

# **Ladislav Mihaly: A Case Study**

**ENGG 513: The Role and Responsibilities of the Professional Engineer in Society**

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**To**

**Dr. Denis Onen**

**By**

**Pankti Shah, 10125556**

**Maria Baclig, 10149905**

**Schulich School of Engineering**

**University of Calgary**

## **INTRODUCTION**

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Association of Professional Engineers and Geoscientists of Alberta, APEGA, is a professional engineering regulatory governing body that publishes practicing standards and guidelines to ensure that engineering professionals maintain high standards for ethical and professional practice. The primary goal of APEGA is to protect the safety and welfare of the public. Members are expected to conduct themselves in a manner that is in the best interest of the public, in accordance with the Code of Ethics and demonstrates knowledge, skills and judgement to practice the profession [6].

An engineer's work and actions contribute to a critical role in safeguarding the public. For this reason, APEGA sets Code of Ethics and a high standard for engineers to ensure safe practices are carried out, even putting penalties in place for non-compliant actions. An important way to ensure foreign-trained engineers understand and meet adequate safe practice standards is for APEGA to require them to write a standardized exam and gain experience working under a professionally trained engineer [1]. Ladislav Mihaly, an engineer from Czechoslovakia felt discriminated on the grounds of his place of origin by APEGA's requirement for him to write a standardized exam and refusing to recognize his education as an equivalent Canadian engineering degree. The Alberta Human Rights Commission agreed that discrimination occurred against Mihaly, but the Court of Queen's Bench overruled this and favored APEGA's actions of keeping a standardized test in place for the well-being of the public. This report summarizes and analyzes a case study based on the Court of Queen's Bench of Alberta's judgment involving APEGA, the Human Rights Commission, and Mr. Ladislav Mihaly. It provides greater insights into the requirements for registering as a professional engineer, APEGA's regulatory process, and the legal and quasi-legal environment in which APEGA operates. The report first provides an outline of associated key stakeholders, followed by an in-depth case background, and the Court of Queen's Bench decision process with Mihaly's case. The report concludes with a reflection and analysis section focusing on the decision made by the Court of Queen's Bench, and identifying potential areas of improvement for APEGA moving forward into the future.

## **STAKEHOLDERS**

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### **Association of Professional Engineers and Geoscientists of Alberta, APEGA**

APEGA's policy of assigning confirmatory exams where competence has not been established is consistent with the Engineering and Geoscience Professionals General regulation, and consistent with its objective of ensuring the competency of professional engineers. Entry level engineering competency is reasonably necessary to ensure safe practice as a professional engineer. APEGA's application process is fair, equitable, and transparent, and the same rigorous standards they implement apply to all applicants for licensure as professional engineers. APEGA believes it has a statutory responsibility for the registration of internal engineers to guarantee their competency to practice in Alberta without causing hardship to the public. The standards applied by APEGA are "adopted for safety and competency reasons" [1]. The standards are rationally connected to APEGA's function and are adopted in good faith. APEGA asserts that they make no assumptions about the qualifications of any institutions' graduates, Canadian or otherwise, until the institution has satisfied APEGA through the knowledge-based CEAB accreditation process or a substantially similar process. Therefore, examinations may be waived by APEGA for particular applicants if, for example, they have completed a graduate degree at a university in Canada or a Mutual Recognition Agreement country (MRA), or if they have 10 years of progressively responsible engineering experience [8].

### **Court of Queen's Bench**

The Court of Queen's Bench or Court of Appeal is a body that conducts criminal matters, civil proceedings, and the judicial review of government and Tribunal action in Alberta. The group includes a chief justice, an executive board, 9 steering committees and ad hoc committees as required [10]. Their goal is to provide impartial judgment and to resolve disputes by applying the Rule of Law and protecting people's rights. They focus on investigating the reasoning of a certain decision and look at the justification, transparency and intelligibility of how the decision was made. They also assess the realistic aspects of the decision and whether they are within the scope of the facts and the law. In terms of their judgment on the Mihaly case, they reviewed the decision based on the following guidelines: procedural fairness, jurisdiction, test for *prima facie* discrimination and justification [1]. Following their review of the case, the Court of Queen's Bench was found to rule in favor of APEGA. They found the Tribunal's initial ruling to pass procedural fairness and falls under their jurisdiction. However, the Tribunal's decision did not pass the test for *prima facie* discrimination and justification as it was lacking in evidence.

### **Alberta Human Rights Commission**

The Alberta Human Rights Act protects Albertans from discrimination in certain areas based on certain criteria. The purpose is to ensure all Albertans are offered an equal opportunity to earn a living, find a place to live, and enjoy services that are customarily available to the public without discrimination. The commission has two key mandates: to foster equality and to reduce discrimination. It executes the mandates through taking community initiatives, public education, and settlement of discrimination complaints through human rights Tribunal and court hearings [7].

Mihaly claimed to have experienced an adverse impact from being educated in his place of origin, Czechoslovakia. The Tribunal established that the Examination Standard and the Experience Standard used by APEGA to assess Mihaly's educational credentials without more individualized assessment or exploration of other options constituted as discrimination as it imposed burdens, obligations and disadvantages to Mihaly. It further caused him to have limited access to opportunities, benefits and advantages available to him [8]. The Alberta Human Rights Tribunal found that the requirement to write confirmatory examinations was *prima facie* discriminatory and not justified on two grounds:

- "Mr. Mihaly should not have been required to write confirmatory examinations or the FE Exam, but only exams to correct perceived academic deficiencies following an individualized assessment of his credentials." [8]
- "Mr. Mihaly should not have been required to write a standardized exam, rather than being individually assessed." [8]

### **Mr. Ladislav Mihaly**

Mr. Ladislav Mihaly is an engineer who was born and educated in former Czechoslovakia with a M.Sc. Diploma specializing in Technology of Fuels and Thermal Energy from Slovak Technical University in Bratislava and a Certificate in Corrosion Engineering from the Institute of Chemical Technology. He has 25 years of experience in piping design and fabrication, having held senior positions in several international companies like Fluor Daniel, Mitsubishi Heavy Industry and Japan Gas Company [1]. He moved to Canada and applied to APEGA for registration as a professional engineer in May 1999. After being asked to take the National Professional Practice Exam (NPPE), 3 confirmatory exams and a course in Engineering Economics, he failed the NPPE

exam three times and failed to show up to the confirmatory exams. He filed a complaint with the Alberta Human Rights Commission on August 5, 2008 against APEGA stating that, “APEGA discriminated against him based on his place of origin when it denied him registration as a professional engineer.” Mihaly also cited hardships experienced by him and his family as a result of APEGA’s actions, such as being unemployed for 3 years, working in low paying jobs for 5 years and relying on his wife’s income, losing 2 fingers and having hearing problems as a result of running a bakery, having low income and living in a basement suite, and his son suffering from mental issues [1].

### **Canadian Engineering Accreditation Board, CEAB**

CEAB assesses engineering programs within and outside of Canada. Engineering programs within Canada that request accreditation by CEAB are assessed in an elaborate process that includes reviewing their curriculum, faculty and facilities. It is a quality checking, management and assurance process with a goal to ensure every single graduate of the program, without exception, meets every requirement for accreditation [1]. Canada and other countries with substantially equivalent accreditation processes for engineering programs may enter into mutual recognition agreements (MRAs). There is an extensive process under which CEAB determines whether the accreditation process is substantially equivalent to the Canadian process. Graduates of accredited programs covered by MRAs are generally not assigned examinations by APEGA [1]. Czechoslovakia, Mihaly’s place of origin, did not apply to go through this process, and there is no MRA between Czechoslovakia and Canada. The Slovak Technical University of Bratislava, which Mihaly attended, has never applied to CEAB and has not been assessed as a substantially equivalent program [1].

### **National Council of Examiner for Engineering and Surveying, NCEES**

NCEES is a group that develops, administers and scores examinations used for engineering and surveying licensure in the United States. More specifically, they facilitate professional mobility and supports the standardization of US licensure procedures. They prioritize “...safeguard[ing] the health, safety and welfare of the public” [9]. NCEES outlines the accreditation process for foreign engineers in the United States and requires the following: bachelor’s or master’s degree in engineering from a program accredited by the Engineering Accreditation Commission, an acceptable result on the Fundamentals of Engineering (FE) or Principles and Practice of Engineering (PE) exam, and 4 years of acceptable work experience in the applicant’s engineering discipline. They would likely have a similar perspective to other accreditation boards and would likely support APEGA in this case who has an equivalent role in Canada and uses the FE exam that they create.

### **Canadian Academic Faculty**

The University of Calgary’s Schulich School of Engineering mission is to educate future engineering leaders and through pivotal research findings make a significant positive impact in discovering solutions to complex problems facing our planet and society today. University of Calgary prepares students to be skilled professionals ready for employment, leaders in engineering, and engaged citizens [11]. University of Alberta’s mission includes providing high-quality service to the engineering profession and the external community [4]. The Faculty takes the safety and well-being of students, staff, faculty members and guests seriously. Delivering a safe and secure environment is valued by both universities as it is a core part of the students’ training, and overall

education experience. Confirmatory examinations are developed by individuals at the University of Alberta and University of Calgary. They are designed to cover the subject matter that APEGA would expect to see in someone who has graduated from a Canadian-accredited program. Exams are developed to assure competency of professional engineers, and thus, public safety. Considering the universities' missions and the importance of core values of both universities, it is likely that they would support APEGA and require foreign students to write and pass standardized exams. They provide Alberta students a very high quality education, and would want foreign students, who would be competing for similar jobs as local students to have the same level of educational standard.

## **BACKGROUND**

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Mr. Ladislav Mihaly, an engineer, was born and educated in corrosion engineering in former Czechoslovakia. He has 25 years of work experience in piping design and fabrication, and previously held senior positions in several international companies. In May 1999, he moved to Canada and applied to APEGA for registration as a professional engineer. He was required to take the National Professional Practice Exam (NPPE), 3 confirmatory exams, and a course in Engineering Economics by May 2001. However, he failed the NPPE exam, and did not attend his second test attempt. He further failed to show up to the confirmatory exams, and did not complete the needed requirements before the application deactivation deadline. A year later, Mihaly reactivated his application to again seek to register with APEGA, but again failed on his next few test attempts. In 2006, he reactivated his application yet again, and was asked to take similar exams and gain one year's worth of Canadian engineering experience by August 2007. He filed a complaint with the Alberta Human Rights Commission on August 2008 against APEGA stating that, "APEGA discriminated against him based on his place of origin when it denied him registration as a professional engineer" [1]. Mihaly also cited hardships experienced by him and his family as a result of APEGA's actions, such as being unemployed for 3 years and living in low-income conditions.

The Alberta Human Rights Commission or the Tribunal decided in favor of Mihaly. The Tribunal found that APEGA's method of assessing educational credentials does not provide individualized assessment or exploration of other options, and constituted the case to be discrimination against Mihaly. The Tribunal found that APEGA discriminated against Mr. Mihaly on the grounds of his place of origin, by refusing to recognize his education as the equivalent of an engineering degree from an accredited Canadian university, and by requiring him to write certain examinations to confirm his academic credentials. He was discriminated against having to take the exam due to his place of origin, but the Tribunal did not support the connection between his place of origin and lack of employment as there are various different factors involved in employing an individual. The Tribunal's decision was appealed by APEGA in July, 2015 and Mihaly submitted a cross-appeal on the same day against APEGA. The Court of Queen's Bench made a decision regarding the appeal and favored APEGA's claims, dismissing the judgment of Tribunal [1].

The Court of Queen's Bench reversed the Tribunal's decision. They reviewed the process of decision making that the Tribunal went through and focused on procedural fairness, jurisdiction, test for prima facie discrimination, and justification. They concluded that the Tribunal's decision fulfilled the requirements for procedural fairness and jurisdiction, but fell short for the requirements of prima facie discrimination and justification because the reasoning for the decision mixed fact with opinion, and did not provide sufficient evidence [1]. When the Court of Queen's

Bench reviewed the Tribunal's interpretation for discrimination, they found error in the fact that they did not even seek all relevant information, such as APEGA's motivations for applying standardized exams. APEGA's motivations for these exams is to have a basis to compare the qualifications of engineers from foreign countries to Canadian engineering accreditation standards. The Court of Queen's Bench was also sympathetic to the amount of effort that goes into determining whether a program is accredited, and supported that APEGA did not have the required amount of resources to accommodate every applicant from a foreign country, especially those who aren't on the MRA list [1]. They reversed the Tribunal's decision as the ruling was based on errors and made unreasonable assumptions about the capabilities of APEGA. In response to the Alberta Court of Queen's Bench decision, Mihaly again filed an appeal, elevating this case to the Alberta Court of Appeal. However, his application for appeal was denied when he failed to follow up.

### **COURT OF QUEEN'S BENCH DECISION**

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The Alberta Human Rights Commission or Tribunal passed judgment on a case of discrimination submitted by Ladislav Mihaly against APEGA. Mihaly cited that he experienced discrimination based on his place of origin because APEGA required him to take standardized exams to prove his academic qualifications, which were from a university they had not made accreditation agreements with. APEGA sought an appeal to the Tribunal's decision from the Court of Queen's Bench, who sided with them, reversed the Tribunal's decision, and declared their decision as final. They rejected Mihaly's cross-appeal on the grounds that the justification for discrimination he claimed did not have adequate reasoning. During the human rights case review, the Tribunal ruled in favor with Mihaly and supported his claim that the, "...Examination Standard and the Experience Standard used by [APEGA] to assess his educational credentials, without more individualized assessment or exploration of other options, constitutes discrimination" [1]. In response to the Tribunal's decision, the Court of Queen's Bench's reviewed their decision making process, and focused on procedural fairness, jurisdiction, test for prima facie discrimination, and justification. They concluded that the Tribunal's decision fulfilled the requirements for procedural fairness and jurisdiction, but fell short for the requirements of prima facie discrimination and justification because their reasoning mixed fact with opinion and was not supported by sufficient evidence.

Looking at the first standard, APEGA claimed that the Tribunal did not follow procedural fairness as they made a decision based on facts that were not even brought up by APEGA or Mihaly during the review, nor did the Tribunal give APEGA an opportunity to respond. More specifically, the Tribunal concluded that examinations were administered for the sole purpose of correcting a perceived academic deficiency. APEGA claims that they were not asked to explain this point, which resulted in a misinterpretation because the requirement that they had outlined was for confirmatory exams or exams that corrected a perceived academic deficiency, with "or" being the operative word. In response, The Court of Queen's Bench found that the Tribunal actually followed procedural fairness standards and did not agree with APEGA's complaints [1]. They explain that Tribunals or courts are not required to hear parties out on every point that they refer to when making a decision, especially when the point was brought up as part of the initial hearing. Procedural fairness would only come into question if the grounds were completely new and not part of the case altogether, but because the point regarding examinations was part of the basis for prima facie discrimination, it was part of the case and did not fall under new grounds [1]. Therefore, the Court of Queen's Bench concluded that APEGA was not able to establish that procedural fairness was breached by the Tribunal.

APEGA's next claim was that the Tribunal had no jurisdiction over Mihaly's complaint because the Alberta Human Rights Act does not protect against discrimination based upon the place of origin of academic qualifications. The Court of Queen's Bench's response found that APEGA was again unsuccessful and unable to prove that the Tribunal lacked jurisdiction. According to the Court of Queen's Bench, discrimination is encompassing and not limited to the rules listed in the Alberta Human Rights Act. When referring to the prima facie legal test, it did not define that the place of origin must include the place of education, so the place of origin can be taken more broadly. Since Mihaly's place of origin, Czechoslovakia, was what defined how his credentials were evaluated, which led to the claimed discrimination, there was a clear link between his place of origin and the adverse impact of being discriminated against and treated unfairly [1]. Therefore, the place of origin is within scope for the Tribunal to have taken into consideration when making their decision.

Besides the scope, APEGA also questioned the Tribunal's analysis of prima facie discrimination itself, particularly with regards to using the Moore test, establishing that Mihaly experienced an adverse impact, and that APEGA's motives were inherently discriminatory. When this was reviewed by the Court of Queen's Bench, they decided that the Tribunal applied the correct test, but was flawed in the actual interpretation of the test. Prima facie discrimination is established if the complainant has a protected characteristic, was adversely impacted, and that characteristic caused the adverse impact. The Tribunal had found that all three requirements were present in the case because Mihaly had a protected characteristic in his place of origin, APEGA caused adverse impact to Mihaly in the form of having to take an examination, and there was a distinct connection between the two because Mihaly was asked to take the exam based on his place of origin. In response to this claim, the Court of Queen's Bench challenged the link between the place of origin and the examination [1]. They reasoned that the Tribunal failed to address the motivations of APEGA in administering the exams, which are based on them lacking knowledge of foreign programs that applicants went through. Essentially, APEGA does not make assumptions about the individual applicants and their academic qualifications, but rather seeks to collect this information and assess the equivalence of the programs to their accepted standard [1]. The Court of Queen's Bench disagrees with the Tribunal's failure to address this evidence in their reasoning. Also, the Tribunal failed to apply the Moore test to APEGA's additional requirements for an NPPE exam and Canadian work experience, which is relevant because Mihaly brought up unemployment as an adverse impact. APEGA is found to be non-discriminatory when administering the NPPE exam because this is done to all applicants [1]. For work experience, engineers are actually free to work under supervision of a licensed engineer and there is no clear connection between Mihaly's place of origin and lack of employment due to the many uncertainties that go into being employed [1]. In conclusion, the Court of Queen's Bench refutes the Tribunal's finding of prima facie discrimination as unreasonable because they did not take into account all relevant evidence and did not prove causal connection between the complainant's protected characteristic and the adverse impact he experienced.

Finally, the Court of Queen's Bench found that the Tribunal judgments were unjustified as they were made with reasoning containing logical errors, missing evidence, and omission of relevant considerations. When applying the test for justification, the standard held against the defendant must have a goal that is rationally connected to their function, true belief in this connection, and

be reasonable for the defendant to accomplish without causing undue hardship. The Tribunal and Court of Queen's Bench both agreed that APEGA fulfilled the first two requirements of the test in applying standards for testing the competency of international engineers because their function as an organization is to protect the public's safety by assuring this competency, which they fulfill in good faith. However, the Tribunal claimed that APEGA did not do enough to accommodate Mihaly and should have made more efforts to individually assess his credentials, make more agreements with foreign countries regarding engineer accreditation, and create a committee focused on mentoring foreign engineers. The Court of Queen's Bench countered this reasoning, saying that it is unreasonable to expect APEGA to have the resources to make these accommodations for about 375 applicants a year and is also not part of their role as a regulatory body [1]. The Tribunal even criticized the FE exam as unfair because it did not test the functional skills of an engineer. According to the Court of Queen's Bench, the data shows that the pass rate for the exam is actually 85% and is developed to match current engineering curriculum, and therefore is reasonable in testing the functional skills of an engineer in an objective manner [1]. In conclusion, the Court of Queen's Bench discovered that the Tribunal did not have strong justification for their decisions and ignored evidence that pointed to the unreasonableness of their requests towards APEGA.

## **REFLECTION AND OPINION**

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### *Question 1: Reflection on Court Decisions*

We agree with the decisions made by the Court of Queen's Bench and the Alberta Court of Appeal because they reviewed Mihaly's case with an objective perspective and made sure to base their decisions and recommendations on reliable evidence and data. The Court of Queen's Bench made the effort to look into the details of the key aspects of the case and the motivations for the defendant and claimant. For example, they assessed APEGA's motivations for their standard examinations and deemed that they put importance on public safety and this was aligned with their functional role as an organization. This helped them distinguish whether or not APEGA's actions were discriminatory. In fact, throughout all their thought processes, their priority was to uphold the law and put their reasoning through rigor using tests, such as the Moore and justification test. The systematic approach that they took showed their experience and full understanding of the context of each claim made by APEGA and Mihaly. For example, they knew about APEGA's full process for standardization including exams, and work experience requirements, and even how many applications they had to review in a year. They also knew about Mihaly's living and familial situation and facts about how it had changed as a result of APEGA's actions, such as his son's mental disorders and losing two fingers in a bakery job. Aside from their comprehensive approach, we also agree with their position in support for APEGA and what they stand for. We too believe standards for engineering accreditation should take priority because being an engineer is in a professional role where their actions can affect the well-being and lives of many people, especially in Mihaly's specialization of pipeline engineering. In fact, about 372 deaths and 1438 pipeline-related injuries have occurred in North America alone between the years 1986 and 2016 [5]. Therefore, it is paramount that thorough vetting is done to guarantee the capabilities and due diligence of engineers – both that have graduated locally and those that come from other countries, because they work with projects that have a great reach of impact. As said by Justice Frans Slatter of the Alberta Court of Appeal, “Even Canadian educational institutions must demonstrate the equivalency of their programs, and Canadians who receive foreign training must also demonstrate equivalency” [2].



We agree with the goals of the Alberta Human Rights Commission as a whole, but we find that the explanations and the rationale for the decisions they made with Mihaly's case as deficient in evidence and the connections between the evidence they did acknowledge and their interpretations were not direct. For example, they instantly assumed that APEGA's motivations for standard examinations were discriminatory because they categorized Mihaly based on his place of origin. Although both facts were true independently and were related, it wasn't a cause and effect relationship as proven by the Court of Queen's Bench in their prima facie testing. As outlined in their mandate, the Alberta Human Rights Commission represents the freedoms of the individual and will always aim to "...reduce discrimination and foster equality" [7]. Therefore, they will make decisions based on this mandate and protect the individual from any situation or treatment that appears to be discriminatory. We agree that people's right to equality is important and should be protected, but we also include people's right to a safe life with no threat to their physical well-being as one to be protected. In conclusion, due to the mentioned impact that engineers can make to people's right to a safe life, we agree that individual's right to equal treatment should be preserved as outlined by the Commission. However, this should also encompass their right to a safe life, which can be achieved by ensuring competent professionals in industry.

#### *Question 2: Accommodation of Foreign Engineers*

APEGA should definitely accommodate foreign-trained engineers and geoscientists. Currently, the population of Alberta is about 4.3 million [3]. Alberta has an increasing demand for engineers as it is a powerhouse in natural resource development and infrastructure. It is important to meet Alberta's need for human resources, and looking for talent in foreign-trained engineers will help support our constantly growing industries. In fact, Canada is a country that celebrates diversity because we recognize the value that different perspectives bring, and accommodating those from foreign countries will enrich the way we solving complex issues. However, public safety should always be a priority and therefore, we agree that APEGA should keep a rigorous screening process when accommodating foreign engineers because to ensure their competency and in turn, public safety. We find value in APEGA's requirement for Canadian work experience and job shadowing because we believe there is a, "...need for [the] applicant to be able to understand Canadian codes and the way engineering is practiced amongst a team of individuals, which may include more than engineers" [1]. In addition, having standardized exams is fair because there is evidence that internationally educated graduates with entry level competency would not have any difficulty passing the FE Exam. The current overall process is also fair because out of 1500 applications a year from internationally educated graduates, 60% are registered with no issues, 25% are assigned the FE Exam or confirmatory examinations, and 15% have sufficient engineering experience to have examinations waived [1]. To address the challenges current applicants face as they complete the requirements for licensure, we believe that APEGA can provide extra support and guidance. APEGA can strive to provide more comprehensive information on their website or in an accessible area for commonly asked questions by applicants, and can even set up an online forum for current and past applicants to help each other through the process. APEGA can initiate connections within the Alberta community – universities and workplaces, as a starting point for applicants to develop mentorship opportunities. They do not have to run these mentorship programs, but pointing the applicants in the right direction, giving them a list of company names, and establishing good rapport with the community on behalf of the applicants would be helpful. APEGA could also partner with already existing third party support organizations, like career coaching, resume building, or networking events and provide applicants with this information as well.

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