

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: July 20, 2023

Discipline Case Number: 22-013

#### IN THE MATTER OF THE ENGINEERING AND GEOSCIENCE PROFESSIONS ACT AND IN THE MATTER OF THE CONDUCT OF HASSAN JWAD, 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 Hassan Jwad, P. Eng.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has conducted an investigation into the conduct of Hassan Jwad, P.Eng. (the Registrant) with respect to a complaint initiated by [Name Withheld] (the Complainant), dated June 23, 2022 (the Complaint).

#### A. THE COMPLAINT

The Complainant filed a complaint alleging the Registrant 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 incomplete detailed drawing and practicing outside of his scope for a project concerning a commercial Hot Tub.

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

Whether the Registrant engaged in unprofessional conduct and/or unskilled practice with respect to designing and submitting authenticated drawings for a commercial Hot Tub, in that the professional work product was:

- 1. Incomplete and unacceptable as the PWP lacked detail and design requirements.
- 2. Requirements to have a Professional Practice Management Plan (PPMP).



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

#### 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 has been an APEGA Professional Member in good standing since January 12, 2009.
- 2. The Registrant, accordingly, was bound by the Engineering and Geoscience Professions Act and the APEGA Code of Ethics during the relevant time.
- 3. The Registrant obtained a bachelor's degree in Mechanical Engineering in 1989 and a Master's in Mechanical Engineering in 2006.
- 4. The Registrant has cooperated with the investigation.
- 5. The Complainant has been an APEGA Professional Member in good standing since August 25, 2016.

#### (ii) Facts Relating to the Allegation #1:

- 6. On December 7, 2022, a Health Inspector with Alberta Health Services (AHS) conducted an inspection per their authority under the Public Health Act for a new hot tub being constructed and installed at the [Place], [Location], Calgary, Alberta. During the AHS inspection several concerns were identified with the design drawings, some specific to engineering, summarily:
  - a. They did not show the full plumbing schematics with all the proposed equipment.
  - b. The drawings lacked information and were confusing.
  - c. The professional engineer did not follow the Provincial Pool Regulation Standards.



- 7. The Inspector notified the city of Calgary, Authority Having Jurisdiction (AHJ) for potential NBC (AE) concerns and [Company 1] with the findings and advised them AHS would not approve it until the requirements were met. [Company 1] contacted the company hired for the overall design, [Company 2], and advised them of the AHS inspection results.
- 8. The Complainant was contacted by [Employee] from [Company 2]. [Employee] advised the Complainant what occurred and requested the Complainant's expertise and help. [Employee] forwarded to the Complainant the Registrants drawings for review and inspection.
- 9. The Complainant in this matter, a professional engineer, has expertise and experience in the noted scope, in particular, on the hydraulic design expertise in conjunction with the NBC(AE) and its relevant codes that apply to pool hydraulics and aquatic facility design.
- 10. The Complainant reviewed/inspected the drawings and believed they lacked required design detail, NBC(AE) criteria, AHS Pool/Spa Standards criteria and also agreed with the AHS inspection results, namely:
  - a. Drawing (M1 .0) the 'Ventilation and Plumbing Plan' did not include adequate information regarding the amount and location of 'Fire Dampers', (NBC(AE), Part 3, Fire Protection, Occupant Safety and Accessibility Requirements).
  - b. Drawing (M2.0) the 'Plumbing and Sanitary Plan', did not include adequate information regarding flow rate, amount of 'skimmers' per code, drainage, pipe size and circulation and filtration information, (NBC(AE) 7.2 Aquatic Facilities Requirements).
  - c. Drawings (M2.1 and M3.0) that concerned 'Mechanical Specifications and Mechanical and Tub Side', did not include adequate information regarding the schematics for turnover rates/period and lacked information on how it applied to selection of volume, pipe sizing and skimmers, (NBC(AE) 7.2 Aquatic Facilities Requirements).
  - d. Drawing M2.1, the hot tub schematic, lacked technical information, and were unclear on its calculations on which ones to use.
- 11. As part of his duties, the Complainant attended the location for inspection and noted the hot tub had already been installed and was in running condition. The Complainant also noted the proper amount of fire dampers, and their locations were present (although not indicated in the drawing).



**Note:** The Investigative Committee learned that the property/hot tub in question has been permanently shut down according to publicly available information.

- 12. On June 23, 2022, the Complainant believed he had a duty to report his findings to APEGA and made an official complaint.
- 13. The Registrant was notified of the Complaint on July 6, 2022.
- 14. The Registrant was cooperative and forthcoming with investigators.
- 15. The Registrant is a professional mechanical engineer who also has experience in the noted areas. His specialties are in mechanical building systems, HVAC plumbing and fire system review, and has experience in scope-oriented pool designs.
- 16. The Registrant was hired by [Company 2] to provide ventilation and plumbing of the hot tub to the building system. The Registrant was provided a 'hand drawn' sketch for the flow diagram by [Employee] who asked the Registrant to add it to the drawings to indicate the 'tie-in' sanitary and 'DCW' line to the proposed mechanical room.
- 17. The Registrant was not involved or responsible at any time for the design of the hot tub itself nor the selection of the related equipment or its surroundings (the system development was not to his scope). The Registrant was not involved in reviewing any shop drawings or system requirements nor was he contacted to do a site visit during the construction. The Registrant did, however, attend the site on one occasion, and made subsequent calls in an attempt to complete an inspection, but could not get access to the mechanical room and therefore was unable to complete a field review.
- 18. The Registrant's scope was limited to providing the ventilation and to indicate the plumbing system connection to the building. The building owner and contractor were responsible for requesting the hot tub detail drawings and the associated equipment technical information from the manufacturer/supplier. The Registrant believed he complied with the required codes, standards, and the obligations of the local Authority Having Jurisdiction (AHJ) to the best of his ability.
- 19. The Registrant admitted he had stamped and signed in error one of the drawings, the hot tub piping schematic diagram (M2.1), 'Jet Plumbing Mechanical Room Side', admitting it was plausible and reasonable to believe others could have relied on this technical information for the overall drawings.



- 20. The Registrant admitted, however, that his drawings lacked some detail and that some of the intended information on his drawings was unclear, which could have added to some confusion. The Registrant maintains that the details in question were not part of the scope and therefore were not required.
- 21. The Registrant admitted he had no formal contract outlining his limited scope with [Company 2] and that his limited scope was not indicated on the drawings; this caused confusion to those that reviewed and critiqued his work product.
- 22. The Registrant is the sole Director/Shareholder of Tamimy Engineering Consulting Ltd. (TECL) and the Responsible Member (RM) for TECL. TECL has been an APEGA Permit Holder since June 2019. TECL was not named in this complaint. The Registrant admitted that in his role as RM for TECL, he failed to implement a Professional Practice Management Plan (PPMP). The Registrant conceded that the lack of a PPMP outlining professional business practices, authentication, and quality management practices contributed to the concerns identified on this project.

### C. CONDUCT BY THE REGISTRANT

- 23. The Registrant freely and voluntarily admits that at all relevant times the Registrant was a professional member of APEGA, and thereby bound by the Engineering and Geoscience Professions Act and the APEGA Code of Ethics.
- 24. The Registrant acknowledges that the conduct described above constitutes 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,



(e) or 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.
- 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.
- 25. The Registrant acknowledges 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.
- 26. Further, the Registrant acknowledges that the conduct described above constitutes a breach of Rules 3 and 4 of the Code of Ethics.

### D. RECOMMENDED ORDERS WITH RESPECT TO THE REGISTRANT

- 27. 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 pay a fine in the amount of \$500.00. 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.
- c. The Registrant shall provide written confirmation to the Director, Enforcement, within six (6) months of the date of this order is approved by the Discipline Committee Case Manager, written confirmation that he has reviewed the following APEGA publications, and that the Registrant will comply with the requirements therein:
  - i. Authenticating Professional Work Products', Professional Practice Standard (January 2022).
  - ii. 'Professional Practice Management Plan', Professional Practice Standard, (November 2022).
- d. The Registrant shall provide the Director, Enforcement, within twelve (12) months of the date this order is approved by the Discipline Committee Case Manager, written confirmation/proof of successful completion of the following module: the APEGA 'Ethical Practice Self-Directed Learning Module' available on myAPEGA.
- e. The Registrant 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, May 2022).
- f. 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.
- g. If the Registrant fails to provide the Director, Enforcement with proof that they have completed the requirements noted above in Paragraphs 27 (b),(c), (d) and (e) 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 27 (c), (d) and (e) to are not completed within six (6) months of the suspension date, the Registrant shall be cancelled.



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 Acknowledgment of Unprofessional Conduct in its entirety.

Signed,

HASSAN JWAD, P. Eng.

**GREG MEYERS**, P.Eng. Panel Chair, APEGA Investigative Committee

JOHN MCDONALD, P.Eng. Case Manager, APEGA Discipline Committee

Date: July 20, 2023