

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: December 11, 2021

Discipline Case Number: 21-017

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 MR. ELLWOOD DAVISON, P.ENG., AND RND ENGINEERING (1997) LTD.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has investigated the conduct of Mr. Ellwood Davison, P. Eng. (the Registrant) and RND Engineering (1997) Ltd. (the Company) with respect to a complaint, initiated by [name withheld] (the Complainant) dated March 24, 2021 (the Complaint).

A. THE COMPLAINT

The Complainant filed a complaint alleging the Registrant and the Company engaged in unprofessional conduct and / or unskilled practice, as defined at section 44(1) of the *Engineering and Geoscience Professions Act*, RSA 2000, c E-11 (EGP Act) in relation to engineering services provided to the Caledonia Enterprises Shop and Office, located in Leduc, AB. (JAK Equipment):

The Investigative Committee's investigation focused on the following allegation which can be summarized as follows:

1. Whether the Registrant and the Company, engaged in unprofessional conduct and / or unskilled practice, in that Inspections should have been done or should have discovered the deficiencies and had the contractor remedy them before signing the schedule C-2; therefore, responsibilities were not completed per the design, despite the fact the schedule C-2's were signed, resulting in an improper issuance of the schedules.

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The Investigative Committee investigated two other allegations outlined in the complaint. The Investigative Committee determined that there was insufficient evidence of unprofessional conduct and / or unskilled practice in relation to the other two allegations.

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 is a Professional Member of APEGA, and the Company is an APEGA Permit Holder; accordingly, both were thus bound by the *Engineering and Geoscience Professions Act* and the *APEGA Code of Ethics*.
- 2. The Company has been an APEGA Permit Holder since April 2, 1997. The Company is located in Medicine Hat Alberta, and generally specializes in Structural Engineering.
- 3. The Registrant holds a Bachelor of Science degree in Civil Engineering from the University of Saskatchewan (1977).
- 4. The Registrant is the President of the Company and is the Responsible Member for the company. The Registrant has an APEGA registration date of May 7, 1979.
- 5. The Registrant and the Company have cooperated with the APEGA investigation.
- (ii) Facts Relating to the Allegation:

Whether the Registrant and the Company, engaged in unprofessional conduct and / or unskilled practice, in that Inspections should have been done or should have discovered the deficiencies and had the contractor remedy them before signing the schedule C-2; therefore, responsibilities were not completed per the design, despite the fact the schedule C-2's were signed, resulting in an improper issuance of the schedules.

- 6. The Complainant in this matter is part owner of JAK's Equipment. The building in question is a 20,000 sq.ft. warehouse/office bump, built in 2009/2010, designed by the Registrant and the Company. Ryken Construction (Ryken) was the primary contractor.
- 7. Problems started with leaking windows in the office bump about two years after construction. Over the years, water ingress was a constant issue and temporary repairs did not resolve the ongoing problems.



- 8. In 2020, a significant amount of moisture in the outer walls of the office bump was discovered and it was determined the windows required replacement. The window repair project, however, expanded as the renovations led to the discovery of several other concerns that required additional work on the buildings stucco and stonework. The Complainant retained a building envelope consultant from Hodgson Schilf Evans Architects Inc. (HSEA) as well as a contractor (H2P Projects) to perform the repairs. Several other concerns were noted during their work.
- 9. The Complainant retained Fulcrum Engineering to help with the redesign. It was Fulcrum's professional opinion upon their investigation of the existing structure that incorrect steel studs were used, windows were not framed correctly and connection / bridging issues at the top of studs were also a concern, summarily:
 - a. The Registrants design called for 1 5/8" flange stud, not a 1 1/4" flange; the 1 1/4" flange stud, which were typically used for interior walls, were found to have been used in the construction.
 - b. Findings determined the window jambs deflected too much and cracked the exterior system. Engineering wise, Fulcrum believed it was inadequate in terms of the framing strength and deflection. The Registrants window design called for a different build, and it did not match the construction. The Registrant said he himself was appalled when he saw pictures of the windows. He did not mix material and would have rejected it without question if he had seen it.
 - c. The Registrants bridging between the studs, called for half inch plywood to exterior and drywall to the interior attached to studs plus light steel bracing. What was discovered was the bridging was not installed properly or in some cases was not installed at all.
 - d. Findings determined there was no vertical deflection clips installed and therefore no slip connection. The Registrant had called for slip connections, but it was not done as per his design.
- 10. Fulcrum determined the construction of the office bump did not match the original design of the Registrant and the Company, yet the Registrant signed off on Schedule C2, incorrectly attesting the walls were built to the Registrants' design.
- 11. The cost of the repairs to the Complainant was close to \$400,000.00 Since the repairs were completed, no further issues have been noted by the Complainant.
- 12. The Registrant accepted full responsibility for the design build inclusive of the 'Architectural' component.



- 13. The Registrant's inspections primarily focused on the warehouse portion of the structure rather than the office bump.
- 14. The Registrant initially believed he fulfilled his requirements and responsibilities and that he issued the Alberta Building Code Schedule C2 (Assurance of Professional Field Review and Compliance) in good faith and to the best of his abilities. The Registrant described his inspections as follows:
 - a. The Registrant said he was doing the architectural part as well and would revert more to an "ISO 9000" type of inspection which would be less stringent and more focused on fire safety and to ensure the building officials, were satisfied with their inspections, code compliance for mechanical and electrical and safety in that direction. His ISO 9000 approach to inspections, meant inspections at minimum once every two weeks, but also random, so that the contractor would not know when he showed up. In general, and in his experience, he believed it was an adequate way of doing it as it would not give a chance to "cover things up".
 - b. Having said that, inspection wise for him, with the secondary structural member, "curtain wall", he may not have seen the stud's, "period!". From the time the construction company start to the time they finished the studs in a certain area, to the time they were covered up may only be a week, or four to five days. His normal practice was to be out there every two weeks, and his primary concern was the main structure, and secondly from an aspect of public safety, was the fire ratings in the building, "he may not have seen it at all".
 - c. The Registrant continued and stated, "There was not someone on the job site full time and number two, I don't have x-ray eyes so I can't see behind drywall".
 - d. The Registrant confirmed he was unable to inspect the suggested items, in general or commented on by the Complainant and Fulcrum if they had been covered up at the time of his inspections. His responsibility was the primary structural inspection which were conducted at every stage, minimum once a week, sometimes a few times a week, on every project, to make sure the main structure was constructed as per his design.
- 15. The Registrant later realized the concerns described by the Complainant and Fulcrum revealed that several components of the construction were not done as per his design.
- 16. The Registrant admits that he engaged in unprofessional conduct by failing to note the construction deficiencies in the office bump during his inspections, and by improperly authenticating Schedule C2 in which he gave assurance that he had



fulfilled his obligations for field review under the Code (build was substantially in accordance with his design).

C. CONDUCT BY THE REGISTRANT AND THE COMPANY

- 17. The Registrant and the Company freely and voluntarily admit that at all relevant times the Registrant was a professional member of APEGA, the Company was an APEGA permit holder and thereby, both were bound by the *Engineering and Geoscience Professions Act* and the *APEGA Code of Ethics*.
- The Registrant and the Company acknowledge that the conduct described above constitutes unskilled practice and / or 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 judgement in the practice of the profession, or
- e) displays a lack of knowledge of or lack of skill or judgement 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.

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.

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- 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 honor, dignity, and reputation of their professions and thus the ability of the professions to serve the public interest.
- 19. The Registrant and the Company acknowledge that the conduct described above is conduct that is detrimental to the best interests of the public, displays a lack of judgment in the practice of the profession, and contravenes the *Code of Ethics* as established under the regulations.
- 20. The Registrant and the Company further acknowledge and admit that the noted conduct was contrary to the Rules of Conduct 1 and 4 of the *APEGA Code of Ethics*.

D. RECOMMENDED ORDERS WITH RESPECT TO THE REGISTRANT AND THE COMPANY

- 21. On the recommendation of the Investigative Committee, and by agreement of the Registrant and the Company 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 pay a fine in the amount of three thousand dollars (\$3000.00). The fine is a debt owing to APEGA and shall be paid within three (3) months of the date this order is approved by the Discipline Committee Case Manager. Failure to pay the fine by the noted three-month deadline will result in the Registrant and the Company being suspended from the practice of engineering until the fine is paid. Further, failure to pay the fine within six months of the date this order is approved shall result in the cancellation of the Registrant and Company's APEGA membership. If there are extenuating circumstances, the Registrant may apply to the Director, Enforcement, for an extension prior to the noted deadlines



- The Registrant on behalf of the Company (RND Engineering 1997 Ltd.). С shall provide the Director, Enforcement, within six months of the date this order is approved by the Discipline Committee Case Manager, an amended Professional Practice Management Plan (PPMP) which is consistent with the current APEGA Practice Standard (Professional Practice Management Plan, Draft V02.5, August 2021). The PPMP shall include quality control, assurance, and management procedures and/or processes of how professional work is being executed by the permit holder including all inspection related work. These procedures and/or processes must conform to current APEGA Standards, Bulletins and Guidelines as well as any Alberta codes or standards. Further, the Registrant shall provide written confirmation to the Director, Enforcement, within 12 months of the date this order is approved, that the Practice Review Board (PRB) has approved the amendments to the PPMP. Such approval shall include the Company implementing the PPMP and providing documentation that is satisfactory to the PRB to demonstrate their understanding of professional practice. If there are extenuating circumstances, the Registrant may apply to the Director, Enforcement, for an extension prior to the noted deadlines. Failure to meet the noted deadlines shall result in the Registrant and the Company being suspended from the practice of engineering until the requirements set out in this paragraph are met.
- d. This matter and its outcome will be published by APEGA as deemed appropriate and such publication will name the Registrant and the Company.

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

Signed,

MR. ELLWOOD DAVISON, P.Eng.

As Both Registrant and Company

MR. KEVIN WILLIS, P.Eng. Panel Chair, APEGA Investigative Committee

MR. RALPH HILDENBRANDT, P.Eng.

Case Manager, APEGA Discipline Committee

Date: December 11, 2021