits that his conduct was also contrary to the Rules of Conduct 4 and 5 of the APEGA Code of Ethics, as defined below:

The Rules of Conduct:

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.*
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 practices.*
5. *Professional engineers and geoscientists shall uphold and enhance the honour, dignity and reputation of their professions and thus the ability of the professions to serve the public interest.*

IV. Recommended Orders

35. 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 practice restriction noted in the Registrant's VU shall remain in place permanently; the Registrant shall be permanently restricted from engaging in the practice of geotechnical engineering in Alberta (the "practice restriction"). This practice restriction shall be noted in APEGA's public member directory.
- c. The Registrant shall provide written confirmation to the Director, Enforcement, within six (6) months of being notified that the Recommended Order has been approved by the Discipline Committee Case Manager, that he has reviewed the following APEGA publications, and that the Registrant will comply with the requirements therein:
 - i. APEGA *Authenticating Professional Work Products* professional practice standard, January 2022.
 - ii. APEGA *Professional Practice Management Plan* professional practice standard, November 2022.
- d. The Registrant shall provide written confirmation to the Director, Enforcement, that he has completed the following educational sessions within twelve (12) months of the date this order has been approved by the Discipline Committee's Case Manager:
 - i. Proof of attendance (in-person or virtual) that he has attended an APEGA Permit to Practice seminar.
 - ii. The APEGA Ethical Practice Self-Directed Learning Module (available on myAPEGA).
- e. The Registrant, on behalf of his company, SMP-Services Corp., shall provide the Director, Enforcement, within six (6) months of the date this order is approved by the Discipline Committee Case Manager, a Professional Practice Management Plan (PPMP) that complies with the current APEGA Practice Standard (*Professional Practice Management Plan* standard, November 2022). Special attention shall be given to how professional work products are reviewed prior to authentication to ensure that quality control and quality assurance measures are in place.
- f. The Registrant shall pay a fine in the amount of \$2000. The fine is a debt owing to APEGA and shall be paid within six (6) months of the date this order is approved by the Discipline Committee Case Manager.
- g. If the Registrant fails to provide the Director, Enforcement, with proof that he has completed the requirements noted above in Paragraphs 36 (c), (d), (e) and (f) within the timelines specified, the Registrant shall be suspended from the practice of engineering until the requirements are met. If the requirements with respect to Paragraphs 36 (c), (d) and (e) 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. If there are extenuating circumstances, the Registrant may apply to the Director, Enforcement, for an extension prior to the noted 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.
- i. This matter and its outcome will be published by APEGA as deemed appropriate and such publication will name the Registrant.

I, Steven Petrovich, P.Eng., acknowledge that before signing this Recommended Discipline Order, I consulted with legal counsel regarding my rights or that I am aware of my right to consult legal counsel and that I hereby expressly waive my right to do so. I confirm that I agree to the facts and admissions as set out above in this Recommended Discipline Order, and that I agree with the Orders that are jointly proposed.

Further to the above, I acknowledge that I have reviewed APEGA's "Good Standing Policy." I understand that I will not be considered to be a member "in good standing" until I have fully complied with the Orders set out above, and I understand that good standing status may affect membership rights or benefits, or the ability to volunteer with APEGA in any capacity.

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

Steven Petrovich, P.Eng.

Signed with ConsignO Cloud (2023/08/22)
Verify with verifio.com or Adobe Reader.



Steven Petrovich, P.Eng.

Peter Bozic, P.Eng., M.Eng.

Signed with ConsignO Cloud (2023/08/18)
Verify with verifio.com or Adobe Reader.



**Mr. Peter Bozic, P.Eng., M. Eng.
Panel Chair
APEGA Investigative Committee**

APEGA Discipline Committee Approval

Adam Whiting

Signed with ConsignO Cloud (2023/11/14)
Verify with verifio.com or Adobe Reader.



Nov 14, 2023

Case Manager