



# BYLAWS

Bylaws approved by Council of the Applied Science Technologists and Technicians of British Columbia under the authority of the Professional Governance Act

**APPLIED SCIENCE TECHNOLOGISTS AND TECHNICIANS OF BRITISH COLUMBIA BYLAWS  
UNDER THE *PROFESSIONAL GOVERNANCE ACT***

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## Definitions

1 In these bylaws,

“**Act**” means the *Professional Governance Act*,

“**applied science and engineering technology practice**” means the regulated areas of practice set out in regulation as it relates to ASTTBC,

“**approved education program**” means a program approved by the credentials committee,

“**ASTTBC**” means the Applied Science Technologists and Technicians of British Columbia as continued as a regulatory body under the Act,

“**continuing education**” or “**CPD**” means the continuing education training and continuing professional development of registrants in support of professional practice, ethics and competence,

“**day**” means calendar day unless otherwise specified,

“**deliver**” with reference to a notice or other document includes to mail to a person or leave with a person, or deposit in a person’s mailbox or receptacle at the person’s residence or business or transmit to the most recent electronic mail address provided by the person to ASTTBC,

“**electronic means**” includes, but is not limited to, email communication, videoconference, telephone conference, and webcasting,

“**former registrant**” means a person who was previously registered with ASTTBC, as continued as a regulatory body under the Act,

“**General Regulation**” means the *Professional Governance General Regulation*,

“**historical member**” means a person who, before February 5, 2014, ceased to be a registered member of the professional association continued as ASTTBC,

“**incompetent practice**” in relation to the performance of duties undertaken while engaged in a regulated practice includes:

- a. a lack of competence or fitness, including for reasons of mental health, drug or alcohol addiction, to engage in the regulated practice, and
- b. an incapacity or impairment that prevents a registrant from engaging in the regulated practice with reasonable skill, competence, and safety to the public,

“**in good standing**” means the registration status of a registrant:

- a. is not cancelled, suspended or subject to restrictions, terms or conditions imposed under the Act, regulations or bylaws, and
- b. no notice of non-compliance is outstanding against the registrant under Part VI (Continuing Education and Professional Development),

**“past president”** means the person who served as ASTTBC president in the term immediately prior to the current president,

**“Practice Assessment Review (PAR)”** means a practice assessment or audit of a registrant’s applied science and engineering technology practice and professional conduct,

**“practising registrant”** means a person registered with ASTTBC and who is permitted to engage in applied science and engineering technology practice but does not include trainees, students, honorary registrants, retired registrants and non-practising registrants,

**“practice rights”** means the scope of professional services prescribed by regulation that registrants of ASTTBC are permitted to provide,

**“president”** means the chair of council elected in accordance with the Act, regulations and bylaws,

**“recent historical member”** means a person who was a member of ASTTBC under the *Applied Science Technologists and Technicians Act* and ceased to be a member of ASTTBC on or after February 5, 2014 but before the reference date,

**“record”** means a record as defined in Schedule 1 of the *Freedom of Information and Protection of Privacy Act*,

**“register”** means a database of ASTTBC registrants maintained on a website maintained by ASTTBC that is accessible to the public,

**“registrant”** means a person who is granted admission, enrolment or reinstatement in a class of registrants within a category of registration,

**“regulations”** means the regulations promulgated under the Act,

**“special resolution”** means a resolution that requires a  $\frac{3}{4}$  vote of the persons present and eligible to vote,

**“Superintendent”** means the Superintendent of Professional Governance,

**“written notice”** means to send information in writing including by mail to a person or to transmit to the most recent electronic mail address provided to ASTTBC by the person for the purposes of delivery.

## **PART I – COUNCIL ELECTIONS AND OPERATIONS**

### **Council elections**

- 2 The registrar must administer the annual election for registrant councillor positions and supervise the conduct of the balloting process for elections.
- 2.1 Council may establish additional procedures consistent with the Act, regulations, and bylaws for the purpose of administering the annual election and must publish those procedures on ASTTBC's website.

### **Eligibility for election to council**

- 3 Subject to section 3.1, only practising registrants who are in good standing and retired registrants are eligible to be elected to council.
- 3.1 A registrant is not eligible to be elected as a councillor if, at the deadline for receipt of nominee applications, they:
  - a. are not a resident of British Columbia,
  - b. are the subject of a citation for a discipline hearing which is to be scheduled or which is in process in British Columbia, another province, or a foreign jurisdiction that could result in the registrant's entitlement to practice in the applicable jurisdiction being cancelled, revoked, suspended or subject to restrictions, terms or conditions for any reason other than late payment or non-payment of fees,
  - c. are the subject of an ongoing investigation as a result of a complaint or a duty to report,
  - d. have been found by any court, inside or outside of Canada, to be incapable of managing their own affairs,
  - e. are an undischarged bankrupt, or
  - f. hold the position of a director, officer or employee of a professional association and/or advocacy body of engineers, applied science and/or engineering technologists or technicians, or a technical specialist subclass or group of subclasses, or have held such a position in the previous six months.

### **Nomination procedures**

- 4 The nomination committee must supervise and administer the nomination process for the election of registrant councillors in accordance with the Act, regulations, and bylaws, and may establish additional nomination procedures for that purpose which must be published on ASTTBC's website.
- 4.1 At least 150 days prior to the date of the annual general meeting, the registrar must deliver a notice of election to all registrants which:
  - a. describes the nomination process,



- b. provides the information required by section 6(4) of the General Regulation regarding the current or expected vacancies and the capabilities, qualifications or skills that are necessary or desirable for the candidates to fill those vacancies,
  - c. provides notice of any additional qualifications specified by council, and
  - d. invites eligible registrants to submit applications for nomination.
- 4.2 The accidental omission to deliver a notice of election to, or the non-receipt of such a notice by, any person entitled to receive notice does not invalidate the election, any proceedings relating to the election, or its results.
- 4.3 Applicants seeking to be nominated for election must submit an application for nomination to the chair of the nominations committee at least 90 days prior to the date set for the annual general meeting.
- 4.4 Applications for nomination under section 4.3 must include the following:
- a. a letter demonstrating that the registrant has the capabilities, qualifications or skills that are specified in the notice delivered under section 4.1,
  - b. a resume or *curriculum vitae* setting out the registrant's professional practice history and educational history, and
  - c. a declaration of any real or perceived conflicts of interest the registrant may have.
- 4.5 No application for nomination will be accepted by the nominations committee after the deadline set out in section 4.3.
- 4.6 The nomination committee must, in determining which applicants to nominate for election, consider the merit-based selection principles prescribed under section 5 of the General Regulation, and any additional qualifications specified by council including:
- a. the applicant's skills and experience, and how those skills and experience would meet the current needs of ASTTBC, and
  - b. the applicant's professional and ethical conduct, objectivity, and competence, having regard to the duties and responsibilities of registrant councillors.
- 4.7 Following its review of the applications for nomination, the nomination committee must prepare a list of approved nominees for election to council.
- 4.8 The nomination committee must list at least one nominee for each vacant registrant councillor position.
- 4.9 The nomination committee must make reasonable efforts to include one more nominee than the expected vacancies.

- 4.10 The nomination committee must provide the list of approved nominees to the registrar at least 60 days before the date set for the annual general meeting.
- 4.11 At least 45 days before the date of the annual general meeting, the registrar must publish the names of the nominees selected by the nomination committee to stand for election and any additional information that the nomination committee directs under section 6(4)(f) of the General Regulation on ASTTBC's website.
- 4.12 If the number of nominated candidates is greater than the number of positions to be elected at the close of nominations, the registrar must conduct an election in accordance with the bylaws.
- 4.13 If the number of nominated candidates equals the number of positions, the registrar must declare the nominees to be acclaimed and promptly notify the president.

### **Election by ballot**

- 5 The election by ballot for registrant councillors must be conducted prior to the date set for the annual general meeting.
- 5.1 Only practising registrants in good standing and retired registrants may vote in an election of council members.
- 5.2 At least 30 days prior to the date set for the annual general meeting, unless the vacant positions are filled by acclamation, the registrar must deliver the list of approved nominees together with information about the election process and instructions for voting by electronic means to each registrant who is eligible to vote.
- 5.3 A notice under section 5.2 must also contain:
  - a. a list of all positions to be filled in the election,
  - b. the date voting closes, which must not be less than a week prior to the date set for the annual general meeting, and
  - c. a description of the merit-based selection principles considered by the nomination committee in preparing the list of approved nominees.
- 5.4 Each eligible registrant may vote for as many candidates as there are vacancies until 4:00 p.m. PDT on the closing date specified in the notice.
- 5.5 Ballots received after the closing date and time for voting specified in the notice will not be accepted.
- 5.6 If there is only one vacancy, the candidate who receives the most votes is elected.
- 5.7 If there is more than one vacancy, candidates are elected in order of the number of votes received beginning with the highest number of votes until all vacant positions are filled.
- 5.8 The registrar must count and record the votes cast for each nominee.

- 5.9 The registrar must implement reasonable control and security measures, in accordance with any directions given by council, to safeguard the integrity and confidentiality of the election process, including measures to reasonably assure that:
- a. only registrants who are eligible to vote in the election may cast a ballot,
  - b. the identities of voters and the contents of their ballots are kept secret, and
  - c. systems used to tabulate votes are accurate.
- 5.10 In the case of a tie, the registrar must select the successful candidate by random draw.
- 5.11 The registrar must resolve any dispute or irregularity in the balloting process or election process generally and their decision is final.
- 5.12 The registrar must deliver notice of the election results to council and all candidates within one business day after the results are determined.
- 5.13 Following delivery of notice to council and the candidates of the election results, the registrar must deliver notice to all registrants as soon as practicable.
- 5.14 Despite section 5.13, the election results must be announced by the registrar or the executive director during the annual general meeting.

### **Term of office**

- 6 The term for a councillor to hold office is three years and any successive terms must comply with sections 24(2) and (4) of the Act.
- 6.1 The term of an incoming registrant councillor commences when the incoming registrant councillor takes the oath of office under section 28 of the Act after the results of the election are determined.
- 6.2 The term of a departing registrant councillor ends when the incoming registrant councillor takes the oath of office under section 28 of the Act in the final year of the departing registrant councillor's term.

### **Vacancies**

- 7 Council may temporarily appoint a practising registrant in good standing as a registrant councillor until a successor is elected.
- 7.1 A temporary appointment under section 7 may not be for a term that is longer than the remainder of the term of the registrant councillor who is being replaced.

### **President and vice president**

- 8 Council must elect a president and vice president by majority vote having regard to the merit and experience of the councillors being considered for those positions.

- 8.1 The president must:
- a. chair all council meetings, the annual general meeting, and any special general meetings, and
  - b. perform any other duties as required to carry out the duties of council, including representing ASTTBC at public functions where such representation is required.
- 8.2 If the president is absent or unable to act, the vice president may exercise the powers and must perform the duties of the president.
- 8.3 If both the president and vice president are absent or unable to act, council must determine by majority vote who will act in the role of president until the president or vice president is able and willing to act or the vacancy is otherwise filled under section 8.6.
- 8.4 The term of a president elected by council is two years.
- 8.5 The term of a vice president elected by council is two years.
- 8.6 When a vacancy arises in the role of president or vice president, a president or vice president must be elected by majority vote having regard to the merit and experience of the councillors being considered to fill the vacancy.

#### **Past president**

- 9 If the past president is absent, unable or unwilling to act, council may appoint another individual who has previously served as president to act as the past president for the purposes of section 23 of the Act, the regulations and bylaws.

#### **Recommendation for removal of lay councillor**

- 10 If, after 14 days' notice to the lay councillor, council, by a vote of at least two-thirds of voting councillors determines that one of the circumstances described in section 30(1)(a) of the Act has occurred, council may direct the registrar to recommend to the Superintendent that the lay councillor's appointment be terminated.

#### **Council meetings**

- 11 Council meetings must be called by the executive director at the request of the president or any three councillors.
- 11.1 Council must meet at least four times a year and the executive director must provide at least 21 days' notice of each council meeting to council members, registrants, and the public.
- 11.2 Despite section 11.1, the executive director may call a meeting of council on not less than 24 hours' notice if urgent circumstances exist, or such a meeting is necessary to properly perform a function or duty of council.
- 11.3 The accidental omission to deliver notice of a council meeting to, or the non-receipt of a notice by, any person entitled to receive notice does not invalidate proceedings at that meeting.

- 11.4 A majority of council with at least one lay councillor constitutes a quorum.
- 11.5 If a meeting cannot proceed because there is no quorum, it may be adjourned to a date determined by those present.
- 11.6 Subject to section 11.2, at least 14 days' notice of the new rescheduled date, place, and time must be delivered to the councillors.
- 11.7 On request, the registrar must provide members of the public with the following information in electronic or other written form:
- a. notice of the place, day, and time of a scheduled council meeting,
  - b. a copy of the agenda for the scheduled council meeting, and
  - c. a copy of the approved minutes of any preceding council meeting.
- 11.8 Subject to section 11.9, council meetings must be open to registrants and to the public.
- 11.9 Council may exclude any person or the public from any meeting or part of a meeting if council considers it necessary or appropriate or if it is satisfied that one or more the following matters will be discussed:
- a. financial, personal, or other matters where the desirability of avoiding public disclosure of them either in the interest of any person affected or in the public interest in avoiding public disclosure of those matters outweighs the public interest in the desirability of adhering to the principle that meetings be open to the public,
  - b. information concerning an application by any individual for admission, renewal, reinstatement, reclassification, or enrolment,
  - c. information concerning a complaint against, or an investigation of, any individual under the Act, the disclosure of which would be an unreasonable invasion of the individual's personal privacy,
  - d. information the disclosure of which may prejudice the interests of any person involved in:
    - i. a proceeding under the Act, including a disciplinary proceeding or any review or appeal, or
    - ii. a criminal proceeding, civil action or any administrative proceeding,
  - e. personnel matters,
  - f. property acquisitions or disposals,
  - g. the contents of examinations or assessments,

- h. communications with the Office of the Ombudsperson or the Office of the Information and Privacy Commissioner,
  - i. instructions to or opinions from legal counsel, or any other matter that is subject to solicitor client privilege or litigation privilege, including communications necessary for that purpose,
  - j. negotiations and related discussions respecting the proposed provision of a service or activity that, in the view of council, could reasonably be expected to harm the interests of ASTTBC or other third parties if they were held in public,
  - k. information that ASTTBC would be required or authorized to refuse to disclose to an applicant making a request for records under Part 2 of the *Freedom of Information and Protection of Privacy Act*, and
  - l. information that ASTTBC is otherwise required by law to keep confidential.
- 11.10 If council conducts a meeting or part of a meeting *in camera*, it must record its reasons for doing so in the minutes.
- 11.11 The executive director must ensure that approved minutes of each council meeting are retained on file for at least 15 years from the date of the meeting and published on ASTTBC's website with any necessary redactions.
- 11.12 Council may meet and conduct all business by videoconference, teleconference, or other electronic or similar methods.
- 11.13 The president may move or propose a resolution.
- 11.14 In the case of a tie, the president does not have a casting, or second, vote and the proposed resolution does not pass.
- 11.15 Council may adopt or establish additional rules, policies or procedures, consistent with the Act, regulations and bylaws, for the purpose of regulating the conduct of council meetings.
- 11.16 The executive director must ensure that rules, policies or procedures established or maintained by council for the conduct of meetings are published on ASTTBC's website.

### **Council resolutions**

- 12 Unless otherwise indicated in the bylaws, council resolutions must be decided by majority of the voting councillors present at the time of the vote.
- 12.1 A resolution proposed by a councillor must have a seconder to be put forward to a vote.
- 12.2 Councillors in attendance in person must vote by a show of hands.
- 12.3 A councillor who is attending a meeting by telephone, videoconference, electronic or other similar means may vote verbally or electronically.

- 12.4 A resolution proposed by a councillor may be delivered to all council members for a vote by electronic means without the calling of a meeting of council.
- 12.5 For the purposes of section 12.4, a proposed resolution will be carried or defeated by majority vote of all voting councillors.
- 12.6 A resolution approved by a majority of all voting councillors in writing, including by mail, facsimile, by telephone, videoconference, electronic or other similar means, is valid and binding and of the same effect as if such resolution had been duly passed at a meeting of council.
- 12.7 A declaration by the chair that a council resolution has been carried or defeated and an entry to that effect in the minutes of council are admissible as proof that the resolution was validly carried or defeated.

### **Financial management**

- 13 Council is responsible for the financial management of ASTTBC.
- 13.1 The fiscal year of ASTTBC commences on January 1 and ends on December 31 of each year.
- 13.2 The executive director must prepare and submit an annual budget forecast to council for approval at least 60 days before the commencement of each fiscal year.
- 13.3 Council must approve an operating and capital budget and corresponding fees for each fiscal year and may amend the approved budget from time to time.
- 13.4 Council, or at its discretion, the executive director, may establish and maintain such accounts with a Canadian chartered bank, trust company or credit union as council determines necessary from time to time.
- 13.5 All monies received by or on behalf of ASTTBC must be deposited with a Canadian chartered bank, trust company or credit union as directed by council.
- 13.6 Records of all funds dispersed by or on behalf of ASTTBC must be kept and maintained by the executive director in accordance with policies established by council.
- 13.7 Council may invest funds of ASTTBC in accordance with any council investment policy, which must be consistent with sections 15.1 and 15.2 of the *Trustee Act*.
- 13.8 Council may raise or secure the payment or repayment of money on behalf of and in the name of ASTTBC, in the manner it decides, in order to carry out the purposes of ASTTBC.
- 13.9 The executive director may authorize any budgeted expenditure provided that the executive director is satisfied that the expenditure will not cause the total of the annual operating expense, revenue budget or council approved expenditures to be exceeded.
- 13.10 Financial records must be maintained by the executive director and must be available for inspection by council.

- 13.11 Financial records maintained by the executive director are not to be available for inspection by registrants, other than registrant councillors, except as authorized by council or as required by law.
- 13.12 Council must make the financial records of ASTTBC available to the public in a form approved by council, including but not limited to applying redactions or releasing the information in summary form.

### **Auditor**

- 14 At each annual general meeting, a member of, or a firm regulated by, the Chartered Professional Accountants of British Columbia must be appointed as auditor to perform a review engagement or audit of ASTTBC's annual financial statements.
- 14.1 The executive director must submit ASTTBC's financial statements to the auditor within 60 days of the end of the fiscal year.
- 14.2 A copy of the accountant's review engagement or audit report must be included in ASTTBC's annual report and made publicly available.

### **Annual report to Superintendent**

- 15 On or before April 1 of each year, council must submit an annual report of ASTTBC's general operations to the Superintendent for the preceding calendar year.

### **Annual general meeting**

- 16 The annual general meeting must be held at least once in every calendar year and not more than 15 months after the preceding annual meeting at a time and place approved by council.
- 16.1 The registrar must deliver written notice of the annual general meeting to all registrants and publish the notice on ASTTBC's website at least 30 days before the date set for the meeting.
- 16.2 The notice of annual general meeting must include:
- a. the place, day, and time of the meeting,
  - b. the proposed agenda,
  - c. any resolutions proposed by council, and
  - d. any resolutions proposed by registrants in accordance with section 34 of the Act and section 18 of the bylaws.
- 16.3 The accidental omission to deliver notice of a meeting to, or the non-receipt of a notice by, any person entitled to receive notice of the annual general meeting does not invalidate proceedings at that meeting.
- 16.4 Attendance at the annual general meeting may be by electronic means.



- 16.5 The business at the annual general meeting must include, but is not limited to:
- a. the announcement of registrants elected to council,
  - b. approval of the minutes from the previous annual general meeting,
  - c. review of reports from officers and committees,
  - d. the appointment of an auditor,
  - e. consideration of proposed resolutions, and
  - f. such other matters required by the Act, regulations, bylaws or otherwise specified in the notice of meeting.
- 16.6 Only practising registrants in good standing and retired registrants may vote at annual general meetings.
- 16.7 Voting may be carried out by ballot, show of hands or by electronic or other similar means as determined by the registrar.
- 16.8 Every voting registrant in attendance at an annual general meeting is entitled to cast one vote on each resolution put to a vote at the meeting.
- 16.9 In the case of a tie, the proposed resolution does not pass.
- 16.10 A quorum for an annual general meeting is 25 registrants who are eligible to vote.
- 16.11 No business, other than the adjournment or termination of the meeting, may be conducted at an annual general meeting if there is no quorum.
- 16.12 When a meeting is adjourned, notice of the rescheduled meeting must be delivered as in the case of the original meeting.
- 16.13 Council may adopt or establish additional rules or procedures, consistent with the Act, regulations and bylaws, for the conduct of annual general meetings.
- 16.14 The executive director must ensure that any rules, policies or procedures established or maintained by council for the conduct of annual general meetings are published on ASTTBC's website.

### **Special general meetings**

- 17 A meeting of the registrants, other than an annual general meeting, is a special general meeting.
- 17.1 If the registrar receives a request for a special general meeting in accordance with section 33(4) of the Act, council must schedule a special general meeting to be convened within four months of receipt of the request.

- 17.2 A quorum for a special general meeting is 25 registrants eligible to vote.
- 17.3 If there is no quorum, the special general meeting must be adjourned for 14 days without further notice and quorum at that meeting will consist of those registrants eligible to vote who are present.
- 17.4 Attendance at a special general meeting may be by teleconference, videoconference or other electronic or similar means.
- 17.5 Only practising registrants in good standing and retired registrants may vote at special general meetings.
- 17.6 Voting may be carried out by ballot, show of hands or by electronic or other similar means as determined by the registrar.
- 17.7 Every voting registrant in attendance at a special general meeting is entitled to cast one vote on each resolution put to a vote at the meeting.
- 17.8 In the case of a tie, the proposed resolution does not pass.
- 17.9 Council may adopt or establish additional rules or procedures, consistent with the Act, regulations and bylaws, for the purpose of regulating the conduct of special general meetings.
- 17.10 The executive director must ensure that any rules, policies, or procedures established or maintained by council under section 17.9 are publicly available on ASTTBC's website.

### **Registrant resolutions**

- 18 A registrant who is eligible to vote may deliver to the registrar a written request that a proposed resolution be considered at an annual or special general meeting which must include:
- a. a copy of the proposed resolution,
  - b. confirmation that the registrant proposing the resolution is eligible to vote, and
  - c. the names, registration numbers, and signatures of at least 25 additional registrants who are also eligible to vote as seconders to the proposed resolution.
- 18.1 A written request to propose a resolution must be delivered to the registrar at least 30 days before the date set for the meeting at which the registrant wishes to have the proposed resolution considered.

### **Referendums**

- 19 A referendum required under section 34 of the Act must be conducted in accordance with sections 19.1 to 19.8.
- 19.1 The registrar must supervise and administer all referendums and may establish additional procedures for that purpose which are consistent with the Act, regulations and bylaws.

- 19.2 The executive director must ensure that any rules, policies or procedures established or maintained by council for conducting referendums are published on ASTTBC's website.
- 19.3 If a referendum is required, within 30 days of the requirements being met, the registrar must deliver a notice of referendum to all registrants who are eligible to vote at a general meeting which must include:
- a. a description of the referendum process,
  - b. a copy of the proposed resolution that is the subject of the referendum,
  - c. the date and time voting on the referendum closes, and
  - d. instructions for voting on the referendum by electronic means.
- 19.4 Every registrant who is eligible to vote at a general meeting may vote once in a referendum.
- 19.5 The registrar must implement reasonable control and security measures, in accordance with any directions given by council, to safeguard the integrity and confidentiality of the referendum process, including measures to provide reasonable assurance that:
- a. only registrants who are eligible to vote in the referendum may cast a ballot,
  - b. the identities of voters and the contents of their ballots are kept secret, and
  - c. systems used to tabulate votes are accurate.
- 19.6 The registrar must count and record the votes cast for and against the proposed resolution.
- 19.7 The registrar must resolve any dispute or irregularity in the balloting process or referendum process generally and their decision is final.
- 19.8 The registrar must deliver notice of the results of the referendum to council and all registrants as soon as practicable after the results are known and publish the results on ASTTBC's website.

## PART II – COMMITTEES

### Committee operations

- 20 Council may appoint committee members, including lay committee members.
- 20.1 All committees must have at least one lay committee member.
- 20.2 Other than the lay members appointed by council, committee members must be practising registrants in good standing or retired registrants.
- 20.3 All committee members must be appointed based on their demonstrated merit and experience.
- 20.4 A person appointed to a committee:
  - a. must serve a term not exceeding four years,
  - b. is eligible for reappointment at any time but may not serve more than three consecutive terms, and
  - c. may be removed from a committee by special resolution of council.
- 20.5 A committee member may resign from the committee by providing a written notice of resignation to the registrar.
- 20.6 If a committee position becomes vacant before the end of the committee member's term, council may appoint a new member to the committee.
- 20.7 Council must annually review the composition of committees and the appointments of committee members to ensure that committees are functioning properly.
- 20.8 A majority of committee members including at least one lay member constitutes a quorum.
- 20.9 Subject to the regulations, a member of council may not be a member of any committee.
- 20.10 The executive director or registrar must ensure that committee members have access to legal advice if requested or required.
- 20.11 A committee may meet in the absence of the public and exclude any person who is not a committee member from a meeting or any part of a meeting:
  - a. for the purpose of considering or discussing any matter of a confidential or privileged nature,
  - b. for the purpose of protecting the privacy of any individual whose personal information is being considered or discussed, or
  - c. for any other reason that the committee or panel considers necessary or appropriate.

- 20.12 Committees may meet and adjourn at dates and times that they consider appropriate.
- 20.13 Council may, at its discretion, establish council working groups to assist council in carrying out its functions, the membership and purpose of which it may determine.
- 20.14 Final copies of standards of competence, practice guidelines and other regulated practice guidance documents developed with the assistance of a committee or working group must be published on ASTTBC's website.

### **Committee panels**

- 21 Council or the chair of any of the committees may appoint panels of not less than three members, which must include one lay member.
  - 21.1 A panel may conduct the business of the committee.
  - 21.2 The chair of the committee appointing the panel must designate a chair for the panel.
  - 21.3 A panel of a committee may exercise any power, duty, or function of that committee.
  - 21.4 With the exception of sections 23 to 23.9, the provisions of these bylaws that relate to committee operations must be read as also applying to the operation of committee panels.

### **Committee and panel resolutions**

- 22 Every committee member is entitled to cast one vote on each matter put forward to a vote at a committee meeting.
  - 22.1 Committee members in attendance in person must vote by a show of hands.
  - 22.2 A committee member who is attending a meeting by telephone, videoconference, electronic or other similar means may vote verbally or electronically.
  - 22.3 A resolution proposed by a committee member may be delivered to all committee members for a vote by electronic means without the calling of a meeting.
  - 22.4 A proposed resolution will be carried or defeated by a majority of all voting committee members.
  - 22.5 In the case of a tie vote, the chair or vice chair do not have a second vote and the proposed resolution does not pass.
  - 22.6 A resolution approved by a majority of all voting councillors in writing, including by mail, facsimile or electronic means, is valid and binding and of the same effect as if such resolution had been duly passed at a meeting of the committee.

### **Appointment of committee chairs and vice chairs**

- 23 Council must appoint a chair for each committee from among the committee members appointed under section 20.

- 23.1 Council may also appoint vice chairs for each committee from among the committee members appointed under section 20.
- 23.2 To appoint a chair or vice chair of a committee, council must issue a call for applications to currently appointed committee members.
- 23.3 A call for applications must contain:
- a. a description of the merit-based selection principles prescribed under section 5 of the General Regulation,
  - b. a description of any additional criteria or preferences established by council for the applicable committee chair or vice chair appointment,
  - c. the deadline for the receipt of applications for the committee chair or vice chair appointment, which is to be fixed by council,
  - d. an advertisement of the position to be filled containing the information required under sections 6(4)(b) and (c) of the General Regulation, and
  - e. the process by which committee members may apply for nomination.
- 23.4 The accidental omission to deliver the call for nominations to, or the non-receipt of such notice by, any person entitled to receive notice does not invalidate the appointment process.
- 23.5 An application for nomination must include the information required under sections 6(4)(c)(i) and (ii) of the General Regulation.
- 23.6 The nomination committee must review all valid applications for appointment that are delivered by the specified deadline and provide a list of recommended nominees to council.
- 23.7 Council may only appoint committee chairs and vice chairs from the list of recommended nominees.
- 23.8 If a committee chair or vice chair ceases to be a committee member before the end of their term, council may appoint a new committee chair or vice chair, as the case may be, from the previous list of recommended nominees or issue a new call for nominations in accordance with sections 23 to 23.7.

#### **Nomination committee**

- 24 A nomination committee is established consisting of:
- a. at least four members who are practising registrants in good standing or retired registrants,
  - b. the past president, and
  - c. at least one lay member.

- 24.1 The past president must act as the chair of the nomination committee.
- 24.2 If the past president is unavailable or unable to act as chair of the nomination committee, council must appoint a chair in accordance with sections 23 to 23.8.
- 24.3 In addition to the powers and duties of the nomination committee under the Act and regulations, the nomination committee:
- a. may exercise the powers and must perform the duties specified in this Part and Part I of the bylaws,
  - b. may exercise any other power, authority or jurisdiction authorized by council under section 32(2) of the Act, and
  - c. must perform any other duties assigned to the committee by council.

### **Credentials committee**

- 25 A credentials committee is established consisting of:
- a. at least four members who are practising registrants in good standing or retired registrants, and
  - b. at least one lay member.
- 25.1 The credentials committee may appoint qualified individuals to assess an application for admission, reinstatement or enrolment and provide an assessment report with recommendations for decision to the committee.
- 25.2 The credentials committee may establish working groups comprised of qualified registrants or other experts to conduct assessments of approved educational programs and/or other similar inquiries and provide recommendations to the committee.
- 25.3 In addition to the powers and duties of the credentials committee under the Act and regulations, the credentials committee:
- a. may exercise the powers and must perform the duties specified in this Part and Part IV of the bylaws,
  - b. may exercise any other power, authority or jurisdiction authorized by council under section 32(2) or 44(2) of the Act, and
  - c. must perform any other duties assigned to the committee by council.
- 25.4 The credentials committee may delegate any of its powers and duties under Part IV of the bylaws to the registrar.

### **Audit and practice review committee**

- 26 An audit and practice review committee is established consisting of:

- a. at least four members who are practising registrants in good standing or retired registrants, and
- b. at least one lay member.

26.1 In addition to the powers and duties of the audit and practice review committee under the Act and regulations, the audit and practice review committee:

- a. may exercise the powers and must perform the duties specified in this Part and Part VI of the bylaws,
- b. may exercise any other power, authority or jurisdiction authorized by council under section 32(2) or 63(2) of the Act, and
- c. must perform any other duties assigned to the committee by council.

### **Investigation committee**

27 An investigation committee is established consisting of:

- a. at least four members who are practising registrants in good standing or retired registrants, and
- b. at least one lay member.

27.1 In addition to the powers and duties of the investigation committee under the Act and regulations, the investigation committee:

- a. may exercise the powers and must perform the duties specified in this Part and Part VIII of the bylaws,
- b. may exercise any other power, authority or jurisdiction authorized by council under section 32(2) of the Act, and
- c. must perform any other duties assigned to the committee by council.

27.2 A member of the investigation committee may not sit on the discipline committee.

### **Discipline committee**

28 A discipline committee is established consisting of:

- a. at least four members who are practising registrants in good standing or retired registrants, and
- b. at least one lay member.

28.1 The chair of the discipline committee must appoint discipline committee panels, which includes at least one lay committee member, to conduct discipline hearings.



- 28.2 In addition to the powers and duties of the discipline committee under the Act and regulations, the discipline committee:
- a. may exercise the powers and must perform the duties specified in this Part and Part VIII of the bylaws,
  - b. may exercise any other power, authority or jurisdiction authorized by council under section 32(2) of the Act, and
  - c. must perform any other duties assigned to the committee by council.

## PART III – ADMINISTRATION OF ASTTBC

### Executive Director

- 29 The executive director is appointed by council and is responsible for all administrative and operational matters of ASTTBC including:
- a. carrying out the duties, powers and responsibilities set out in the Act, regulations and bylaws,
  - b. managing the funds of ASTTBC and banking,
  - c. submitting, at each meeting of council, a report of all revenues and expenditures since the last meeting, unless otherwise directed by council,
  - d. ensuring that minutes are taken at each council meeting and retained on file,
  - e. submitting a financial statement to the auditor after the end of each fiscal year, including a copy of the auditor's report from the prior year,
  - f. assisting council in submitting an annual report to the Superintendent of Professional Governance,
  - g. making all human resource decisions in relation to ASTTBC staff and retaining agents, and
  - h. performing such other duties as required by council.
- 29.1 The executive director is the chief executive officer of ASTTBC and may use the title "Chief Executive Officer" when representing ASTTBC.
- 29.2 At the direction of council, the executive director may designate an officer, employee, or agent of ASTTBC to perform all duties and exercise all powers of the executive director.
- 29.3 An officer, employee, or agent of ASTTBC referred to in section 29.2 has the same authority as the executive director when acting on behalf of the executive director.
- 29.4 In the event the position of executive director is vacant, council must temporarily appoint an acting executive director until a successor is appointed by council.

### Registrar and Deputy Registrar

- 30 The registrar is appointed by council and is responsible for carrying out the duties, powers and responsibilities set out in the Act, regulations and bylaws including:
- a. maintaining the ASTTBC register,
  - b. establishing forms for the purposes of the bylaws, and requiring the use of such forms by registrants and other individuals,

- c. keeping the records and seal of ASTTBC,
  - d. ensuring applications for admission, enrolment, renewal and reinstatement are determined in accordance with the Act and bylaws, and
  - e. performing such other duties as required.
- 30.1 The registrar may designate an officer, employee, or agent of ASTTBC to perform all duties and exercise all powers of the registrar.
- 30.2 An officer, employee, or agent of ASTTBC referred to in section 30.1 has the same authority as the registrar when acting on behalf of the registrar.
- 30.3 A deputy registrar may be appointed by council and if so appointed, is authorized to perform:
- a. all duties and exercise all powers of the registrar, subject to the direction of the registrar, and
  - b. all duties and exercise all powers of the registrar, if the registrar is absent or unable to act for any reason.
- 30.4 In the event the position of registrar is vacant and no deputy registrar has been appointed, council must temporarily appoint an acting registrar until a successor is appointed by council.

### **ASTTBC register**

- 31 In this section, “registrant” includes a former registrant..
- 31.1 The registrar is responsible for maintaining the public register on the ASTTBC website.
- 31.2 In addition to the information required to be included in the register under section 31 of the Act, the register must contain the following information for registrants:
- a. the registrant’s legal surname, first name and any other names used for business purposes,
  - b. area of practice, category class and subclass, if applicable, of registration,
  - c. registration effective date and status, including any limits or conditions on the registrant’s applied science and engineering technology practice,
  - d. employer or company name, business address, telephone number, and email address, if applicable, and
  - e. business address where the registrant practices if applicable.
- 31.3 The registrar may waive the requirement to publish a registrant’s business address upon request by the registrant if satisfied that disclosure would raise safety concerns or there are other extenuating circumstances.

- 31.4 For every recent historical member, the registrar must include the following information in the ASTTBC register:
- a. the person's name and that the person is a historical member,
  - b. the category, class and subclass, if applicable, in which the person was registered, and
  - c. a notation of each cancellation or suspension of the person's registration.
- 31.5 A notation of discipline history, if any, and any previous limits or conditions on the practice of a registrant or recent historical member will remain on the register indefinitely including each cancellation or suspension of registration that occurred or was recorded before the enactment of these bylaws.
- 31.6 Where publication is required under 31(3)(f)(i)(B) of the Act, the registrar may determine that it is not in the public interest for the information to be publicly available in accordance with section 1.7 of the General Regulation.
- 31.7 The register may also contain any additional information specified by council, the credentials committee, audit and practice review committee, investigation committee, or the discipline committee, as the case may be.

#### **Legal counsel**

- 32 The registrar, executive director, or council may retain members of the Law Society of British Columbia for the purpose of advising ASTTBC on any matter, and assisting council, any committee or panel, or the registrar, in exercising or performing any power, duty or function under the Act, regulations, or bylaws.

## **PART IV – ADMISSION AND PRACTICE RIGHTS**

### **Categories of registration**

- 33 The following categories of registration are established:
- a. practising,
  - b. non-practising,
  - c. student,
  - d. temporary,
  - e. trainee,
  - f. retired,
  - g. honorary, and
  - h. firm.

### **Classes of registrants**

- 34 The following classes of registrants are established:
- a. Applied Science Technologist,
  - b. Certified Technician, and
  - c. Registered Technical Specialist.
- 34.1 Registrants granted admission in any of the classes established in section 34 are permitted to use the title associated with that class of registration.

### **Sub-classes, disciplines and endorsements**

- 35 The following sub-classes of Applied Science Technologist are established:
- a. Professional Technologist (PTech), and
  - b. Registered Technology Manager (RTMgr).
- 35.1 The following sub-class of Certified Technician is established:
- a. Registered Technology Manager (RTMgr).
- 35.2 The following sub-classes of Registered Technical Specialist are established:
- a. Registered Fire Protection Technician (RFPT),

- b. Registered Onsite Wastewater Practitioner (ROWP),
- c. Certified House Inspector (CHI),
- d. Certified Property Inspector (CPI),
- e. Registered Reserve Fund Analyst (RRFA),
- f. Construction Safety Officer (CSO),
- g. Registered Construction Safety Officer (RCSO),
- h. Certified Public Works Inspector (CPWI),
- i. Registered Public Works Technician (RPWT),
- j. Registered In Site Improvements Surveys (RSIS),
- k. Registered Steel Detailer (RSD),
- l. Certified Steel Detailer (CSD),
- m. Registered Building Designer (RBD),
- n. Certified Building Designer (CBD), and
- o. Registered Utility Locator Technician (RULT).

35.3 An applicant must specify the discipline or endorsement, as the case may be, that is applicable to their requested class and/or sub-class in their application for admission, enrolment, reclassification or reinstatement as a registrant.

**Admission requirements for practising registrants (all classes)**

- 36 An applicant seeking admission in the practising category of registration must:
- a. have attained the minimum educational requirements from an approved education program for their proposed class, sub-class, discipline and/or endorsement as specified in Schedule A,
  - b. have completed the required experiential requirements for their proposed class, sub-class, discipline and/or endorsement as specified in Schedule A,
  - c. demonstrate proficiency in the English language to the satisfaction of the credentials committee,
  - d. provide evidence satisfactory to the credentials committee that the applicant is a person of good character and is fit to practice consistent with the responsibilities and standards expected of a registrant,

- e. be a Canadian citizen, a permanent resident of Canada, or otherwise authorized to work in Canada, and
- f. deliver to the registrar:
  - i. a completed application for registration in a form approved by the registrar,
  - ii. evidence satisfactory to the credentials committee that the applicant meets the requirements for registration set out in sections 36(a) to (e), including original or certified copies of transcripts of grades from an approved education program,
  - iii. proof of completion of an approved education program conducted in English or proof of successful completion of an examination as listed in Schedule B,
  - iv. proof of successful completion of a professional practice and ethics examination approved by the credentials committee as listed in Schedule B,
  - v. a criminal record check,
  - vi. a letter of good standing from the jurisdiction in which the applicant practised immediately before seeking admission with ASTTBC if applicable;
  - vii. the fees specified in Schedule C, and
  - viii. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.

36.1 Despite section 36, an applicant may be granted practising registration by the credentials committee if the applicant provides evidence satisfactory to the credentials committee that they:

- a. hold registration or licensure in good standing in another Canadian jurisdiction which is equivalent to a category and class, sub-class, discipline and/or endorsement recognized by ASTTBC in British Columbia, and
- b. meet the requirements established in sections 36(c), (d), and (e).

36.2 Despite sections 36(a) and (b), the credentials committee may consider whether an applicant's knowledge, skills, and abilities are substantially equivalent to the standards of educational or technical achievement and the competencies or other qualifications established in sections 36(a) and (b) and grant practising registration on that basis provided the applicant provides evidence satisfactory to the credentials committee that they:

- a. possess such knowledge, skills and abilities, and
- b. meet the requirements established in sections 36(c), (d), and (e).

36.3 Applicants under section 36.1 and 36.2 must deliver to the registrar:

- a. a completed application for registration in a form approved by the registrar,

- b. evidence satisfactory to the credentials committee that the applicant meets the requirements for registration set out in sections 36, 36.1 or 36.2, as the case may be,
  - c. a criminal record check,
  - d. a letter of good standing from the jurisdiction in which the applicant practised immediately before seeking admission with ASTTBC if applicable;
  - e. the fees specified in Schedule C, and
  - f. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.
- 36.4 Where the applicant completed the requirements in section 36(a) or (b) more than three (3) years before the date the application for admission is received by the registrar, the applicant must provide, in addition to the requirements in section 36, evidence of one of the following:
- a. successful completion of a refresher or upgrading program approved by the credentials committee within three (3) years immediately preceding the date of application for admission; or
  - b. completion of at least 20 CPD hours per year for each year between the date of graduation and/or date of last relevant experiential requirements and the date of application for admission acceptable to the credentials committee.
- 36.5 Section 36.4 does not apply to applicants who apply for registration within the first three years after their graduation: (a) from an approved educational program specified in Schedule A; or (b) from a program outside of Canada considered to be substantially equivalent by the credentials committee.
- 36.6 After considering an application for admission under this section, the credentials committee may impose such limits or conditions on an applicant's registration which, in its opinion, are necessary to protect the public.
- 36.7 A registrant granted admission may engage in applied science and engineering technology practice subject to the Act, regulations, bylaws and any limits or conditions imposed by the credentials committee as relates to their class, sub-class, discipline and/or endorsement.
- 36.8 A former registrant or non-practising registrant who wishes to apply for admission in the practising category of registration must apply for reinstatement under sections 47, 47.1 or 48, as applicable.

### **Admission requirements for student registrants (all classes)**

- 37 An applicant seeking admission in the student category of registration must:
- a. be enrolled full-time in an approved education program,
  - b. demonstrate proficiency in the English language to the satisfaction of the credentials committee,



- c. provide evidence satisfactory to the credentials committee that the applicant is a person of good character consistent with the responsibilities and standards expected of a registrant,
- d. be a Canadian citizen, a permanent resident of Canada, or otherwise authorized to study in Canada, and
- e. deliver to the registrar:
  - i. a completed application for registration in a form approved by the registrar,
  - ii. evidence satisfactory to the credentials committee that the applicant meets the requirements for registration set out in sections 37(a) to (d), including proof of registration as a full-time student,
  - iii. the fees specified in Schedule C, and
  - iv. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.

37.1 A student registrant may only engage in applied science and engineering technology practice on the terms approved by the credentials committee.

37.2 A student registrant may only engage in applied science and engineering technology practice while under supervision in accordance with section 40.

#### **Admission requirements for temporary registrants (all classes)**

- 38 An applicant seeking admission in the temporary category of registration must:
- a. be a practising registrant in good standing of a regulatory body governing applied science and engineering technology practice in a jurisdiction approved by the credentials committee in Schedule A, and
  - b. deliver to the registrar:
    - i. a completed application for registration in a form approved by the registrar,
    - ii. evidence satisfactory to the credentials committee that the applicant meets the requirement in section 38(a),
    - iii. proof of completion of an approved education program conducted in English or successful completion of an English language examination listed in Schedule B,
    - iv. proof of successful completion of a professional practice and ethics examination approved by the credentials committee in Schedule B,
    - v. criminal record check,
    - vi. letter of good standing from the jurisdiction in which the applicant practised immediately before seeking admission with ASTTBC;

- vii. the fees specified in Schedule C, and
  - viii. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.
- 38.1 A registrant in the temporary registration category must be assigned a registration class based on their educational qualifications, competencies and work experience outside of British Columbia or Canada, as the case may be.
- 38.2 Temporary registration may be renewed annually up to a maximum of period of three years from the date of the temporary registrant's first renewal.
- 38.3 A temporary registrant must include the word temporary in brackets at the end of their reserved title.
- 38.4 A temporary registrant may only engage in applied science and engineering technology practice on the terms approved by the credentials committee.

**Enrolment requirements for trainees (all classes)**

- 39 An applicant seeking enrolment as a trainee must:
- a. have completed the educational requirements for practising registrants in section 36(a) for their proposed class, sub-class, discipline and/or endorsement as specified in Schedule A,
  - b. undertake to complete the work experience requirements set out in section 36(b) for practising registrants in their proposed class, sub-class, discipline and/or endorsement as specified in Schedule A, and
  - c. deliver to the registrar:
    - i. a completed application for enrolment in a form approved by the registrar,
    - ii. evidence satisfactory to the credentials committee that the applicant meets the requirements for enrolment set out in section 36(a), including original or certified copies of transcripts of grades from an approved education program,
    - iii. proof of completion of an approved education program conducted in English or successful completion of an English language examination listed in Schedule B,
    - iv. proof of successful completion of a professional practice and ethics examination approved by the credentials committee in Schedule B,
    - v. a declaration in a form approved by the registrar,
    - vi. the name and qualifications of their proposed supervisor for approval by the credentials committee,
    - vii. a criminal record check,

- viii. letter of good standing from the jurisdiction in which the applicant practised immediately before seeking admission with ASTTBC;
  - ix. the fees specified in Schedule C, and
  - x. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.
- 39.1 The credentials committee or the registrar may renew trainee registration annually to a maximum period of five years from the date of the registrant's first renewal as a trainee.
- 39.2 A trainee registrant may only engage in applied science and engineering technology practice while under supervision in accordance with section 40.

### **Supervisors of trainee and student registrants**

- 40 A supervisor must be a registrant in good standing of a regulatory body designated under the Act who has at least three years' experience and practices in the same area as their student or trainee.
- 40.1 A supervisor must either be in regular communication with the student or trainee registrant, which may include electronic communication, or be physically present with the student or trainee registrant during practice.
- 40.2 A supervisor is responsible for all work performed by the students and trainees under their supervision and for:
- a. educating the student or trainee registrant on the requirement to comply with safe practices in accordance with the Act, regulations, and bylaws and any guidelines, standards and codes established by relevant authorities,
  - b. providing the student or trainee registrant with opportunities to work on assignments or projects that will develop their practical skills and competence,
  - c. supervising the quality and thoroughness of the work of the student or trainee registrant,
  - d. reviewing, stamping and signing work completed by the student or trainee registrant, including tags and reports,
  - e. verifying work experience claimed by the student or trainee registrant, and
  - f. serving as a referee for the student or trainee registrant and, upon request of the credentials committee, providing a reference validating the accuracy of the information and quality of the work completed by the student or trainee registrant.
- 40.3 A supervisor may not be responsible for more than four student or trainee registrants at the same time.

**Retired registrants**

- 41 A registrant seeking reclassification to the retired category must:
- a. be at least 60 years of age,
  - b. be a practising registrant in good standing, and
  - c. deliver to the registrar:
    - i. a completed application for a reclassification in a form approved by the registrar,
    - ii. an undertaking that they have ceased to practice in a form approved by the registrar,
    - iii. the fees specified in Schedule C, and
    - iv. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.
- 41.1 Despite section 41, the registrar may reclassify a registrant as retired who is not yet 60 years of age if the registrant has:
- a. achieved retirement status from an employer based on years of service and age, or
  - b. has retired from working or employment because of a physical or mental condition.
- 41.2 A retired registrant must not practice, supervise or delegate in any class of applied science and engineering technology practice or use a stamp or seal.
- 41.3 A retired registrant may only use their pre-retirement title if they include the word retired in brackets after the title.
- 41.4 The registrar must notify any applicable Authority Having Jurisdiction (AHJ) or any other applicable licensing authority of the registrant's reclassification to retired status.

**Non-practising registration (all classes)**

- 42 An applicant seeking admission in the non-practising category of registration must:
- a. be a practising registrant or otherwise meet the requirements for practising registration under section 36,
  - b. not be a "disciplined person" as defined in section 48,
  - c. submit a completed application in a form approved by the registrar,
  - d. pay the fees specified in Schedule C, and
  - e. provide an undertaking that they will not engage in applied science and engineering technology practice in a form approved by the registrar.

- 42.1 A non-practising registrant must not practice, supervise or delegate in any class of applied science and engineering technology practice or use a stamp or seal.
- 42.2 A non-practising registrant is not eligible to:
- a. be nominated as a councillor by the nomination committee,
  - b. sit on committees,
  - c. vote in an election of councillors, or
  - d. vote at the annual general meeting or any special general meeting.

**Honorary registrants (all classes)**

- 43 Council may grant honorary registration to a person who in its opinion has made significant contributions to the development and advancement of applied science and engineering technology practice.
- 43.1 An honorary registrant is not assigned a class of registration.
- 43.2 An honorary registrant must not practice, supervise or delegate in any class of applied science and engineering technology practice or use a stamp or seal.
- 43.3 Council may rescind a grant of honorary registration without prior notice to the honorary registrant if, in its opinion, the honorary registrant ceases to demonstrate the ethics and values of ASTTBC.
- 43.4 An honorary registrant is not eligible to:
- a. be nominated as a councillor by the nomination committee,
  - b. sit on committees,
  - c. vote in an election of councillors, or
  - d. vote at the annual general meeting or any special general meeting.

**Reclassification**

- 44 A practising registrant may apply to the credentials committee for:
- a. reclassification of their class, sub-class and/or discipline, or
  - b. the addition of an endorsement to their current registration.
- 44.1 A registrant seeking to add an endorsement or reclassify into another class, sub-class and/or discipline of registration must:

- a. have attained the minimum educational requirements from an approved education program for their proposed class, sub-class, discipline and/or endorsement as specified in Schedule A,
- b. have completed the required experiential requirements for their proposed class, sub-class, discipline and/or endorsement as specified in Schedule A, and
- c. deliver to the registrar:
  - i. a completed application for reclassification or for an additional endorsement to their current registration in a form approved by the registrar,
  - ii. evidence satisfactory to the credentials committee that the applicant meets the requirements for registration set out in sections 44.2(a) and (b) including original or certified copies of transcripts of grades from an approved education program,
  - iii. proof of successful completion of a professional practice and ethics examination approved by the credentials committee as listed in Schedule B,
  - iv. a criminal record check,
  - v. the fees specified in Schedule C, and
  - vi. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.

### **Annual registration renewal**

45 On or before September 30 each year, the registrar must notify registrants of:

- a. the annual renewal deadline of November 30,
- b. the requirement to pay their annual fees by November 30 of each year, and
- c. the consequences for failure to renew registration by the annual renewal deadline.

45.1 A registrant seeking renewal of registration must:

- a. provide an application for renewal in a form approved by the registrar;
- b. pay the renewal fees specified in Schedule C,
- c. provide a declaration in a form approved by the registrar that they are in compliance with the Act, regulations and bylaws, and with any limits or conditions imposed on their registration,
- d. provide confirmation that they have completed the CPD requirements in Part VI, as applicable, and
- e. pay any other outstanding fee, fine, debt or levy owed to ASTTBC.

**Confirmation of registration**

- 46 After the credentials committee or registrar, as the case may be, has granted admission, enrolment, reinstatement or renewal of registration, the registrar must confirm the registrant's registration including any terms, limits and conditions on their practice.
- 46.1 Registration, or any renewal of it, is valid as follows:
- a. for practising registrants until December 31 each year, or
  - b. in all other cases, until the date specified by the credentials committee or registrar,
- unless registration is otherwise suspended or cancelled under the Act, regulations or bylaws.
- 46.2 The registrar or the credentials committee may summarily reject an application for admission, enrolment, or reinstatement if the applicant has been convicted of an indictable offence in Canada or an offence in another jurisdiction that is comparable to an indictable offence.

**Cancellation for non-payment of fees**

- 47 If a registrant fails to pay the annual fees specified in Schedule C by November 30, their registration will be cancelled effective January 1 of the following year.
- 47.1 Despite section 47, if a registrant pays their annual fees and any late fees under Schedule C:
- a. after November 30 but before December 31, the registrar may renew the registrant's registration without requiring the registrant to apply for reinstatement, or
  - b. after December 31 but before March 1, the registrar may renew the registrant's registration without requiring the registrant to apply for reinstatement if the registrant provides a reasonable justification for the late payment.
- 47.2 If the registrar grants a renewal application under section 47.1, the registrant's registration is effective the date of the renewal.

**Reinstatement for former and non-practising registrants**

- 48 In this Part, "disciplined person" means a former registrant or historical member whose previous registration or membership was cancelled either under the *Applied Science Technologists and Technicians Act* and regulation or the Act, regulations, and bylaws and who is eligible for reinstatement of registration.
- 48.1 A non-practising registrant, former registrant or historical member who is not a disciplined person and who has been out of practice for less than three consecutive years may be admitted to practising registration by the credentials committee where the non-practising registrant, former registrant or historical member provides:
- a. a completed application for reinstatement in a form approved by the registrar, which must include a declaration of competencies validated by the three referees referred to in section 48.1(c),

- b. contact information, including a physical address, telephone number, and email address,
- c. the names, professional designations, and business contact information for at least three referees acceptable to the credentials committee, of whom one must consent to act as the applicant's supervisor if required by the credentials committee,
- d. evidence satisfactory to the credentials committee that the applicant is a person of good character consistent with the responsibilities and standards expected of a registrant,
- e. proof that the applicant is a Canadian citizen, a permanent resident of Canada, or is otherwise authorized to work in Canada,
- f. official transcripts or other evidence satisfactory to the credentials committee of any education, training or professional development activity completed that was not previously submitted and included in the record on file with ASTTBC,
- g. a criminal record check,
- h. payment of the fees specified in Schedule C, and
- i. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.

48.2 A non-practising registrant, former registrant or historical member who is not a disciplined person and who has been out of practice for three or more consecutive years may be admitted to practising registration by the credentials committee where the non-practising registrant, former registrant or historical member provides:

- a. a completed application for reinstatement in a form approved by the registrar, which must include a declaration of competencies validated by the three referees referred to in section 48.2(c),
- b. contact information, including a physical address, telephone number and email address,
- c. the names, professional designations, and business contact information for at least three referees acceptable to the credentials committee of whom one must consent to act as the applicant's supervisor,
- d. evidence of successful completion of examinations or refresher courses which the credentials committee, in its discretion, may require as a prerequisite for granting practising registration,
- e. proof of completion of all continuing education requirements under Part VI, as if the applicant had not ceased to be registered, unless waived in whole or in part by the credentials committee,
- f. evidence satisfactory to the credentials committee that the applicant is a person of good character consistent with the responsibilities and standards expected of a registrant,



- g. proof that the applicant is a Canadian citizen, a permanent resident of Canada, or is otherwise authorized to work in Canada,
- h. official transcripts or other evidence satisfactory to the credentials committee of any education, training or professional development activity completed that was not previously submitted and included in the record on file with ASTTBC,
- i. a criminal record check,
- j. payment of the fees specified in Schedule C, and
- k. payment of any outstanding fee, fine, debt or levy owed to ASTTBC.

### **Reinstatement following disciplinary action**

- 49 Subject to section 49.1, a disciplined person seeking reinstatement to practising or non-practising registration must:
- a. meet the applicable requirements for registration under section 36,
  - b. not be in contravention of the Act, regulations, or bylaws,
  - c. provide evidence satisfactory to the credentials committee:
    - i. of their good character and fitness to practice consistent with the responsibilities and the standards expected of a registrant,
    - ii. that their registration will not pose an undue risk to public health or safety, and
    - iii. that their registration will not otherwise be contrary to the public interest,
  - d. deliver to the registrar:
    - i. a completed application for registration in a form approved by the registrar, which must include a declaration of competencies validated by the three referees referred to in section 49.1(d)(iii),
    - ii. contact information, including a physical address, telephone number and email address,
    - iii. the names, professional designations and business contact information for a minimum of three referees acceptable to the credentials committee of whom one must consent to act as the applicant's supervisor,
    - iv. proof that the applicant is a Canadian citizen, a permanent resident of Canada, or is otherwise authorized to work in Canada,
    - v. official transcripts or other evidence satisfactory to the credentials committee of any education, training or professional development activity completed that was not previously submitted and included in the record on file with ASTTBC,

- vi. a criminal record check,
- vii. payment of the fees specified in Schedule C, and
- viii. payment of any outstanding fee, fine, debt or levy owed to ASTTBC.

49.1 A disciplined person whose previous registration has been suspended or cancelled for three or more consecutive years must also comply with the requirements of section 48.2.

### **Review on the record**

50 Within 30 days of receiving a decision from the registrar or credentials committee, an applicant who is dissatisfied with the outcome of their application for admission, reinstatement, renewal, or enrolment may request in writing that council conduct a review on the record.

50.1 The request for review must be delivered to the executive director and outline the grounds for challenging the decision.

50.2 The executive director must provide the record of the credentials committee's or registrar's decision to council at least 14 business days in advance of the meeting at which the review will be conducted.

50.3 The president must appoint a panel of three councillors, including one lay councillor, to conduct the review on the record.

50.4 The panel must provide the applicant with an opportunity to provide written submissions on the terms that it directs.

50.5 After conducting the review, the panel may:

- a. confirm the decision in respect of the application, or
- b. substitute a decision in respect of the application, including by imposing any limits, terms, or conditions on the applicant's registration.

### **Notification of change of registrant information**

51 A registrant must notify the registrar in writing forthwith and in any event not later than 14 days of any change of name, address, email, place of employment or other contact information previously provided to the registrar.

### **Fees**

52 Council establishes the fees set out in Schedule C.

52.1 The executive director or registrar may, in their discretion, reduce or waive a fee payable under Schedule C if satisfied that an applicant or registrant is facing undue hardship and there are extenuating circumstances that justify the reduction or waiver.

**Transitional provisions for associate and provisional registration**

53 The following sections are repealed effective December 31, 2022.

- 53.1 Until December 31, 2022, an applicant who does not meet the requirements in section 36 may be granted practising registration by the credentials committee where the applicant:
- a. practised in British Columbia as an associate or provisional registrant under the *Applied Science Technologists and Technicians Act* and regulation prior to December 31, 2020,
  - b. has successfully completed any courses and examinations required by the credentials committee, including any upgrading or refresher courses,
  - c. satisfies the credentials committee that the applicant is person of good character and is fit to practice consistent with the responsibilities and standards expected of a registrant,
  - d. delivers to the registrar:
    - i. a completed application for admission in a form approved by the registrar,
    - ii. evidence satisfactory to the credentials committee that the applicant meets the requirements for registration set out in sections 53.1(a) to (c),
    - iii. a criminal record check,
    - iv. the fees specified in Schedule C, and
    - v. payment of any outstanding fee, fine, debt, or levy owed to ASTTBC.
- 53.2 The associate and provisional categories of registration will cease to exist as of January 1, 2023.

**PART V – FIRMS**

[to be inserted when those provisions of the Act come into force]

## **PART VI - CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT**

### **General requirements**

- 54 All practising registrants must complete the continuing professional development (CPD) and currency of practice requirements in this Part.
- 54.1 Practising registrants must complete 20 CPD hours per year unless the registrar exercises their discretion to extend the deadline for completion of the CPD hours under section 55.3.

### **Continuing education – Professional development**

- 55 Practising registrants must maintain proficiency and competence to advance the body of knowledge within their class and sub-class of registration by completing the applicable CPD requirements set out in Schedule F.
- 55.1 On or before November 1 of each year, the registrar will deliver a notice to all practising registrants outlining their CPD hours for the current calendar year and any shortfall in CPD hours.
- 55.2 Registrants must annually record their continuing education activity in their online ASTTBC account by November 30.
- 55.3 A registrant may submit a written request to the registrar for an extension to complete annual CPD requirements if there are extenuating medical or other circumstances.
- 55.4 On receipt of a written request for an extension, the registrar:
- a. may grant an extension if satisfied that there are extenuating circumstances to warrant additional time for completing the annual CPD requirements, and
  - b. must report any extension to the audit and practice review committee.
- 55.5 The registrar may issue a written notice of non-compliance to a registrant who has not completed the annual CPD requirements by November 30.
- 55.6 If a registrant does not complete the required CPD hours by December 31 after receiving a notice of non-compliance, the registrar may impose a fine not to exceed \$500.00.
- 55.7 The registrar must report a registrant who receives more than one fine under section 55.6 to the audit and practice review committee which may direct a practice review.

### **Continuing education – Reconciliation, equity, diversity, and inclusion**

- 56 Practising registrants must complete the CPD requirements specified in Schedule F on topics related to reconciliation, intercultural competency, conflict resolution, human rights, and anti-racism.

**Currency of practice requirements**

- 57 A practising registrant must complete a cumulative total of 200 hours in applied science and engineering technology practice during any consecutive 24-month period to maintain currency of practice.
- 57.1 A practising registrant must provide written confirmation of currency of practice to the registrar on request.

**Competence and currency of practice declaration**

- 58 On or before November 30 of each year, practising registrants must submit a declaration in a form approved by the registrar attesting that they are current and competent in the knowledge, skills and practice for their area of practice and compliant with the CPD and currency requirements in this Part.
- 58.1 Registrants must only include currency hours in areas of practice in which they are authorized to practice in their declaration under section 58.

**Conflict of interest declarations and disclosure**

- 59 On or before November 30 of each year, practising registrants must submit a declaration in a form approved by the registrar attesting that they are aware of their duty to avoid conflicts of interest.
- 59.1 The filing of a conflicting of declaration and disclosure form does not absolve the registrant from the responsibility to address the real or perceived conflict of interest.

**Audit of CPD and currency of practice**

- 60 On or before April 1 of each year, the registrar must submit a report summarizing registrant compliance with CPD requirements to the audit and practice review committee which identifies the number of registrants who are compliant and the names of registrants who are not compliant.
- 60.1 The audit and practice review committee must conduct an annual random audit of the CPD hours recorded by practising registrants and provide a report to council.
- 60.2 After conducting its annual random audit, the audit and practice review committee may take any remedial action it considers appropriate which may include, but is not limited to, issuing warnings for non-compliance, conducting practice reviews, and referring non-compliant registrants to the investigation committee.
- 60.3 The audit and practice review committee may, at any time, conduct an audit of a registrant's applied science and engineering technology practice to verify that information contained in the registrant's annual declaration is complete and accurate in accordance with the council's policies regarding acceptable forms of practice hours.
- 60.4 If the audit and practice review committee determines that a registrant is non-compliant with currency of practice or CPD requirements, it may take action it considers appropriate which may include, but is not limited to, issuing warnings for non-compliance, conducting practice reviews, and refer the matter to the investigation committee.

## PART VII - AUDIT AND PRACTICE REVIEWS

### Practice reviewers and assessors

- 61 The audit and practice review committee will:
- a. appoint assessors to assist in the conduct of audits and practice reviews, and
  - b. approve the practice review criteria or instruments to be used to assess the practice of registrants.
- 61.1 Assessors may be ASTTBC employees, qualified professionals or other independent consultants.

### Initiating practice reviews

- 62 The audit and practice review committee may delegate authority to select registrants to undergo a practice review to the registrar based on one or more of the following criteria:
- a. random selection out of all practising registrants,
  - b. random selection out of registrants in certain categories, classes or sub-classes of registration,
  - c. the consent of a registrant to undergo a practice review, or
  - d. where there is reason to believe that a registrant may have:
    - i. contravened the Act, regulations, or bylaws,
    - ii. failed to comply with a standard, limit or condition imposed under the Act, regulations, or bylaws,
    - iii. acted in a manner that constitutes professional misconduct or conduct unbecoming a registrant, or
    - iv. acted in a manner that constitutes incompetent performance of duties undertaken while engaged in practice.
- 62.1 Following the selection of a registrant or cohort of registrants for a practice review, the audit and practice review committee must identify the scope of the practice review which must relate to the registration category and class of the registrant(s) undergoing the practice review.
- 62.2 The audit and practice review committee must appoint an assessor who has relevant experience with the practice area in question for the practice review.
- 62.3 The audit and practice review committee must provide written notice to registrants that they have been selected for a practice review and the name of the appointed assessor.

- 62.4 A registrant who receives a written notice that they have been selected for a practice review may, within 15 business days of receiving the notice, provide a written objection to the registrar regarding the appointed assessor if there is a potential or real conflict of interest or other legitimate reason why an alternate assessor should be appointed.
- 62.5 Upon receipt of a written objection, the registrar may appoint an alternate assessor if, in their opinion, a potential or real conflict of interest exists or there is a legitimate reason for the appointment of an alternate assessor.
- 62.6 A practice review may include but is not limited to:
- a. a review of the registrant's recent work product or examples the registrant's work,
  - b. interviews with the registrant, their clients, supervisors or others on the conduct, content, compliance, and competence of the registrant's practice ,
  - c. review of the registrant's CPD records or currency of practice records, and
  - d. direct observation of the registrant's application of knowledge, skills, techniques and judgment.
- 62.7 A registrant undergoing a practice review has a duty to cooperate, answer questions, and promptly provide unrestricted access to information, files or records in the registrant's possession or control.
- 62.8 The registrar must report to the audit and practice review committee if:
- a. there is undue and unjustifiable delay on the part of a registrant in cooperating with or completing the practice review, or
  - b. the registrant refuses to undergo a practice review.
- 62.9 If the audit and practice review committee receives a report from the registrar under section 62.8, it may refer the matter to the investigation committee.
- 62.10 Upon completion of a practice review, the assessor must submit a written practice review report to the audit and practice review committee which:
- a. summarizes the specific actions taken during the practice review to review and assess the registrant's practice,
  - b. summarizes the key observations and findings including a description of any issues identified with the registrant's knowledge, skills, techniques and judgment or any gap between the registrant's applied science and engineering technology practice and the standards of practice applicable to the registrant's category, class or sub-class of registration,
  - c. provides recommendations to remediate any identified deficiencies, and



- d. provides one of the following conclusions:
  - i. the registrant under review is practising competently and is substantially in compliance with applicable standards of practice,
  - ii. the registrant under review is practising partially in compliance having found some minor deficiencies in the registrant's practice in complying with applicable standards of practice, or
  - iii. the registrant is not practising in compliance with applicable standards of practice.

62.11 The assessor must provide a copy of the draft practice review report to the registrant for response before finalizing and submitting it to the audit and practice review committee.

62.12 If the registrant does not respond to the draft practice review report within 21 business days, the registrant is deemed to have accepted the findings and recommendations contained in it.

### **Audit and practice review committee action**

63 If the audit and practice review committee determines there are deficiencies in the registrant's practice based on a practice review report, it must provide the registrant at least 60 days to submit evidence of improvement that, in the opinion of the audit and practice review committee, is sufficient to address any health, environmental, public safety or other concerns.

63.1 If the registrant provides evidence satisfactory to the audit and practice review committee under section 63, the audit and practice review committee must advise the registrar that the registrant has completed the practice review.

63.2 If the registrant fails to provide satisfactory evidence of improvement or respond within the period specified by the audit and practice review committee, it may refer the registrant to the investigation committee.

63.3 If the audit and practice review committee determines on the basis of the practice review report that the registrant's practice poses a risk to the health or safety of the public or is otherwise unsatisfactory, it may take one or more of the following actions:

- a. restrict the practice that may be engaged in by the registrant,
- b. require the registrant to be overseen by another registrant to be approved by the audit and practice review committee when engaged in applied science and engineering technology practice on the terms it directs, and
- c. require the registrant to undertake additional training on the terms it directs.

63.4 If the audit and practice review committee considers on the basis of the practice review report that the registrant's conduct may constitute professional misconduct, conduct unbecoming a registrant or incompetent performance of duties undertaken while engaged in the registrant's regulated practice, it may refer the practice review report to the investigation committee.

## **Confidentiality**

- 64 Subject to s. 64.1 and the Act, regulations or the bylaws, the practice review process is confidential and no identifying information or records will be disclosed regarding whether a registrant has been selected for or has undergone a practice review.
- 64.1 Limits or conditions placed on a registrant's practice under section 63 of the Act must be posted on the ASTTBC register.

## PART VIII – COMPLAINTS, INVESTIGATIONS AND DISCIPLINE

### Definitions

65 In this part:

“**discipline committee panel**” means a panel of three discipline committee members, including one lay member, appointed to conduct a disciplinary hearing,

“**duty to report**” means a written report received by ASTTBC under section 58 of the Act,

“**inspector**” means a person approved by the investigation committee to assist with an investigation,

“**registrant**” in this section includes a former registrant,

“**respondent**” means a registrant or former registrant whose conduct or competence is the subject of a discipline hearing.

### Procedures upon receipt of a complaint or statutory duty to report

66 Upon receipt of a complaint or statutory duty to report, the registrar must provide a copy of the complaint or report to the investigation committee with any recommendations for disposition.

66.1 The registrar must provide notice of the complaint or statutory duty to report to the registrant with a request for a written response and copies of relevant records within a specified timeframe.

66.2 The registrar may delay providing notice of the complaint or statutory duty to report to the registrant if there is a concern that evidence may be tampered with to allow the investigation to proceed first.

66.3 Submissions provided by the complainant and registrant during the investigation process will be disclosed to the other party unless there are privacy or safety considerations that justify a withholding of some or all of the information.

### Registrar dispositions

67 Despite section 66, the registrar may dismiss a complaint without referral to the investigation committee for investigation if the registrar determines that the complaint:

- a. is trivial, frivolous, vexatious or made in bad faith,
- b. concerns a matter that is outside the jurisdiction of ASTTBC, or
- c. does not, on its face, raise an issue of competency, fitness, professional misconduct, conduct unbecoming of a registrant, or a breach of the Act, regulations or bylaws.

67.1 The registrar may dismiss a complaint or request that the registrant act as described in section 71 of the bylaws without referring the matter to the investigation committee where the complaint:

- a. does not contain allegations that, if admitted or proven, would constitute a matter subject to investigation by the investigation committee under section 68.2, or
  - b. contains allegations that, if admitted or proven, would constitute a matter subject to investigation by the investigation committee under section 68.2 but would not ordinarily result in a suspension or cancellation of the registrant's registration.
- 67.2 If the registrar becomes aware that a registrant has been convicted of an indictable offence anywhere in Canada, the registrar may summarily suspend or cancel the registrant's registration.
- 67.3 Prior to issuing a disposition decision under section 67, 67.1 or 67.2, the registrar must deliver a written report to the investigation committee outlining the proposed disposition for approval.
- 67.4 Upon receiving a report under section 67.3, the investigation committee may approve the registrar's proposed disposition or direct that the matter proceed to an investigation under section 68.

## **Investigations**

- 68 Upon receipt of a complaint, the investigation committee must initiate an investigation as soon as practicable.
- 68.1 A registrant has a duty to co-operate with an investigation and make their records available to the registrar or an inspector on request in a timely manner.
- 68.2 The investigation committee may, on its own motion, initiate an investigation of a registrant regarding any of the following matters:
- a. a contravention of the Act, regulations, or bylaws,
  - b. a failure to comply with a limit, term or condition imposed on the registrant's practice,
  - c. a conviction for a summary or indictable offence, or
  - d. professional misconduct, incompetent practice, or unprofessional conduct.
- 68.3 During an investigation, the investigation committee may appoint an inspector to conduct interviews and gather information.
- 68.4 Inspectors may not be a committee member or councillor.
- 68.5 An inspector must provide a written report to the registrar summarizing the information gathered during the investigation.
- 68.6 The registrar must provide a copy of the inspector's report to the complainant, if any, and registrant for response with any redactions that the registrar considers to be necessary.
- 68.7 The registrar must provide a copy of the inspector's report and any responses to it received from the complainant, if any, and the registrant to the investigation committee.

68.8 Following receipt of the registrant's written response or upon the expiry of the period for a response in section 66.1, the investigation committee may appoint a mediator to attempt to resolve the complaint.

### **Alternative complaint resolution**

69 To proceed with alternative complaint resolution, the complainant, registrant, registrar and investigation committee must agree that the matter is suitable for mediation or facilitated discussion.

69.1 If the registrant or registrar do not agree that the matter is suitable for alternative complaint resolution, the matter must be referred back to the investigation committee for decision.

69.2 The registrar may appoint a mediator to assist with mediation or facilitated discussion if alternative complaint resolution proceeds.

69.3 If the parties participating in the mediation or facilitated discussion are not able to reach agreement within a reasonable period as determined by the investigation committee, the matter must be directed back to the investigation committee for a disposition decision.

### **Investigation committee dispositions**

70 After considering the information gathered during an investigation, the investigation committee may do one or more of the following:

- a. take no further action on the basis that the registrant's conduct or competence is satisfactory or that the matter is trivial, frivolous, vexatious or made in bad faith,
- b. refer the registrant to the audit and practice review committee for a practice review,
- c. issue a letter of caution to the registrant,
- d. propose a consent order under section 71,
- e. recommend that the matter proceed by alternative complaint resolution under sections 69 to 69.3, if it has not yet been referred, or
- f. direct the registrar to issue a citation against the registrant.

70.1 Following the disposition of a complaint under section 70, the registrar must notify the complainant, if any, and registrant of the disposition as soon as practicable.

### **Remedial action by consent**

71 The investigation committee may provide a proposed consent and undertaking to the registrant containing terms to do one or more of the following:

- a. undertake not to repeat the conduct to which the matter relates,

- b. undertake to take educational courses or complete a remedial training program specified by the investigation committee,
- c. consent to a reprimand,
- d. consent to payment of a fine, or
- e. undertake or consent to any other action specified by the investigation committee.

- 71.1 If the registrant consents to the proposed consent and undertaking or terms otherwise acceptable to the investigation committee, the registrar must, within 30 days of the consent or undertaking being given, deliver to the complainant, if any, a written summary of the consent or undertaking.
- 71.2 If the registrant will not consent to the investigation committee's proposal or to alternative terms that are acceptable to the investigation committee, the investigation committee may direct the registrar to issue a citation or take any other action under section 70.

### **Citation for discipline**

- 72 A citation issued by the registrar must provide the date, time and location of the discipline hearing or indicate that such information is to be determined, and a summary of the allegations against the respondent.
- 72.1 The registrar must serve the citation on the respondent not less than 60 days before the date set for the commencement of the discipline hearing.
- 72.2 On the direction of the investigation committee or the discipline committee, the registrar may:
- a. join one or more complaints or other matters which are to be the subject of a discipline hearing in one citation, or
  - b. sever one or more complaints or other matters which are to be the subject of a discipline hearing.
- 72.3 On the direction of the investigation committee, the registrar may amend a citation issued under section 72.
- 72.4 If a citation is amended under section 72.3, it must be delivered to the respondent at least 30 days before the commencement of the hearing.

### **Consent orders after citation issued**

- 73 At any time prior to or during a discipline hearing, the respondent or investigation committee may propose that a consent order be made for the voluntary resolution of one or more matters that may otherwise be dealt with at the discipline hearing.
- 73.1 Subject to sections 73.2 and 73.3, a consent order under this section must include:
- a. terms acceptable to the investigation committee,

- b. one or more admissions in relation to the allegations in the citation by the respondent, and
- c. one or more of the actions or penalties in section 75(6) of the Act.

73.2 If the respondent is a trainee, a consent order under this section must include:

- a. terms acceptable to the investigation committee,
- b. one or more admissions in relation to the allegations in the citation by the trainee, and
- c. one or more of the actions or penalties in section 73.3 of the bylaws.

73.3 In a consent order under section 73.2 involving a trainee, the investigation committee may do one or more of the following:

- a. require that the trainee undertake further training,
- b. reprimand the trainee,
- c. impose a penalty on the trainee in an amount not exceeding \$2,000, or
- d. cancel the enrolment of the trainee.

#### **Disciplinary hearing procedures**

74 All members of a discipline committee panel must hear and determine a matter set for hearing by citation.

74.1 The discipline committee panel may determine whether a hearing will proceed in person, including by electronic means, or in writing.

74.2 The respondent and ASTTBC may appear as parties and with legal counsel at a discipline hearing.

74.3 A discipline hearing under this section must be open to the public unless:

- a. the complainant, the respondent or a witness requests the discipline committee panel to hold all or any part of the hearing in private, and
- b. the discipline committee panel is satisfied that holding all or any part of the hearing in private would be appropriate in the circumstances.

74.4 At a discipline hearing:

- a. the panel has discretion to accept evidence tendered by way of affidavit,
- b. testimony of witnesses must be taken on oath or affirmation which may be administered by any member of the discipline committee panel, and
- c. ASTTBC counsel and the respondent have the right to cross examine witnesses and to call evidence in reply.

- 74.5 Subject to section 74.6(b), evidence is not admissible at a discipline hearing unless, at least 14 business days before the hearing, the party intending to introduce the evidence provides the other party with:
- a. in the case of documentary evidence, an opportunity to inspect the document,
  - b. in the case of expert testimony,
    - i. the name and qualifications of the expert,
    - ii. a copy of any written report the expert has prepared respecting the matter, and
    - iii. a written summary of the evidence the expert will present at the hearing if the expert did not prepare a written report in respect of the matter, and
  - c. in the case of testimony of a witness who is not an expert, the name of that witness and a written outline of their anticipated evidence.
- 74.6 Prior to the commencement of or during a discipline hearing, the discipline committee panel may:
- a. grant an adjournment of a hearing,
  - b. allow the introduction of evidence that was not provided in accordance with section 74.5, or
  - c. make any other direction it considers appropriate,
- if it is satisfied that this is necessary to ensure that a party will not be unduly prejudiced.
- 74.7 If the respondent, although duly served, does not attend a discipline hearing, a discipline committee panel may:
- a. proceed with the hearing in the respondent's absence on proof of delivery of the citation to the respondent, and
  - b. without further notice to the respondent, take any action that it is authorized to take under the Act, regulations, and bylaws.
- 74.8 Proof of delivery of the citation may include, but is not limited to, delivery by registered mail to the respondent's last known address or email delivery to the respondent's last known email address.
- 74.9 The discipline committee panel may order a person to attend at a discipline hearing to give evidence and to produce records in the possession of or under the control of the person.
- 74.10 If the discipline committee panel considers that regulatory action is necessary to protect the public between the time a hearing is commenced and the time it may take to render a decision, it may impose limits or conditions on the practice of respondent or may suspend the registration of the respondent.



- 74.11 If the discipline committee panel decides to act under section 74.10, sections 76 to 76.5 of this Part apply.
- 74.12 All discipline hearings will be recorded and any person may obtain, at their expense, a transcript of any part of a hearing unless the hearing or part thereof was held *in camera* or information disclosed at a hearing is prohibited from disclosure by any provincial or federal legislation.

**Action by the discipline committee panel**

- 75 The discipline committee panel must dismiss the citation or determine one or more of the following:
- a. the respondent committed professional misconduct or unprofessional conduct,
  - b. the respondent engaged in conduct unbecoming a registrant, or
  - c. the respondent was incompetent in the performance of duties undertaken while engaged in the respondent's regulated practice.
- 75.1 The discipline committee panel must provide reasons on liability to the registrar and the parties within 90 days of the last day of the hearing.
- 75.2 If an adverse determination is made under section 75, the discipline committee panel may convene an oral hearing or invite written submissions on proposed disciplinary action following which it may, by order, do one or more of the following:
- a. reprimand the respondent,
  - b. impose limits, terms or conditions on the respondent's practice,
  - c. suspend the respondent's registration,
  - d. impose conditions on the lifting of a suspension or the eligibility to apply for reinstatement of registration,
  - e. direct that the lifting of the suspension or the eligibility to apply for reinstatement of registration will occur on:
    - i. a date specified in the order, or
    - ii. the date the discipline committee determines that the respondent has complied with the conditions imposed under section 75.2(f),
  - f. impose conditions on the respondent's practice that will apply after the lifting of a suspension or the reinstatement of registration,
  - g. cancel the respondent's registration,
  - h. fine the respondent in an amount not exceeding the maximum fine established under the Act.

- 75.3 An order of the discipline committee panel must:
- a. be in writing,
  - b. include reasons for the order, and
  - c. be delivered to the respondent and to the complainant, if any, within 30 days after the date the order is made.
- 75.4 Subject to any restrictions on publication issued by the discipline committee panel:
- a. if the panel makes an adverse determination against a respondent, the registrar must publish the name and registration status of the respondent, a summary of the discipline committee panel's findings regarding the allegations and its reasons on ASTTBC's website, or
  - b. If the panel dismisses a citation, the registrar must publish the respondent's name and registration status, a summary of the allegations and the discipline committee panel's reasons on ASTTBC's website.
- 75.5 Publication under section 75.4 must occur within 30 days of the issuance of the discipline committee panel's order.
- 75.6 Where publication is required under 75.4(b), council may determine that it is not in the public interest for the information to be publicly available in accordance with section 1.8 of the General Regulation and may direct the registrar to redact the summary of the discipline committee panel's reasons before it is published.
- 75.7 The discipline committee panel may require the respondent to pay costs in accordance with the Tariff of Costs in Schedule C having regard to the following factors:
- a. whether the respondent made any admissions which expedited the hearing,
  - b. whether all or most of the allegations in the citation were proven,
  - c. the seriousness of the proven allegations, and
  - d. whether the respondent rejected a proposed consent order under section 73.
- 75.8 The respondent must pay the full amount of any costs imposed by the discipline committee panel within 30 business days of the date of the discipline committee panel's order unless it grants a request for an extension of time.
- 75.9 A respondent seeking an extension to pay costs must submit a request in writing to the discipline committee panel within 10 business days of the date of the panel's order.

**Extraordinary action to protect public**

- 76 If the investigation committee or discipline committee, as the case may be, considers interim action may be in the public interest, it may direct the registrar to notify the registrant in writing

that extraordinary action in the form of suspension or limits, terms and conditions on practice is being considered and of the date that the investigation committee or discipline committee, as the case may be, will meet to make a determination.

- 76.1 Unless extenuating circumstances exist, the registrar must, at least seven business days in advance of the meeting, provide the registrant with the disclosure of all information that will be relied upon at the meeting to determine if extraordinary action is necessary.
- 76.2 The investigation committee or discipline committee may suspend a registrant's registration or place limits, terms and conditions on a registrant's registration where it is satisfied that:
- a. the complaint or own motion investigation, as the case may be, gives rise to a *prima facie* case against the registrant,
  - b. there is a risk to the public interest arising from the matter under investigation or proceeding to hearing and the risk is serious in nature, and
  - c. there is urgency to the risk identified.
- 76.3 If the investigation committee or discipline committee, as the case may be, determines that action under this section is necessary, any order made must:
- a. be in writing,
  - b. include reasons for the order, and
  - c. be delivered to the registrant as soon as possible.
- 76.4 The registrar must publish an order for extraordinary action under section 76.3 as well as the registration status of the registrant and particulars of the alleged misconduct on ASTTBC's website within 30 days of the issuance of the order.
- 76.5 Where publication is required under 76.4, council may determine that it is not in the public interest for the information to be publicly available in accordance with section 1.8 of the General Regulation and may direct the registrar to redact the order before it is published.
- 76.6 If the investigation committee or discipline committee, as the case may be, determines that extraordinary action is no longer necessary, the order must be rescinded.
- 76.7 Written notice of the rescission must be sent to the registrant as soon as possible.

### **Reporting and publication**

- 77 The registrar must publish:
- a. a consent order under sections 71 or 73 as well as the name, registration status of the registrant and nature of the misconduct on ASTTBC's website within 30 days of the consent order being signed by the registrant,

- b. notice of a citation including the name of the respondent and the allegations of misconduct on ASTTBC's website at least 30 days before the date set for a hearing, and
  - c. limits and conditions imposed on a registrant's practice by the audit and practice review committee as well as the name and registration status of the registrant, the date and nature of the misconduct and a summary of the action on ASTTBC's website within 30 days of the imposition of the limits and conditions.
- 77.1 Where publication is required under 77, council may determine that it is not in the public interest for the information to be publicly available in accordance with section 1.8 of the General Regulation and may direct the registrar to redact the order, notice or summary before it is published.
- 77.2 The registrar must provide written notice to the Superintendent of the disposition of a complaint, own motion investigation, or duty to report and update ASTTBC's register if necessary.
- 77.3 The registrar may distribute a summary of any decision or disposition to registrants which may include commentary about related professional standards, requirements, policies or guidelines, for the purposes of educating and assisting registrants about professional and ethical issues.

## **PART IX – ASTTBC RECORDS**

### **Freedom of information and protection of privacy**

- 78 The registrar is the head of ASTTBC for the purposes of the *Freedom of Information and Protection of Privacy Act*.
- 78.1 The registrar may authorize a deputy registrar or an ASTTBC employee or agent to perform any duty or exercise any function of the registrar that arises under the *Freedom of Information and Protection of Privacy Act*.
- 78.2 Council is responsible for ensuring that the registrar fulfills their duties under the *Freedom of Information and Protection of Privacy Act*.
- 78.3 The registrar must report annually to council regarding the steps taken to fulfill the duties of ASTTBC under the *Freedom of Information and Protection of Privacy Act*.

### **Protection of personal information**

- 79 ASTTBC must take all reasonable measures to ensure that the collection, use, and disclosure of personal information complies with the *Freedom of Information and Protection of Privacy Act*.

### **Disclosure of annual reports and public interest documents**

- 80 Annual reports prepared by the Executive Director for council must be made available upon request and without application of the fees in Schedule E.
- 80.1 The registrar must make an annual report available electronically on ASTTBC's website.
- 80.2 Documents prescribed under the public interest disclosure sections of the Act and regulations must be provided by the registrar upon request.

### **Disclosure of registration status**

- 81 Any person may inquire with the registrar as to the registration status of a person.

### **Fees for information requests**

- 82 Subject to section 75 of the *Freedom of Information and Protection of Privacy Act*, an applicant who requests access to an ASTTBC record under section 5 of that Act must pay the fees set out in Schedule E.

## PART X – STAMPS AND SEALS

### Issuance of a seal to registrants

- 83 Council must approve suppliers who are exclusively authorized to issue stamps, seals, and digital signatures under the authority of ASTTBC.
- 83.1 Stamps and seals must not be acquired, reproduced, or otherwise obtained from any source other than an ASTTBC approved supplier.
- 83.2 Any seal provided to a registrant remains the property of ASTTBC and must be returned immediately upon demand by the registrar.
- 83.3 The charge for a stamp or seal is a lease fee set out in Schedule C for the period that the registrant continues to practice.
- 83.4 The registrar must revoke digital signature service for a registrant who ceases to be a practising registrant.
- 83.5 A registrant must immediately report in writing a lost, stolen, or damaged stamp or seal to the registrar.

### Use of the stamp or seal by registrants

- 84 Practising and temporary registrants in good standing are authorized to affix their stamp or seal to practice-related records including, but not limited to, plans, drawings, details, specifications or other documents which may require a stamp or seal, either as required by law or ASTTBC practice guidelines.
- 84.1 By affixing their stamp or seal, the registrant authenticates records that they have prepared in their capacity to confirm:
- a. the registrant's identity,
  - b. that they are professionally responsible and accountable for the record, including assurances that applicable codes, standards, laws, professional practice guides and legislation have been met,
  - c. the records comply with the Act, regulations, bylaws and ASTTBC policies, and standards of practice, and
  - d. the registrant is qualified, competent, and capable of accepting responsibility, and takes responsibility, for the work that has been authenticated.
- 84.2 The requirement for authentication of work under section 84.1 applies equally to electronic and hard copy documents.
- 84.3 Stamps and seals may only be affixed to documents prepared by a practising or temporary registrant or prepared under that registrant's direct supervision, or prepared by another person

in circumstances where the registrant has thoroughly reviewed the documents and accepted professional responsibility for them.

- 84.4 The use of the stamp and seal are strictly limited to records describing work or containing information that is within the scope of practice defined by the registrant's category, class of registration and any limits or conditions on registration.
- 84.5 Stamps and seals issued to a registrant must, at all times, remain under that registrant's direct and secure control.
- 84.6 Registrants must not allow a stamp or seal to be physically located or accessible in a manner that would allow its use by another person.
- 84.7 Registrants are prohibited from charging a fee or being remunerated or otherwise rewarded for the simple application of their stamp or seal.
- 84.8 A stamp, seal, or digital signature may only be used by a practising or temporary registrant in good standing.
- 84.9 A stamp, seal, or digital signature must not be used for improper, unlawful, or unethical purposes.
- 84.10 The registrant must include their signature and the date that the stamp or seal is applied when affixing the stamp or seal, unless the stamp or seal to be affixed is digital.

## PART XI – GENERAL

### Standards of competence and Code of Ethics

- 85 Registrants must conduct themselves in a professional manner in accordance with ASTTBC's Code of Ethics, all applicable standards of competence and practice guidelines, including but not limited to those set out in Schedule D.
- 85.1 Registrants have a duty to review the ASTTBC website regularly and to review any new standards of competence or practice guidelines that are posted.
- 85.2 Registrants must comply with standards of competence and practice guidelines posted on ASTTBC's website insofar as they relate to their applied science and engineering technology practice.

### Liability insurance

- 86 All registrants must carry and maintain professional liability insurance, whether it is through the employer or a third-party organization.
- 86.1 Before entering into an agreement to provide applied science and engineering technology services, registrants must:
- a. provide written notification to their client of the status of their professional liability insurance and confirm whether it covers the services to be provided, and
  - b. request the client to provide a written acknowledgement of receipt of the written notification.
- 86.2 Council may:
- a. establish a secondary professional liability insurance program, which is independent of any third party or employer professional liability insurance coverage and which includes any terms, conditions, policies and procedures applicable to that program,
  - b. require that the secondary professional liability insurance program, subject to the terms and conditions of the policy, provide coverage to all registrants, and
  - c. establish the fees to be paid by registrants for the secondary professional liability insurance and publish those fees on ASTTBC's website.
- 86.3 Registrants must provide proof of liability insurance on request of the registrar.

### Registrant record keeping

- 87 Registrants must maintain contemporaneous, accurate and comprehensive records relating to their applied technology and engineering technology practice.
- 87.1 Registrants must maintain records for their applied technology and engineering technology practice for at least 10 years.



- 87.2 Registrants must prepare and maintain records for their applied technology and engineering technology practice in legible written, typed or electronic form and store them in systematic manner to ensure their retrieval.
- 87.3 A registrant must make their records and any written, electronic, computerized, or mechanically recorded documentation relevant to those records available during business hours for inspection by ASTTBC or otherwise provide copies to ASTTBC on request.
- 87.4 The requirements in this Part may be satisfied by a registrant if employed by an organization that creates, manages, and retains its records in a manner that is consistent with the intent of these bylaws.

**Electronic and other similar means**

- 88 Despite any other section of the bylaws, any duty, power or responsibility of council, the registrar, deputy registrar, executive director, or any other officer, committee or panel may be completed by teleconference, videoconference, or other similar electronic means.

## SCHEDULE A – Admission requirements for registrants

### Part 1: General admission requirements by class of registrant

This table identifies the basic requirements that must be met for each class of registration. For additional general and discipline-specific competencies, applicants must refer to the remainder of this Schedule.

Note: where educational requirements are specified for a class, sub-class, discipline or endorsement, the applicant must have successfully completed the educational or training program within three (3) years of the date of their application.

Class	Educational requirements	Experiential requirements
Applied Science Technologist (AScT)	<p>Successful completion of a two-year diploma of post-secondary studies in applied science or engineering technology approved by the ASTTBC credentials committee, <u>or</u></p> <p>Evidence of competence approved by the credentials committee as being equivalent to a two-year post-secondary diploma program, <u>or</u></p> <p>Successful completion of one or more examinations listed in Schedule B as assigned by the credentials committee, <u>and</u></p> <p>Successful completion of the ASTTBC Professional Practice and Ethics examination</p>	Completion of 24 months (3,600 hours) progressive, relevant work experience of which a minimum of 12 months (1,800 hours) must be at the technologist profile of practice or higher and in a Canadian work environment
Certified Technician (CTech)	<p>Successful completion of a one-year diploma of post-secondary studies in applied science or engineering technology approved by the ASTTBC credentials committee, <u>or</u></p> <p>Evidence of competence approved by the credentials committee as being equivalent to a one-year post-secondary certificate program, <u>or</u></p> <p>Successful completion of one or more examinations listed in Schedule C as assigned by the credentials committee, <u>and</u></p> <p>Successful completion of the ASTTBC Professional Practice and Ethics training program and examination</p>	Completion of 24 months (3,600 hours) progressive, relevant work experience of which a minimum of 12 months (1,800 hours) must be at the certified technician profile of practice or higher and in a Canadian work environment
Registered Technical Specialist (RTS)	<p>Successful completion of the ASTTBC Professional Practice and Ethics training program and examination, <u>and</u></p> <p>Successful completion of the post-secondary studies, competencies and/or training required for the applicant's requested sub-class, discipline or endorsement as set out in this Schedule</p>	As listed in Part 4 of this Schedule for each subclass, discipline and endorsement

## Part 2: Additional admission requirements for Applied Science Technologists (AScT)

### General Learning Outcomes (competencies): Required for all AScT registrants

<b>GY 01</b>	<b>Technology report</b>
<b>GY 02</b>	Mathematics
<b>GY 03</b>	Project management
<b>GY 04</b>	Physical and natural sciences
<b>GY 05</b>	Ethics, sustainability, contracts and codes
<b>GY 06</b>	Communication
<b>GY 07</b>	Computer knowledge
<b>GY 08</b>	Health and safety

These competencies are mandatory for all disciplines are described by the Technology Accreditation Canada (TAC) in additional detail [here](#).

### Discipline-specific competencies

To be registered in a AScT discipline, applicants must have a minimum of five (5) discipline-specific TAC competencies of which three (3) are the mandatory competencies listed in the following table (which is based on TAC criteria and standards), or equivalent competencies. Additional detail is available [here](#).

AScT Discipline		Mandatory Competencies			
		TAC Code	1	2	3
1	Architecture Building Construction Technology	ARCTY	02	03	09
2	Bioscience Technology	BSTY	01	02	03
3	Biomedical Engineering Technology	BMTY	02	03	05
4	Chemical Engineering Technology	CHTY	01	02	07
5	Civil Engineering Technology	CVTY	01	02	07
6	Electrical Engineering Technology	ELITY	01A	02A	03A
7	Electronic Engineering Technology	ELOTY	01	02	03
8	Environmental Engineering Technology	ENTY	01	05	06
9	Petroleum and Gas Engineering Technology	PETY	04	05	09
10	Geotechnical Engineering Technology	N/A	CVTY 05	CVTY 06	CVTY 07
11	Industrial Engineering Technology	INDTY	01	02	03
12	Information Technology	INFTY	01	04	06
13	Instrumentation Engineering Technology	INSTY	01	02	05
14	Marine Engineering Technology	MATY	01	02	05
15	Mechanical Engineering Technology	METY	01	02	08
16	Metallurgical Technology	N/A	CHTY 01	CHTY 02	CHTY 07

17	Mineral Resources Technology	MRTY	01	02	03
18	Naval Architecture Technology	NATY	01	02	03
19	Survey / Geomatics Technology	SGTY	02	04	09

Sub-class	Educational requirements	Experiential requirements
Registered Technology Manager (RTMgr)	<p>Be registered as an ASCT or CTech, <u>and</u></p> <p>Successful completion of post-secondary training related to the RTMgr discipline in Schedule B</p>	<p>Completion of 24 months (3,600 hours) relevant management experience in a technical environment as per the registered technology manager profile of practice, demonstrating the competencies required at Appendix 1 to this Schedule</p>
Professional Technologist (PTech)	<p>Be registered as an ASCT</p>	<p>Minimum of six (6) years of work experience, at least four (4) years of which are senior technical experience. At least two years of the senior technical experience must be in the areas and at the level of:</p> <ul style="list-style-type: none"> <li>• Collecting, organizing, evaluating and designing products, services or procedures in complex technological areas.</li> <li>• Being a consultant or being regarded as a technical expert in the discipline.</li> <li>• Consistently demonstrating current, state of the art technical competencies and commitment to technological best practices including application of the latest codes and standards.</li> <li>• Independently defining complex technology problems to be solved and conceptualizing a satisfactory solution.</li> <li>• Frequently being involved in the analysis of services, products or processes for the purpose of improving effectiveness or efficiency of work being done.</li> </ul>

		Applicants must provide the names and contact information of a minimum of four referees that have a professional designation with legislated practice rights in the field of practice of the applicant and have overseen or taken responsibility for the applicant's work for a minimum of two years.
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### Part 3: Additional admission requirements for Certified Technicians (CTech)

#### General Learning Outcomes (competencies): Required for all CTech registrants

<b>GN 01</b>	<b>Communication</b>
<b>GN 02</b>	Mathematical techniques
<b>GN 03</b>	Teamwork
<b>GN 04</b>	Management and business principles
<b>GN 05</b>	Ethics, sustainability, contracts and codes
<b>GN 06</b>	Graphical communication
<b>GN 07</b>	Computer knowledge
<b>GN 08</b>	Health and safety

These competencies are mandatory for all disciplines are described by TAC in additional detail [here](#).

#### Discipline-specific competencies

To be registered in a CTech discipline, applicants must have a minimum of five (5) discipline-specific TAC competencies of which three (3) are the mandatory competencies listed in the following table (which is based on TAC criteria and standards) or equivalent competencies. Additional detail is available [here](#).

CTech Discipline		Mandatory Competencies			
		TAC code	1	2	3
1	Architecture, Building Construction Technician	ARCTN	01	02	10
2	Biotechnology Technician	BSTN	01	02	03
3	Chemical Technician	CHTN	01	02	05
4	Civil Technician	CVTN	01	05	07
5	Computer Systems Technician	CSTN	01	02	04
6	Electrical Technician	ELITN	01	03	08
7	Electro-Mechanical Technician	EMTN	01	03	04
8	Electronics Technician	ELOTN	01	02	03
9	Environmental Technician	ENVTN	01	02	03

10	Instrumentation Technician	INSTN	01	02	05
11	Mechanical Technician	METN	01	03	04
12	Mineral Resources Technician	GMRTN	01	02	03
13	Petroleum and Gas Technician	PETN	04	05	09
14	Power Systems Technician	PSTN	01	02	03
15	Survey / Geomatics Technician	SGTN	01	02	03

Sub-class	Educational requirements	Experiential requirements
Registered Technology Manager (RTMgr)	<p>Be registered as an ASCT or CTech, and</p> <p>Successful completion of post-secondary training related to the RTMgr discipline in Schedule B</p>	<p>Completion of 24 months (3,600 hours) relevant management experience in a technical environment as per the registered technology manager profile of practice, demonstrating the competencies required at Appendix 1 to this Schedule</p>

## Appendix A – RTMgr Competencies

The following requirements will be applied by the credentials committee when assessing applications for registration in the RTMgr sub-class.

### 1.0 General

Admission in the RTMgr sub-class may be granted if:

- a. in addition to being an ASCT or CTech, the applicant has a minimum of six (6) years of management experience during which the competencies, described herein have been achieved, or
- b. the applicant has completed an approved education program and has a minimum of two(2) years of relevant management experience in a technical environment.

### 2.0 Competencies

To be admitted in the RTMgr sub-class, the applicant must attain a minimum of eighty percent (80%) of the primary and secondary competencies. Achieving competency requires evidence that a minimum of seventy five percent (75%) of the indicators for each selected competency have been achieved by the applicant.

#### A. Primary Competencies

Applicants for the RTMgr sub-class must achieve eighty percent (80%) of these primary competencies. The applicant is able to:

1. demonstrate leadership in a technical specialization,
2. plan and manage human resources,
3. apply regulations and laws for business,
4. manage projects, and
5. analyze and solve problems through appropriate decision-making.

#### *Indicators Describing Primary Competencies*

A primary competency will be deemed to be achieved when a minimum of seventy five percent (75%) of the indicators within each competency are claimed by the applicant. Each of the five primary competencies is described in detail below.

1. Demonstrate leadership in a technical specialization
  - a. Distinguish between the roles and responsibilities of technical specialists and managers.
  - b. Describe issues, tasks and duties of technical specialists and managers.
  - c. Identify indicators of a personal transition from technical specialist to manager role.
  - d. Demonstrate skills needed by an effective leader / manager.
  - e. Demonstrate skills associated with each level of management.
2. Plan and manage human resources
  - a. Apply human resource systems and processes designed for technology- based organizations.
  - b. Determine the organization's workforce needs and the selection process required to achieve those needs.
  - c. Motivate employees in the work setting of technology-based organizations.
  - d. Design and implement a career management program.
  - e. Conduct performance appraisal and training functions of an organization.
3. Apply regulation and laws for business
  - a. List the sources of Canadian law.
  - b. Explain legal concepts and rules associated with tort, contract, employment, partnership and intellectual property.
  - c. Describe the general judicial process involved when a dispute is taken to court.
  - d. Describe the legal means of protecting technological innovations including licensing of use.
  - e. Explain the law and legal process related to ethical and moral considerations in business.
4. Manage projects
  - a. Develop, build and coordinate work within effective project teams.
  - b. Plan and schedule projects, monitor and report progress, and systematically address project issues.
  - c. Recognize and act appropriately to the characteristics of different personality styles and cultures.
  - d. Use conflict management skills applicable to different behavior styles.
  - e. Apply fiscal monitoring, cost and budget control techniques when managing projects.

5. Analyze and solve problem through appropriate decision-making
  - a. Describe the problem solving process.
  - b. Identify and analyze the facts to solve a problem.
  - c. Explore and select alternate solutions.
  - d. Apply tools and techniques to solve problems.
  - e. Make effective decisions.

B. Secondary Competencies

Applicants for the RTMgr sub-class must achieve eighty percent (80%) of the secondary competencies. The applicant is able to:

1. apply fundamental accounting principles,
2. develop business strategy and structure,
3. communicate effectively in a technological environment,
4. conceive marketing strategies for technical products or services, and
5. manage technological change.

*Indicators Describing Secondary Competencies*

A secondary competency will be deemed to be achieved when a minimum of seventy five percent (75%) of the indicators within each competency are claimed by the applicant. Each of the five secondary competencies is described in detail below.

1. Apply fundamental accounting principles
  - a. Describe accounting principles.
  - b. Explain and interpret the meaning of balance sheets and financial statements.
  - c. Describe the relationship between and applicability of both financial and managerial accounting.
  - d. Evaluate a company's financial condition.
  - e. Use financial statements and costs to make better management decisions.
2. Develop business strategy and structure
  - a. Develop a business strategy and an assessment of company strengths, weaknesses, opportunities and threats.
  - b. Structure a team, organization or unit within the organization to enable it to take advantage of business opportunities.
  - c. Use life cycle models to evaluate business and technical impacts on product developments.
  - d. Formulate business strategies to include technological integration.
3. Communicate effectively in a technological environment
  - a. Use appropriate tone, style and structure in written presentations.
  - b. Identify the desired outcome to select a communication form, recognizing its objective as technical, administrative or motivational.
  - c. Use communication persuasion techniques to achieve desired results.
  - d. Write effective technical proposals.



4. Conceive marketing strategies for technical products and services
  - a. Create a strategic image and plans that tie into corporate objectives.
  - b. Define target market and customers.
  - c. Select brand planning to create a lasting image in the markets.
  - d. Identify a promotion strategy to communicate effectively with the target audience.
  
5. Manage technological change
  - a. Demonstrate characteristics of a leader.
  - b. Use leadership in the change process.
  - c. Identify opportunities for change that will bring benefit to a business and manage the validation and need for that change.
  - d. Identify stakeholders impacted by organizational change.
  - e. Plan for change in context to the organization.

**Part 4: Admission requirements for sub-classes of Registered Technical Specialists (RTS), except ROWP and RFPT**

RTS Sub-class	Educational requirements	Experiential requirements
Certified House Inspector (CHI) (Trainee)	Successful completion of  BCIT BLDG 2915 House Inspection 1,  BCIT BLDG 2925 House Inspection 2,  BCIT BLDC 2935 House Inspection 3: Report Writing,  BCIT BLDC 2945 House Inspection 4: Field Inspection  BCIT BLDC 1500 BC Building Code Part 9,  BCIT BLDC 3050 Building Envelope Performance,  <u>or</u>  equivalent post-secondary training satisfying the competencies for inspecting residential properties to applicable codes, standards and bylaws	N/A

<p>Certified House Inspector (CHI)</p>	<p>Be registered as a CHI (Trainee),  <u>or</u>  Successful completion of post-secondary training satisfying the competencies required of a CHI (Trainee), <u>and</u></p>	<p>Completion of a minimum of 50 hours of field experience under the supervision of a practising CHI or CPI approved by ASTTBC, <u>and</u>  A minimum of three “test” inspections of residential properties under the supervision of a practising CHI or CPI approved by the credentials committee</p>
<p>Certified Property Inspector (CPI)</p>	<p>Be registered as a practising CTech or ASCT in the Building, Civil, Electrical, Mechanical, or related discipline, <u>and</u>  Successful completion of  Okanagan College (Vernon) CON 051 Commercial Inspections,  Okanagan College (Vernon) CON 055 Advanced Building Envelope,  Okanagan College (Vernon) CON 056 Building Code for Commercial Inspections, <u>and</u>  RJ &amp; Associates Inspecting Hazardous Materials,  or equivalent post-secondary training satisfying the competencies for inspecting commercial properties to applicable codes, standards, and bylaws</p>	<p>One year of work experience as a Certified House Inspector (CHI) including 50 hours of field experience under the supervision of a practising CPI approved by ASTTBC, <u>and</u>  A minimum of three “test” inspections of commercial properties under the supervision of a practising CPI approved by approved by the credentials committee</p>
<p>Registered Reserve Fund Analyst (Limited) (RRFAL)</p>	<p>Be registered as a practising CHI, <u>and</u>  Successful completion of Okanagan College (Vernon) CON 052 Strata Depreciation Reporting <u>and</u> Okanagan College (Vernon) CON 053</p>	<p>Completion of a minimum of 6 months (900 hours) of relevant work experience that includes inspecting, analyzing and reporting on a minimum of three strata properties under the supervision of a practising RRFA approved by the credentials committee</p>

	<p>Or equivalent post-secondary training approved by the ASTTBC credentials committee as satisfying the competencies for inspecting, analyzing and preparing depreciation reports to applicable codes, standards, and bylaws.</p>	
Registered Reserve Fund Analyst (RRFA)	<p>Be registered as a practising CPI, <u>and</u></p> <p>Successful completion of Okanagan College (Vernon) CON 052 Strata Depreciation Reporting <u>and</u></p> <p>Okanagan College (Vernon) CON 053</p> <p>Or equivalent post-secondary training satisfying the competencies for inspecting, analyzing and preparing depreciation reports to applicable codes, standards, and bylaws.</p>	<p>Completion of a minimum of 6 months (900 hours) work experience that includes inspecting, analyzing and reporting on a minimum of three strata properties under the supervision of a practising RRFA approved by the credentials committee</p>
Construction Safety Officer (Trainee)	<p>Successful completion of</p> <p>BCIT CNST 1100 – Construction Safety Officer Training, <u>or</u></p> <p>Universal Health TSC/CSO - Safety Management Training, <u>or</u></p> <p>Care Institute: Construction Safety Officer training, <u>or</u></p> <p>equivalent post-secondary training satisfying the competencies required of a qualified person under applicable provincial and municipal bylaws and</p>	N/A

	regulations and successful completion of the examination listed in Schedule B	
Construction Safety Officer (CSO)	Be registered as a CSO (Trainee)	36 months (5400 hours) work experience on construction projects of which a minimum of 12 months (1,800 hours) must be as a CSO (Trainee)
Registered Construction Safety Officer (RCSO)	Be registered as a practising CSO	Completion of an additional 24 months (3,600 hours) as a CSO on one or more construction projects
Certified Public Works Inspector (CPWI)  Levels 1, 2, and 3	Successful completion of post-secondary training satisfying the competencies to apply applicable standards, provincial and municipal bylaws, regulations and specifications for infrastructure construction projects and those set out at Appendix 1 to this Part	Completion of a minimum of 24 months (4000 hours) work experience conducting inspections, monitoring project progress and reporting on various public works projects  Level 1: a minimum of 4,000 hours (2 years full time) work experience performing inspection-related duties  Level 2: a minimum of five years inspection experience demonstrating a progressive increase in responsibility  Level 3: a minimum of ten years inspection experience demonstrating an increase in responsibility
Registered Public Works Technician (RPWT)	Successful completion of post-secondary training satisfying the competencies required to apply applicable standards, provincial and municipal bylaws, regulations and specifications for various public works operational departments and functions, and as set out at Appendix 2 to this Part	Completion of a minimum of 1800 hours (or 1 year full time) of supervised work experience in public works functions
Registered In Site Improvements Surveyor (RSIS)	Be registered as a practising CTech or AScT in the survey / geomatics discipline	Completion of a minimum of 12 months (1,800 hours) experience conducting cadastral (legal) surveys

		under the direction of a registered BC Land Surveyor (BCLS) or RSIS
Certified Residential Designer (CRD)	Be registered as an ASCT or CTech in building technology, <u>and</u>  Successful completion of  BCIT BLDG 1810, <u>or</u>  BCIT BLDC 1500, <u>or</u>  equivalent post-secondary training satisfying the competencies required to design structures to applicable codes, standards, conventions and municipal bylaws	Completion of a minimum of 12 months (1,800 hours) experience designing residential buildings under the supervision of a registrant or equivalent practitioner approved by the credentials committee
Registered Building Designer (RBD)	Be registered as an ASCT or CTech in building technology, <u>and</u>  Successful completion of  BCIT BLDG 1810, <u>or</u>  BCIT BLDC 1500, <u>or</u>  equivalent post-secondary training satisfying the competencies required to design structures to applicable codes, standards, conventions and municipal bylaws	Completion of a minimum of 12 months (1,800 hours) experience designing residential buildings under the supervision of an approved registrant, or equivalent practitioner approved by the credentials committee
Steel Detailer (Trainee)	Meet Steel Detailer (Trainee) requirements set out in the ASTTBC Steel Detailing Registration Policy	Meet Steel Detailer (Trainee) requirements set out in the ASTTBC Steel Detailing Registration Policy
Certified Steel Detailer (CSD)	Meet CSD requirements set out in the ASTTBC Steel Detailing Registration Policy	Meet CSD requirements set out in the ASTTBC Steel Detailing Registration Policy
Registered Steel Detailer (RSD)	Meet RSD requirements set out in the ASTTBC Steel Detailing Registration Policy	Meet RSD requirements set out in the ASTTBC Steel Detailing Registration Policy

Registered Utility Locator Technician (RULT)	Successful completion of BC Common Ground Alliance (BCCGA) Utility Locator Specialist Training Program, offered by the BC Municipal Safety Association, <u>or</u> equivalent post-secondary training satisfying the competencies required to safely and accurately identify and document the location of sub-surface utilities	Completion of a minimum of 12 months (1,800 hours) experience working on locate projects of varying complexity while under the supervision of a RULT or equivalent practitioner approved by the credentials committee
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**Appendix A - CPWI Competencies**

A numerical taxonomy is listed in the right-hand columns, ranking the required competency from level 1 (simple recall of facts) to 6 (complex judgments). The ranking is intended to provide guidance for assessment of competencies, and is based on the following outline<sup>1</sup>:

Level	Competency	Description of Competency
1	Knowledge	The recognition and recall of factual information providing the foundation of thought processes.
2	Comprehension	Interpreting or understanding the meaning or use of factual information.
3	Application	Selecting relevant information to be applied when completing a duty or task.
4	Analysis	Analytical ability to interpret and apply information when considering a duty or tasks.
5	Synthesis	Combining or consolidating multiple sources of information to form a new opinion, action or result.
6	Evaluation	Making judgments to determine if an object or an action conforms to specifications or to acceptable performance standards.

<sup>1</sup> Taxonomy of Educational Objectives: The Classification of Educational Goals (Bloom et al 1956)

No.	Competency	Indicators	Level		
			PWI-1	PWI-2	PWI-3
<b>1.0</b>	<b>Apply fundamental occupational skills</b>				
1.1	Maintain a professional work ethic	<ol style="list-style-type: none"> <li>1. Assess, apply ASTTBC Code of Ethics and Practice Guidelines.</li> <li>2. Apply general principles of professionalism, diligence.</li> <li>3. Advocate professionalism, best practices, promote regulatory compliance</li> </ol>	6	6	6
1.2	Formulate effective communications	<ol style="list-style-type: none"> <li>1. Present verbal and written communications with English literacy suited for a Canadian technical workplace.</li> <li>2. Apply techniques for active listening, conflict resolution, and negotiations.</li> <li>3. Employ verbal communication skills suited to liaison and coordination with others incidental to the work.</li> <li>4. Industry specific, technical communication skills</li> <li>5. Interpret specifications, standards, test reports.</li> <li>6. Use verbal and written skills to convey technical conclusions and expectations; to recommend acceptance or rejection of materials or workmanship.</li> </ol>	4	4	4
1.3	Apply math and science concepts	<ol style="list-style-type: none"> <li>1. Apply basic math concepts including decimal and percentage expressions, fractions and the order of arithmetic operations.</li> <li>2. Apply metric and imperial systems of measurement to convert from one system to the other, interpret specifications expressed in either system of measurement.</li> </ol>	2	3	4

		<ol style="list-style-type: none"> <li>3. Use scale systems to interpret drawings and create simple scale sketches.</li> <li>4. Use expressions of slope such as percentage (rise/run) and ratios to measure and describe site topography and to specify constructed features such as grade of piping, roadways, and sidewalks.</li> <li>5. Calculate volumes for earthworks, size of tanks, transportation of materials and costing.</li> </ol>			
1.4	Evaluate measurements	<ol style="list-style-type: none"> <li>1. Record accurate measurements in the field to support drawings and reports.</li> <li>2. Use basic survey instruments to identify horizontal and vertical alignments using measuring tapes, eye levels, basic dumpy level or rotary laser.</li> <li>3. Use simple differential levelling techniques to determine elevations and to confirm elevations of constructed features using eye level, rotary laser or similar instruments.</li> </ol>	4	5	6
1.5	Evaluate engineering drawings	<ol style="list-style-type: none"> <li>1. Interpret technical plans, showing sections, elevation, profile views, detail and assembly views.</li> <li>2. Create sketches by hand to show field installations, observations.</li> <li>3. Employ common terminology, abbreviations and symbols used for civil engineering drawings and building plans.</li> </ol>	4	5	6



1.6	Assess civil infrastructure, utilities	<ol style="list-style-type: none"> <li>1. Differentiate the purposes, typical configurations, materials used and the corresponding systems of classification and specifications for utilities such as water, sewer, gas, electricity and telephone.</li> <li>2. Differentiate the purposes, classifications/specs and key properties of common aggregates for earthworks.</li> <li>3. Differentiate the common types, constituents, properties and applications for asphalt and concrete</li> <li>4. Identify the construction methods for public works infrastructure.</li> </ol>	4	5	6
1.7	Evaluate standards and specifications	<ol style="list-style-type: none"> <li>1. Evaluate applicable standards and specifications including: Master Municipal Construction Documents (MMCD) and municipal engineering standards.</li> <li>2. Assess public works construction standards and best practices for utilities installation, road construction, concrete and asphalt lay down, and restorations.</li> </ol>	4	5	6
1.8	Distinguish utility marking conventions	<ol style="list-style-type: none"> <li>1. American Public Works Association (APWA) uniform color code for marking utility locations (as used by BCOneCall).</li> <li>2. Marking methods including paint, flags, stakes, chalk, offsets.</li> </ol>	2	2	2
1.9	Apply basic computer skills	<ol style="list-style-type: none"> <li>1. Internet searches and e-mail applications.</li> <li>2. Basic word processing and spreadsheets.</li> <li>3. Basic digital file management.</li> </ol>	3	3	3

<b>2.0</b>	<b>Work Safely</b>				
2.1	Apply applicable OH&S regulations	<ol style="list-style-type: none"> <li>1. Part 4 General Conditions.</li> <li>2. Part 8 Personal Protective Clothing and Equipment.</li> <li>3. Part 9 Confined Spaces.</li> <li>4. Part 18 Traffic Control.</li> <li>5. Part 19 Electrical Safety.</li> <li>6. Part 20 Construction, Excavation and Demolition.</li> </ol>	3	3	3
2.2	Evaluate safe work practices	<ol style="list-style-type: none"> <li>1. Evaluate hazards to the personal safety of the Inspector and apply safe practices to mitigate hazards such as excavation stability, crushing and impact hazards, working around mobile equipment, confined space, electrical hazards and fall protection.</li> <li>2. Advocate and exemplify safety behaviour.</li> </ol>	4	5	6
<b>3.0</b>	<b>Perform inspections</b>				
3.1	Evaluate background information	<ol style="list-style-type: none"> <li>1. Review permits, plans, specifications.</li> <li>2. Access historic inspection reports, test results, etc.</li> </ol>	4	5	6
3.2	Develop a work plan	<ol style="list-style-type: none"> <li>1. Establish required scope of inspection work, deliverables, client needs.</li> <li>2. Determine schedule, confirm access and other coordination with contractor, project management, and others incidental to the work.</li> </ol>	2	3	4
3.3	Conclude (perform) field assessments	<ol style="list-style-type: none"> <li>1. Prepare field notes as per 4.1.</li> <li>2. Conduct visual assessments of components, systems, procedures.</li> <li>3. Determine quantifiable measurements, confirm specified alignments.</li> </ol>	4	5	6

		4. Perform sampling as required for quality control.			
3.4	Evaluate findings	<ol style="list-style-type: none"> <li>1. Compare as constructed features to drawings, specifications and standards.</li> <li>2. Assess sampling/testing results if applicable.</li> <li>3. Recommend acceptance or rejection of materials or workmanship.</li> </ol>	4	6	6
<b>4.0</b>	<b>Create documentation</b>				
4.1	Develop field notes and sketches	<ol style="list-style-type: none"> <li>1. Include date, time, location, weather, and persons in attendance.</li> <li>2. Create legible and accurate notes and sketches.</li> <li>3. Ensure sufficient clarity to allow another competent person to understand.</li> <li>4. Include adequate detail to support drawings and written report.</li> <li>5. Include adequate detail to support recommendations and conclusions.</li> <li>6. Optional: prepare a photographic record to record key findings and support conclusions.</li> </ol>	3	4	5
4.2	Create records, reports	<ol style="list-style-type: none"> <li>1. Prepare formal inspections and progress reports that include dates, time, identity of inspector and others, the methodology, scope, limitations of the inspection a conclusion and recommendations.</li> <li>2. Create as constructed (as built) plans that include adequate representations, dimensioning and labelling as per industry standards and practice.</li> <li>3. Maintain effective filing systems for records and reports.</li> </ol>	3	4	5

**Appendix B: RWPT Competencies**

All RPWT applicants are required to achieve the majority of indicators for each of the competencies described in 1.0, 2.0, 3.0 and 4.0. In addition, a minimum of one optional competency selected from 5.0, 6.0, 7.0, 8.0 or 9.0 is required for registration in the RWPT sub-class.

No.	Competency	Indicators
1.0	Assess safety risks and maintain safe workplaces and practices.	<ol style="list-style-type: none"> <li>1. Identify the agencies and authorities overseeing safe work practices in British Columbia.</li> <li>2. Describe and recognize safety risks associated with confined space, fall hazards, pressurized or combustible fuels, chemicals and other materials.</li> <li>3. Maintain personal and public safety while working with and around heavy equipment including excavators, cranes, crushers, trucks and tractors.</li> <li>4. Explain the importance of safe excavation practices as per part 20 of Occupational Health and Safety (OHS) Act including underground utility damage prevention and excavation stability risks.</li> <li>5. Describe personal and public safety risks and safe practices related to work around electricity supply systems, electrical equipment installation, maintenance and operation.</li> <li>6. Implement safe hoisting and lifting practices as described in Part 15 of OHS.</li> <li>7. Promote public safety regarding hazardous work sites and environments requiring mitigation of risks due to excessive noise, dust, traffic, falling into excavations or risk of falling objects.</li> </ol>
2.0	Select and safely use equipment appropriate for various jobs.	<ol style="list-style-type: none"> <li>1. Describe the appropriate type and size of equipment used when excavating or compacting.</li> <li>2. Specify the most appropriate hand tools required for various tasks and working conditions.</li> <li>3. Identify, inspect, maintain and safely use electric, pneumatic, hydraulic and gasoline-powered portable tools.</li> <li>4. Specify the appropriate size and type of auxiliary equipment such as generator sets, lighting towers, pumps, compressors, excavators and conveyors.</li> <li>5. Secure, transport, set-up and commission auxiliary equipment.</li> </ol>

<p>3.0</p>	<p>Apply skills generic to all RPWT competencies.</p>	<ol style="list-style-type: none"> <li>1. Maintain a professional work ethic.</li> <li>2. Apply effective interpersonal skills in the workplace context.</li> <li>3. Apply effective communication skills.</li> <li>4. Describe public works operations, organizational structure and to functions.</li> <li>5. Apply technical math to solve problems involving measurement, volumes, areas, weight, conversion of units, slope, angles and arcs.</li> <li>6. Create and interpret drawings, sketches and maps including site plans, sections, contours, profiles, elevations and detail and associated nomenclature.</li> <li>7. Use basic surveying techniques and instruments to establish grades, layouts and relationship to plans.</li> <li>6. Describe the key characteristics and uses of common construction materials including aggregates, geotextiles, asphalt, concrete, wood, metal and plastics.</li> </ol>
<p>4.0</p>	<p>Describe and apply environmental best practices.</p>	<ol style="list-style-type: none"> <li>1. Demonstrate awareness of environmental regulations and their application under federal, provincial and local agencies such as the Ministry of Environment, Department of Fisheries and Oceans and Ministry of Health.</li> <li>2. Describe ways to mitigate environmental risks related to fish and wildlife including riparian area protection, concepts of fish biology and the effects of silt and pollution on birds, fish and wildlife.</li> <li>3. Describe and apply erosion prevention measures when doing earthworks.</li> <li>4. Describe and apply practices that will reduce environmental damage from spills, chemical contamination and disposal of hazardous materials.</li> <li>5. Describe risks and safe methods for controlling invasive and noxious plant species.</li> <li>6. Describe and protect archeological sites, heritage buildings and sites including First Nations cultural, historical sites and values such as culturally modified trees, human remains and middens.</li> <li>7. Describe best practices in collecting and disposing of solid waste using approved reduced waste methods.</li> </ol>

<p>5.0</p>	<p>Describe fundamental principles and criteria for constructing and maintaining roads, sidewalks and signage for vehicle and pedestrian traffic.</p>	<ol style="list-style-type: none"> <li>1. Describe basic design principles and construction methods for: stairs, ramps, sidewalks, curbs, gutters, roadways, bridges, culverts, streetlights, signals, signage and road markings.</li> <li>2. Describe the materials and techniques used for road surface treatments and for the placement and compaction of subgrade materials for various site and soil conditions.</li> <li>3. Describe techniques used for road surface repairs and maintenance including repair of concrete.</li> <li>4. Identify and correct conditions requiring new signage design, placement, installation, repair or maintenance.</li> <li>5. Perform earthworks processes including layout, excavating, backfilling and compacting to specifications.</li> </ol>
<p>6.0</p>	<p>Describe fundamental principles and methods of constructing, maintaining and repairing water supply systems.</p>	<ol style="list-style-type: none"> <li>1. Identify water supply components and construction techniques for pressurized piping systems</li> <li>2. Explain the principles of potable water wells and pumps including routine adjustments, repair and water quality monitoring.</li> <li>3. Describe routine maintenance, troubleshooting and emergency repair procedures for pumping systems.</li> <li>4. Demonstrate awareness of Drinking Water Quality regulations and guidelines and their application under federal, provincial, and local agencies.</li> <li>5. Describe water treatment parameters, drinking water standards and methods of maintaining common treatment technologies.</li> <li>6. Perform pressure testing, flushing and disinfection.</li> <li>7. Describe fundamentals of hydraulics including flow volume, cross connection detection, backflow prevention, pressure, head and water hammer.</li> <li>8. Monitor, adjust, trouble shoot and repair valves, hydrants, meters, force mains and service connections.</li> </ol>

<p>7.0</p>	<p>Interpret essential regulations as they apply to the design construction, maintenance and repair of waste water systems.</p>	<ol style="list-style-type: none"> <li>1. Check the condition and repair sewer system components including: manholes, pump stations (lift stations), catch basins, inlet and outfall structures, discharge to surface bodies, settling ponds, and underground infiltration systems</li> <li>2. Describe Sewerage System Regulation requirements for onsite wastewater systems</li> <li>3. Maintain, troubleshoot and repair wastewater pumping systems</li> <li>4. Maintain, troubleshoot and repair common treatment processes</li> <li>5. Describe purposes, procedures, materials and equipment to perform flushing, jetting, vacuuming, camera inspections, dye and smoke testing</li> </ol>
<p>8.0</p>	<p>Conduct preventative basic maintenance and routine repairs on residential and commercial buildings.</p>	<ol style="list-style-type: none"> <li>1. Describe essential features of the BC Building Code applicable to the construction of: foundations, framing, flooring, roofing, plumbing, electrical, heating and ventilation systems, vapor barrier and insulation</li> <li>2. Demonstrate fundamental carpentry and construction processes when assisting in the installation of doors, windows, cabinets, stairs, ramps and handrails.</li> <li>3. Describe the essential features and components of potable water supply and wastewater drainage systems.</li> <li>4. Identify various types of roofing materials suitable for flat and sloping roof styles and components such as vents, flashing and gutters.</li> <li>5. Select and apply paint and other materials used to protect and beautify residential, commercial and heritage buildings.</li> </ol> <p>Recognize unsafe conditions and recommend appropriate process and qualified people to remediate conditions of mold, asbestos, insect, animal and pest infestation.</p>

<p>9.0</p>	<p>Monitor, maintain and repair parks and playground areas, structures and equipment.</p>	<ol style="list-style-type: none"> <li>1. Describe due diligence and safety issues related to inspection of parks and playground equipment.</li> <li>2. Describe the importance of structural integrity of structures and playground equipment accessible to the public.</li> <li>3. Conduct routine ocular inspections to identify when maintenance and repair is needed.</li> <li>4. Report conditions in parks and playgrounds that may cause risks to public safety.</li> <li>5. Outline regulatory requirements for various recreational facilities.</li> <li>6. Inspect, repair and maintain sports fields of various surface materials and requirements specific to the intended sport</li> <li>7. Repair and maintain trails and natural areas to ensure sustainability and public safety.</li> <li>8. Repair and maintain irrigation systems and equipment including flood control plans.</li> <li>9. Select, plant and maintain shrubs, annuals, perennials, trees, grass and turf</li> <li>10. Identify strategies for controlling damage to flora due to pests, pest infestation, wildlife or climate extremes.</li> </ol>
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**Part 5: Registered Onsite Wastewater Practitioners (ROWPs) Admission Requirements**

If an applicant is registered as an ROWP with one or more endorsements and applies to ASTTBC to add another endorsement, the registration requirements below may be modified to reflect only the additional competencies and examinations.

ROWP Endorsement	Educational requirements	Required competencies
ROWP Planner	<p>Successful completion of the ASTTBC Professional Practice and Ethics exam, <u>and</u></p> <p>Successful completion of the ROWP Jurisprudence Exam in an invigilated setting</p>	<p>A ROWP Planner must meet the competencies set out at sections 1-4 of the ROWP competencies at Appendix A to this Part and be competent in planning a sewerage system for servicing domestic strength sewage wastewater using a Type 1 or Type 2 treatment method for daily design flow of domestic sewage less than 9,100 liters, in accordance with the Standard Practice Manual pursuant to the <a href="#">Sewerage System Regulation and Public Health Act</a></p>
ROWP Installer	<p>Successful completion of the ASTTBC Professional Practice and Ethics exam</p> <p>Successful completion of the ROWP Jurisprudence Exam in an invigilated setting</p>	<p>A ROWP Installer must meet the competencies set out at sections 1-3 and 5 of the ROWP competencies at Appendix 1 to this Part, and be competent to install a sewerage system servicing domestic strength sewage wastewater using a Type 1 or Type 2 treatment method for daily design flow of domestic sewage less than 9,100 liters in accordance with the Standard Practice Manual pursuant to the <a href="#">Sewerage System Regulation and Public Health Act</a>, and in accordance with specifications within the Filing documents prepared by an Authorized Person and accepted by the relevant Health Authority.</p>
ROWP Maintenance Provider	<p>Successful completion of the ASTTBC Professional Practice and Ethics exam</p> <p>Successful completion of the ROWP Jurisprudence Exam in an invigilated setting</p>	<p>A ROWP Maintenance Provider must meet the competencies set out at sections 1-3 and 6 of the ROWP competencies at Appendix 1 to this Part, and be competent in monitoring and maintaining a sewerage system servicing domestic strength sewage wastewater using a Type 1 or Type 2 treatment method for daily design flow</p>

		of domestic sewage less than 9,100 liters, in accordance with the Standard Practice Manual pursuant to the <a href="#">Sewerage System Regulation and Public Health Act</a> .
ROWP Private Inspector – Residential or Commercial	<p>Successful completion of the ASTTBC Professional Practice and Ethics Exam</p> <p>Successful completion of the ROWP Jurisprudence Exam in an invigilated setting</p>	<p>A ROWP conducting residential inspections must meet the competencies set out at sections 1-3 and 7 of the ROWP competencies at Appendix 1 to this Part, and be competent in inspecting residential sewerage systems using a Type 1, 2 or 3 treatment method.</p> <p>A ROWP conducting commercial inspections must meet the competencies set out at sections 1-3 and 7 of the ROWP competencies at Appendix 1 to this Part , and be competent in inspecting a commercial sewerage system, using a Type 1, 2 or 3 treatment method.</p>

A registrant in good standing who is registered by the credentials committee as a Registered Onsite Wastewater Practitioner (ROWP) is recognized under the [Sewerage System Regulation](#) (SSR) as an Authorized Person (AP). An AP may provide onsite wastewater services within the scope of practice for which the ROWP is certified (Installer, Maintenance Provider or Planner).

Authorized Persons must comply with all provisions of the *Sewerage System Regulation* including the restrictions to ROWP Practice. Unless supervised by a professional, ROWPs must not design, construct or maintain systems using type 3 treatment or systems with daily design flow >9100 L.

**Planner**

A registrant must be registered by the credentials committee as a ROWP Planner before providing site/soil assessment, design and construction review services, or conclusions regarding suitability of sites for onsite wastewater treatment.

A registrant must be certified as a ROWP Planner before submitting Filing or Certification documents to the Health Authority.

**Installer**

A registrant must be registered by the credentials committee as a ROWP Installer before providing system installation, system repair or replacement (as defined by SPM) or supervision of construction by non-authorized persons.

At the discretion of the credentials committee an Installer may be certified for installing Type 3 systems or systems with daily design flow design >9100 L. The *Sewerage System Regulation* requirements for Professional supervision of construction for type 3 or systems with daily design flow >9100 L remain in effect.

**Maintenance Provider**

A registrant must be registered by the credentials committee as a ROWP Maintenance Provider before providing system maintenance and monitoring, and before undertaking component repair or replacement (as defined in Sewerage System Standard Practice Manual (SPM) available [here](#)).

At the discretion of the credentials committee Maintenance Provider may be permitted to provide service for Type 3 systems or systems with daily design flow design >9100 L. The Sewerage System Regulation requirements for Professional supervision of type 3 or systems with daily design flow >9100 L remain in effect.

**Private Inspector**

On application, the credentials committee must register qualified ROWPs in one of the following categories of Private Inspector: (1) Inspector – Residential, or (2) Inspector – Commercial.

A registrant must be registered by the credentials committee as a ROWP Residential Private Inspector or Commercial Private Inspector before providing inspection or assessment services (as defined by Section 7 and Annex 1 of the ROWP Practice Guidelines).

**Appendix A – ROWP Competencies**

No.	Competency	Indicators
<b>1.0</b>	<b>Apply fundamental occupational skills</b>	
1.1	Maintain a professional work ethic	<ol style="list-style-type: none"> <li>1. Conduct and apply ASTTBC Code of Ethics and Practice Guidelines.</li> <li>2. Apply general principles of professionalism, diligence.</li> <li>3. Advocate best practices, promote regulatory compliance.</li> </ol>
1.2	Employ effective business practices	<ol style="list-style-type: none"> <li>1. Obtain written declarations from owners to confirm usage information relevant to system design.</li> <li>2. Provide written quotes with fixed pricing or expected range of pricing.</li> <li>3. Prepare written contracts describing the service you will provide and expectations of the client.</li> <li>4. Use effective printed document and electronic data filing systems including backup to maintain records for a minimum of 15 years.</li> </ol>
1.3	Use effective interpersonal skills	<ol style="list-style-type: none"> <li>1. Apply conflict resolution methodologies.</li> <li>2. Describe effective behaviour in organizations.</li> <li>3. Use interpersonal skills to define expectations and agreements with clients and owner education.</li> </ol>

1.4	Apply effective communication skills	<ol style="list-style-type: none"> <li>1. Complete the general competencies for verbal and written English literacy suited for a Canadian technical workplace.</li> <li>2. Apply effective techniques for active listening, questioning strategies and interview techniques.</li> <li>3. Use communication skills to define expectations and agreements with clients and to inform owners of system functions, operating and maintenance instructions.</li> </ol>
1.5	Apply math and science concepts	<ol style="list-style-type: none"> <li>1. Apply basic math concepts including:             <ol style="list-style-type: none"> <li>a. Decimal, fraction and percentage expressions.</li> <li>b. Order of arithmetic operations.</li> <li>c. Exponential functions.</li> <li>d. Logarithms.</li> <li>e. Rounding and significant figures.</li> </ol> </li> <li>2. Apply metric and imperial systems of measurement:             <ol style="list-style-type: none"> <li>a. Convert linear, volume and pressure variables from metric to imperial systems.</li> <li>b. Interpret specifications and regulatory requirements that are expressed in systems of measurement.</li> <li>c. Prepare specifications for onsite systems using the metric system.</li> </ol> </li> <li>3. Interpret and create drawings using linear scales on drawings and sketches.</li> <li>4. Use expressions of slope to measure and report site topography and to specify constructed features (e.g. grade of piping, infiltrative surfaces, cover soil, etc.).             <ol style="list-style-type: none"> <li>a. Percentage (rise/run).</li> <li>b. Ratio (run:rise).</li> </ol> </li> <li>5. Calculate volume:             <ol style="list-style-type: none"> <li>a. Determine volume of existing tanks.</li> <li>b. Estimate volume of excavations, volume of imported sand media and other aggregates, including bulking and settling estimates.</li> </ol> </li> <li>6. Use differential levelling techniques to determine elevations in the field, establish benchmarks and confirm elevations of constructed features.</li> <li>7. Apply fundamentals of Geomatics:             <ol style="list-style-type: none"> <li>a. Interpret Dominion Land Survey methodology (range, township etc.).</li> <li>b. Use geodetic system/elevations.</li> <li>c. Interpret/report geographic coordinates (i.e. latitude, longitude).</li> <li>d. Interpret magnetic declination to convert compass bearings in the field to 'true' bearings on drawings and vice versa.</li> </ol> </li> </ol>

		8. Interpret basic parameters for sewage and effluent characteristics, including total suspended solids, biological oxygen demand, oil and grease quantities, mass loading.
1.6	Perform basic surveying measurement	<ol style="list-style-type: none"> <li>1. Select and use measuring tools per industry practices</li> <li>2. Determine adequate dimensions in the field to support drawings and reports.</li> <li>3. Establish suitable reference points in the field to convey specifications and facilitate job control and layout.</li> <li>4. Use basic GPS equipment to identify and report geographic coordinates.</li> <li>5. Use basic survey instruments to identify horizontal and vertical alignments, or to construct features as per specified horizontal and vertical alignments including the following instruments:               <ol style="list-style-type: none"> <li>a. Measuring tapes.</li> <li>b. Hand held compass.</li> <li>c. Hand held clinometer.</li> <li>d. Rotary laser level.</li> </ol> </li> <li>6. Basic dumpy level (i.e. builder's level/transit).</li> </ol>
1.7	Use engineering drawings	<ol style="list-style-type: none"> <li>1. Interpret and create plan, section, elevation, profile views.</li> <li>2. Create drawings by hand, to scale, with regard to basic drafting conventions (CADD competencies are optional).</li> <li>3. Use scale systems to create drawings to scale or to identify dimensions in the field from scale drawings.</li> <li>4. Use common terminology, abbreviations and symbols used for civil engineering drawings and sewerage system drawings. Examples include: bench marks (BM) reference points (RP), catch basin (CB), property line (PL), monuments (Mon), sanitary (san), symbols for valves, water courses, and utilities.</li> </ol>
1.8	Differentiate civil infrastructure utilities	<ol style="list-style-type: none"> <li>1. Describe the purpose, configuration and materials used for infrastructure systems such as: drinking water, sanitary and storm sewers, gas and electrical.</li> <li>2. Describe the typical units of measurement, specifications and other terminology used for infrastructure systems including pipe classifications and aggregates.</li> </ol>

1.9	Describe uses and limitations of locating technologies	<ol style="list-style-type: none"> <li>1. Electro magnetic: Active - direct connection or inductive Passive</li> <li>2. Ground penetrating radar.</li> <li>3. Physical exposure (daylighting/hand exposure, hydro-vacing).</li> <li>4. Pipe camera.</li> <li>5. 'Fish tapping'.</li> </ol>
1.10	Distinguish utility marking conventions	<ol style="list-style-type: none"> <li>1. APWA uniform color code.</li> <li>2. Symbols and abbreviations for civil drawings and specifications.</li> <li>3. Marking methods including paint, flags, stakes, chalk, offsets.</li> </ol>
1.11	Employ basic computer skills	<ol style="list-style-type: none"> <li>1. Search information on the internet using various browsers.</li> <li>2. Send, receive and manage e-mail messages.</li> <li>3. Prepare documents using word processing software.</li> <li>4. Scan, save and send documents.</li> <li>5. Clearly label and manage digital files.</li> <li>6. Complete periodic backup of computer files and operating software.</li> </ol>
<b>2.0 Work Safely</b>		
2.1	Determine applicable OH&S regulations	<ol style="list-style-type: none"> <li>1. Outline and apply portions of the OH&amp;S regulations that have common applicability to onsite sewerage work, including: <ul style="list-style-type: none"> <li>○ Part 4 General Conditions.</li> <li>○ Part 8 Personal Protective Clothing and Equipment.</li> <li>○ Part 9 Confined Spaces.</li> <li>○ Part 18 Traffic Control.</li> <li>○ Part 19 Electrical Safety.</li> </ul> </li> <li>2. Part 20 Construction, Excavation and Demolition.</li> </ol>
2.2	Select and use Personal Protection Equipment (PPE)	<ol style="list-style-type: none"> <li>1. Identify the purposes, proper use and adjustment, inspection and maintenance procedures for the types of PPE commonly used in the excavating, general construction and sewerage industries.</li> </ol>
2.3	Evaluate risks of exposure to sewage	<ol style="list-style-type: none"> <li>1. Identify risks to human health and the environment.</li> <li>2. Employ mitigating strategies to reduce risks to the ROWP, the owners/clients and the public.</li> </ol>

2.4	Evaluate safe work practices	<ol style="list-style-type: none"> <li>1. Evaluate excavation stability: <ul style="list-style-type: none"> <li>• Identify sloping standard practice.</li> <li>• Identify shoring standard practice.</li> <li>• Identify factors contributing to soil instability.</li> </ul> </li> <li>2. Assess electrical hazards.</li> <li>3. Identify confined space conditions and risks.</li> <li>4. Evaluate risks of working around heavy equipment. Determine appropriate barriers, signage, site security.</li> </ol>
2.5	Promote public safety	<ol style="list-style-type: none"> <li>1. Identify when traffic control is needed.</li> <li>2. Adopt best practices for signage, barriers, site security. Advocate and exemplify safety behaviour.</li> </ol>
<b>3.0 Apply onsite wastewater fundamentals</b>		
3.1	Examine hazards to health and the environment	<ol style="list-style-type: none"> <li>1. Describe the health risks, harm to the environment and potential impact on aquatic species of the following: <ul style="list-style-type: none"> <li>• Exposure to pathogens and viruses.</li> <li>• Nitrogen and phosphorus.</li> <li>• Increased organic content and associated oxygen depletions.</li> </ul> <p>Chemical constituents of cleaning products, cosmetics, pharmaceuticals, and others.</p> </li> </ol>
3.2	Evaluate regulatory framework	<ol style="list-style-type: none"> <li>1. Outline the <i>Sewerage System Regulation</i>.</li> <li>2. Evaluate health risks and identify reporting requirements.</li> <li>3. Identify and apply when necessary the regulations applicable to onsite wastewater systems including: <ol style="list-style-type: none"> <li>a. Public Health Act.</li> <li>b. Past Acts and Regulations in effect at the time a specific system being inspected was constructed</li> <li>c. Riparian Area Regulation.</li> <li>d. Drinking Water Protection Act.</li> <li>e. Ground Water Protection Act.</li> <li>f. Environmental Management Act.</li> <li>g. Municipal Wastewater Regulation.</li> <li>h. Industrial Camps Regulation (and proposed BC Guidelines for Work Camp Operations).</li> <li>i. Health Authority Subdivision Guidelines.</li> <li>j. Local bylaws and zoning including development permit areas and sewage maintenance bylaws.</li> <li>k. Covenants and easements that may impact sewerage.</li> </ol> </li> <li>4. Building Code and Electrical Code provisions that pertain to sewerage.</li> </ol>

3.3	Apply Standard Practice Manual (SPM) standards and guidelines	<ol style="list-style-type: none"> <li>1. Comply with the procedures and standards applicable to:               <ol style="list-style-type: none"> <li>a. Deciding on a system suitable for site conditions and client needs</li> <li>b. Planning the detailed components and layout of the system</li> <li>c. Installation practices in compliance with system design and component specifications</li> </ol> </li> <li>2. Planned preventative maintenance and system monitoring</li> </ol>
3.4	Identify principles of treatment and dispersal	<ol style="list-style-type: none"> <li>1. Describe principals of pre-treatment:               <ul style="list-style-type: none"> <li>• Settling and floatation, retention time.</li> <li>• Bacterial processes in tanks.</li> <li>• Aerobic and attached growth approaches.</li> <li>• Nitrification/de-nitrification.</li> <li>• Disinfection.</li> <li>• Filtration including effluent coarse screen filters, disc filters, membrane filters.</li> </ul> </li> <li>2. Describe principles of dispersal: Soil as a treatment media (bacteriological and chemical processes, physical filtration and adsorption).               <ul style="list-style-type: none"> <li>• Water movement in soil (saturated soil/preferential flow versus unsaturated soil/matrix flow, capillary action, evapotranspiration, permeability, oxygen flux, long term clogging effects/biomat formation).</li> <li>• System sizing and configuration principles to achieve adequate retention time in soil.</li> <li>• Benefits of uniform distribution.</li> </ul> </li> <li>3. Benefits of small dose volumes and dosing equalization/timed dosing.</li> </ol>
3.5	Differentiate treatment and dispersal technologies in common use both currently and historically	<ol style="list-style-type: none"> <li>1. Differentiate treatment technologies, processes, hardware:               <ul style="list-style-type: none"> <li>• Describe processes, advantages and disadvantages of common treatment methods including aerobic, attached growth, disinfection, membrane and media.</li> <li>• Identify common proprietary hardware and outline the treatment processes used.</li> </ul> </li> <li>2. Differentiate dispersal technologies, processes, hardware:               <ul style="list-style-type: none"> <li>• Describe processes, advantages and disadvantages of dosing and dispersal methods including lagoons, trickle gravity, dose to D-box, pressure, drip, combined treatment and dispersal, packed bed filters, sand media systems, flouts and siphons, centrifugal and turbine pumps, demand and timed dosing, zoned dispersal.</li> </ul> </li> <li>3. Differentiate monitoring technologies, processes, hardware.               <ul style="list-style-type: none"> <li>• Describe processes and hardware for flow monitoring</li> </ul> </li> </ol>



		<p>including mechanical cycle counters, flow meters, control panels using cycle counts and pump run times, data logging, and telemetry.</p> <p>4. Describe processes and hardware for effluent sampling and groundwater monitoring including observation ports and sampling ports for in-tank and in-soil monitoring.</p>
<b>4.0 Design onsite sewerage systems</b>		
4.1	Assess site and soil conditions	<ol style="list-style-type: none"> <li>1. Select and use appropriate equipment and tools.</li> <li>2. Use test pits to identify soil characteristics.</li> <li>3. Use test pits to identify limiting conditions for vertical separation.</li> <li>4. Use percolation tests to indicate permeability.</li> <li>5. Use permeameter testing to determine permeability.</li> <li>6. Identify performance boundaries for compliance with horizontal separation standards.</li> <li>7. Identify topography for compliance with slope limitations for different dispersal systems.</li> <li>8. Identify most favourable locations on the lot for dispersal.</li> <li>9. Identify problematic soil types (e.g. expanding clays, fractured rock, highly permeable soils, and soils with low permeability).</li> </ol>
4.2	Classify soils	<ol style="list-style-type: none"> <li>1. Identify and report the following soil characteristics as per SPM requirements using USDA or CANSIS systems: <ul style="list-style-type: none"> <li>• Texture, structure and consistence.</li> <li>• Coarse fragments and roots.</li> <li>• Colour, mottling, greying.</li> </ul> </li> <li>2. Use hand texturing methods to determine texture.</li> <li>3. Interpret lab testing reports (typically sieve analysis) to determine soil texture categories.</li> </ol>
4.3	Evaluate background information	<ol style="list-style-type: none"> <li>1. Retrieve and review any sewerage permits, filings or certification documents.</li> <li>2. Retrieve and review building plans, health orders, covenants, easements.</li> <li>3. Interview owner/system user, and obtain written declarations with usage information.</li> </ol>

4.4	Determine conceptual design	<ol style="list-style-type: none"> <li>1. Characterize sewage source and site use.</li> <li>2. Apply system selection standards.</li> <li>3. Conclude dispersal system location.</li> <li>4. Conclude method of dispersal.</li> <li>5. Determine pre-treatment method and location of tanks/treatment hardware.</li> </ol>
4.5	Configure system	<ol style="list-style-type: none"> <li>1. Determine daily design flow.</li> <li>2. Configure pre-treatment system.</li> <li>3. Configure dosing system.</li> <li>4. Configure soil dispersal system.</li> <li>5. Determine maintenance requirements.</li> </ol>
4.6	Create documentation	<ol style="list-style-type: none"> <li>1. Create field notes, design notes, supporting documents.</li> <li>2. Create photographic record.</li> <li>3. Create drawings.</li> <li>4. Create design filing submission</li> <li>5. Health Authority Record of Sewerage System form.</li> <li>6. Site/soil evaluation report, associated drawing(s).</li> <li>7. Record of Design.</li> <li>8. Specifications, associated drawings.</li> <li>9. Create certification submission:             <ol style="list-style-type: none"> <li>a. Health Authority Certification form</li> <li>b. Record drawing(s)</li> <li>c. Maintenance and monitoring plan</li> <li>d. Owner's manual</li> <li>e. Compile supporting documentation (e.g. manufacturer's manuals, warranty cards, and photographic record)</li> </ol> </li> </ol>
4.7	Provide construction review	<ol style="list-style-type: none"> <li>1. Conduct pre-construction orientation.</li> <li>2. Examine construction at key stages of the installation.</li> <li>3. Participate in commissioning.</li> </ol>

		<ol style="list-style-type: none"> <li>4. Complete final inspection and approval.</li> <li>5. Provide orientation for owner.</li> </ol>
<b>5.0 Install onsite sewerage systems</b>		
5.1	Develop a work plan	<ol style="list-style-type: none"> <li>1. Select and use appropriate equipment and tools.</li> <li>2. Determine access for construction.</li> <li>3. Determine electrical service requirements for the system.</li> <li>4. Determine requirements and schedules for sub trades, source of water supply for commissioning the system, and coordinate any relevant activities or contributions by the client.</li> <li>5. Develop materials lists (and place orders as required), estimate volumes of sand media, aggregates.</li> <li>6. Obtain and review filing, confirm acceptance by Health before construction start.</li> <li>7. Review site constraints and specifications with the AP on record during a pre- construction meeting on site.</li> </ol>
5.2	Validate compliance with critical standards	<ol style="list-style-type: none"> <li>1. Confirm that the proposed system will comply with critical SPM standards for the following:               <ol style="list-style-type: none"> <li>a. Horizontal separation (incl. SSR 30 m setback to wells).</li> <li>b. Vertical separation.</li> </ol> </li> <li>2. Distinguish system selection standards including restrictions to gravity dispersal, slope limitations for different system types, suitability for lagoons, identification of expanding clays and highly permeable soils.</li> <li>3. Confirm that the system specifications include access provisions for maintenance as per SPM standards.</li> <li>4. Confirm that the system specifications and proposed construction procedures comply with SPM standards for installation.</li> </ol>
5.3	Install components	<ol style="list-style-type: none"> <li>1. Create layout in the field to control horizontal and vertical alignments.</li> <li>2. Collaborate with AP on Record to ensure diligent construction review as construction proceeds.</li> <li>3. Demonstrate hands on competency for operating earthmoving equipment, at least with entry-level competency for either skid steer, backhoe or excavator.</li> </ol>

		<ol style="list-style-type: none"> <li>4. Demonstrate knowledge and experience related to earthmoving - sufficient to provide supervision as per industry expectations.</li> <li>5. Install tanks, (including treatment plants, filters, UV units), plus anti floatation features and insulation when required.</li> <li>6. Use compaction techniques to provide full support of piping.</li> <li>7. Perform leak testing of tanks.</li> <li>8. Install dosing systems including:             <ol style="list-style-type: none"> <li>a. Pumps, flouts, siphons.</li> <li>b. Control systems and flow monitoring provisions including floats, transducers, control panels and alarm(s).</li> <li>c. Set floats, transducers to specifications.</li> <li>d. Program control panels.</li> </ol> </li> <li>9. Install soil dispersal systems:             <ol style="list-style-type: none"> <li>a. Installers shall demonstrate competency at installation of at least gravity, pressure, combined treatment and dispersal systems, in-ground and raised systems including sand mounds.</li> <li>b. Perform site/soil preparation, soil remediation and scarification.</li> <li>c. Install sand media and/or aggregates.</li> <li>d. Install dispersal piping system and observation ports.</li> </ol> </li> <li>10. Install cover soil and other backfilling and site clean up.</li> </ol>
5.4	Commission system at completion	<ol style="list-style-type: none"> <li>1. Test and adjust D-box (levellers) to promote even distribution for gravity systems.</li> <li>2. Perform flushing and squirt testing (residual head) for pressure dispersal systems.</li> <li>3. Confirm float/transducer settings as per specification.</li> <li>4. Perform dosing (pump, flout, siphon) and alarm testing, including filling tank too at least alarm event and conducting full dose test to confirm specified drawdown/dose volume.</li> <li>5. Record panel record.</li> <li>6. Provide owner orientation.</li> </ol>

5.5	Create documentation	<ol style="list-style-type: none"> <li>1. Create photographic record showing at minimum the pre-existing site conditions, post installation conditions (the finished product) and key stages of work as construction progressed.</li> <li>2. Demonstrate ability to create field notes adequate to support formal record drawing, and to record panel record for the maintenance plan (although often the planner will complete these tasks).</li> <li>3. Create Installer’s Letter of Certification (if installer is not also the planner).</li> <li>4. Create and retain a permanent file with all records pertaining to the project.</li> </ol>
<b>6.0 Maintain and monitor onsite sewerage systems</b>		
6.1	Carry out system assessment and maintenance	<ol style="list-style-type: none"> <li>1. Select and use appropriate equipment and tools.</li> <li>2. Interview owner/system user, and obtain written declarations with usage information.</li> <li>3. Characterize sewage source and residence or facility use.</li> <li>4. Obtain and apply the maintenance plan (including completion of the prescribed maintenance procedures of the maintenance plan).</li> <li>5. Perform maintenance procedures as per standard practice, and SPM standards and guidelines.</li> <li>6. Perform locating procedures including pipe camera methods and using electro- magnetic locating technology.</li> <li>7. Test (and repair or replace) aerators, recirculation pumps.</li> <li>8. Clean and replace filters, membranes, UV bulbs, replenish chlorination materials.</li> <li>9. Assess condition and serviceability of filter media (e.g. sand media, peat, fabrics and plastics).</li> <li>10. Assess condition and performance of dispersal systems including at least the following types: gravity, pressure, combined treatment and dispersal systems, and drip.</li> <li>11. Perform flushing, jetting, vacuuming.</li> <li>12. Assess and maintain grease interceptors.</li> <li>13. Assess condition and performance of dosing systems including indexing valves, pumps, siphons, flouts and associated control systems.</li> </ol>

		14. Make conclusions about system performance and condition. Make recommendations for repairs and improvements.
6.2	Monitor the system	<ol style="list-style-type: none"> <li>1. Determine system flow volumes using control panel records, water meters or other means.</li> <li>2. Evaluate flow volume, compare to design capacity, with consideration of current occupancy and usage patterns.</li> <li>3. Conduct sampling for assessment of sewage and effluent characteristics, as per standard practice and requirements of testing labs.</li> <li>4. Conduct field tests of sewage and effluent characteristics including at least ph, temperature, turbidity meters, CBOD5 field tests, dissolved oxygen probes.</li> <li>5. Evaluate pre-treatment performance using: Lab testing data, field test results. and visual and odour indicators.</li> <li>6. Assess solids accumulations in septic tanks and other components. Make conclusions and recommendations regarding system usage and subsequent maintenance frequency.</li> </ol>
6.3	Perform component repairs	<ol style="list-style-type: none"> <li>1. Diagnose performance shortcomings, troubleshoot system malfunctions.</li> <li>2. Prioritize corrective actions when performance emergencies occur (typically to mitigate health hazards).</li> <li>3. Perform component repair or replacement, including all those defined in the SPM Table II- 2.</li> <li>4. Install access provisions, filters, replace UV bulbs and replenish chlorination materials.</li> <li>5. Replace control system components. Install observation ports and other provisions for effluent sampling.</li> </ol>
6.4	Create documentation	<ol style="list-style-type: none"> <li>1. Create photographic record showing at minimum the pre-existing site conditions, post maintenance conditions, key stages of maintenance work, including photographs selected to support conclusions about condition, performance and recommended repairs or improvements.</li> <li>2. Demonstrate ability to create field notes adequate to support formal reports.</li> <li>3. Create report of maintenance for clients. Include flow monitoring data/panel records to support subsequent maintenance.</li> </ol>

		<p>4. Create simplified maintenance plan where none exists. Create and retain a permanent file with all records pertaining to the project.</p>
<p><b>7.0 Conduct inspections</b></p>		
7.1	Determine the purpose and type of inspection	<ol style="list-style-type: none"> <li>1. Interview owner/system user, and obtain written declarations with usage information</li> <li>2. Determine if the purpose of the inspection is for system performance, compliance or other regulatory function</li> <li>3. Characterize sewage source and residence/facility use.</li> <li>4. Evaluate sewage flow volume and establish a design flow allowance.</li> <li>5. Retrieve and review any sewerage permits, filings or certification documents.</li> <li>6. Retrieve and review building plans, health orders, covenants, or easements.</li> </ol> <p>Obtain written permission to enter property and disturb the site.</p>
7.2	Carry out system assessment and inspection	<ol style="list-style-type: none"> <li>1. Select and use appropriate equipment and tools.</li> <li>2. Perform locating procedures including pipe camera methods and using electro- magnetic technology.</li> <li>3. Expose and access system components.</li> <li>4. Use pipe camera methods to assess condition and configuration of system components.</li> <li>5. Evaluate the configuration, capacity and condition of tanks including sewage transfer/lift stations, flow equalization, septic tanks, trash tanks, pump chambers and other dosing tanks.</li> <li>6. Evaluate the treatment capacity of treatment plants, CTDS, and other treatment technologies.</li> <li>7. Assess performance of aerators, recirculation pumps.</li> <li>8. Assess condition and serviceability of filters, membranes, UV bulbs, chlorination materials.</li> <li>9. Assess condition and serviceability of filter media (e.g. sand media, peat, fabrics and plastics).</li> </ol>

		<ol style="list-style-type: none"> <li>10. Evaluate the configuration, size and performance of dispersal systems including at least the following types: gravity, pressure, combined treatment and dispersal systems, and drip.</li> <li>11. Evaluate configuration, capacity and performance of dosing systems including indexing valves, pumps, siphons, flouts and associated control systems based on standards applicable at the time of construction.</li> <li>12. Conduct flow testing.</li> <li>13. Perform other inspection procedures as listed in ASTTBC Standard Practice Guidelines for Inspection of Onsite Wastewater Systems.</li> <li>14. Compare size, capacity, and configuration of system components to relevant standards 'of the day' and the current SPM – for the design allowance (based on current and/or anticipated use).</li> <li>15. Make conclusions about system performance, condition and serviceability.</li> <li>16. Make recommendations for repairs, improvements, replacement.</li> </ol>
7.3	Create documentation	<ol style="list-style-type: none"> <li>1. Create photographic record showing at minimum the pre-existing site conditions, post inspection conditions, key stages of inspection, including photographs selected to support conclusions about size, capacity, configuration, condition, performance.</li> <li>2. Demonstrate ability to create field notes and field sketches adequate to support formal reports.</li> <li>3. Create record drawings (see 1.7 – Use engineered drawings)</li> <li>4. Create report of inspection for clients and/or other agencies, using approved terminology to report conclusions as per ASTTBC Standard Practice Guidelines for Inspection of Onsite Wastewater Systems.</li> <li>5. Create and retain a permanent file with all records pertaining to the project.</li> </ol>



**Part 6: Registered Fire Protection Technician (RFPT) Admission Requirements**

RFPT Sub-class	Educational requirements	Experiential requirements
Registered Fire Protection Technician (RFPT)	Successful completion of the education/training requirements of each endorsement applied for by the applicant	Completion of the experiential requirements listed below for each endorsement applied for by the applicant

**Registered Fire Protection Technician (RFPT) Endorsement Requirements**

RFPT Endorsements	Education / Training requirements	Experiential requirements	Competencies / Indicators
Portable Fire Extinguishers (EX)	BCIT- OCHS 1410, <u>or</u> Equivalent course, <u>or</u> 80% on relevant challenge exam at Schedule B	A minimum of 3 months of work experience that includes supervised testing of 200 fire extinguishers of various types including CO <sub>2</sub> , stored pressure, cartridge, dry chemical and others	Competencies 1.0 to 4.0 as set out in Appendix A to this Part Appendix A Competency 5.1
Unit Emergency Lighting (EM)	Electrical Fundamentals or an equivalent course meeting the competencies listed at Schedule G, <u>and</u> BCIT- Fire 2077 or equivalent course, <u>or</u> 80% on relevant challenge exam at Schedule B	A minimum of 3 months of work experience that includes supervised testing of 100 various types of emergency lighting units (a minimum of 3 types and voltages)	Appendix A Competencies 1.0 to 4.0 Appendix A Competencies 5.8, 5.9
Fire Alarm Systems (AL)	Electrical Fundamentals Electrical Fundamentals or an equivalent course meeting the competencies listed at Schedule G, <u>and</u> BCIT- Fire 2084 or equivalent course, <u>or</u> 80% on relevant challenge exam at Schedule B	A minimum of 1 year of work experience that includes supervised testing of 25 fire alarm systems	Appendix A Competencies 1.0 to 4.0 Appendix A Competencies 5.2 to 5.4

Water-Based Fire Protection Systems (WA)	BCIT- Fire 2080 or equivalent course, or  80% on relevant challenge exam at Schedule B	A minimum of 1 year of work experience that includes supervised inspection and testing of a minimum of 40 water-based fire protection systems of various types such as wet, dry, deluge, and standpipe	Appendix A Competencies 1.0 to 4.0  Appendix A Competencies 5.5 to 5.7
Commercial Kitchen Exhaust Cleaning (CO)	Philip Ackland Course, or  80% on relevant challenge exam at Schedule B	A minimum of 3 months of work experience that includes supervised cleaning and inspection of a minimum of 25 commercial kitchen exhaust systems	Appendix A Competencies 1.0 to 4.0  Appendix A Competency 5.10
Special Fire Suppression Systems – Pre-Engineered (SP-P)	BCIT – Fire 2088 or equivalent course, or  80% on relevant challenge exam at Schedule B	A minimum of 2 years of work experience that includes: supervised inspection and testing of a minimum of 40 special fire suppression systems	Appendix A Competencies 1.0 to 4.0
Special Fire Suppression Systems - Custom Engineered (SP-C)	BCIT – Fire 2088 or equivalent course, or  80% on relevant challenge exam at Schedule B	A minimum of 2-years work experience that includes:  Supervised inspection and testing of a minimum of 40 special fire suppression systems of various types	Appendix A Competencies 1.0 to 4.0
Stationary Fire Pumps (FP)	80% on relevant challenge exam at Schedule B	A minimum of 1 year of work experience that includes:  Supervised inspection and testing of a minimum of 40 water-based fire protection systems that include fire pumps	Appendix A Competencies 1.0 to 4.0
Smoke Control Systems (SM)	RFPT (AL) certification and  BCIT- Fire 2086 or Equivalent course, or 80% on relevant challenge exam at Schedule B	A minimum of 2 years work experience that includes:  Supervised inspection and testing of a minimum of 40 smoke control systems	Appendix A Competencies 1.0 to 4.0  Appendix A Competencies 5.2, 5.3, 5.4

<p>Generator Systems (GS)</p>	<p>Electrical Fundamentals or an equivalent course meeting the competencies listed at Schedule G, <u>or</u></p> <p>Red Seal Electrician (Industrial or Construction)</p> <p>Red Seal mechanic, or</p> <p>Heavy-duty mechanic, or</p> <p>Automobile mechanic, and</p> <p>80% on relevant challenge exam at Schedule B</p>	<p>A minimum of 2-years work experience that includes:</p> <p>Supervised inspection and testing of a minimum of 40 generator systems of various types</p>	<p>Appendix A Competencies 1.0 to 4.0</p>
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**Appendix A: RFPT Competency Standards**

No.	Competency	Indicators
<b>1.0 Apply fundamental occupational skills</b>		
1.1	Maintain a professional work ethic	<ul style="list-style-type: none"> <li>• Assess, apply ASTTBC Code of Ethics and Practice Guidelines</li> <li>• Apply general principles of professionalism, diligence.</li> <li>• Advocate best practices.</li> <li>• Promote regulatory compliance.</li> <li>• Promote fire and life safety.</li> </ul>
1.2	Employ effective business practices	<ul style="list-style-type: none"> <li>• Determine liability risks and mitigating strategies.</li> <li>• Obtain written declarations from owners to confirm permission to enter property, structures and to conduct inspections.</li> <li>• Provide written quotes with fixed pricing.</li> <li>• Use written contracts.</li> <li>• Maintain insurance coverage.</li> <li>• Use effective office filing systems with backup.</li> </ul>
1.3	Apply effective communication skills	<ul style="list-style-type: none"> <li>• Attain verbal and written English literacy suited for a Canadian technical workplace.</li> <li>• Use communication skills to define expectations and agreements with clients and owner education.</li> <li>• Convey limitations of the inspection processes.</li> <li>• Apply metric and imperial systems of measurement:               <ul style="list-style-type: none"> <li>○ Calculate conversions.</li> <li>○ Interpret specifications and regulatory requirements that are expressed in systems of measurement.</li> </ul> </li> </ul>
1.4	Apply math and science concepts	<ul style="list-style-type: none"> <li>• Apply basic math concepts including:               <ul style="list-style-type: none"> <li>○ Decimal and percentage expressions.</li> <li>○ Fractions.</li> <li>○ Order of arithmetic operations.</li> <li>○ Exponential functions.</li> <li>○ Rounding and significant figures.</li> </ul> </li> </ul>
1.5	Differentiate systems	<ul style="list-style-type: none"> <li>• Define terminology, nomenclature in common usage for each endorsement category.</li> <li>• Describe types and configurations of systems</li> <li>• Identify purposes and function of hardware as applicable to endorsement including:               <ul style="list-style-type: none"> <li>○ Fire protection.</li> <li>○ Fire and smoke alarms.</li> <li>○ Extinguishers.</li> <li>○ Emergency lighting.</li> <li>○ Ductwork.</li> </ul> </li> </ul>
1.6	Use equipment and tools	<ul style="list-style-type: none"> <li>• Explain purposes, demonstrate proper selection, use, and care of tools and equipment applicable to the various endorsements:</li> </ul>

		<ul style="list-style-type: none"> <li>○ Hand tools.</li> <li>○ Ladders.</li> <li>○ Canned smoke</li> <li>○ Heat gun.</li> <li>● Electrical testing equipment: <ul style="list-style-type: none"> <li>○ Multimeter.</li> <li>○ Voltage tick meter.</li> <li>○ Battery load tester.</li> <li>○ Pressure differential manometer (for smoke control).</li> <li>○ Smoke detector sensitivity testers.</li> </ul> </li> </ul>
<b>2.0 Work Safely</b>		
2.1	Apply applicable OH&S regulations	<ul style="list-style-type: none"> <li>● Outline and apply portions of the following OH&amp;S regulations that have applicability to the personal safety of the RFPT: <ul style="list-style-type: none"> <li>○ Part 3 Rights and Responsibilities</li> <li>○ Part 4 General Conditions</li> <li>○ Part 7 Noise, Vibration and Temperature</li> <li>○ Part 8 Personal Protective Clothing and Equipment</li> <li>○ Part 9 Confined Spaces</li> <li>○ Part 10 De-energize and lockout</li> <li>○ Part 11 Fall protection</li> <li>○ Part 13 Ladders, Scaffolds and Temporary Work Platforms</li> <li>○ Part 19 Electrical Safety</li> </ul> </li> </ul>
2.2	Evaluate risks associated with worksites	<ul style="list-style-type: none"> <li>● Identify risks to the personal safety of the RFPT and adopt strategies to eliminate or reduce those risks, including the following: <ul style="list-style-type: none"> <li>○ Electrical safety.</li> <li>○ Gas safety.</li> <li>○ Confined space.</li> <li>○ Hazardous materials.</li> <li>○ Driving, traffic risks, security of loads.</li> <li>○ Working in vicinity of mobile equipment, manufacturing equipment, material moving equipment, conveyors, other industrial hazards.</li> <li>○ Transport of dangerous goods.</li> </ul> </li> <li>● Identify the purposes, proper use and adjustment, inspection and maintenance procedures for the types of PPE commonly used in the specific industry of the RFPT, including: <ul style="list-style-type: none"> <li>○ High visibility apparel.</li> <li>○ Safety headgear.</li> <li>○ Eye protection.</li> <li>○ Hand protection/gloves.</li> <li>○ Respiratory protection.</li> </ul> </li> </ul>

<b>3.0 Test and inspect fire protection systems</b>		
3.1	Develop a work plan	<ul style="list-style-type: none"> <li>• Gather background information including previous inspection reports (incl. fire safety plan if applicable).</li> <li>• Identify types of systems, scope of work.</li> <li>• Select and use appropriate equipment and tools.</li> <li>• Consult, confirm plan with property management.</li> <li>• Identify impact of circumventing systems (if applicable), contact authority having jurisdiction (as applicable to task).</li> </ul>
3.2	Analyse regulatory compliance	<ul style="list-style-type: none"> <li>• Determine access to system components</li> <li>• Identify impediments to accessing components and mitigation strategies.</li> <li>• Access, outline, apply relevant portions of the following: <ul style="list-style-type: none"> <li>○ Occupational Health and Safety Regulation.</li> <li>○ BC Building Code.</li> <li>○ Fire Codes (national, provincial and local codes, standards and bylaws). Including ULC/CAN S 536.</li> <li>○ Electrical code including section 32, 10.</li> </ul> </li> </ul>
<b>4.0 Create Documentation</b>		
4.1	Produce field notes	<ul style="list-style-type: none"> <li>• Include date, time, location, weather, and persons in attendance.</li> <li>• Ensure sufficient clarity to allow another competent person to understand.</li> <li>• Include adequate detail to support conclusions and reports.</li> </ul>
4.2	Prepare tags	<ul style="list-style-type: none"> <li>• Complete and affix tags as per regulatory requirements and standard practice.</li> </ul>
4.3	Prepare a photographic record	<ul style="list-style-type: none"> <li>• Select number of photos and orientation to record the following: <ul style="list-style-type: none"> <li>○ Convey understanding of the site/workplace conditions.</li> <li>○ Support conclusions and recommendations.</li> <li>○ Provide evidence of diligent scope of work.</li> </ul> </li> </ul>
4.4	Create written report	<ul style="list-style-type: none"> <li>• Select format and scope of reports depending on regulatory reporting requirements and workplace policies/expectations (often checklist forms).</li> <li>• Include sufficient information to convey findings and to support recommendations and conclusions.</li> <li>• Include evidence such as photographs, supporting documents</li> </ul>

**Appendix B: RFPT Endorsement Specific Competencies**

No.	Competency	Indicators
<b>Portable Fire Extinguishers (EX)</b>		
5.0	Confirm systems are operating as intended	Test, inspect and recharge portable fire extinguishers.
<b>Fire Alarm Systems (AL)</b>		
5.1	Apply principles of electricity	Apply Ohm's law to determine voltage, amperage, resistance Identify and explain the basic functions of electronic components such as capacitors, resistors, and diodes Describe the difference between alternating current and direct current.  Interpret wiring schematics.
5.2	Interface with addressable systems	Navigate panel menus. Access data logs.
5.3	Confirm systems are operating as intended	Manipulate controls. Alarm systems. Heat Pull station testing. Smoke detectors.
<b>Water-based Fire Protection Systems (WA)</b>		
5.4	Inspect system components	Identify and set control valves to be normally open or closed. Identify control valves required to be normally open are supervised/secure Inspect system components for accessibility, damage, leaks, corrosion, impairment, proper position and orientation, normal and seismic support and protection from damage.  Inspect data placards and signs.  Check to determine if there is adequate heat to protect freezing of water-filled pipes / systems.
5.6	Test system components	Operate water control and test valves. Conduct drain test and interpret results Conduct water-flow alarm tests.  Perform manufacturer's specified test procedures for deluge and pre-action sprinkler systems as per manufacturer's specifications.

5.7	Confirm systems are operationally ready	Confirm that water supply valves are fully open Check that alarm lines are open.  Verify that system pressures are normal.
<b>Unit Emergency Lighting (EL)</b>		
5.8	Apply principles of electricity	Apply Ohm's law to determine voltage, amperage, resistance Identify and explain the basic functions of electronic components such as capacitors, resistors, and diodes.  Describe the difference between alternating current and direct current.  Interpret wiring schematics.
5.9	Confirm systems are operating as intended	Check battery condition and adequacy of power. Verify connection to 110 volt power source.  Test operating condition of lights and fuses.
<b>Commercial Kitchen Exhaust Cleaning (CO)</b>		
5.10	Confirm systems are operating as intended	Check cleanliness of exhaust ducts, filters, and grease traps.  Test cables and fusible links.  Verify operating condition of fire retardant cylinder.
<b>Special Fire Suppression Systems (Custom and Pre-Engineered)</b>		
5.11	Smoke Control Systems (SM)	Apply principles of electricity Interface with addressable systems.  Confirm systems are operating as intended.  Navigate panel menus.  Access data logs.  Manipulate controls.  Alarm systems.  Pull station testing.  Heat detectors.  Smoke detectors



## Part 7: Approved jurisdictions

### Canada

All regions and programs accredited and accepted by Technology Accreditation Canada, for more information click [here](#).

### International Jurisdictions as per agreements signed by Canada include:

Accord	Level	Signatories
Sydney	Technologist	Australia, Canada, Chinese Taipei, Hong Kong, Ireland, Korea, New Zealand, South Africa, United Kingdom, United States, Malaysia, Peru *, Sri Lanka *
Dublin	Technician	Australia, Canada, Ireland, Korea, New Zealand, South Africa, United Kingdom, United States, Malaysia

\*Denotes countries which currently have provisional status. Provisional signatories are recognized as having appropriate systems and processes in place to develop towards becoming a full signatory.

### Sydney Accord

The Sydney Accord was signed in June 2001, it is specifically focused on academic programs dealing with engineering technology. The Accord acknowledges that accreditation of these academic programs is a key foundation for the practice of engineering technology in each of the countries or territories covered by the Accord. Qualifications and accreditations are recognized by other signatories and are recognized by each signatory as being substantially equivalent to accredited or recognized qualifications within its own jurisdiction.

For more information on the Sydney Accord click [here](#).

### Dublin Accord

The Dublin Accord was signed in May 2002. The agreement established mutual recognition of the qualifications which underpin the granting of Engineering Technician titles. As with the other Accords, the signatories are committed to development and recognition of good practice in engineering education. The Dublin Accord is specifically focused on the mutual recognition of academic program and qualifications that underpin the educational base for Engineering Technicians.

For more information on the Dublin Accord click [here](#).

### SCHEDULE B – Examinations

No.	Examination title	Administered
1.	Professional practice and ethics (written by all practising and temporary registrants)	ASTTBC
2.	Technologist fundamentals	Yardstick
3.	Civil engineering technologist	Yardstick
4.	Mechanical engineering technologist	Yardstick
5.	Electrical engineering technologist	Yardstick
6.	Petroleum engineering technologist	Yardstick
7.	Engineering Drafting and Design Technology	Yardstick
8.	Instrumentation Engineering Technology	Yardstick
9.	Fire Protection RFPT Fire Extinguishers	ASTTBC
10.	Fire Protection RFPT Electronics basics	ASTTBC
11.	Fire Protection RFPT Fire Pumps	ASTTBC
12.	Fire Protection RFPT Commercial kitchen exhaust cleaning	ASTTBC
13.	Fire Protection RFPT Emergency generators	ASTTBC
14.	Fire Protection RFPT Unit Emergency Lighting	ASTTBC
15.	Fire Protection RFPT Water-based suppression systems	ASTTBC
16.	Fire Protection RFPT Fire pumps	ASTTBC
17.	Fire Protection RFPT Fire Alarm system testing	ASTTBC
18.	Fire Protection RFPT Special suppression system	ASTTBC
19.	Fire Protection RFPT Smoke control systems	ASTTBC
20.	Onsite Wastewater ROWP Jurisprudence (written by all ROWP registrants)	ASTTBC
21.	Onsite Wastewater Planner (ROWP)	ASTTBC
22.	Onsite Wastewater Installer (ROWP)	ASTTBC
23.	Onsite Wastewater Maintenance Provider (ROWP)	ASTTBC
24.	Construction Safety Officer CSO	ASTTBC
25.	Canadian Language Benchmark Test of English	External

## SCHEDULE C – Fees

### Application Fees and Annual Dues

Purpose	Fee	GST	Total
Application for registration	\$ 256.25	\$ 12.81	\$ 269.06
Application for reinstatement	\$ 256.25	\$ 12.81	\$ 269.06
Application for reclassification	\$ 179.35	\$ 8.97	\$ 188.32
Adding an endorsement	\$ 179.35	\$ 8.97	\$ 188.32
Application for inter-provincial transfer	\$ 50.00	\$ 2.50	\$ 52.50
Examination fee	\$ 250.00	\$ 12.50	\$ 262.50
Registration fee is *pro-rated in the 1st year for all applicants registered with ASTTBC	\$ 380.00	\$ 19.00	\$ 399.00
Renewal of annual registration fee (practising & temporary registrants)	\$ 380.00	\$ 19.00	\$ 399.00
Registration fee (specific to ROWP, RFPT, CPI) *pro-rated in the 1st year for all applicants registered with ASTTBC	\$ 429.00	\$ 21.45	\$ 450.45
Renewal of annual registration fee (specific to ROWP, RFPT, CPI - practising & temporary registrants)	\$ 429.00	\$ 21.45	\$ 450.45
Annual registration fee (Trainees)	\$ 180.00	\$ 9.00	\$ 189.00
Annual registration fee (Retired registrants)	\$ 95.00	\$ 4.75	\$ 99.75
Annual registration fee (Multi-designation registrants)	\$ 80.00	\$ 4.00	\$ 84.00
Review on the record application fee	\$ 100.00	\$ 5.00	\$ 105.00
Annual registration renewal fee (on leave)	\$ 75.00	\$ 3.75	\$ 78.75
Annual registration renewal late fee (after November 30 but before December 31)	\$50.00	\$2.50	\$ 52.50
Annual registration renewal late fee (after December 31 but before March 1)	\$150.00	\$7.50	\$ 157.50

\*Upon acceptance of an application a registrant is invited to register with ASTTBC. This type of registration is prorated. When a new registrant registers part way through the calendar year, pro-rated annual dues apply. Annual amount/12 months x number of months. Fees for registrants reinstated part way through the calendar year are not prorated.

**Investigation Tariff**

<b>Expense</b>	<b>Rate of Indemnity (Up to)</b>
For any legal services contracted by the college for the purposes of the investigation	60% of actual legal fees
For any other professional services contracted by ASTTBC for the purposes of the investigation	80% of actual fees
Salary costs for ASTTBC employees or officers engaged in the investigation	Calculated by hour
For any disbursements arising from the need to rent facilities (e.g. meeting rooms) for the purposes of the investigation	100% of actual disbursements

**Discipline Hearings Tariff**

<b>Expense</b>	<b>Rate of Indemnity (Up to)</b>
Legal fees for each day of hearing preparation*  *Maximum of three days preparation for each scheduled day of hearing	60% of actual legal fees
Legal fees for each day of the hearing	60% of actual fees
Expert witness fees	80% of actual fees
All other disbursements	100% of actual disbursements

## SCHEDULE D – Standards of Competence and Code of Ethics

1. Registrants are expected to:
  - a. hold paramount the safety, health and welfare of the public, including the protection of the environment and the promotion of health and safety in the workplace,
  - b. practice only in those fields where training and ability make the registrant professionally competent,
  - c. have regard for the common law and any applicable enactments, federal enactments or enactments of another province,
  - d. have regard for applicable standards, policies, plans and practices established by any level of government or ASTTBC,
  - e. maintain competence in applicable category, class, sub-class, and/or discipline, including advances in the regulated practice and relevant science,
  - f. provide accurate information in respect of qualifications and experience,
  - g. provide professional opinions that distinguish between facts, assumptions and opinions,
  - h. avoid situations and circumstances in which there is a real or perceived conflict of interest and ensure conflicts of interest, including perceived conflicts of interest, are properly disclosed and necessary measures are taken so a conflict of interest does not bias decisions or recommendations,
  - i. report to ASTTBC and, if applicable, any other appropriate authority, if the registrant, on reasonable and probable grounds, believes that the continued practice of a regulated practice by another registrant or other person, including firms and employers, might pose a risk of significant harm to the environment or to the health or safety of the public or a group of people,
  - j. present clearly to employers and clients the possible consequences if professional decisions or judgments are overruled or disregarded,
  - k. clearly identify each registrant who has contributed professional work, including recommendations, reports, statements or opinions,
  - l. undertake work and documentation with due diligence and in accordance with any guidance developed to standardize professional documentation for the applicable profession,
  - m. conduct themselves with fairness, honesty, and good faith towards clients, colleagues and others,
  - n. not engage in any conduct that the registrant knows, or ought to know, would bring ASTTBC or its registrants into disrepute,

- o. not engage in any conduct that is likely to undermine the standards, methods or principles that are the foundation of the registrant's applied science and engineering technology practice,
- p. treat other registrants, clients, employees and members of the public with respect and courtesy,
- q. consider employer/client materials confidential and not use the proprietary/confidential information learned for personal gain or the advantage of other parties,
- r. recognize the expectation of confidentiality does not hold where the employer/client actions are unlawful, in which case the registrant is obliged to report the activity to the appropriate authority,
- s. be aware of and comply with applicable privacy legislation, including but not limited to the *Personal Information Protection Act* and the *Freedom of Information and Protection of Privacy Act* as applicable,
- t. practice only when they are able to do so with reasonable skill, competence and safety to the public,
- u. counsel students and trainees to perform those activities that are within their scope of knowledge, skill and judgment and not to exceed that scope,
- v. ensure that any supervision provided to another person, whether a trainee, student or non-registrant, is provided to the best of the supervising registrant's ability and takes into account the knowledge, skill and judgment of the person being supervised,
- w. take all reasonable steps to ensure that those under their direct supervision engage in the practice of applied science and engineering technology in a professional and ethical manner and in accordance with all applicable enactments and standards of competence,
- x. refuse to counsel other registrants or non-registrants regarding the performance of work that is outside of the scope of that person's registration, competency, knowledge, skill, or training, as the case may be,
- y. refuse to delegate work to other registrants in the performance of their regulated practice that is outside of the scope of that person's registration, competency, knowledge, skill, or training, as the case may be, and
- z. uphold professional obligations to ASTTBC while in the workplace by ensuring any such obligations are treated as paramount to other work-related duties and encourage those that the registrant supervises to do the same.

**Delegation to non-registrants**

1. A practising or temporary registrant may delegate work related to the practice of applied science and engineering technology in accordance with this schedule.
2. Registrants may only delegate work to a non-registrant that is related to the practice of applied science and engineering technology that is within their specific area of practice, knowledge, skill and training.
3. If a registrant intends to delegate work to a non-registrant, the registrant must ensure that the work is carried out under their direct supervision.
4. A registrant who delegates work related to the practice of applied science and engineering technology must do so in accordance with the bylaws, any limits or conditions on their registration, applicable standards of competence and ethics, guides to professional practice, or any other practice guidance issued by ASTTBC.
5. A registrant who delegates work to a non-registrant remains responsible for all work performed by the non-registrant.

**SCHEDULE E – Freedom of Information and Protection of Privacy Access Fees**

Item	Description of Services	Management Fees
1	<b>For applicants other than commercial applicants</b>	
	(a) for locating and retrieving a record	\$7.50 per 1/4 hour after the first 3 hours
	(b) for producing a record manually	\$7.50 per 1/4 hour
	(c) for producing a record from a machine readable record from a server or computer	\$7.50 per 1/4 hour for developing a computer program to produce the record
	(d) for preparing a record for disclosure and handling a record	\$7.50 per 1/4 hour
	(e) for shipping copies	actual costs of shipping method chosen by applicant
	(f) for copying records:	
	(i) CDs and DVDs, recordable or rewritable	\$4 per disk
	(ii) Memory USB sticks	\$10 per USB stick
	(iii) computer tapes	\$40 per tape, up to 2,400 feet
	(iv) microfiche	\$3 per fiche
	(v) microfilm duplication	\$25 per roll for 16 mm microfilm, \$40 per roll for 35 mm microfilm
	(vi) microfiche or microfilm to paper duplication	\$0.50 per page (8.5" x 11")
	(vii) photographs, colour or black and white	\$5 to produce a negative
		\$12 each for 16" x 20" photograph
		\$9 each for 11" x 14" photograph
		\$4 each for 8" x 10" photograph
		\$3 each for 5" x 7" photograph
	(viii) photographic print of textual, graphic or cartographic record, black and white	\$12.50 each (8" x 10")



	(ix) dot matrix, ink jet, laser print or photocopy, black and white	\$0.25 per page (8.5" x 11", 8.5" x 14" or 11" x 17")
	(x) ink jet, laser print or photocopy, colour	\$1.65 per page (8.5" x 11", 8.5" x 14" or 11" x 17")
	(xi) scanned electronic copy of a paper record	\$0.10 per page
	(xii) photomechanical reproduction of 105 mm cartographic record/plan	\$3 each
	(xiii) slide duplication	\$0.95 each
	(xiv) audio cassette tape (90 minutes or fewer) duplication	\$5 per cassette plus \$7 per 1/4 hour of recording
	(xv) video cassette recorder (VHS) tape (120 minutes or fewer) duplication	\$5 per cassette plus \$7 per 1/4 hour of recording
<b>2</b>	<b>For commercial applicants, the applicable cost for each service listed in Item 1 is the actual cost to the public body of providing that service</b>	

**SCHEDULE F – Continuing education requirements and practice advice**

**A. Eligible CPD Categories, Activities and Hours**

Category		Activity or Training	CPD Hours
1	Formal or structured learning	<ol style="list-style-type: none"> <li>1) Completing structured discipline or practice-related courses or training provided at or by a post-secondary public or private education institution</li> <li>2) Indigenous cultural awareness and reconciliation education programs as described in this Schedule</li> <li>3) Teaching a course or training program related to your discipline or professional practice but not as part of your fulltime job or practice</li> <li>4) Presenting at conferences, workshops or seminars related to your discipline or professional practice but not as part of your fulltime job or practice</li> </ol>	1 CPD Hour per hour of activity
2	Informal or self-directed learning	<ol style="list-style-type: none"> <li>1) Creating instructional materials, exercises, case studies, surveys or exams for a course, training program, workshop, seminar or webinar that you will be teaching or presenting but not as part of your fulltime job or practice</li> <li>2) Researching and writing technical papers, articles, chapters or reviews that may be published in journals, books or submitted for professional or commercial purposes</li> <li>3) Attending seminars, workshops, webinars, technical field trips, or on-the-job training provided by your employer or a supplier of equipment or services</li> <li>4) Reading books, journals or technical publications including online web searches related to the work you do or plan to do</li> <li>5) Contributing to the development of codes, standards, innovative processes, applications of technology and patents</li> <li>6) Attending ASTTBC AGM, member meetings and networking events</li> </ol>	1 CPD Hour for every 2 hours of activity

3	Community or volunteer engagement	<ol style="list-style-type: none"> <li>1) Participating on education boards, industry advisory committees or similar profession-related organization or association activities</li> <li>2) Volunteering as a practice advisor for ASTTBC registrants</li> <li>3) Volunteering as a member of a statutory committee</li> </ol>	1 CPD Hour for every 3 hours of activity
4	Employment or Practice	<ol style="list-style-type: none"> <li>1) Employed or self-employed in a technology-related business or practice</li> <li>2) Eligible activities include management, supervising or teaching in a technology-related environment.</li> </ol> <p>Note: One month of work = 150 hours</p>	1 CPD Hour for every month

**B. Continuing education to support reconciliation with Indigenous peoples**

Education is key to a true and lasting reconciliation. Sustained learning and development require continually increasing a registrant’s ability to build and maintain respectful and effective relationships with Indigenous peoples.

Registrants are required to commit to a minimum of two hours annually to continuing professional development which addresses Indigenous intercultural competency, Indigenous history, Indigenous engagement, Indigenous conflict resolution, Indigenous human rights, and Indigenous anti-racism as it relates to a registrant’s applied science and engineering technology practice.

Continuing educational development must address a minimum of one of the following learning outcome areas:

- Foundational awareness: history and impact of colonialization in Canada; legal rights of Indigenous Peoples and relevant law; reconciliation actions.
- Service-related skills: communication, consultation, engagement, relationship-building, and collaboration; understanding and respect for the contribution of Indigenous knowledge.
- Organization approach: incorporate cultural safety and humility into meetings and events; employee onboarding; change leadership; outreach, recruit, retain, and develop qualified Indigenous employees.

CPD hours taken in these learning areas are inclusive of the 20 hours required to fulfil annual CPD requirements. Recognition will be given to those registrants that have taken previous course work that addresses the learning outcomes below. Registrants will be permitted to apply extra Indigenous CPD credit up to a maximum of three years.

Recognized Indigenous Education Providers include:

- BC Government House of Indigenous Learning (<https://learning.gov.bc.ca>)
- Canadian Council for Aboriginal Business (<https://www.ccab.com>)
- Ground Work for Change (<http://www.groundworkforchange.org>)
- Indigenous Awareness Canada (<https://www.indigenousawarenesscanada.com>)
- Indigenous Perspective Society (<https://www.ipsociety.ca>)
- Kairos Canada (<https://www.kairoscanada.org/what-we-do/indigenous-rights/blanket-exercise>)
- Rainwatch Advising (<http://www.rainwatch.ca>)
- Raven Institute (<http://www.raveninstitute.ca>)
- Reconciliation Canada (<https://www.reconciliationcanada.ca>)
- San'yas Indigenous Cultural Safety Training (<https://www.sanyas.ca>)

## SCHEDULE G – Approved education and training programs

1. ASTTBC has approved those post-secondary education programs for technologists accredited by Technology Accreditation Canada (TAC). A list of those programs may be found here:
2. ASTTBC has approved those post-secondary education programs for technicians accredited by TAC. A list of those programs may be found here:

[http://www.technologyaccreditation.ca/National-Accreditation/Nationally\\_Accredited\\_Programs](http://www.technologyaccreditation.ca/National-Accreditation/Nationally_Accredited_Programs)

[http://www.technologyaccreditation.ca/National-Accreditation/Nationally\\_Accredited\\_Programs](http://www.technologyaccreditation.ca/National-Accreditation/Nationally_Accredited_Programs)

3. ASTTBC has approved the following two courses for Registered Fire Protection Technicians (RFPT):

### **Electrical Fundamentals**

BCIT – 1050 Electrical for Fire Protection, or

Equivalent course that includes:

Basic Electrical theory - Ohm's law, Kirchoff's law, magnetism, energy generation and the dangers of higher A/C voltages. Understanding the Canadian Electrical Code with reference to the following areas:

1. Electrical safety
2. Conductors: sizing, insulation types, voltage ratings and other conductor characteristics,
3. Grounding of conduit systems and enclosures - Section 10,
4. Wiring methods, conduit and cable installation,
5. Protection and control of electrical circuits - overcurrent protection (fuses & breakers),
6. Disconnecting means, class 1 & 2 circuits

### **Electronics Fundamentals**

Principles of electronics applicable to life safety systems, including fire alarms and building automation systems including analogue and digital systems and their applications.

1. Measurement techniques to verify the operation of a circuit
2. Make and follow a troubleshooting plan
3. Isolate, verify and repair circuit faults
4. Use Basic Electronic Test Equipment
5. Use a bench power supply, multimeter, oscilloscope and function generator

6. Understand the limitations of measurement equipment
7. To read electronic schematic diagrams.
8. Understand the basic electronic theory as it applies to electron flow and current flow, impedance, inductance, capacitance and modulation.
9. Explain rectification of A/C power, the theory and operation of charging circuits, batteries, voltage regulation, and know how to test these systems.
10. Understand and identify amplifier circuits, filtering circuits, op amps, switching circuits and other electronic circuits.
11. Know the use and be able to identify diodes (all types), transistors (all types), capacitors, and resistors, as in their colour code.

The knowledge of basic digital and analog technology, and integrated circuits should be displayed.

## **SCHEDULE H – ASTTBC Program for Registrants – Professional and Ethical Issues**

ASTTBC practice advisors, who may consist of ASTTBC staff, practising registrants in good standing or retired registrants, will receive and respond to inquiries regarding professional and ethical issues faced by registrants.

Inquires may be made by email, telephone or in writing. A practice advisor will respond to the registrant as soon as practicable and may, in preparing a response, consult with other practice advisors or other appropriate third parties; however, personal information provided to practice advisors will remain confidential.

Responses provided by practice advisors will be to the best of their knowledge and reflect current legislative and regulatory requirements, as well as ASTTBC's standards of competence and Code of Ethics. Practice advisors cannot offer any legal advice, employment standards advice, specific guidance for work-related tasks, approval of work-related decisions, or provide dispute resolution.

ASTTBC will, from time to time, provide general guidance to registrants on professional and ethical issues to assist them in practice. Such guidelines will be made available on ASTTBC's website and may include, but is not limited to, practice advisories, bulletins, and publications.

ASTTBC may also, at its discretion, offer continuing education programs either virtually or in person for registrants regarding the issues of professional obligations and ethical issues.