RECOMMENDED ORDERS
to the
DISCIPLINE COMMITTEE

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

AND

IN THE MATTERS OF THE CONDUCT OF
Roni Goswami, P.Eng. (#216527)

Investigation Case: #24-03 RG

APEGA
Recommended Orders
to the
Discipline Committee

In the matters of the Engineering and Geoscience Professions Act

and

In the matters of the conduct of
Roni Goswami, P.Eng.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has conducted an investigation into the conduct of Roni Goswami, P.Eng., (the "Registrant") with respect to a complaint initiated by [redacted] (the "Complainant") dated January 8, 2024 ("Complaint 24-03").

A. Complaint

The Complainant alleged the Registrant engaged in unprofessional conduct as defined in Section 44(1) of the *Engineering and Geoscience Professions Act*, RSA 2000, c E-11 ("EGP Act") with respect to,

Allegation #1

Whether the Registrant failed to provide adequate responses to the Complainant's requests for clarification on the cyclical loading identified in the October 27, 2023, Issued for Permit tall wall design drawing (Sheet 11 - TW3).

Allegation #2

Whether the Registrant failed to provide adequate responses after being informed by the Complainant that the tall wall drawing (Sheet 11 - TW3) of the Issued for Permit drawings (revised January 8, 2024) still failed to remedy the cyclical loading issue.

The Investigative Committee expanded its investigation with respect to the following:

Allegation #3

The Registrant engaged in unskilled practice when practising structural engineering without sufficient knowledge or training in the discipline of structural engineering.

B. 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 the APEGA Code of Ethics.

2. The Registrant holds a bachelor of science degree in mine and quarry engineering from Queen's University (2015).

3. The Registrant began working at his father's business, [redacted] ("[redacted]") in 2021, and has since progressed to supervising other staff.

4. The Registrant has been a member of APEGA since 2022 and is licensed to practise engineering in the province of Alberta.

5. The Registrant cooperated with the investigation.

(b) Facts Relating to Allegations #1 and #2:

6. The Complainant is a project coordinator for a building truss company. On January 2, 2024, the Complainant received a structural drawing package from a builder for an estimate. The drawings were designed by [redacted].

7. Upon review of the drawings, the Complainant observed what he described as cyclical loading in a tall wall detail drawing TW-3 (sheet 011 of the package) and emailed [redacted] to bring it to their attention. [redacted] response was that everything appeared to be in order and that laminated veneer lumber (LVL), an engineered wood product being used as conventional sawn lumber, was inadequate for the tall wall design.

8. The Complainant's concern was not the framing materials, but rather the load path which the Complainant articulated in writing and a diagram to illustrate the cyclical loading. "Cyclical loading" in this case refers to a situation where the same member appears more than once within the load path for a given applied load. This makes it impossible to determine the forces acting on the system and indicates an issue with the way structural members are arranged (a direct analogy to this situation is a "circular reference" in a spreadsheet, in which a cell formula refers to the cell itself, which prevents an accurate calculation).

9. On January 8, 2024, the Complainant received another package from [redacted] along with a diagram of the revised TW-3 drawing illustrating reinforced connectors for King Posts and headers purported to eliminate the cyclical loading issue.

10. Upon review of the revised TW-3 drawing, the Complainant noticed the cyclical loading was still present and emailed [redacted] again to explain, using the analogy of visualizing the wall design as a floor:

    If you have 2 stair openings offset from each other, header joist #1 hangs on header joist #2, then header joist #2 loads back to header joist #1 via another header, the loads go in an infinite circle.

11. The Registrant replied to this email, stating:
    The wall is pinned at the top and bottom, as well as the joists on the sides. Any loads induced into this wall will distribute and transfer at these pinned connections through the trusses and foundation wall into the rest of the structure until all loads have been dispersed. This also does not take into the additional bracing from the stairs, wall sheathing, etc. All studs have been calculated for applicable loads.

12. The Registrant also included the Complainant's diagram with red markups to illustrate the load distribution.

13. The Complainant agreed that the vertical loads would be managed by the configuration but stated that the wind load was laterally loading the studs which causes the cyclical loading.

14. The Registrant responded that all lateral loads are distributed as per the red markups, into the foundation and the floor and roof of the structure. The Registrant directed proceeding with the lumber order as per the revised drawings.

15. The Complainant did not respond further, as he felt the Registrant's emails demonstrated that his concerns were being dismissed or that the Registrant did not fully understand the issue.

16. The Registrant stated that after being notified of the cyclical loading issue by the Complainant, the TW-3 design was reinforced in order to provide the most efficient and cost-effective solution.

17. The Registrant further stated that it was one of [redacted] employees who first brought the Complainant's inquiries to his attention. The Registrant acknowledged that in hindsight his responses could appear dismissive as he misunderstood what the Complainant was trying to explain about the cyclical loading present in the revised TW-3 drawing.

18. Although not the Engineer of Record for this design, the Registrant is involved in the quality assurance process at [redacted] and acknowledged that the original TW-3 drawing required revisions and should not have been issued.

19. The Registrant plans to implement an internal process at [redacted] to properly address similar concerns in the future.

(ii) Facts Relating to Allegation #3:

20. The Registrant did not have any formal training or education in structural engineering while in university. However, he stated that many of the practices he learned from mining, such as soil mechanics and hydraulics, were applicable as they also relate to civil engineering.

21. The Registrant stated that he has approximately 10 years of practical experience within the residential construction field where he learned by working with trades people and other professionals.

22. During his time at [redacted], the Registrant has attended seminars and presentations on topics related to structural engineering. Despite his practical experience, the Registrant acknowledged that he required additional formal education.

23. During his interview with the Investigation Panel about wind loads affecting the TW-3 design, the Registrant described the methodology and calculations used to determine the sufficient reinforcements and connectors required to ensure the wall could withstand lateral wind loads.

24. Fundamentally, structural engineering involves creating a path for loads to travel from their point of application or source through a series of members and connections to a foundation. The members, connections, and foundation are then verified to ensure they have sufficient capacity to transfer the loads as intended.

25. The cyclical loading issue should have become clear to the Registrant through the design process, as the issue makes it impossible to correctly define specific loading values for individual members affected by the circularity. However, it is possible that conservative loading assumptions were made that would have allowed the individual members to be designed without revealing the presence of cyclical loading. Thus, the original presence of the cyclical loading does not necessarily reflect unskilled practice.

26. Once the issue was brought to the Registrant's attention, it should have been easily recognized and corrected. However, the Registrant failed

to identify the cyclical loading issue even after multiple promptings from the Complainant.

27. In his interview with the Panel, the Registrant dismissed the concerns based on the source of the information–refusing to consider that a supplier could know more about wall design than the Registrant. The failure of the Registrant to correctly identify and respond to the issue reflects a clear lack of understanding; this lack of understanding is evidence of unskilled practice of the profession.

28. The Registrant stated that he "overestimated" his design by doubling up framing members "just to be safe". A conservative design is always acceptable to an extent, but the Registrant's description displays a lack of confidence in his ability to correctly verify his own calculations. This is not acceptable for an engineer of record.

29. The Panel pointed out to the Registrant that he was using US catalogues as resources for specifying hardware. American standards and codes differ from Canadian ones; it is not acceptable to rely on the specified capacities from American sources unless calculations are converted to reflect Canadian standards. It appears the Registrant was not aware that the resource was an American one–there was a Canadian-market product catalogue available.

30. The Registrant was responsive to the Panel's interview and observations. It was the Panel's opinion that the responses from the Registrant displayed a lack of understanding of the fundamentals of structural engineering analysis and the correct specification of materials.

31. The Registrant is proactively pursuing additional training courses to enhance his professional development in residential structural design.

C. Conduct

32. The Registrant freely and voluntarily admits that the conduct described in the allegations constitutes unprofessional conduct as defined in Section 44(1) of the EGP 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.

33. The Member also acknowledges that the conduct described above breaches Rule(s) of Conduct #2 & #3.

The Rules of Conduct 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.*

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.*

D. Recommended Orders

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

35. The Registrant shall be reprimanded for their conduct and this order shall serve as the reprimand.

36. The Registrant shall provide the Discipline Manager, within six (6) months of the date this order is approved by the Discipline Committee Case Manager, a letter of apology to the Complainant suitable to the Discipline Manager. The letter of apology shall include what the Registrant learned about the ethical and professional responsibilities of a professional engineer with respect to client communications and how these learnings will affect his future practice.

37. The Registrant shall be restricted from engaging in any scope of engineering practice that relates to structural engineering from the date this order is approved by the Discipline Committee Case Manager, until the Registrant has provided the Discipline Manager with written confirmation/proof of successful completion (passing grade) of the following structural engineering courses or equivalents:

    a. University of Calgary ENCI451 - Structural Engineering I ENCI451 Course | UCalgary Catalog

    b. Structural Engineers Association of BC (SEABC) - C11 Timber Design of Light Residential and Commercial Buildings Course List – Structural Engineers Association of British Columbia

38. Upon successful completion of the courses noted above in paragraph (37), the Registrant's scope of engineering practice shall be restricted to engaging in structural engineering only with respect to Alberta Building Code - Part 9 *Houses and Small Buildings* requiring professional involvement until the following courses outlined below in (39) are completed.

39. Upon successful completion of the courses noted in paragraph (37), should the Registrant wish to engage in structural engineering of commercial buildings with respect to the Alberta Building Code - Part 4 Structural Design, then the Registrant will be required to successfully complete the following four (4) additional structural engineering courses or equivalents as deemed appropriate by the Discipline Manager.

    a. Structural Engineers Association of BC (SEABC) - E10 Structural Analysis Fundamentals: A Refresher, Course List – Structural Engineers Association of British Columbia

    b. Structural Engineers Association of BC (SEABC) - C12 Practical Design of Reinforced Concrete Course List – Structural Engineers Association of British Columbia

c. Structural Engineers Association of BC (SEABC) - E1 Masonry Design of Buildings Course List – Structural Engineers Association of British Columbia

d. Structural Engineers Association of BC (SEABC) - C13 Structural Steel Design for Buildings Course List – Structural Engineers Association of British Columbia

40. If any of the noted courses are no longer available on approval of this order, at the discretion of the Discipline Manager, another course may be authorized for substitution if it is deemed substantially equivalent. The Registrant shall be responsible for all costs associated with the completing the courses.

41. The Registrant shall be subject to the following restrictions and conditions for a period of twelve (12) months from the date this Order is approved by the Discipline Committee Case Manager:

a. The Registrant will be restricted from engaging in any scope of engineering practice that relates to structural engineering unless the Registrant is directly supervised by a qualified engineer who practices in the area of structural engineering.

b. The registered professional engineer providing the direct supervision and control shall be known as the Supervisor.

c. The Registrant shall not practise structural engineering, as defined in the *Engineering and Geoscience Professions Act* Section 1(q), independently while under direct supervision and control.

d. The Registrant's restricted status shall be reflected in APEGA's Member Directory.

e. The requirements of direct supervision and control are defined in 3.1 of the *Relying on the Work of Others and Outsourcing* practice standard.

f. Any professional work products (PWP's) completed by the Registrant must be reviewed and authenticated by the Supervisor as outlined in the APEGA practice standard, *Authenticating Professional Work Products*.

g. Meetings and correspondence where the Registrant provides recommendations or advice must be directly supervised by the Supervisor.

h. The Registrant shall not manage or supervise other professional registrants or members-in-training.

i. The Registrant shall not be permitted to act as a Responsible Member until the condition of supervised practice has been lifted.

j. All costs related to the supervision and required reporting shall be at the expense of the Registrant.

k. The registered professional engineer as specified in clause (b) must be deemed acceptable to act as the Supervisor by the Discipline Manager.

l. The Registrant shall submit in writing to the Discipline Manager the names, qualifications, position title, and contact information of up to three registered professional engineers willing to provide the required direct supervision and control as defined in clause (b). The Discipline Manager will decide on the final selection of the Supervisor(s).

m. The Supervisor shall enter an undertaking with APEGA to provide the required direct supervision, control, and reporting. This undertaking will comprise of a form provided by APEGA.

n. The Supervisor shall provide a report each quarter respecting all projects undertaken by the Registrant in that quarter, for a period of twelve (12) months.

    i. Reports shall include for each project a summary of the project, a description of the Registrant's role and responsibilities on the project, a list of all PWPs related to the project where the Registrant was the primary contributor, and the supervisor's assessment of the Registrant's work on the project.

    ii. Reports shall be deemed to be a professional work product, requiring authentication.

o. At the conclusion of the twelve months of supervised practice, the supervisor shall provide a written summary assessment in a format provided by APEGA and attest to the Registrant's competency in structural engineering in writing to the Discipline Manager. If, on review of the supervisor's written assessment, the Practice Review Board deems that the Registrant's competency remains unsatisfactory, the Registrant shall be indefinitely restricted from practising structural engineering until they can demonstrate competency to APEGA. This indefinite restricted status shall be reflected in APEGA's Member Directory. If the Supervisor does not attest to the Registrant's competency at the conclusion of the twelve (12) months of supervised practice, the

period of supervised practice will be extended for a further (12) months.

42. The Registrant shall provide the Discipline Manager, within twelve (12) months of the date this order is approved by the Discipline Committee Case Manager, written confirmation/proof of successful completion (passing grade) of the National Professional Practice Exam (NPPE). The Registrant shall be responsible for all costs associated with completing the NPPE.

43. If the Registrant fails to provide the Discipline Manager with proof that they have completed the requirements noted above in paragraphs 36 and 42 within the timelines specified, or any extended timeline granted, the Registrant shall be suspended from the practice of engineering for a minimum of thirty (30) days. The Registrant is required to meet their regulatory obligations during their suspension period with respect to payment of professional dues and/or levies, compliance with the mandatory CPD program, and completing the mandatory portion of the annual declaration. If the requirements in paragraphs 36 and 42 of this Order are not completed within six (6) months of the suspension date, the Registrant shall be cancelled. In the event of cancellation, the Registrant will be bound by APEGA's reinstatement policy.

44. This matter and its outcome will be published by APEGA as deemed appropriate and such publication will name the Registrant.

I, Roni Goswami, 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 a copy of this Order and my identity will be disseminated to all provincial and territorial engineering and geoscience regulators in Canada.

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 Acknowledgment of Unprofessional Conduct in its entirety.

Roni Goswami, P.Eng.
Signed with ConsignO Cloud (2025/02/13)
Verify with verifio.com or Adobe Reader.

Roni Goswami, P.Eng.

Roxanne Pierre, P.Eng.
Signed with ConsignO Cloud (2025/02/13)
Verify with verifio.com or Adobe Reader.

Roxanne Pierre, P.Eng.
Panel Chair
APEGA Investigative Committee

APEGA Discipline Committee

By: Niki Weinrauch
Signed with ConsignO Cloud (2025/03/10)
Verify with verifio.com or Adobe Reader.

Case Manager