

Professional Association Audit Report – Applied Science Technologists and Technicians of BC

1. Introduction

This report is one component of the Professional Reliance Review announced by the Minister of Environment and Climate Change Strategy George Heyman in October 2017. The Province is conducting a review of the professional reliance model of the natural resource sector to ensure the highest professional, technical and ethical standards are being applied to resource development in British Columbia. The Review has several components, including assessing the enabling legislation and performance of professional associations that govern qualified professionals, including the BC Institute of Agrologists (BCIA), the Applied Science Technologists & Technicians of BC (ASTTBC), the College of Applied Biology (CAB), the Engineers and Geoscientists of BC (EGBC), and the Association of BC Forest Professionals (ABCFP). This report provides the results of an examination of the Applied Science Technologists and Technicians of BC.

Professional reliance takes different forms across the natural resources sector, but in general terms is a regulatory model in which government sets the natural resource management objectives or results to be achieved, and professionals hired by proponents decide how those objectives or results will be met. Generally, government oversight focuses on monitoring, compliance and enforcement, rather than reviewing and approving plans or project designs. In doing so, government relies on the professionalism of the qualified professional (QP), the professional and ethical codes they are required to follow, and oversight by the professional associations to which they belong.

The Professional Reliance Review will make recommendations on:

1. Whether professional associations that oversee QPs employ best practices to protect the public interest;
2. Whether government oversight of professional associations is adequate; and
3. Conditions governing the involvement of QPs in government's resource management decisions and the appropriate level of government oversight to assure the public their interests are protected.

2. Approach and Scope

A multi-agency government team of 4 members met with representatives of ASTTBC to discuss how the association is meeting its obligations under the *Applied Science Technologists and Technicians Act (Act)*, and a number of issues relating to professional governance and professional reliance. A number of questions were provided in advance, and ASTTBC provided considerable information and documents both before and during the interview, which was held on November 24, 2017.

The focus of this report is to assess whether and how ASTTBC is meeting its obligations under the *Act*, to help inform the Professional Reliance Review's consideration of Issue #1 above. To do this, the

interview team considered the current legislation and supporting regulations, formal submissions from the association, documents publically available on the association website, and conducted interviews with association staff. This audit assessed the enabling legislation and activities of ASTTBC in fulfilling its legal obligations, focussing on: standards of enrollment, including continuing professional development and maintaining competency; code of ethics, including conflict of interest for professionals, reporting and reviewing conflicts, transparent disclosure, transparency in financial and employment relationships, and the mechanisms that govern such relationships; standards of professional conduct and their enforceability; and liability and professional negligence.

This report does not address whether the *Act*, council bylaws or ASTTBC policies and procedures employ best management practices to protect the public interest, but provides important information for that evaluation. This report is one part of a broader review that will consider comments from professionals, members of the public, government employees, and other professional regulators and governance experts, all of which will inform any recommendations that result from the project.

This audit is one part of a broader review of professional reliance; comments from professional members of the association, members of the public, and regulators are not included within the scope of this audit but will inform any recommendations that result from the project.

3. ASTTBC Governance Context

Formed in 1958 under the *Society Act*, ASTTBC was incorporated as a self-governing professional association under the *Act* in 1985. The *Act* provides that the primary purpose of the association is “to maintain, improve, and increase the knowledge, ability and competence of the members of the association; to regulate standards of training and practice to and for its members and to protect the interests of the public.”

The association is overseen by a Council, which consists of 12 certified members and 3 public representatives appointed by council who are not certified members. No members of the Council are appointed by government. There are approximately 10,200 members registered with ASTTBC. The Association has a basic foundation for the regulation of its mandate with a self-financed annual budget of about \$3.5M, and a full time equivalent (FTE) of 22 staff. The *Act* provides the ASTTBC Council with the power to make regulations as well as bylaws. Within government, the *Act* is the responsibility of the Ministry of Advanced Education, Skills and Training.

4. Membership

The *Act* enables ASTTBC to register applied science technologists and certified technicians. Section 18 of the *Act* enables ASTTBC to make regulations respecting the establishment of categories of and conditions for the enrolment of members. ASTTBC’s regulations set out different categories of membership, including the technical specialist category, under which there are 10 different technical specialist designations each with distinct certification requirements and practice responsibilities. The Regulations provide the authority for members to use exclusive titles, however there is no explicit

authority in the *Act* for ASTTBC to create the right to title other than Applied Science Technologists and Certified Technicians. Members registered with ASTTBC may use one of two professional designations - the title “applied science technologist” or “AScT”, or the title “certified technician” or “CTech”. The association stated that the professional designation “professional technologist” or “PTech” has been recently established under the regulations as a designation for senior technologists, similar to the PTech in Alberta. The *Act* grants council the authority to establish regulations respecting the establishment of categories for members, as well as conditions of enrolment. In addition to the titles protected under the *Act*, the ASTTBC regulations create a number of other “Technical Specialists” who can be licensed with ASTTBC.

4.1. Enrollment Standards for Professional Membership and Licence

Under the *Act*, the Board of Examiners considers applications for registration of members. The association stated that applicants to the association may come in through two streams: graduates from accredited technology programs offered at a post-secondary institution in BC or from recognized programs outside BC including internationally trained applicants. According to ASTTBC, rates of application are roughly even through both streams. Transfers from jurisdictions outside of BC under the Canadian Free Trade Agreement or other labour mobility agreements represent a third source of applicants.

Applied Science Technologists and Certified Technicians are considered certified members and are statutory designations defined in the *Act*. These members must demonstrate a minimum educational standard either as a technologist or a technician and complete a minimum of two years of progressive, relevant work experience in an approved discipline to be certified and registered for membership as a Technologist or Technician. The experiential requirement for the Professional Technologist is a total of 6 years. Requirements for membership in a technical specialty vary depending on the particular specialty. The criteria for certification and registration for technical specialist designations includes post-secondary education or training plus work experience.

The association stated that applicants must study the Professional Practice and Ethics module and pass the accompanying exam or equivalent from their originating jurisdiction. The Board of Examiners also has the discretion in the *Act* to set other requirements for membership in their particular classification.

The Board of Examiners must approve the registration of a person as a member if the person is of good character and reputation, the person is a Canadian citizen or permanent resident, and the person’s education and experience meet the requirements of the regulations and bylaws. The board may deny an application depending on a criminal record review, and may require an in-person interview to resolve an application for acceptance or denial.

The association indicated that the Board of Examiners will rarely reject an applicant outright. Applicants who have insufficient education or experience in one category of membership may be placed into another membership category, such as an associate member.

ASTTBC is subject to the *Trade, Investment and Labour Mobility Agreement (TILMA)* and other labour mobility agreements, and indicated they are required to accept applicants coming through other

jurisdictions. Transfer applicants request a stamped and sealed transfer form from the registrar of the sending province, showing that they are in good standing with their provincial association. Where education and experience is comparable to the designation requested, the applicant is automatically transferred in. Where requirements are not compatible, the association indicated that the applicant will be transferred in at another level, where appropriate, and given the information they need to upgrade. ASTTBC stated during the interview that for two of the technical specialist categories of membership there have been instances under labour mobility agreements such as TILMA where residents of BC have gone to Alberta or Ontario for certification and transferred into BC. The association also stated that for one such technical specialty they have instituted practice assessment reviews within six months for all applicants in or out of province to assure compliance with standards of practice. The assessments are done at no cost to the applicant. Prior to TILMA, the 10 provincial associations reportedly came together to create transfer agreements, which facilitated members moving between provinces.

4.1.1. Designations and Limited Licences

Technical Specialists are approved by the Special Certification Board and must meet the standard of training, experience, and employment for that field of practice. The regulations also create two additional senior designations: a Registered Technology Manager and a Professional Technologist. These designations require additional experience and competency development.

The association's designations are established under statutory and regulatory authorities, and represent a wide variety of technical roles. These technical roles include specializations in building design, construction safety, fire protection, house and property inspection, onsite wastewater, public works inspections, site improvement surveys, steel detailing, and underground utility locating.

4.2. Continuing Professional Development and Training

The *Act* provides the authority to make regulations providing for the continuing professional development (CPD) and training of members. The Regulations allow the council, by policy, to establish the minimum number of required CPD hours. This policy was made mandatory in 2015, and is available on the ASTTBC website. ASTTBC indicates that it tracks all CPD online, with members logging CPD throughout the year through an online logbook. Members must achieve 20 points per year, averaged over the previous 5 years, with 12 points awarded annually for being active. The association has published guidelines to support members. While ASTTBC is not currently auditing all members for compliance with this policy, the Association stated that a member's engagement with CPD is always reviewed when a complaint is filed against the member or there is some other reason to review a members file.

4.3. Professional Review and Audits

The *Act* does not explicitly grant the power for the association to conduct a professional review. It does grant authority for the council to make regulations governing the conduct of members in their practice by prescribing a code of ethics, rules of conduct and standards of practice, and by providing for the suspension, expulsion or other penalty for misconduct, incapacity or incompetence. Through the regulations, a practice review board is established by the Council, consisting of the chairperson and a minimum of 5 members in good standing.

ASTTBC indicates that the mandate of the Practice Review Board is the enforcement of the Code of Ethics, development of practice standards, and the adherence to best practices by the membership. The practice review board may evaluate the practice of a specific member to determine compliance. This may involve appointing a member or staff person to conduct an evaluation, requiring the member to submit to an interview on the content and conduct of their practice, making documents available, and identifying clients or other persons with knowledge of their practice. As a part of the practice review, the Practice Review Board may prepare recommendations for the improvement of the practice of the member.

Practice reviews may be implemented randomly, at the initiative of the practice review board, or may be initiated in response to a complaint or in the absence of a complaint due to a suspicion of questionable practice. Members or registrants may also volunteer to be audited.

As the CPD requirements are averaged over five years, ASTTBC plans to begin applying more scrutiny to compliance with CPD standards once the policy has been in place for five years (2020). With the online tracking system in place, ASTTBC stated that they will begin auditing CPD requirements for all members, with the possibility of engaging in a disciplinary process for non-performers or non-reporters. ASTTBC stated that at a high level, audits will look at how many members are meeting the CPD standards and how many are not meeting or not adequately recording their professional development activities. More in depth audits will examine the type of development activities members are engaging in to achieve the required CPD credits.

5. Protecting the Public Interest

Government and the public share an expectation that a key role of regulatory bodies such as ASTTBC is to ensure the competency and integrity of professionals, in order to protect the public interest.

Although the *Act* does not explicitly define the public interest, the purpose and objects of the association as defined in the *Act* include protecting the public.

The association stated that, in its view, there are three aspects to the public interest. The first is the consideration of potential harm to the public, and to worker health and safety. The second consideration is concern for the environment, and the third is the competency of the member to work within applicable regulations, the *Act* and other legislation, and standards of practice. The association also considers compliance to the Code of Ethics to evaluate member actions with regards to the public interest.

6. Code of Ethics

The *Act* defines establishing and maintaining standards of ethics as one of the objects of the association, and enables the council to make regulations governing the conduct of members by prescribing a code of ethics. The stated purpose of the Code of Ethics is to “give general statements of the principles of ethical conduct in order that the members of ASTTBC may fulfill their duty to the public, the profession, and other ASTTBC Members.” It specifies that the members are bound by the provisions of the Code of Ethics. The association reports that complaints regarding a member’s breach of the Code of Ethics are

dealt with by the Practice Review Board, and contraventions of the Code of Ethics may lead to reprimands and censure conditions, and can lead to cancellation of membership.

There are 10 principles in the Code of Ethics, which define how members and the Association should work in the public interest. ASTTBC has also published Guidelines for the Code of Ethics, intended to assist members in interpreting and adhering to the code. In the Guidelines, each principle is described in detail, providing additional context and practical applications of the Code.

6.1. Conflicts of Interest

Conflicts of interest are situations in which the actions, aims, or goals of parties seem incompatible. The *Act* does not specifically mention conflicts of interest, only that the council can make rules pertaining to the conduct of members. Principle 4 of the Code of Ethics governs conflicts of interest, stating that members must avoid a conflict of interest and where such conflict arises and members must fully disclose the circumstances without delay to the employer or client. The Guidelines for Code of Ethics describe in more detail what may constitute a conflict of interest, and states that where members are instructed to proceed in spite of a conflict, the client's or employer's interests shall be held above the interests of the member. ASTTBC has stated that the potential for conflict of interest exists regardless of being in independent practice or being an employee of a company or proponent.

ASTTBC indicates that the professional practice and ethics course applicants must take to gain membership addresses conflicts of interest, and includes case studies and exam questions specifically relating to this topic. Failure to disclose a conflict would subject a member to an investigation by the Practice Review Board. The association also stated that conflicts of interest are a standing agenda item to be discussed by the boards. Members must physically remove themselves if a discussion takes place where they have a conflict of interest.

6.2. Employer and Proponent Relationships

Principle 5 of the Code of Ethics addresses the principle of appropriate and adequate compensation for performance of work. The Code of Ethics guideline for this principle does not address instances where compensation could be tied to a specific or desired outcome, and ASTTBC is not aware of any instances where this has been offered or accepted.

The *Act*, regulations, and guidelines do not address the transparency of financial and employment relationships. ASTTBC states that it does encourage the use of written contracts for all work and employment relationships and cautions against undertaking contracts or submitting proposals without a firm price in place.

6.3. Professional Conduct

The *Act* specifically grants authority for the council to make regulations relating to standards of practice, and one of the objectives of the association stated in the *Act* is to regulate standards of training and practice of and for its members. ASTTBC has developed several practice guidelines – two for technical specialist certification groups, and eight others for engineering technology disciplines. ASTTBC indicated that it has worked with the Province in the past to provide input into practice related content for regulations and the development of the Ministry of Health's Standard Practice Manual for Onsite

Wastewater Systems. Guidelines for documenting work are included in recently developed standards of practice and the association intends to continue to include these guidelines in the future.

The association indicated that it plans to develop six new practice guides by the end of 2018, some of which will relate to the natural resource sector such as guidelines for Mineral Resources Technology and Environmental Engineering Technology. Practice guides do not require ratification or endorsement by membership as it is not a legislative requirement. ASTTBC stated that guidelines are prepared with input from subject matter experts in consultation with stakeholders, reviewed by internal certification and practice review boards, and given final approval by the Council of ASTTBC. The Association believes that standards of practice and guidelines are essential as they act as a framework for decisions about member conduct on practice reviews and in response to complaints.

7. Complaints and Discipline

The *Act* does not explicitly address complaints, but it does give the authority to provide for suspension, expulsion, or other penalty for misconduct, incapacity, or incompetence in the regulations. The Regulations outline in section 4 a comprehensive complaints system including a Practice Review Board that evaluates complaints and recommends hearings, penalties, reporting of case summaries, and appeals. ASTTBC maintains two full time staff members that manage the complaint and administrative tribunal process, as well as a compliance officer that provides expertise on a part-time basis. ASTTBC stated that they maintain a network of quality assurance specialists in each of the technical specialties to provide expert knowledge who can be engaged in investigations and member practice audits. These quality assurance specialists are remunerated for their services. ASTTBC has identified that outside of the complaints process, resourcing is a constraint in being able to undertake proactive actions to identify poor professional practice outside of the complaints process.

All complaints are posted publicly and remain available online indefinitely. The association stated that names of registrants are withheld, unless there is a disciplinary hearing or membership is revoked as a result of the complaint – in these cases the name is published. All complaints are considered formal and are investigated. If a complaint shows a potential risk to the public, ASTTBC has stated that they will immediately notify the appropriate government authorities. If a complaint is made anonymously ASTTBC will take on the complaint on behalf of the complainant in order to maintain their anonymity and provide whistle blower protection, to the extent possible, to encourage reporting of poor professional practice. However, the association has stated in small communities it is often possible to speculate who is making the complaint. ASTTBC also stated that there have been instances where Government employees have indicated a reluctance to file a formal complaint. In rare cases Government employees have advised ASTTBC that they have been instructed to not file a formal complaint. ASTTBC is of the opinion that willingness to make a complaint is influenced by perceived or potential repercussions. It is a requirement under Principle 9 of the Code of Ethics that members shall report hazardous, illegal, or unethical professional decisions or behaviours. ATSSBC indicated that when the association learns of a potential complaint the Registrar will open a file and pursue the matter.

While ASTTBC states that all complaints are investigated, there are alternate resolutions available other than the formal disciplinary process, such as a stipulated order or censure conditions. The Practice Review Board is the primary decision making body for all complaints.

The association indicated that in its view, government, and not regulatory bodies, should take the lead in framing the requirements of professional associations to inform the public on when complaints should be made about poor professional practice for all professions.

8. Liability and Negligence

Professional liability refers to the legal responsibility of a professional to be held accountable for the outcomes of his or her professional work, specifically any errors and omissions. Professional negligence is where a professional fails to provide duty of care to their client, meaning that harm to people or property has occurred as a result of improper advice and precautions by the professional. The expected standard for professional practice is defined as what another reasonable person in that profession would do.

8.1. Liability Insurance

Professional liability insurance is recommended for members of ASTTBC, but is not mandatory with the exception of certified home inspectors who are required to have liability insurance in order to be licensed by Consumer Protection BC. To encourage members to maintain professional liability insurance ASTTBC has partnered with insurance agents to obtain preferential rates for members. ASTTBC has posted guidance on its website for members on their obligations to serve the public and clients and their obligations to protect the varying interests, including their own. The association is currently reviewing policy statements around the idea of mandatory professional liability insurance.

8.2. Assurance Statements or Certifications

Registered members of the association who are certified (meaning that they hold a certificate of registration under the *Act*), and in good standing (meaning that the member has paid the applicable dues and is not under suspension), may apply for or order a stamp or seal. Use of stamp or seal is addressed in the Regulations and further described in the guidance document available on ASTTBC website. Regulation 4.4 states that use of stamps or seals is “limited to documents describing work or containing information that is within the scope of practice defined by the member’s academic qualifications, training and experience.” Members may only use the stamp or seal for documents prepared by that member or under their direct supervision and stamps and seals are not transferable and may not be used by anyone other than the individual to whom they are issued.

9. Discussion and Conclusions

This audit found that the association is in compliance with the mandatory requirements of the *Act*. The *Act* provides a basic framework for ASTTBC to regulate its members, and is unique among the professions looked at in the review in that it provides the Council with regulation-making authority as well as the ability to make bylaws. The *Act* provides basic title protection for the A.Sc.T. and C.Tech. designations, but does not define or protect scope of practice for those designations. The association

has requested a defined scope of practice that is independent of the regulatory authority of other professions (e.g. Engineering), and it has included a general scope of practice for certified members within its Regulations.

There is no clear authority under the *Act* for title protection of additional specialties, and the association has made a regulation that provides the authority to create categories of membership. The association has created different types of “technical specialists” and protects their titles through its regulations.

ASTTBC has stated that it considers the public interest at the highest level when managing complaints and discipline. The association considers public interest to be foremost related to health and safety, followed closely by environmental protection.

The Code of Ethics is supported by interpretive guidelines that provide additional context for ASTTBC members. The association has stated that failure to comply with the principles in the Code of Ethics is grounds for a complaint and disciplinary action, including the cancellation of registration. ASTTBC has outlined its complaints process within its regulations. Its *Act* does not prescribe a particular complaints process, other than providing the authority to suspend or cancel. The association stated that they see an opportunity for self-regulating professions to improve complaints and discipline processes by working together on identifying best practices or creating a common framework.

In the course of this audit, ASTTBC submitted some suggestions to government going forward that focus on collaboration between the five professional organizations and government. One such recommendation is the creation of a council, including representatives from government, ASTTBC, EGBC, CAB, BCIA, and ABCFP for ongoing discussion and improvements to the professional reliance model. ASTTBC also suggests that an office of professions be created within government to provide central expertise on professional organizations. Finally, ASTTBC suggests that government look at a model similar to the *Health Professions Act*, where all health professions are governed under one umbrella statute.

The association also stated that it believes the current legislative framework for professional regulation requires modernization, and practice restrictions established historically do not necessarily reflect the needs and skills of the workforce today. ASTTBC has advocated for greater clarity, for example, with regards to the practice of ‘engineering technology’ versus the practice of ‘professional engineering’ and scope of practice in general.

This limited scope audit is one part of a broader review of professional reliance.