ASSOCIATION OF PROFESSIONAL GEOSCIENTISTS OF NOVA SCOTIA (Geoscientists Nova Scotia)

Fair Registration Practices Act (FRPA) Review
January 2019

Province of Nova Scotia

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Executive Summary

The Association of Professional Geoscientists of Nova Scotia's (APGNS) Action Plan is a progressive response to the recommendations resulting from the Fair Registration Practices Act (FRPA) review process. These actions will support the fairer assessment of applicants to the profession in Nova Scotia and are fully consistent with the FRPA.

Many aspects of the APGNS's registration practices are commendable. The APGNS has been engaged in developing tools which help to clarify the requirements for registration. These include a Self-Assessment Worksheet which enables applicants to assess their academic training and background against entry-to-practice standards. This is particularly helpful for applicants from outside of Canada, because it allows them to familiarize themselves with occupational standards and identify and address any gaps that may exist in their competencies or training prior to their arrival in Canada. The APGNS has also developed an Academic Assessment Guide which details the expected academic syllabus for each Educational Unit. These documents demonstrate a commitment to facilitating successful outcomes for all applicants. In addition, these tools help increase transparency during the registration process by clearly establishing both the knowledge and competencies needed to be successful in registration. The result is that applicants are better informed about the skills they must possess and the standard to which they will be assessed prior to commencing the registration process.

The APGNS has demonstrated a commitment to upholding their responsibilities under Chapter 7 of the Canadian Free Trade Agreement. Their efforts ensure that professional geoscientists educated in other Canadian jurisdictions can travel freely into Nova Scotia and have their qualifications recognized efficiently. The APGNS provides effective and timely communication and support to applicants during the application process. Finally, the APGNS has made efforts to develop thorough policies on many important aspects of the registration process providing decisions to applicants, and accommodating applicants with physical and mental disabilities. These measures demonstrate that the APGNS is committed to continuous improvement in implementing registration practices that are transparent, objective and procedurally fair.

In this context, I expect that APGNS will address three important recommendations that resulted from the 2018 FRPA review process:

- Update website to include the following:
  - A section with registration information for international applicants
  - Information on the APGNS's policy for accommodation for applicants with disabilities
  - A timeframe for responding to inquiries for applicants
- Develop a visual pathway to licensure
- Develop policies addressing the following aspects of APGNS registration practices:
  - Revising and updating website regularly
  - Accepting alternative information to required documentation

I truly appreciate APGNS's cooperation and openness during the registration review process and thank David Carter, Registrar, and the staff at APGNS for their participation.

Sincerely,

Cara Spittal, Ph.D.
FRPA Review Officer

Introduction

The purpose of the Fair Registration Practices Act (FRPA) Review is to share the Review Officer's understanding of the Association of Professional Geoscientists of Nova Scotia's (Geoscientists Nova Scotia, APGNS) practices regarding the fair consideration of individuals applying for registration.[1] During the FRPA Review Process, a regulatory body's registration practices are measured against both the specific and general duties outlined in the *Fair Registration Practices Code*—all of which encompass the overarching principles of transparency, objectivity, impartiality and procedural fairness.[2]

The analysis is based on the FRPA Review Officer's work with the Geoscientists Nova Scotia to date. The *Association of Professional Geoscientists of Nova Scotia 2018 Review* captures the results of the FRPA Review Process and includes an inventory of exemplary licensing practices and Action Plan that holds Geoscientists Nova Scotia accountable for continuous improvement within two years of the review.

Through the 2018 FRPA Review, the FRPA Review Officer aims to build on the work of APGNS to date and identify opportunities to further improve and evolve registration practices.

[1] For more information on the FRPA Review Process, see the *Guide to Fair Registration Practices Act*: http://novascotia.ca/lae/RplLabourMobility/documents/FRPA_GuidetoReviewProcess_WEB.pdf

[2] The *Fair Registration Practices Code* is delineated in Sections 6-12 of the Fair Registration Practices Act. *Government of Nova Scotia*. Ch. 38 of the Acts of 2008, as amended by 2014, c. 14.

Context of the Profession in Nova Scotia

Occupational Profile

The Association of Professional Geoscientists of Nova Scotia ('APGNS' or 'Geoscientists Nova Scotia') has a legislated mandate, under the ***Geoscience Profession Act*** of 2002, to regulate the practice of geoscience in Nova Scotia and to register professional geoscientists. This legislation constitutes *'right to title'* and *'license to practice'* for registered geoscientists in Nova Scotia.

Geoscience is the scientific study of the planet Earth and its many different natural geologic systems. It includes the study and investigation of Earth's minerals, soil, water and energy resources: how Earth's natural systems work today, how they operated in the recent and ancient past, and how we expect they may behave in the future. Geoscience is real-world science, relevant to us all, every day.

Geoscience was established as a regulated profession in Nova Scotia, by the ***Geoscience Profession Act*** (Bill no. 117; Chapter 7 of the Acts of 2002; which received royal assent on May 30, 2002). The Act established the **Association of Professional Geoscientists of Nova Scotia** (APGNS or Geoscientists Nova Scotia), with a mandate to protect the public through the regulation of geoscience and registration of geoscientists.

Our Earth has been around for more than four billion years so there's a lot of information to work with. Some geoscientists work in a traditional broad area of Earth science like geology, geophysics, geochemistry and environmental geoscience. Others practice geoscience in one of many specialized areas, such as volcanology (volcanoes), paleontology (fossils) or geochronology (age-dating rocks); or they work in a new emerging discipline such as medical or forensic geology. What's important to remember is that there are many different types of geoscientists and different forms of geoscience practice.

Organizational Description

The legal name of the Association is the "Association of Professional Geoscientists of Nova Scotia". The name may be abbreviated as "APGNS". The business or brand name of the Association is "Geoscientists Nova Scotia" and it should not be abbreviated.

The Association was established in 1997 under the Societies Act and by specific legislation under the Nova Scotia ***Geoscience Profession Act*** of 2002. The prime objective of the Association is to protect the public interest through the regulation of the practice of geoscience. Under the Act, an individual or corporation offering, providing or undertaking geoscience in Nova Scotia is deemed to be practising geoscience, and therefore must be registered with and/or licensed by the Association. The Association is a self-regulating, professional body, with practice defined by a Code of Ethics and with investigative and disciplinary powers. The ***Geoscience Profession Act*** provides "right to title" and "license to practice" to registered geoscientists. The Association is governed by a policy-making Council consisting of nine (9) elected members; there are six (6) elected Councillors, and a three-person (3) Executive (President, Vice-President and Past-President), who are representative of the profession in Nova Scotia. Council also includes up to two (2) appointed lay

members / public representatives. The function of Council is documented in the Council Attendance and Procedures Guidelines which are included in the new Councillor Briefing Document provided to each member of Council.

The Council is assisted by several standing boards and committees (e.g. Admissions Board, Communications Committee, Mining Committee, Environment Committee, etc) as well as assigned purpose task groups and a staff headed by an Executive Director and Registrar (i.e. Chief Executive Officer).

Active Membership Requirements

APGNS considers that it is a professional obligation for the registrant to ensure that their professional fees are paid on or before December 31st of each year. Registration is granted based on the calendar year. This has been confirmed in a policy document which is available on the Association website. The information is also conveyed to all registrants as part of the annual invoice and in follow-up communications regarding annual fees.

Registration Requirements

The role and responsibility of the APGNS Admissions Board (the 'Board') is to evaluate applicants for professional geoscience registration in Nova Scotia. APGNS Council (the 'Council') has mandated that all applicants for professional geoscience registration must be determined to be in compliance with the established and accepted standards and criteria of the Association in:

(1) knowledge requirements / academic training,

(2) geoscience work experience,

(3) good character, and

(4) language proficiency.

Based on the Board's review and evaluation of all the information available through and / or in support of an application, the Board may recommend to the Council acceptance or rejection of the applicant. Board recommendations are subject to review and final approval by Council.

Therefore, the Board is mandated and commissioned by the ***Geoscience Profession Act*** and the by-laws of the Association made under it, as well as this Council approved policy and procedures document.

What are the educational requirements to practice the profession?

If no specific education is required, describe the types of education attained by those currently practicing the profession.

The **Canadian Geoscience Standards Committee (CGSC)**, a standing committee of **Geoscientists Canada (GC)**, has published the ***Geoscience Knowledge and Experience Requirements for Professional Registration in Canada (GKE)*.** The **Association of Professional Geoscientists of Nova Scotia (APGNS** or **Geoscientists Nova Scotia),** as a Constituent Association of GC, is represented on the CGSB.

The GKE document has been accepted by the provincial and territorial geoscience regulatory associations, including APGNS, as the fundamental reference for evaluating academic training and geoscience work experience for Professional Geoscience registration.

All the Canadian regulatory bodies, including APGNS, have mechanisms in place to receive applications from people at different stages of their careers. This includes 'seasoned' geoscientists who have yet to become registered as professional geoscientists, those arriving as immigrants to join the Canadian workforce, or internationally trained and mobile professionals whose activities require that they attain P.Geo licensure in one or more Canadian jurisdictions.

The basic requirements for professional registration in Canada, including Nova Scotia, are as follows:

- the equivalent of a four-year B.Sc. degree in geoscience, geology or earth science;
- a minimum of 48 months of documented, supervised, cumulative and progressive, geoscience work experience;
- demonstrated good character, reputation and conduct, established through professional references;
- proficiency in the language of business in the province or territory of practice; and
- demonstrated knowledge of professional practice issues and requirements, including law and ethics, through successfully completing the National Professional Practice Exam (NPPE).

Typical documents which are required to be considered for admission are:

- a completed application form;
- official academic transcripts; sent directly to the Registrar by the university(s)
- a detailed work experience record; signed and dated resume; and
- professional references (identified by the applicant and contacted by the Registrar).

CFTA Transfers

APGNS recognizes the requirements of the CFTA and previously the AIT. APGNS also recognizes the requirements for professional geoscientists to practice in more than one Canadian jurisdiction, as was previously defined by the Inter Association Mobility Agreement(s). Therefore, APGNS Council has authorized the Registrar to evaluate and approve transfer registration requests. A member-in-good standing with a similarly constituted professional Association in Canada is eligible for transfer to APGNS under the CFTA. A non-resident is eligible for registration with a License to Practice (LTP) and a NS resident is eligible for registration as a P.Geo member. This confirmation of registration status is normally completed through emails and a record of the inquiry and response is included in the applicant's registration file.

Also, to facilitate the applicant's compliance with the APGNS Continuing Professional Development and Competency Assurance (CPD) program, the Registrar has also been authorized by Council to receive, evaluate and approve a copy of the applicant's CPD submission to the home Association as compliant with the APGNS CPD program.

International Applicants

Geoscientists Nova Scotia is participating with Geoscientists Canada on an initiative aimed at improving the assessment of internationally trained geoscientists seeking professional geoscientist licensure.

The initiative, the **"Admissions Support Tools Project (Phase II)"** consists of two main components. The first involves the development of an on-line resource designed to provide relevant and actionable information on how to apply for licensure in Canada. This resource will include a self-assessment tool where prospective applicants will be able to input information related to their geoscience education and work experience. An automated program will collect the responses and generate a brief report on any gaps identified that the prospective applicant may need to remediate relative to Canadian entry-to-practice standards before becoming eligible for licensure.

Once complete, this resource will be available to all prospective professional geoscientist applicants, regardless of the jurisdiction to which they may eventually apply and will be offered at no charge to users. Geoscientists Canada expects that this tool will help to streamline the registration process, answering applicant questions and identifying areas that may require further work or clarification before the actual application begins.

The second component of the project will result in a new assessment tool for evaluating an applicant's relevant geoscience work experience. A series of indicators will be developed to help individuals identify specific aspects of their geoscience work experience that are required by Canadian regulators. Indicators will be tied directly to an existing Entry to Practice, Competency Profile which was introduced in 2014 and approved by APGNS Council in 2014 (https://geoscientistscanada.ca/wpcontent/uploads/2015/07/Competency-Profile-for-Professional-Geoscientistsat-Entry-to-Practice-Combined-Doc.pdf).

Organizational Structure and Staffing

The Association is governed by a policy-making Council consisting of nine (9) elected members; six (6) elected Councillors, and a three-person (3) Executive (President, Vice-President and Past-President), who are representative of the profession in Nova Scotia and elected by the Members. Council also includes two (2) appointed lay members / public representatives appointed by the Executive Committee.

The function of Council, as well as the roles and responsibilities and expectations of the members of Council is documented in the **Council Attendance and Procedures Guidelines** which is included in the **New Councillor Briefing Document.**

The Council is assisted by several standing boards (e.g. the Admissions Board) and committees (e.g. the Environment, Mining, and Communications Committees) as well as assigned purpose task groups (e.g. the Insurance Task Group) and a part-time staff headed by the Executive Director and Registrar (i.e. Chief Executive Officer) who is assisted by the part-time Administrative Assistant (who handles bookkeeping, accounts payable and accounts receivable, etc.).

Types of Licenses/Certificates Issued

APGNS Currently registers professional geoscientists (P.Geo's); members-in-training (MIT's); and issues Licenses to Practice as well as corporate Certificates of Authorization (CofA's).

The categories of membership in the Association are:

- member,
- license to practice,
- member-in-training,
- retired member,
- life member,
- honourary life member,
- Certificate of Authorization (sole practitioner and corporate), and
- such other categories as established by Council.

The Board reviews and make recommendations only with respect to the following membership categories:

- member, and
- member-in-training.

The Registrar has been authorized by the Council to issue, assign and renew a 'license to practice' (non-resident licensure), or a "P.Geo" registration (resident licensure) which are based on the transfer of professional geoscientist, member-in-good-standing, from another Canadian jurisdiction which, in the opinion of the Registrar, is similarly constituted. The Registrar is also authorized to issue, assign and renew a Certificate of Authorization.

Retired, life, honourary life member, or “other” member status may be assigned by Council as defined by the Act and by-laws.

Requirements for registration as a member:

1. The following are the requirements for registration as a member:

    (a) the applicant must be a Canadian citizen or legally entitled to work in Canada and a resident of the Province of Nova Scotia;

    (b) completion of the application form approved by the Council;

    (c) payment of the application, assessment and service fee(s) approved by Council;

    (d) successful completion of an education program as approved by Council and determined by the Board;

    (e) successful completion of the registration examination and such other examinations or other means of assessment as may be approved by Council;

    (f) demonstration and documentation of relevant experience in such manner and for such time set out in a policy approved by Council;

    (g) if the applicant is currently or was registered in another jurisdiction, a certificate of standing from each such jurisdiction establishing that there are no impediments to registration in the Province;

    (h) evidence acceptable to the Registrar that the person holds professional liability insurance as required by Council; and

    (i) evidence acceptable to the Registrar that the applicant has the competence, capacity and character to competently and ethically engage in the practice of professional geoscience.

Requirements for registration as a licensee

2. The following are the requirements for registration as a licensee:

    (a) the applicant meets the requirements for registration as a member as in the section above, with the exception of the residency requirement in the Province of Nova Scotia; or

    (b) the person meets the requirements for registration as a member as in the section above, with the exception of the residency requirement in the Province of Nova Scotia and the applicant establishes to the satisfaction of the Registrar, that the applicant is a registered as a member-in-good standing of an association of professional geoscientists, which in the opinion of the Registrar, is similarly constituted and has similar membership requirements to the Association, and furnishes the Registrar with the certificate of membership-in-good standing in the other Association.

Requirements for registration as a member-in-training

3. The following are the requirements for registration as a member-in-training:

(a) the applicant must be a Canadian citizen or legally entitled to work in Canada;

(b) completion of the application form(s) approved by Council;

(c) payment of the application, assessment and service fee(s) approved by Council;

(d) successful completion of an education program as approved by Council and determined by the Board;

(e) successful completion of the registration examination and such other examinations or other means of assessment as may be approved by Council;

(f) proof that the applicant has entered an agreement approved by the Registrar to obtain training in professional geoscience under the supervision of a mentor approved by the Registrar and is actively pursuing such training; and

(g) evidence acceptable to the Registrar that the applicant has the competence, capacity and character to competently and ethically engage in the practice of professional geoscience.

Overview of Registration Process

Registration Information

The registration process begins with the submission of an application form, which is posted on the Association web site or available directly from the Registrar. The Registrar compiles the application material(s) and conducts a preliminary review of the application to ensure completeness. Once the application is complete it is forwarded to the Chair of the Admissions Board who assigns one or more members of the Board to review and present their findings at a meeting of the Board along with a motion for action.
Motions presented to the Board require a 'mover' and a 'seconder' from among the voting members of the Board.

As shown in the steps below, the Board should place significant emphasis on reaching decisions by consensus. In the case of a decision regarding an applicant file, where questions or concerns are raised in the discussion, the Chair has the authority to defer the discussion and vote on the decision to allow for additional information to be acquired and introduced. It is intended that a voting member should only abstain from a vote in a case of a potential conflict of interest regarding the application file under consideration by the Board and that it should be identified to and recognized by the Chair

The Council and the Board have adopted the following as a guide for a decision-making process:

The goal is everyone in agreement (unanimity).

Steps to achieve that goal are:

- the application file or other matter and the recommendation is presented by the reviewing member, Registrar and/or the Chair;
- the proposal (recommendation) is 'framed' by the Board (*i.e.* the motion is moved and seconded);
- the Chair calls for further discussion;
- the Chair determines the acceptability of any discussion and/or amendments, if any required;
- if required, the motion is amended;
- once the Chair determines that discussion is complete, the Chair may use tools (*e.g.* 'testing the waters' with a straw poll, etc.), or call for a formal vote;
- if the Chair determines that there is less than consensus, at the discretion of the Chair; the Board may continue discussions; the Chair may table (postpone temporarily) the motion, pending additional information; or the Chair may call for formal vote; (note that the motion / recommendation cannot be tabled continuously, *i.e.* the Chair has a responsibility to see that it 'lands'); or
- in the case of formal vote, the majority determines the acceptance or rejection of the motion / recommendation and Chair only votes to break a tie;
- if, based on the result of the formal vote, the Chair declares a consensus and instructs that the minutes reflect that the motion has been carried; or
- the minutes reflect that the motion / recommendation is carried or defeated.

Registration Process

All applications for professional geoscience registration, (member, license to practice, member-in-training, retired member, life member, honourary life member), will be directed to the Registrar.
The Registrar will facilitate and coordinate all contact and communications with the applicant.
All applications for professional geoscience registration must be submitted to the Registrar on the most current version of the application form(s) available from the Office of the Registrar and/or as posted on the Association website. Applications which are submitted using an out of date application form may not be accepted for evaluation.

All applications for registration must include the payment in full of all current and applicable fees and service charges. Applications submitted without full payment of the applicable fees and service charges may not be accepted for evaluation.

It is the responsibility of all applicants to provide official documents for evaluation by the Board. Where translation and/or verification are required (*e.g.* internationally trained applicants) the provision of documents (including the cost) will be the applicant's responsibility.

3B. Application Assembly

The Registrar will function as the source and contact for all communications between the Board, the Association and the applicant regarding the application and its disposition.

1. The Registrar will create a file for the applicant, record the date the application form was received, assemble the supporting documentation, issue letters of request for professional references, and authorize the deposit of all fees and/or service charges to the applicable Association account.

2. Once the complete application file has been assembled, the Registrar shall forward the application file and all supporting documentation to the Chair of the Board. The Registrar shall notify the applicant that the application file has been compiled and submitted to the Board for consideration as well as an estimate of the time required for the Board evaluation and recommendation to Council.

3. If the application is not complete within one month of the date of submission/request for letters of reference, the Registrar will contact the applicant informing them of what information remains outstanding.

4. If the application is not complete within two months of the initial date of submission/request for letters of reference, the Registrar will contact the applicant to identify the documentation that remains outstanding. At that time the applicant may submit alternate supporting information (*i.e.* contact references). The Registrar may indicate that if the application is not completed by the end of the third month, the application will be considered terminated. In that case, the applicant will be required to re-apply with supporting documentation as well as all applicable application fees and service charges.

5. The Registrar may, on written application, extend the application deadlines, if the Registrar is satisfied that the delay is due to extenuating circumstances, beyond the control of the applicant, which have prevented the timely completion of the application.

3C. Application Examination

1. The Chair will assign the application file to a member of the Board for review, evaluation and presentation to the Board. The Chair may assign all or part of the review of either the academic or the experience portion of the application to a second member of the Board or to an external reviewer, a member-in-good standing of the Association, if applicable.

3. The assigned reviewer(s) will evaluate the application and all supporting materials, using the approved assessment tools and/or worksheets, to confirm that all requirements for professional registration have been met, and/or noting which requirements have not been met. The reviewer(s) shall notify the Chair when the evaluation is complete and the Chair shall schedule a presentation of the application file by the evaluating reviewer at the next available Board meeting.

4. At the scheduled presentation meeting of the Board, the evaluating reviewer(s) will present their examination findings, including the evaluation worksheets and any other supporting documentation, indicating whether the requirements for professional geoscience registration have been met or not, identifying any deficiencies in qualifications, and making a recommendation regarding the disposition of the application.

The Board will then decide:

(a) that the applicant meets the requirements for professional registration, either as a member or a member-in-training, in which case the file and the completed worksheets will be returned to the Registrar with the appropriate notations;
(b) that the applicant does not meet the requirements for professional registration, either as a member or a member-in-training, in which case the file and the completed worksheets will be returned to the Registrar with the appropriate notations;
(c) that further information is necessary to evaluate the candidate, in which case the complete file and the completed worksheets will be returned to the Registrar with a request specific to the file and/or the applicant to compile the additional information;
(d) that further evaluation, for example, through a personal interview, or examination(s), or other evaluation tool(s), is necessary to evaluate the candidate, in which case the file and the completed worksheets will be returned to the Registrar with a request to facilitate and schedule the interview, examination(s), or other evaluation tool(s), *e.g.* a confirmatory examination(s);
   - an interview may be recommended where the evaluation has identified knowledge gap(s), but the reviewer(s) have determined that there is sufficient evidence to believe that the applicant may have the knowledge to address some, if not all, of the identified knowledge gaps, or if further confirmation of the applicant's knowledge is considered desirable;

   - the applicant will be informed, prior to the interview, of any specific knowledge areas the assessors wish the applicant to address during the interview and the interview should allow the applicant to provide further information and to give a brief presentation if the applicant so desires;

   - the interview panel will have the opportunity to ask questions of the applicant in order to ascertain the applicant's understanding of the subject matter in the various knowledge gap subject areas;

   - if an interview is not practicable or possible to accommodate, a confirmatory exam(s) may be assigned; or

(e) that the application should be reviewed by another member(s) of the Board, in which case the file and the completed worksheets will be returned to the Chair who shall assign the review to another member(s) of the Board.

4. Based on the evaluation of the application and the recommendation of the Board, or alternatively, based on a specific request by the applicant, the Board may consider a 'seeking to exempt' philosophy and conduct an evaluation of the applicant's knowledge and experience based on **Prior Learning Assessment and Recognition ('PLAR')**; in either case, there may be circumstances in which a significant accumulation of cumulative and progressive geoscience work experience (normally on the order of 10 or more years) may be considered in lieu of select academic requirements.

   If an evaluation under PLAR is considered, based on the initial evaluation and recommendation of the Board, the applicant will be informed of the specific deficiencies, the application file will be held as 'pending' for a specified period of time and the applicant will be offered a specific period of time to collect and present the required additional documentation; the time frame will be determined by the Registrar in consultation with the Board and it will be based on the specifics of the additional material required to complete the application file; on receipt of the additional information by the Registrar, the evaluation of the application by the Board would be resumed.

   The applicant will also be advised that, simply requesting or participating in an evaluation under the PLAR process, the result (recommendation and/or approval) will not be predetermined, or ensured, or guaranteed, or binding on either the Board or Council.

   Each applicant, including those requesting a PLAR evaluation, will be advised to complete a geoscience knowledge requirements self-assessment document; the self-assessment document should be included with the application; it should be noted that the self-assessment is the opinion of the applicant; the Board and/or the Council are under no obligation to accept the self-assessment; the self-assessment document is a tool to assist the applicant and the Board with communication.

   The applicant will be informed that should the self-assessment identify academic training deficiencies, in the applicant's opinion, and should s/he believe that the knowledge requirement deficiency has been satisfied through learning in or outside of the formal education environment, s/he should provide sufficient detailed information to satisfy the Board that the knowledge requirement has been satisfied; this information may be demonstrated through, but not limited to, the following:
   - additional courses or academic training completed (documented by official transcripts, course description/syllabus, etc);
   - supervised geoscience work experience; (documented in the work experience diaries)
   - structured and/or independent research; (demonstrated through work product, peer reviewed publications, etc); and/or
   -
   - formal and/or informal presentations, courses, etc; (conference sessions, field guides, short courses, poster presentations, corporate seminars, etc).

   For each of the above examples, and any other method through which the knowledge may be demonstrated:

- the specific knowledge requirement, and the component(s) of that requirement, as defined by the GKE and/or other Board documents, and which are submitted to demonstrate compliance or completion, should be clearly identified, and

- supporting documentation, clearly linked to the knowledge requirement being demonstrated, should be provided (*e.g.* certificates; attendance records; research results; copies of presentations, etc); for each knowledge requirement to be demonstrated; further, statements of support from registered professional geoscientists, or professional engineers who are qualified to conduct geoscience, indicating that, to the best of their knowledge, the noted knowledge requirement has been satisfied; any other supporting documentation.)

For an applicant to be considered under this policy, the geoscience work experience must be determined to be 'current', specifically, it must represent relevant geoscience experience within the last 10 years, and it must be supported by professional and character references representing the same time frame; this should be supported by examples of geoscience work product and may be subject to consideration in a personal interview.

However, without limiting the specific requirement for currency, it must also be recognized that the application of PLAR may be utilized to determine knowledge gained by the applicant, through learning in and outside of the formal education environment, in order to fulfill knowledge gaps noted by academic assessors; therefore, the date at which the knowledge was acquired may not be in question; it is a matter of whether the required knowledge has been gained

It must also be stressed that 'seeking to exempt' or 'PLAR' will only be extended and evaluated in the context that the public interest is protected from unprofessional and/or unregulated geoscience practice and by the registration of only qualified, competent geoscientists.

5. As approved by Council, the review of applications by the Board will utilize the Geoscientists Canada (GC), Canadian Geoscience Standards Council (CGSC), ***Geoscience Knowledge and Experience Requirements for Professional Registration in Canada***, (GKE) as a reference. The Board will also consider the GC document, ***Framework for Assessment in the Licensing of Professional Geoscientists in Canada***, dated April 2012 as well as the Nova Scotia ***Fair Registration Practices Act*** (FRPA) and the ***Canadian Free Trade Agreement*** (CFTA) ***(***formerly the ***Agreement on Internal Trade*** (AIT, Chapter 7).

   The APGNS ***Self-Assessment Worksheet*** and the ***Academic Assessment Guide***, incorporating the practical application of these documents, has been developed by the Board and approved for use by the Council. Council has also considered that the Board may utilize the GC, ***Entry to Practice Competency Profile*** as a tool for evaluating and assessing the geoscience work experience requirements, work experience as well as the principles of ***Prior Learning Assessment and Recognition*** (PLAR).

   The applicant assessment worksheet will be completed as part of the review of each application file and the original will be returned to the Chair. The worksheet will be signed and dated by the reviewing

member as well as the Chair. The original worksheet will retained by the Registrar as part of the application file, regardless of the disposition of the file.

Cost of Registration (including payment methods)

The one-time and annual cost of professional geoscience registration is posted on the Association website, it is available from the Registrar; and it is included in the application for registration form as follows:

Applicants for **Member** must enclose a payment for the **Total of $862.50.**
(Annual Dues $450.00, Stamp fee $50.00 and Assessment fee $250.00 plus HST@15%)

Applicants for **Member-in-Training** must enclose a payment for the **Total of $316.25**.
(Annual Dues $175.00 and Assessment fee $100.00 plus HST@15%)

Applications for **License to Practice** must enclose a payment for the **Total of $862.50.**
(Annual Dues $450.00, stamp fee $50.00 and Assessment fee $250.00 plus HST@15%)

An application for **Certificate of Authorization** must include:

- a payment of the one-time application / administrative fee = **$316.25** (HST included) and
- annual fees for a Certificate of Authorization (issued for one calendar year,
  - sole practitioner **$264.00** (HST included), or
  - corporate / two or more practitioners **$920.00** (HST included).

The full schedule of Professional Fees and Service Charges is set for the calendar year and approved annually by the Council. The schedule of fees and service charges is also posted on the Association website.

Schedule A. APGNS Professional Fees and Service Charges
In effect for the period January 1, 2019 to December 31, 2019
(Approved by Financial Committee November 2018 / Council November 2018)

1.0	Application/Registration fees* (assessment fees):	2019
1.1	Application for registration of a corporate Certificate of Authorization	$275.00
1.2	Application for registration as a Member	$275.00
1.3	Application for registration as a Member-in-Training (MIT); fee waived for applications submitted in the year of graduation	$100.00
1.4	Application for registration as a License-to-Practice	$275.00

1.5	Application for transfer or registration from another Canadian Professional Geoscience Association (IAMA, AIT Ch 7, etc.)	$250.00
1.6	Application for evaluation of international training and/or experience by a 3rd party service provider (est; actual fee to be determined based on actual cost) (Member, MIT or LTP, in additional to standard application & other fees)	$450.00
1.7	Application for change of designation (transfer from MIT to registration as a P.Geo member)	$150.00
1.8	Application for examination (confirmatory or technical)	$350.00
1.9	Pre-application academic assessment (review of academic transcripts in preparation for submission of an application for registration)	$250.00
1.10	APGNS Professional Stamp	$50.00
2.0	**Membership fees*:**	**2019**
2.1	Annual fees for a Member (renewal issued for one calendar year)	$450.00
2.2	Annual fees for a retired Member (renewal issued for one calendar year)	$100.00
2.3	Annual fees for an MIT (renewal issued for one calendar year)	$200.00
2.4	Student Membership	free
2.5	Annual fees for a License to Practice (renewal issued for one calendar year)	$450.00
2.6	Annual fees for a Certificate of Authorization (issued for one calendar year)	---
	• sole practitioner operating as a corporate entity (one practitioner)	$230.00
	• corporate, partnership, etc. (two or more practitioners)	$800.00
3.0	**Other fees*:**	**201**
3.1	National Professional Practice Examination (written in NS)	$275.00
	National Professional Practice Examination (written in Canada)	$375.00

	National Professional Practice Examination (written in US)	$400.00
	National Professional Practice Examination (written outside Canada or US)	$450.00
	Deferral of scheduled NPPE exam (to next available; must be within the registration deadline)	$50.00
3.2	Academic Examination (required by the Admissions Board) per examination	$750.00
	Defer scheduled academic examination to a subsequent session	$75.00
	Examination re-read, per examination	$500.00
3.3	Replacement of Certificate	$75.00
3.4	Confirmation of registration status (requested by member)	$75.00
3.5	Shipping charges for certificates and stamp (in Canada)	$50.00
	Shipping charges for certificates and stamp (in US)	$75.00
	Shipping charges for certificates and stamp (outside Canada and US)	$80.00
3.6	Appeal of Registrar or Admissions Board or Council decision; includes interview / records review / examination fee (technical or confirmatory), requested by applicant	$625.00
3.7	Application for reinstatement of P.Geo / MIT designation (after resignation in good standing)	$150.00 / 100.00
3.8	Application for reinstatement of P.Geo / MIT designation (without resignation in good standing)	$275.00 / 200.00
3.10	Application for reinstatement of P.Geo / MIT (after sanction)	$500.00
3.11	Late Payment Fee (applied to unpaid accounts on January 15th)	$75.00
3.11	Interest on overdue accounts (applied to unpaid accounts after February 1st)	10%/month
3.12	Bank payment refusal fee	$75.00

***** **plus applicable taxes (15% HST)**

2017 Registration Data

The following is a copy of the information provided to the FRPA Review Office through the Annual Assessment Questionnaire.

#	Question	Response
1	**Total number of individuals with practicing licenses/certifications. Do not report on any licenses or certificates you issue to a business, school or group.**	Total registrants = 272 (P.Geo-177, LTP-27, MIT-18 & CofA-48) as reported to Council on September 19, 2018. .
2	**Number of registrations for the reporting year, from applicants who received their qualifications as indicated below:**	
	• Received qualifications (training/work experience for trades) in NS, new applicant.	8
	• Received qualifications in Canada, new applicant - n/a for trades - issue a Certification of Qualification.	0
	• Received qualifications (training/work experience for trades) internationally, new applicant.	0
	• CFTA Transfers, applicants already registered in another Canadian jurisdiction.	14
	• Total number of applicants.	22
3	**Types of practicing licenses/certificates you issue and total number of individuals for each type identified for the reporting year.**	
	• Membership Certificate	22
4	**Number of completed applications submitted by applicants who received their qualifications as indicated below.**	
	• Received qualifications (training/work experience for trades) in NS, new applicant:	
	○ *Accepted:*	8
	○ *Rejected:*	0
	○ *Still in process:*	0
	○ *Withdrawn:*	0
	○ *File inactive or closed:*	0

	• Received qualifications in Canada, new applicant:	
	○ *Accepted:*	0
	○ *Rejected:*	0
	○ *Still in process:*	0
	○ *Withdrawn:*	0
	○ *File inactive or closed:*	0
	• Received qualifications (training/work experience for trades) internationally, new applicant:	
	○ *Accepted:*	0
	○ *Rejected:*	0
	○ *Still in process:*	0
	○ *Withdrawn:*	0
	○ *File inactive or closed:*	0
	• CFTA transfers, applicants already registered in another Canadian jurisdiction:	
	○ *Accepted:*	14
	○ *Rejected:*	0
	○ *Still in process:*	0
	○ *Withdrawn:*	0
	○ *File inactive or closed:*	0
5	**For those new Canadian applicants (not NS), list the provinces in Canada (and associated numbers) where the level of education to qualify the applicant for licensure (training or work experience for trades) was obtained.**	
	• Province/Territory	N/A
6	**For new international applicants, list the source countries (and associated numbers) where the applicant received the level of education to qualify them for licensure (training or work experience for trades).**	
	• Country	N/A
7	**Average length of time (in days) between receipt of a completed application and response to the applicant, for those who received their qualifications as indicated below. Response to the applicant**	

	to include whether they meet the requirements, partially meet and need to fill gaps, or there is no match and other pathways might be a consideration.	
	• Received qualifications (training/work experience for trades) in NS, new applicant:	30
	• Received qualifications in Canada, new applicant:	0
	• Received qualifications (training/work experience for trades) internationally, new applicant:	90
	• CFTA transfers, applicants already registered in another Canadian jurisdiction:	30
8	**Average registration process time (or application approval) for those who received their qualifications as indicated below.**	
	• Received qualifications (training/work experience for trades) in NS, new applicant:	30
	• Received qualifications in Canada, new applicant - n/a for trades - issue a Certification of Qualification	0
	• Received qualifications (training/work experience for trades) internationally, new applicant	90
	• CFTA transfers, applicants already registered in another Canadian jurisdiction	30
9	**Total costs (to the applicant) associated with registration (certification) for applicants who received their qualifications as indicated below. Separate costs that the regulatory body themselves imposes on the applicant from other necessary costs incurred related to registration.**	
	• Received qualifications (training/work experience for trades) in NS, new applicant:	Regulatory body costs: $675 Other: 0
	• Received qualifications in Canada, new applicant:	Regulatory body costs: $675 Other: 0
	• Received qualifications (training/work experience for trades) internationally, new applicant	Regulatory body costs: $675 Other: 0
	• CFTA transfers, applicants already registered in another Canadian jurisdiction:	Regulatory body costs: $230 Other: 0
10	**Number of appeals, internal reviews or challenges related to a registration decision from applicants who received their qualifications as indicated below:**	
	• Received qualifications (training/work experience for trades) in NS, new applicant:	0
	• Received qualifications in Canada, new applicant:	0
	• Received qualifications (training/work experience for trades) internationally, new applicant	0

	• CFTA transfers, applicants already registered in another Canadian jurisdiction:	0
	• Total number of appeals, internal reviews or challenges related to a registration decision:	0
11	**Length of time the appeals or internal review process took for applicants who received their qualifications as indicated below:**	
	• Received qualifications (training/work experience for trades) in NS, new applicant:	0
	• Received qualifications in Canada, new applicant:	0
	• Received qualifications (training/work experience for trades) internationally, new applicant:	0
	• CFTA transfers, applicants already registered in another Canadian jurisdiction:	0
12	**What does registration with your organization authorize?**	Geoscience is a regulated profession in Nova Scotia. Any individual or company that offers, provides or undertakes geoscience work must be registered / licensed by APGNS. The Geoscience Profession Act mandates “License to Practice” and “Right to Title” to registered Professional Geoscientists, Licenses and Members-in-Training. Geoscience work must only be undertaken under the supervision of a registered professional. The use of the designation Geologist, Geoscientist, or any derivation is prohibited.

Exemplary Practices

As part of its continuous improvement strategy, the FRPA Review Office identifies the commendable practices of regulated professions in Nova Scotia.

An Exemplary Practice is defined as program, activity or strategy that meets one or more of the following criteria:

- improves transparency, objectivity, impartiality and/or fairness of registration practices;
- produces successful outcomes for regulators and/or applicants; and
- is shown to be effective through qualitative and/or quantitative data.

The Association of Professional Geoscientists of Nova Scotia is committed to ensuring that applicants have access to registration practices that are transparent, objective, impartial and procedurally fair. During the FRPA Review Process, the progressive steps that Geoscientists Nova Scotia has taken to improve registration practices were brought to light, including:

The APGNS ***Admissions Board Policies and Procedures*** is an internal reference / guidance document was developed by the Board and approved by Council in 2015. It is intended to guide Board members in the fair, transparent and objective evaluation of applications for professional registration. The document combines the past experience of the Board with the current requirements for regulating professional registration, for example those required under the ***Fair Registration Practices Act*** and the **Canadian Free Trade Agreement** as well as the reference documents developed by **Geoscientists Canada** and the **Canadian Geoscience Standards Board**.

The document serves as an introduction and reference for Board members; it describes membership classifications and requirements; the admissions procedures; the knowledge requirements; acceptable geoscience work experience; requirements for professional references and character requirements; the language requirements as well as miscellaneous policy and practice requirements. These policy documents are individually posted on the APGNS website.

The APGNS Council approved the Admissions Board to use the ***Geoscience Knowledge and Experience Criteria for Professional Registration in Canada*** (GKE) as the fundamental reference in the evaluation of applicants for professional geoscience registration in 2002, as soon as the ***Geoscience Profession Act*** was established. The GKE document was developed by Geoscientists Canada (GC) and the Canadian Geoscience Standards Council in the late 1990's and was released in 2000. It was revised in 2008 and is currently being updated (modern photos and minor wordsmithing). It is anticipated that it will be re-released in the fall of 2018 or spring of 2019 and preliminary review indicates that there will be no substantive changes.

The Board has developed two reference documents, based on the GKE, to assist applicants as well as the Board: the ***Self-Assessment Worksheet Tool*** provides a list of the GKE requirements in tabular format as a fillable form; and the **Academic Assessment Guide** which provides a detailed description of the course syllabus expected by the Board to fulfil the Educational Unit (EU) requirements. Both of these documents are available on the Association website or directly from the Registrar who also references and provides copies to applicant inquires.

APGNS is a **Constituent Association** of Geoscientists Canada (GC), and we appoint one member of the **Board of Directors.** We also appoint one representative to the **Canadian Geoscience Standards Council** (CGSC). We also appoint one representative to the **Admissions Officers Group** who participate in Standards Council

meetings and activities. It is important to note that these national organizations facilitate discussions and provide guidance on registration and regulation issues and they operate based on one vote for each member, i.e, APGNS is recognized as an equal member.

The Standards Council developed and monitors the implementation of the GKE. GC, through the CGSC, has completed the federally funded **Admissions Support Tools 1** (AST 1) project which resulted in a **Competency Profile for Geoscientists on Entry to Practice**, a **Gaps Survey**, a review of the **Prior Learning Acceptance and Recognition** (PLAR) procedure, as well as a report on standardizing **Applicant Interview** procedures.

The **AST 2** project is currently underway and it seeks to develop tools (work experience competencies) / indicators (rubric) for assessing geoscience work experience based on competency assessment. The project will also develop a computer-based, geoscience, self-assessment tool for applicants as well as regulators. This self-assessment tool will be based on the engineering self-assessment tool, which was developed by Engineers and Geoscientists BC, and which is currently being evaluated by several Canadian engineering regulators.

Name of the Exemplary Practice:		
Exemplary Practice Category:	☒ Acceptable alternatives for meeting registration requirements ☒ Recognition of prior learning / work experience ☐ Cultural competency, equity, diversity and inclusion ☒ Collaboration at regional, national level ☒ Making or communicating registration decisions ☒ Impartial, objective and consistent assessment ☒ Preparation and pre-arrival supports ☒ Assessment criteria and methods	☒ Training for decision-makers ☒ Governance ☒ Access ☒ Outreach ☒ Workforce integration ☒ Exams ☒ Appeals
Description:	**Acceptable alternatives for meeting registration requirements, recognition of prior learning / work experience**; the APGNS Admissions Board Policy and Procedures guide encourages the application of "seeking to exempt" as a method to evaluate applicants; this includes that use of PLAR; APGNS is an active participant in the Geoscientists Canada Admissions Support Tools Phase 1 and 2 projects in developing the Entry to Practice Competency Profile and the Workplace Experience Competencies as well as the evaluation tools. **Collaboration at regional, national level**; APGNS is a Constituent Association of Geoscientists Canada (GC) and is represented on the Board of Directors; APGNS participates in the GC Presidents Group, the CEO's Group and the Executive Committee; the GC President-Elect is a member of APGNS and will	

	start his term as President in June of 2019; APGNS participates in the Canadian Geoscience Standards Committee as well as the Admissions Officers Group as well as several sub-committees and task groups. **Making or communicating registration decisions**; self-regulation of geoscience in NS is based on protection of the public from illegal, unethical, and incompetent practice; this is accomplished through the registration of professional geoscientists and the regulation of professional practice; after thoroughly evaluating an application for professional geoscience registration, a recommendation is submitted by the Registrar and the Admissions Board to the Council; applicants are informed by email and/or regular mail regarding the progress of their application and the results at decision points; applicants are encouraged to contact the Registrar for updates and/or information; applicants are also advised of the requirement to adhere to the APGNS **Code of Ethics.** **Impartial, objective and consistent assessment**; the Admissions Board Policies and Procedures as well as the New Councilor Briefing Document stress the role and responsibilities of the individual members as well as the Board / Council; the reference documents also stress the required conduct regarding impartial, objective and consistent decision making. **Preparation and pre-arrival supports**; the APGNS Academic Assessment Guide and the Self-Assessment Worksheet are designed to assist applicants in all stages of their application, including pre-arrival; applicants are encouraged to communicate with the Office of the Registrar in order to understand the required components for registration as well as any additional materials or submissions that may be of assistance to the Board in the evaluation of an applicant; APGNS has also consulted with the Immigrant Services Association of NS on professional practice and registration issues. **Assessment criteria and methods**; the applicant assessment criteria are clearly referenced in the **Geoscience Knowledge and Experience Criteria Guidelines for Professional Registration in Canada** (GKE), the **Entry-to-Practice Competency Guide**, the **Academic Assessment Guide**, and the **Applicant Self-Assessment Worksheet** as well as other specific policy documents posted on the website. **Training for decision-makers**; Council and Board members are encouraged to be familiar with and participate in training offered by Geoscientists Canada as well as other Constituent Associations; the Registrar and the President are ex-offico members of all boards and committees to promote communication between boards and committees. In particular, Admissions Board members are senior practitioners drawn from the academic, industry and government communities and most have served several years and are well versed in providing guidance for other newer members as well as applicants; participation with the Association as a volunteer is acceptable as credit in the APGNS **Continuing Professional Development and Competency Assurance Program.** **Governance**; the ***Geoscience Profession Act*** and the by-laws of the Association are available on request from the Registrar and they are posted on the web site; the proposed revisions to the ***Geoscience Profession Act***, as well as the proposed **Geoscience Practice Regulations** (compiled by the

	APGNS Governance Committee in consultation with APGNS Legal Counsel) were submitted to the Department of Justice in March 2015; these documents had been circulated to and approved by the members electronically and in hard copy at the Annual General Meeting; members are provided with an update on the progress and developments with respect to the proposed legislation on a regular basis; once the proposed Act and Regulations are approved by the Legislature, the members will be consulted with respect to the development of by-laws. **Access and Outreach**; APGNS publishes a newsletter (the **GeoGazette**) several times each year; submissions, letters to the editor, submissions, notices, etc from the members are encouraged; the Registrar maintains a mailing list of registrants and others who are contacted as notices, issues or other needs arise; APGNS circulates and receives information through social media (**LinkedIn and Facebook**); in the fall of each academic year, APGNS visits NS university geology/earth science departments to meet with students and provide information regarding course selection and the requirements for professional registration; APGNS also sponsors and participates with the **Atlantic Universities Geology Conference** and the **Atlantic Geoscience Society** colloquium / meetings; APGNS provides a scholarship program in conjunction with **Techsploration** to encourage female students to become involved in the sciences; the scholarship is awarded based on an essay which is published in the newsletter and featured at the Annual General Meeting. **Workforce integration**; APGNS has worked with the NS Department of Environment on the preparation and revision of the **Contaminated Sites Regulations** as well as the designation of a **Site Professional (SP)**; APGNS has worked with NS Natural Resources / Energy and Mines in the development and presentation of information regarding social license; APGNS has also worked with Energy and Mines on the **Mineral Resource Development Fund** regarding professional requirements and we continue to participate in the Education Stream of the fund. **Exams**; the Admissions Board has the option of assigning technical exams or specific academic courses to address any deficiencies in an applicant's academic training; APGNS is participating association offering the **National Professional Practice Exam** to applicants for professional registration; successful completion of the NPPE is a requirement for professional geoscience registration in NS as it is in other Canadian jurisdictions; the NPPE is not a technical exam, it is based on an understanding of business law and ethics; it is a computer-based, multiple choice exam; it is available in English and French; a preparation seminar in cooperation with Engineers NS and web-based practice tests are available and applicants with special needs can be accommodated. **Appeals**; under the proposed ***Geoscience Profession Act*** and the **Geoscience Practice Regulations**, appeals regarding an application for professional registration will be directed to the **Registration Appeal Committee**; if the Admissions Board recommends that an application be denied, and if the recommendation is approved by Council, the applicant will be advised by the Registrar that they have the right to appeal to the Committee; the Committee is appointed by Council and is comprised of one (1) public representative and two (2) members who are not currently serving on Council; the Committee shall give its decision in writing to the Registrar and the Registrar shall inform the applicant and the Council; the decision of the Registration Appeal Committee is final.

Value to Applicants:	All applicants for professional geoscience registration with APGNS are treated with fairness; the application process is objective and transparent; applicants are encouraged to communicate with the office of the Registrar as early as possible to receive advice and guidance; APGNS is aware of the activities, policies and procedures which are applied by other Canadian jurisdictions and APGNS strives to demonstrate the required due diligence in the evaluation of applicants in compliance with the ***Fair Registration Practices Act*** and the **Canadian Free Trade Agreement**; the success of APGNS efforts to demonstrate due diligence, objectivity, fairness and transparency is indicated by the cooperation and acceptance of the Geoscientists Canada Constituent Associations and the ease of mobility for APGNS registered professionals.
Value for Regulator:	APGNS is recognized as a Constituent Association of Geoscientists Canada; APGNS Is represented on the Board of Directors and in various Boards, Committees and Task Groups; the efforts of APGNS to effectively evaluate applicants for professional geoscience registration, and the ability to undertake those evaluations as effectively as other jurisdictions with a much larger member base, is demonstrated by the acceptance for registration or transfer of APGNS registered members to the other jurisdictions; P.Geo registration by APGNS is also recognized by other regulatory bodies, *e.g* Canadian and International stock exchanges / market regulators, corporate director regulators as well as Nova Scotia regulators*, i.e*. the Departments of Energy and Mines, Environment, Transportation and Infrastructure Renewal, as well as the Halifax Regional Municipality.
Link to further information:	www.geoscientistsns.ca; www.geoscientistscanada.ca;

Fair-access Analysis

Overall, the Association of Professional Geoscientists of Nova Scotia's registration practices comply with *the Fair Registration Practices Code* as outlined in Sections 6 to 12 of the *Act (FRPA)*.

Per Section 16 of the Act, the registration practices of a regulating body must be reviewed and a public report produced. The FRPA Office works with the regulatory bodies to assess their registration practices against the Fair-access Guidelines listed below, and develop an Action Plan to help each body comply with the Act and improve their registration practices.

Geoscientists Nova Scotia's responses to the FRPA Review Survey are detailed below, along with the Review Findings determined by the Review Officer in accordance with the Act.

FRPA Review Questionnaire and Assessment

	Question	Respondent Answer	Compliance Guideline	Review Finding	FRPA Reference
1a	How (what methods) do you use to provide information to potential applicants on your registration practices? (i.e. internet, individual counselling, hard copies)?	*APGNS provides information on the requirements for professional registration directly through the Registrar who is the initial point of contact for all applicants, usually be email or phone with documents submitted by email or regular mail. Outreach to potential applicants is directed through the Academic Advisory Committee (members of the University Earth Science and Geology Departments; Dal, SMU, Acadia and St FX) as well as through the Student Awareness Committee. The Student Committee meets with and makes presentations to the University Earth Science / Geology departments as well as at other venues. The information is targeted at 2nd and 3rd year students as a guide to assist them in course selection. It is also directed to 4th year students as a guide to acceptable geoscience work experience and work diary preparation.* *Potential applicants are directed to the Registrar for information and / or assistance in the application process. First contact is usually through internet, email, hard copy, telephone. Direct contact with the Office of the Registrar. The APGNS website (**www.geoscientistsns.ca**) provides information to applicants for all categories of registration. Individual counseling and assistance is provided by the Registrar on request.* *The Association website is written in plain language. The registration process and all the required application forms are posted on the website. Applications can be downloaded from the website and can be submitted electronically by email.*	**Level 1** Paper forms and information made available to applicants via regular post, Telephone **Level 2** E-mail forms and information, telephone. Forms and information can be downloaded from website to be emailed / faxed / mailed in after completion **Level 3** Automated on-line form on website and information is easily accessible on a website Process in place for applicants to track application status	Level 2	16(3)(g)

1b	Can applicant begin the process outside of Canada?	*Yes. There are no residency or citizenship restrictions regarding licensure. The applicants must demonstrate that they are legally entitled to work in Canada. Any individual can apply at any time, regardless of their physical location.* *APGNS has developed a* ***Self-Assessment Worksheet*** *to assist applicants in identifying their academic training and background. APGNS also has an* ***Academic Assessment Guide*** *which details the expected academic syllabus for each* ***Educational Unit*** *(EU). These are available on the Association website or from the Registrar.* *The Geoscientists Canada, Canadian Geoscience Standards Council is currently working on Phase II of the* ***Admissions Support Tools Project*** *which is based on the* ***Entry to Practice Competency Profile*** *and which will include the development of an on-line, applicant self-assessment tool to facilitate the application process. This project is designed to assist* ***Internationally Trained Geoscientists*** *as well as* ***Canadian Trained Geoscientists*** *in achieving professional geoscience registration.*	**Level 1** No **Level 2** Yes	Level 2	
2	Please provide a link to your website.	*http://www.geoscientistsns.ca/*	**Level 1** No website **Level 2** Website is not up to date Website is not in plain language Website does not have links for international applicants Website does not contain all forms and/or guidelines	Level 2	16(3)(g)
2a	I believe that information on our website is: clear and understandable, written in plain language?	*Yes. The website is reviewed on a regular basis to ensure that it is clear and up to date. Registration lists are provided as well as application forms, registration information and updates to policies and procedures.*			
2b	On what basis do you make changes to your website?	*The website is an active tool for contact with members, applicants and the public. The website is monitored and maintained by the website manager. Website information is updated to keep registrant and application*			

		information, schedules, dates, fees, etc., current. *Feedback from users is an important tool in keeping the website up to date. Policy documents and policy updates are posted as required. Notification of events and/or professional development activities are also posted on a regular basis.*	**Level 3** Website content is reviewed for accuracy and updated annually Website is in plain language Website is easy to navigate (e.g. international applicants) Website contains all forms and/or guidelines Information on pathway to licensure		
2c	When was the section of the website pertaining to registration last updated?	*The registration pages are updated on an ongoing, regular basis whenever there is a change that effects applicants. The last update to the registration information and application form was February 2018.*			
3a	Are your requirements (e.g. education, work experience, examination and fees) for registration specified by legislation, regulation and/or policy?	*Regulation of geoscience practice and registration of individual and corporate practitioners by the Association of Professional Geoscientists of Nova Scotia (APGNS) is mandated by the* ***Geoscience Profession Act****. The Act specifies the general requirements for registration, including academic training, geoscience work experience, and professional references. The operations of the Association are documented in the by-laws as well as policies. The Council determines the specific requirements for admissions and mandates the Registrar and the Admissions Board to evaluate applicants.* *Proposed revisions to the Act and by-laws as well as the creation of Regulations were submitted to the NS Dept of Justice on March 12, 2015 for consideration and scheduling with the Legislature.* *The registration requirements for education and work experience are fully documented in the* ***Geoscience Knowledge and Experience***	**Level 1** Policy describing the registration process does not exist or is not documented Documents only available upon specific request **Level 2** Policy exists to describe certain aspect of registration process Available to the applicant **Level 3** Policy exist to describe all aspects of the registration practices	Level 3	7(a), 7(c), 7(f), 16(3)(a), 16(3)(d)

		Requirements for Professional Registration in Canada *(GKE); the* ***Competency Profile for Professional Geoscientists at Entry to Practice****; the* ***Current Methods of Identifying Formal Educational Courses to Satisfy Professional Knowledge Requirements****; the* ***Diagnostic Study for Internationally Trained Geoscientists Admissions Support Tool****; and the* ***Satisfying Professional Geoscience Knowledge Requirements Deficiencies Through Prior Learning Assessment and Recognition*** *are available on the Association website under the policies section.* *These are supplemented by the APGNS* ***Self-Assessment Worksheet Tool*** *and the* ***Academic Assessment Guide*** *which were developed by APGNS to specifically address the expectations of the Admissions Board in evaluating applications.* *The syllabus, application form and fees for the* ***National Professional Practice Exam*** *(NPPE) are posted on the Association website and are available from the Registrar. The document also includes an introduction and background information as well as instructions written in plain language.* ***APGNS Council*** *annually approves Schedule A, a detailed list of professional fees and service charges. The schedule is posted on the Association website and is available from the Registrar.*	Available to the applicant		
3b	Specify the appropriate section(s)	*Section 7(1) states the qualifications for registration as a member (P.Geo), a licensee (LTP), and a member-in-training (MIT).* *1. Member* *An individual who wishes to apply for registration as a "Member" must meet all of the knowledge and experience requirements set out in the Geoscientists Canada, Canadian Geoscience Standards Council, Geoscience Knowledge and Experience Criteria for*			

		Professional Registration. The Applicant must have more than 48 months of cumulative and progressive geoscience work experience. In addition, the applicant must be a legally eligible to work in Canada, have good character, be conversant with the English language and pass the National Professional Practice Exam. *2. Member in Training (MIT)* *A geoscientist who has completed the academic requirements, but has acquired less than 48 months of cumulative and progressive geoscience work experience, may be registered as a "Member in Training" (MIT).* *The Geoscientists Nova Scotia's Admissions Board will determine if the applicant is missing any of the required academic components, as defined by the* ***Geoscience Knowledge and Experience Requirements for Professional Geoscience Registration in Canada*** *(GKE) and will prescribe the necessary examination(s) and/or course(s) to fulfil these requirements. Note that in accordance with the other Canadian Geoscience regulators, an applicant cannot be registered as an MIT until all the academic requirements are complete. APGNS encourages applicants with missing EU's to complete them as soon as possible by holding their application as "pending for up to 24 months, or longer if requested and approved, and with no additional fees applied.* *Registration as an MIT allows the individual to legally work on geoscience projects, under supervision, and to gain the required geoscience experience.* *MITs are required to demonstrate completion of progressive and cumulative geoscience work experience with the preparation of 48 months of diaries detailing their geoscience work experience acceptable to the Registrar and the Admissions Board.*			

		In addition, the applicant must be legally entitled to work in Canada, have good character, be competent with the English language and pass the National Professional Practice Exam. *3. License to Practice (LTP)* *A geoscientist who is licensed in another Canadian jurisdiction as a "professional geoscientist" may apply for a license to practice in Nova Scotia. The license will be granted based on confirmation of registration in another Canadian jurisdiction. An LTP is valid for a calendar year and may be renewed for one additional year at the discretion of the Registrar.*			
3c	Is this information made available to applicants	*Yes. Information regarding registration requirements is available on the APGNS website or directly from the Registrar. Note that the registration requirements are consistent with other Canadian geoscience regulators.*			
4	Are you waiting for legislation to be passed?	*Yes. The* ***Geoscience Profession Act*** *was proclaimed in 2002 and is the standard under which APGNS functions, however, there have been significant changes in the subsequent 15 years.* *APGNS has submitted a proposed revision of the* ***Geoscience Profession Act*** *as well as proposed* ***Geoscience Profession Regulations*** *to the NS Department of Justice for review and approval and to be placed on the legislative order paper. The revised Act is intended to bring the legislation into compliance with the* ***Canadian Free Trade Agreement*** *(CFTA) as well as the* ***Fair Registration Practices Act*** *(FRPA) and other internal policies and procedures.* *The proposed revisions were carefully considered. The contents were drafted by the Association's legal counsel in concert with the Governance Committee and they were vetted in consultations with the Constituent Associations*	N/A	N/A	

		of Geoscientists Canada as well as Nova Scotia stakeholders. *We are familiar with professional geoscience legislation in other Canadian jurisdictions and it is our opinion that the proposed revisions to the* ***Geoscience Profession Act,*** *along with the* ***Geoscience Profession Regulations*** *and the associated* ***by-laws,*** *will be considered one of the better legislative frameworks for the geoscience profession in Canada.*			
5a	Is the criteria for meeting the requirements of registration documented?	*Yes. Information regarding the requirements for professional registration, as well as all supporting documents, are available on the Association website as well as being available directly from the Registrar.*	**Level 1** Criteria is made available to applicants verbally but no supplemental documentation **Level 2** Criteria is documented and made available to applicants Limited information about the standard you will be assessed against **Level 3** Criteria is documented and made available to applicants Criteria clearly outlines all assessment methods to be used and what competencies are being assessed by each method Applicants know the required	Level 2	7(d), 16(3)(b)
5b	Do you provide applicants with the description of the criteria used to assess whether the requirements have been met (i.e. the number of years of schooling needed to be considered equivalent to a degree)?	*Yes. The* ***Geoscience Knowledge and Experience Criteria for Professional Registration in Canada*** *(GKE) is the fundamental reference used by the APGNS Admissions Board, as well as other Canadian geoscience regulators, to evaluate applicants. That document / booklet is posted on the Association website and is available from the Registrar.* *The GKE booklet was developed by the* ***Canadian Geoscience Standards Council****, a committee of* ***Geoscientists Canada****. It was first released in 2000 (formally adopted by APGNS in 2002), revised in 2005-2006 and is being updated and is scheduled for re-release in November of 2018. It has also been provided to all Nova Scotia University Earth Science / Geology departments and student advisors.* *APGNS has also developed a* ***Self-Assessment Worksheet Tool*** *to document the educational units which are applicable to the registration requirements and an* ***Academic Assessment Guide*** *to indicate the expected academic course syllabus or content.* *All descriptions of the criteria used to assess whether the requirements have been met are available on the APGNS website under the*			

		"Become a Member" tab located at the top of the page.	standards that they will be assessed to		
6	If you require translation of specific documents how is the applicant informed?	*Requirement of translation is found at the bottom of page 4 of the application document. It states, "All non-Canadian trained applicants must provide government or professional translations into English of all non-English language documentation as part of the submission of this application."* *It is also stated in the "**Application for Assessment and Registration**" section under the "**Become a Member**" tab on the website:* *"If English is not the language of instruction or 'mother tongue,' all documents will need to be translated and certified by a competent translator. All transcripts must also be translated by a competent translator. The more information provided, the easier it is to assess the applicant's credentials."* ***All applicants must** communicate with and through the Registrar and support staff to compile their applications and supporting documents for submission to the Admissions Board and their language competency, written and oral, is noted. The Board may also request a personal interview to assess language competency.* ***APGNS** staff **applies the Competency Tables established by the Canadian Language Benchmarks: English as a Second Language for Adults.** As well as **the ITC Immigration and Employment Services: Language Equivalency Charts***	**Level 1** No indication of translation requirements Available to applicants upon request **Level 2** Translation requirements indicated but not specific Available to applicants **Level 3** Translation requirements documented with specific instruction Available to applicants	Level 2	7(a)

7	Do you have a streamlined registration process for those applicants already registered in another Canadian jurisdiction (as per Chapter 7 Canadian Free Trade Agreement)?	*Yes. APGNS supports the full mobility of professional geoscientists as per the requirements of the Canada Free Trade Agreement. APGNS meets or exceeds the requirements of the CFTA in policies approved by Council and administered by the Registrar and the Admissions Board.* *On receipt of an application for transfer, the Registrar contacts the home Association of the applicant to confirm the applicant's status as registered as a member-in-good standing in another Canadian jurisdiction. The Registrar has been authorized by Council to issue the applicant registration as a professional geoscientist (P.Geo) (resident) or be granted a License to Practice (LTP) (non-resident). The process can normally be completed within several days.* *The process is stated on the "Application for Assessment and Registration" section in the "Become a Member" tab located on our website:* *Section C. Transfer from Another Association in Canada* *For those applicants who are licensed in a self-regulating geoscience association in Canada, complete the following requirements.* 1. *Complete sections A, B, C, D, E1, E5, and F of the Application Form.* 2. *Attach a current resume.* 3. *Include the required fee."*	**Level 1** Yes – process not documented **Level 2** Yes – process documented **Level 3** Yes – process documented and made public on website Any additional requirements approved by government are explained on website	Level 3	3
8	Does your organization make accommodation for applicants with physical or mental disability?	*Yes. APGNS has developed a policy regarding physical and mental disabilities and the policy is posted on the Association website.*	**Level 1** Yes – process not documented **Level 2**	Level 2	16(3)(h)

		APGNS is committed to make every effort to accommodate applicants with special needs.	Yes – process documented **Level 3** Yes – process documented and available to applicant		
9a	Is any of your assessment process conducted by a third party (i.e. national bodies, credential assessment agencies, etc.)?	*No. The assessment of an application for professional registration is assigned to the APGNS Admissions Board. The Board has the authority to acquire information and advice as necessary. The Board makes a recommendation regarding the suitability for registration to the Council. The Council has final authority regarding registration.* *Prior to registration, an applicant must successfully complete the National Professional Practice Examination (NPPE). The exam is administered by a third-party computer-based testing vendor (Yardstick). All examination results are received by and distributed by APGNS.* *Under the proposed* ***Geoscience Profession Act and Geoscience Practice Regulations****, an appeal process and an appeal committee will be established. The appeal committee will be separate from the Council.*	**Level 1** Regulatory body assumes that the certifying organization meets FRPA standards **Level 2** Regulatory body has received documentation indicating that the certifying organization meets FRPA standards **Level 3** Regulatory body has influence with the certifying organization (e.g. membership) or has an agreement	Level 3	16(3)(i)

9b	If so, please specify the name of the organization and describe their role.	*The NPPE is administered by the NPPE Advisory Committee, of which APGNS is a member. The content is created by the NPPE Committee and APGNS appoints a representative. The NPPE program is managed by APEGA (Alberta) under agreement with the participating Constituent Associations of Geoscientists Canada. The computer-based exam is offered by a private company, Yardstick, a Canadian computer-based testing vendor.* *Technical examinations, oral and/or written, if required, are set and administered by the Admissions Board.*	with the certifying organization		
9c	Please indicate the types of activities that they assist with.	*The NPPE is a computer-based exam and Yardstick manages the logistics associated with writing the exam, location, proctoring, etc.* *The exam materials (syllabus, subjects and questions) are set by the NPPE Advisory Committee of which APGNS is a member.* *The scoring of the exam is under the direction of the APEGA Examination Committee and the NPPE Advisory Committee. All examination results are received and distributed to the applicant's by APGNS with follow-up as required by the Registrar.*			
9d	Can you describe how they adhere to the General Duties of the Regulatory Body as outlined in the Act, including transparency, objectivity, impartiality and procedural fairness?	*The requirement for an applicant to successfully complete the NPPE is specified by Council in the policies of the Association. It is also a requirement of most of the other Canadian geoscience regulators and is a component for approval of a transfer of registration status.* *An exam preparation seminar, available to APGNS applicants, is offered by Engineers Nova Scotia.* *Preparation (practice) exams are available on-line. An online NPPE practice test is available for*			

		applicants to take to prepare for the NPPE. The practice test can be taken by anyone, anywhere in the world, simply by going to the NPPE practice test website (https://nppepractice.ysasecure.com/); a practice test bundle is also offered which includes textbooks to prepare for the exam and access to the 100-item practice test. *Individuals who may be interested in coming to Canada to pursue a career in geoscience may also take the practice test abroad.* *The practice tests are composed of retired questions that have appeared on previous* *NPP Examinations.* *The NPPE is offered in 12 Canadian jurisdictions. The subjects, the questions and preparation materials are agreed upon by the regulatory in a Memorandum of Understanding (MOU). The Candidate Guide as well as information on the exam syllabus is posted on the Association website and are available from the Registrar.* *Unsuccessful candidates are contacted by the Registrar and they are provided with a detailed report identifying areas for additional preparation and information regarding scheduling for a re-write is provided by the Registrar.*			
9e	Are you informed of all decisions made by third parties on applicants?	*Yes.*			

9f	Does the third party have an internal review process for unsuccessful applicants?	*Yes. The attendance and results of each exam session, including the questions and responses, are evaluated for a number of variables, e.g. collusion, consistency, appropriateness of the questions, etc. These metrics are shared with each of the participating association partners.* *Applicants who receive failing grades are informed by the Registrar and provided with a detailed individual mastery assessment report including an itemized list of their shortfalls and recommendations for preparation for the next attempt to successfully complete the exam.*			
10 a	What types of supports do you provide to applicants during the registration process?	*An applicant for professional geoscience registration has as the first point of contact, the Registrar. Information on the registration policies and procedures is provided directly (email and oral, and followed up with additional documentation where necessary, the policies and procedures are also posted on the Association website, in multiple formats and/or they are available from the Registrar. Direct consultation and support is provided by the Registrar and/or the Administration Assistant by email, telephone, etc. on request or as required.*	**Level 1** None **Level 2** Multiple types of supports exist but not well documented **Level 3** Multiple types of support exist, well defined and accessible	Level 3	7(e), 16(3)(k)
10 b	Have you had applicants who need support mechanisms that you can't provide or are not available?	*No. Individual counselling and support is available from the Office of the Registrar as required.*			
11	Where practical, do you provide unsuccessful applicants with information on programs and services they can participate in to facilitate successful	*Yes. All applications are reviewed individually and in detail and recommendations are based on the merit of the application and supporting materials.* *Applicants are informed of any deficiencies (academic or experience) that need to be addressed prior to registration. Specific exams, courses, interviews etc. may be suggested or assigned.*	**Level 1** Only upon request Not documented **Level 2** Yes – not documented **Level 3**	Level 3	8(d)

	registration in the future?	*The APGNS Admissions Board Policy and Procedures document does not consider that applicants are not successful, we simply have some applicants who have not yet demonstrated that all the requirements for licensure / registration as a professional geoscientist have not been met. Ultimately, APGNS and the Admissions Board are charged with the responsibility to determine if an individual applicant is competent, qualified and capable for independent professional practice.*	Yes – documented and available to applicant Applicants are told what their competencies gaps are that need to be addressed		
12	Do you have a reasonable timeframe to respond to inquiries from applicants?	*Yes. Typically inquiries are replied to within 1 to 2 business days. This does not require an official stand-alone policy. It is simply the way the Association does business in recognizing the importance and the requirement for professional registration and the importance of communications.* *The anticipated time frame for responses it documented in the Admissions Board Policy and Procedures document, as well as the Access to Information and Privacy, the Interview Policy, the Discipline and Enforcement Policy the Policy on Notices, the Onus to Respond Policy, the RE-Instatement Policy, and others which are all posted on the Association website or available from the Registrar.*	**Level 1** No policy **Level 2** Policy in Place **Level 3** Policy in place and accessible	Level 2	7(b), 8(a), 8(b), 8(c)
13 a	Do you provide written decisions, responses and reasons for acceptance or rejection of an application?	*Yes. The APGNS Admissions Board Policy & Procedures document the process that includes clearly established timelines, written decisions with detailed rationale.* *In addition to recommendations for remediation, applicants who are not granted registration are provided information regarding a review and appeal process.*	**Level 1** Upon request, limited documentation and no standard timeline **Level 2** Some documentation	Level 3	8(b), 8(c), 10
13 b	Do you have a formal policy for this process?	*Yes. The Admissions Board Policy and Procedures document as well as several policy*			

		documents derived from the Board Policy and posted on the Association website.	**Level 3** Well-documented process with clearly established timelines		
	Do you have a standard timeline	*Yes. The website, under the "Become a member" tab states: "Please be prepared to allow 6 to 8 months for processing of your application. The Admissions Board will take this time to consider your individual file with care and in detail." However, it should be noted that some applications, depending on responses from other participants and components, can be completed in 3 to 5 months.* *Applications are submitted to the Admissions Board when all the required documents and supporting information is received and compiled, i.e. when all the required documents and supporting information, including any additional information requested by the Registrar, has been received.*			
13 c	Do you provide applicants who are not granted registration with information regarding an internal review process (including the opportunity to make submissions respecting such reviews?)	*Yes. The "decision" letter is sent to applications after the Board and Council meetings. This includes information on additional requirements for re-submission of an application for professional geoscience registration as well as information on how to initiate an appeal.*	**Level 1** Yes – upon request, limited documentation **Level 2** Yes – limited documentation **Level 3** Yes – well documented process	Level 3	
13 d	Based on the previous questions, describe ways your organization could improve the timeliness of your decisions and/or how you could communicate the results.	*The timeline is conditional on the submission of the application and supporting materials by the applicant. The timeline is also conditional on receipt of professional references. Preliminary vetting by the Registrar may identify deficiencies in the application which are transmitted to the applicant who may provide additional materials.*			

		Once the application is compiled, with all the required materials, it is submitted to the Admissions Board for review. In some cases, the Board may defer a recommendation and require the Registrar to request additional information in order to make an informed recommendation. *Normally, the Board meets monthly, depending on the number of files to be reviewed.* *The recommendation of the Board is submitted by the Chair and/or the Registrar to Council for final decision and recommended action by the Registrar. Council meets monthly.*			
14 a	Do you provide information on what documentation of qualifications must accompany an application?	*Yes. The initial point of contact for applicants is the Registrar who provides recommendations as to what may enhance the application, for example, a cover letter, letters of support, published abstracts, special courses, etc.* *The application requirements are clearly stated on the application form. The application requirements are posted on the website and they clearly state what documentation each applicant must submit with their application.* *A preliminary review of the application is completed by the Registrar who may advise the applicant on what additional materials may be submitted in support of the application.*	**Level 1** Documents indicated and communicated verbally **Level 2** List of required documents indicated on website Process to verify document authenticity **Level 3** N/A	Level 2	9(a), 16(3)(a), 16(3)(b), 16(3)(e)
14 b	Do you include a process for verification of documentation authenticity?	*Yes. Documents must be sent directly to the Registrar from the university to ensure authenticity. If that is not possible, original documents and/or copies which have been validated may be accepted.*			
15	Do you provide information on the steps in the registration process including	*Yes. The APGNS website provides a detailed step by step guide that identifies all of the requirements and fees associated with the application process. The pathway to licensure is*	**Level 1** General information	Level 2	7(c), 16(3)(a), 16(3)(b)

	supporting documentation required at the various steps?	*also presented graphically as well as a step by step guide.*	Not broken into steps **Level 2** Step by step process indicate where applicant needs to supply information **Level 3** Step by step process indicate where applicant needs to supply information Pathway to licensure		
16	Do you accept alternative information if required documents cannot be obtained for reasons beyond the applicant's control (i.e. a sworn statement in lieu of full documentation)?	*Yes. See attached documents for a sample policy to be implemented. The Admissions Board has the authority to consider all information submitted by the applicant. It is the applicant's responsibility to provide all the documents necessary for the Board's consideration. Documents must be originals or validated copies.*	**Level 1** Yes – on a case by case basis **Level 2** Yes – examples documented Process not clearly laid out or documented **Level 3** Yes – process clearly documented	Level 1	9(b), 16(3)(c)
17	What difficulties or obstacles are faced by applicants who received their qualifications in a	1. *Obtaining original documents* 2. *Verification of credentials / transcripts* 3. *Language proficiency or professional technical language* 4. *Difficulty in documenting geoscience work experience*	N/A	N/A	6, 9(b), 16(3)(c)

	country other than Canada?	*5. Difficulty identifying Canadian or Canadian equivalent work experience*			
18 a	Do you have a process for which requests for access documentation related to registrations are considered?	*Yes. The Council approved Admissions Board Policy and Procedures which is to be incorporated into a revised Act and Regulations.*	**Level 1** Not documented **Level 2** Documented **Level 3** Documented and made available to applicants	Level 3	12, 16(3)(j)
18 b	Is this made available to applicants?	*Yes. Any fees for authentication or translation or evaluation (course equivalency, etc) are the responsibility of the applicant.*			
18 c	What information may you exclude?	*The Admissions Board will consider any and all information presented with respect to an application.*			
18 d	Do you charge a fee?	*No. An appeal of the Council's decision relating to registration is not included in the current Geoscience Profession Act, however, it is included in the proposed revision which has been submitted to the Department of Justice.*			
19	Does your Act include an authority to conduct an internal review of the registration decision?	*No. The Admissions Board Policy and Procedures document. Standard practice is to re-assess the application and the recommendation at the request of the refused applicant.*	**Level 1** N/A **Level 2** N/A **Level 3** Yes	N/A	7(a)
20	Do you have a regulation or by-law that defines the internal review process?	*Yes. The Council approved Admissions Board Policy and Procedures which is to be incorporated into a revised Act and Regulations.*	**Level 1** N/A **Level 2** N/A **Level 3** Yes	Level 3	7(a), 10

21	When are unsuccessful candidates informed of their right to internal review of the registration decision?	*Directly after the Board and Council meetings the successful and unsuccessful candidates are informed in writing by the Registrar including the reasons that they were unsuccessful and the recommended remedial action to re-apply.*	**Level 1** No specific timeline **Level 2** Specific timeline Not documented **Level 3** Specific timeline Documented and communicated	Level 2	7(a), 10(1)
22 a	Do you have an internal review process and procedures document (policy document)?	*Yes. The Admissions Board Policy and Procedures document.*	**Level 1** Yes Not documented **Level 2** Yes Documented **Level 3** Yes Documented and available to applicant	Level 2	7(a), 10(1)
22 b	Does this include time frames for the internal review?	*Yes.*			
23 a	With regards to the internal review process you make available to applicants that are not granted registration: summarize the process of the internal review.	*When an applicant is denied registration, the Registrar advises the applicant to review the decision and provide any additional information / documentation that could lead to a reconsideration of the deficiencies identified in the decision. Upon receipt of additional documentation the Registrar will provide this to the Board.*	**Level 1** Not documented **Level 2** Documented **Level 3**	Level 2	7(a), 10, 16(3)(m)

		Any amendments to the assessment decision or lack thereof will be communicated immediately following the meeting of the Board. *The Registrar works with the applicants to identify deficiencies in documentation in support of the application. The intention is to provide a pathway to registration that is fair and transparent and that results in an applicant being given ample opportunity to meet the registration requirements.* *The provision of additional information to the Admissions Board continues until the applicant has provided all available documentation.*	Documented and made available to applicant		
23 b	Describe the opportunities made available to an applicant to make submissions respecting such review.	*The applications are reviewed by the Registrar to ensure that they are complete (e.g. the application may be missing an up to date resume or the resume may not include information that the Board will require); additional materials (e.g. publication abstracts) may not be included by the applicant and the Registrar may suggest that they be added to the application before submission to the Board; if any deficiencies are noted, that information is provided to the applicant prior to submission to the Admissions Board; applicants may submit additional materials to the Registrar at any time.*			
23 c	Specify the format for the internal review submission	*Written.*			
23 d	What is the timeline for submitted supporting evidence?	*Unlimited.*			
23 e	Do you believe this is enough time to receive supporting	*Yes.*			

	evidence from outside Canada?				
24 a	Are the results of the internal review made available to applicants in writing with reasons?	*Yes.*	**Level 1** Yes **Level 2** Yes Specific timeline **Level 3** Yes Specific timeline and communicated	Level 2	7(a), 10(3)
24 b	In what timeframe are the results of the internal review made available to applicants?	*Approximately 1 to 3 months; the website (How to Apply) indicates that an applicant should prepare for six (6) to eight (8) months to process an application;*			
24 c	Are these timelines communicated?	*Yes, these are indicated in the Admissions Board Policy and Procedures. The Registrar is the point of contact for information regarding the status of an application.* *Applications for registration are compiled by the Registrar for submission to the Admissions Board when they are complete, i.e. when all the required documents have been received by the Registrar.* *The Board's recommendation for registration acceptance / rejection, including reviews is submitted to the Council for ratification a process that normally takes 1 to 3 months. The decision by Council is transmitted by the Registrar to the applicant in writing directly after the Council meeting.*			
25	Have individuals who make internal review decisions received appropriate training?	*Yes. The Admissions Board is comprised of senior practitioners, several of whom are academics or individuals involved with geoscience education. Most have served on the Board for up to 15 years or more and they assist in the orientation of new members as they are appointed. The Executive Director and Registrar and the President are ex-officio members of the Board and they serve as a conduit for information flow to and from*	N/A	N/A	7(a), 11, 16(3)(p)

		Council as well as to and from Geoscientists Canada.			
26	Do you have a prohibition that states that 'no one who acted as a decision-maker in respect of a registration decision acted as a decision-maker in an internal review?	*No. Currently, such a restriction is not included in the scope, role, responsibility and function of the Admissions Board or the Council. Decisions are normally reached by consensus and a vote is seldom required. If there is a disagreement or discussion, the applicant or specific matter is deferred in order to allow for the compilation and presentation of additional information.* *Under the proposed revision of the* ***Geoscience Profession Act*** *and the* ***Geoscience Practice Regulations*** *a* ***Registration Appeal Committee*** *will be established and it will be specifically constituted to exclude current members of the Council and Admissions Board; this would also apply to previous members who may be in a conflict position with respect to a Board recommendation of Council decision.*	**Level 1** N/A **Level 2** N/A **Level 3** Yes	N/A	7(a), 10(5), 16(3)(n)
27	Do you have any international agreements (i.e. reciprocal recognition) endorsed by your regulatory body or national organization?	*No. APGNS has not entered into international agreements or memoranda. Geoscientists Canada has facilitated discussions at that level, however, the authority to sign agreements rests with the Association.*	N/A	N/A	7
28	Has your organization experienced any unintended consequences—defined as an unintended negative impact on labour market, economic, social or other condition—arising as a result of the	*No.*	N/A	N/A	3

	implementation of Chapter 7 of the Agreement on Internal Trade / Canadian Free Trade Agreement?				
29	Does your legislation and/or regulations include labour mobility provisions (i.e. the ability to accept applicants already certified in another Canadian jurisdiction regardless of the requirements in the previous jurisdiction?	*Yes. Inter-Association mobility was addressed under the Canadian Council of Professional (CCPG) / Geoscientists Canada, Inter-Association Mobility Agreements. Those were superseded by the Agreement on Internal Trade (AIT Chapter 7) and the current Canadian Free Trade Agreement (CFTA).* *APGNS Council has approved the Registrar to process and approve transfer applications, if appropriate, as a means to facilitate mobility. Where questions or deficiencies are identified, the Registrar refers the application to the Admissions Board.* *The Council has approved the use of the Geoscience Knowledge and Experience Requirements for Professional Registration in Canada (GKE) as the fundamental reference for the assessment of applications. This is the primary reference used by all Canadian geoscience regulators.*	N/A	N/A	Chapter 7, CFTA
30	Do you review the requirements of the other provincial regulatory bodies regularly?	*Yes. APGNS is a Constituent Association of CCPG / Geoscientists Canada. We are represented on the Board of Directors, as well as on the Canadian Geoscience Standards Council, the Chief Executive Officers Group, the Admissions Officers Group, and the National Professional Practice Exam Committee and the Advisory Committee. These groups and other national committees and task groups facilitate the exchange of information, so all are informed and up to date on any issues, developments or changes.*	N/A	N/A	3, Chapter 7, CFTA

31 a	Has your organization made any changes to the occupational standards in your legislation, regulations and/or by-laws (i.e. entry to practice standards, continuing education requirements, codes of ethics) within the last two years?	*No.*	N/A	N/A	
31 b	If yes, did you work with the Labour Mobility Coordinator or a Provincial Government representative to complete an AIT/CFTA notification (i.e. notification form sent prior to approval that informs other Canadian jurisdictions of the proposed change)?	*No.*			

FRPA Action Plan

In accordance with the *Fair Registration Practices Code*, the FRPA Action Plan outlines the measures that Geoscientists Nova Scotia has agreed to work towards before the commencement of its next FRPA Review.

#	Action	Questionnaire Reference	FRPA Reference	Plan for Completion
1	Create a dedicated section on the website for international applicants.	2	6	Geoscientists Nova Scotia is participating with Geoscientists Canada on an initiative aimed at improving the assessment of internationally trained geoscientists as well as Canadian trained geoscientists who are seeking professional geoscientist licensure. The initiative, the "**Admissions Support Tools Project (Phase II)**" consists of two main components. The first involves the development of an online resource designed to provide relevant and actionable information on how to apply for licensure in Canada. This resource will include a self-assessment tool where prospective applicants will be able to input information related to their geoscience education and work experience. An automated program will collect the responses and generate a brief report on any gaps identified that the prospective applicant may need to remediate relative to Canadian entry-to-practice standards before becoming eligible for licensure. Once complete this resource will be available to all prospective professional geoscientist applicants, regardless of the jurisdiction to which they may eventually apply and will be offered at no charge to users. Geoscientists Canada expects that this tool will help to streamline the registration process, answering applicant questions and identifying areas that may require further work or clarification before the actual application begins.

				Once the resources have been approved by APGNS Council they will be made available to all applicants and posted on the Association website. The second component of the project will result in a new self-assessment tool for evaluating an applicant's relevant work experience. A series of indicators will be developed to help individuals identify specific aspects of their geoscience work experience that are required by Canadian regulators. Indicators will be tied directly to an existing Competency Profile introduced in 2014 (https://geoscientistscanada.ca/wpcontent/uploads/2015/07/Competency-Profile-for-Professional-Geoscientistsat-Entry-to-Practice-Combined-Doc.pdf). The self-assessment tool will include consultation with an applicant-identified "validator". The regulator will identify an "assessor" to review the applicant's submission. Once approved by APGNS Council, this assessment tool can be made available to all applicants and will be posted on the Association website.
2	Also ask for formal policy around revising/updating website. (FRPA has checklist) at least 1 per year.	2	6	This task will be assigned to the APGNS Communications Committee. The current Communications Policy is under review to develop a formal policy regarding the website as well as the social media presence and activity. Once approved by

				Council it will be implemented and posted on the website in the Policy section. As included in the APGNS Communications Policy, the Communications Committee will review annually potential upgrades (value for the members) to services that can be offered through the website. Other elements of the annual review should include the following: • a thorough check of all links by the Website Manager and the Executive Director, and • a review of all website content by the Website Manager and the Executive Director to ensure that forms, schedules, pricing, member lists, etc. are current. Access to member, stakeholder and public information will be maintained and streamlined as much as possible. For example, access to information on the ***Geoscience Profession Act***, and by-laws, as well as Association Policies and Procedures, Professional Practice Guidelines and Standards of Practice, and the Association's strategic planning will be a priority. Biographies and/or profiles of new members, promotion of Association affinity programs, etc., may also be considered.
3	Revise Bylaws respecting application for membership to ensure	3, 5	7	The current by-laws respecting application for professional registration are reflected in the registration practices. This includes the

	they reflect existing registration practices.			Application for Registration Form, the APGNS Admissions Board Policy and Procedure reference document, as well as the New Councilor Briefing Document. On successful passage of the proposed ***Geoscience Profession Act*** and **Geoscience Practice Regulations,** the by-laws as well as policy and procedures documents will be reviewed and updated to reflect the proposed legislation.
4	Establish an benchmark language proficiency level, **or** remove the language proficiency requirement.	5	7(d)	Requirement of translation is found at the bottom of page 4 of the application document. It states, "All non-Canadian trained applicants must provide government or professional translations into English of all non-English language documentation as part of the submission of this application." It is also stated in the "Application for Assessment and Registration" section under the "Become a Member" tab on the website: "If English is not the language of instruction or 'mother tongue,' all documents will need to be translated and certified by a competent translator. All transcripts must also be translated by a competent translator. The more information provided, the easier it is to assess the applicant's credentials." **All applicants must** communicate with and through the Registrar and support staff to compile their applications and supporting documents for submission to the Admissions Board and their language competency, written and oral, is noted. The Board may also request a personal interview to assess language competency.

				APGNS staff applies the Competency Tables established by the Canadian Language Benchmarks: English as a Second Language for Adults. As well as the ITC Immigration and Employment Services: Language Equivalency Charts
5	Provide transparency to applicants on the purpose, contents and possible outcomes of the interview requirement.	5	7	The current interview process is completely transparent, fair, and consistent. Where a personal interview is requested by the Admissions Board, the applicant is given full transparency pertaining to the interview participants, the reason for requesting the interview, the timing, purpose and scope of the interview, and the anticipated outcome(s).
6	Make the policy respecting accommodations for applicants with disabilities publicly accessible through the website.	8	16(3)(h)	Done, approved by Council and posted on the Association website (see appended policy document).
7	Make the timeframe for responding to inquiries publicly accessible through the website.	12	8(a)	The timeframe for responding to inquiries varies with the nature of the inquiry. The communication of this information is currently available and is most often communicated through direct communication with the Office of the Registrar.
8	Create a visual pathway to licensure, including steps administered by third parties, and the documentation and fees required at each step	15	6	A flow chart detailing the Professional Conduct; Preliminary Investigation; Complaints Committee; Settlement Agreement; Hearings; etc, has been drafted by APGNS legal counsel in preparation of the proposed revisions to the ***Geoscience Profession Act***. A similar flow chart detailing the pathway to professional licensure will be prepared.
9	Develop a policy on accepting alternative	16	9(b)	The policy on accepting applicant information is addressed in the APGNS

	information to required documentation.			Admissions Board Policy and Procedure guide document. The recognition of the problems associated with unavailable documents may be addressed in the Geoscientists Canada, Admissions Support Tools 2 project and it anticipated that it will be based on the Competency Profile for Professional Geoscientists at Entry to Practice documents.
10	Make information on the appeal process publicly available.	21-24	10	**The proposed revisions to the *Geoscience Profession Act* and the Geoscience Practice Regulations include the following …** **Appeal to Court of Appeal** **1** (1) A party may appeal to the Nova Scotia Court of Appeal on any point of law arising from the final findings of the Hearing Committee. (2) The notice of appeal shall be filed at the Nova Scotia Court of Appeal and served upon the other party not later than thirty days after service of the decision of the Hearing Committee. (3) The record on appeal from the findings of the Hearing Committee consists of a copy of the transcript of the proceedings, the decision of the Committee and the evidence before the Hearing Committee certified by the Chair of the Hearing Committee. (4) The *Civil Procedure Rules*, governing appeals from the Supreme Court of Nova Scotia to the Nova Scotia Court of Appeal, that are not inconsistent with this

				Act, apply *mutatis mutandis* to appeals to the Court of Appeal pursuant to this Section. (5) Where a matter is appealed to the Nova Scotia Court of Appeal pursuant to this Section, the decision of the Hearing Committee takes effect immediately unless the Court of Appeal grants a stay of any order made pursuant to this Act where, in its discretion, it deems fit. The proposed Geoscience Profession Regulations includes the following … Registration Appeal Committee 9. (1) The Registration Appeal Committee shall be appointed by Council and shall consist of: (a) at least one public representative; and (b) at least two members who are not currently serving on Council or the Admissions Board. (2) A quorum of the Registration Appeal Committee consists of a majority of the members appointed pursuant to subsection (1). (3) Failure of one or more Registration Appeal Committee members to receive any notice of a meeting does not invalidate the proceedings at the meeting or hearing, and nothing precludes the members from waiving notice of the meeting.

				(4) All Registration Appeal Committee decisions require a majority vote from the persons serving on the Committee. (5) Where a proceeding is commenced before the Registration Appeal Committee and the term of office of any person sitting on the Committee expires, the Chair of the Registration Appeal Committee may extend the term of office of such person until the proceeding is concluded. (6) The Registration Appeal Committee shall determine the process to be used for the appeal and shall determine whether the appeal process will include written submissions or oral submissions before the Registration Appeal Committee. (7) The Registration Appeal Committee may, in its discretion, allow the introduction of new evidence that was not before the Admissions Board, under such terms as the Registration Appeal Committee determines. (8) The Registration Appeal Committee, in accordance with the information it receives, may make any determination that, in its opinion, ought to have been made by the Council. (9) The Registration Appeal Committee shall give its decision in writing to the Registrar and the Registrar shall send the applicant a copy of the written decision by registered mail or personal service. (10) The decision of the Registration Appeal Committee is final. These documents will be posted on the Association website pending legislative approval and proclamation.

11	Develop a training plan for internal review decision-makers, which may include training in administrative law and cultural competency.	25	11	The APGNS Council and Admissions Board are provided with introductory documents which outline the role and responsibility of serving on Council and the Board. Committees members are provided with a detailed Terms of Reference which also outlines expectations and roles and responsibilities. The currency of these training / guidance documents are closely monitored by the Registrar and these documents are reviewed regularly, at least annually, and are updated as required.
12	Develop a policy statement ensure that a decision-maker in respect of a registration decision cannot act as a decision-maker in an internal review	26	10(5)	This is addressed in our response to question 10 above. The issues regarding review of decisions will be addressed in the propose revisions to the ***Geoscience Profession Act***, including the proposed Geoscience Practice Regulations and the up-dated by-laws.

Disclaimer

The Association of Professional Geoscientists of Nova Scotia hereby declares that the information contained in this report is a true and accurate representation of current registration practices of their organization.

David C. Carter, P.Geo., FGC.
APGNS Executive Director and Registrar

Jan 10, 2019
Date

Appendix

- ✓ Application for Assessment and Registration Form
- ✓ Applicant Assessment – Academic Requirements Guide
- ✓ Academic Self-Assessment Worksheet
- ✓ Sample, Redacted Rejection Letter
- ✓ Sample, Redacted NPPE Individual Mastery Report
- ✓ Guideline for Applicant Interviews
- ✓ Policy Regarding Accommodation of Applicants with Physical and Mental Disabilities
- ✓ Special Accommodations Application Form
- ✓ Special Accommodation Documentation
- ✓ Access to Records and Privacy Policy
- ✓ Policy Regarding Appeal of a Registration Decision
- ✓ Re-Instatement Policy
- ✓ Code of Ethics

1. Application for Assessment and Registration Form

Name of Applicant _____ Application Number A-18-_____

INFORMATION ABOUT MEMBERSHIP CATEGORIES

Categories of Membership

1. **Member**
   A geoscientist who wishes to apply to the Association of Professional Geoscientists of Nova Scotia (APGNS) for Professional Registration as a "Member" must meet all of the knowledge requirements of the Geoscientists Canada (GC), Canadian Geoscience Standards Board (CGSB), ***Geoscience Knowledge and Experience Requirements for Professional Registration in Canada (GKE)***. The applicant must also demonstrate that they have acquired a minimum of 48 months of cumulative and progressive geoscience work experience as per the GKE.

   The applicant must be a legal resident of Canada, or be legally entitled to work in Canada, demonstrate that they have good character and be conversant with the English language (oral and written). The applicant must also successfully complete the Professional Practice Exam (NPPE).
   Note that the NPPE must be completed within one year of the date of an accepted application.

2. **Member-in-Training (MIT)**
   An applicant who has completed the GKE knowledge requirements, but has less than 48 months of cumulative and progressive work experience, may be enrolled as a Member-in-Training (MIT).

   The APGNS Admissions Board will determine if the knowledge requirements are complete and, if required, may prescribe examination(s) and/or course(s) to be completed for registration as an MIT. MITs are required to demonstrate a minimum of 48 months of progressive and cumulative geoscience work experience through the preparation and submission of diaries which provide details of their geoscience work experience. These diaries must be reviewed and authorized by a mentor or supervisor and they must be acceptable to the Registrar.

   In addition, the applicant must be a legal resident of Canada, be legally entitled to work in Canada, demonstrate that they have good character, be conversant in the English language (oral and written) and pass the Professional Practice Exam (NPPE).
   On completion of these requirements, the MIT may apply for transfer to registration as a P.Geo.

3. **License to Practice (LTP)**
   A geoscientist who is not a resident of Nova Scotia and is registered or licensed as a professional geoscientist, is a member-in-good-standing in another Canadian jurisdiction, may apply for a license to practice in Nova Scotia. A "License" or "LTP" is valid for the current calendar year and may be renewed at the discretion of the Registrar.

DIRECTIONS FOR COMPLETING APPLICATION FORM

A. Member or MIT (Member-in-Training)

All applicants who are applying for registration as either a Member or Member-in-Training must provide the following information for assessment by the Admissions Board.

A Member-in-Training is a geoscientist who has completed the knowledge requirements and has less than 48 months (4 years) of cumulative and progressive geoscience work experience.

For an applicant educated in North America, these are the requirements for a 'completed application.'

1. **Fill in all parts of the application form.**
2. **Attach an up-to-date, signed and dated resume.**
3. **Provide the name and contact information for four professional references.***
   See page 4 of the Application form.
4. **Provide transcripts of all college and university courses completed.***
   Transcripts must be sent directly to APGNS from the College or University Registrar's office.
5. **Include the required fee.***
   See page 9 of the Application Form.
6. **Provide other information (cover letter, description of courses, additional references, etc.) as may be required or which may assist the Admissions Board in evaluating the application.**
7. **Present evidence of legal residence in Canada. Please provide any one of the following: a copy of the picture page of a passport, copy of a Ministerial permit, copy of legal entry into Canada, or copy of provincial or territorial health card.**

B. Non-North American Trained Geoscientists

Non-North American trained geoscientists must complete all of the above requirements. In addition, the applicant must provide a description of courses (syllabus or calendar information). If English is not the language of instruction or 'mother tongue,' all documents must be translated and certified by a competent translator. All transcripts must also be translated by a competent translator. Applicants should note that the more information provided, the easier it will be to assess the applicant's credentials.

C. Transfer from another Association in Canada - License to Practice (LTP)

Applicants who are non-resident in Nova Scotia, who are licensed in a self-regulating professional geoscience association in Canada, are a member-in-good-standing, are eligible for a License to Practice (LTP) and must complete the following requirements.

1. Complete sections A, B, C, D, E1, E5, and F of the Application Form.
2. Attach an up-to-date, signed and dated resume.
3. Include the required application assessment and registration fee.*
   ****See page 9 of the Application Form.***

If you have questions, please contact the Registrar at: registrar@geoscientistsns.ca

APPLICATION FOR ASSESSMENT AND REGISTRATION

Please complete this application form carefully and legibly in ink. Mistakes or omissions will delay your application and may incur additional fees. APGNS uses the ***Geoscience Knowledge and Experience Requirements for Professional Registration in Canada*** as a reference to evaluate the applicant's knowledge and experience.

Note that additional information in support of the application may be submitted as a cover letter to the application.

A. TYPE OF MEMBERSHIP

I wish to apply for the following category of membership:

[ ] Member [ ] Member in Training [ ] License to Practice [ ] Transfer Member

NAME

I, _____

(Surname) (Full Given Names)

do hereby make application to be considered for registration as a Professional Geoscientist.

B. PERSONAL INFORMATION

Place of Birth: _____ Date of Birth: _____

(Country, Province, City) (Year, Month, Day)

Present Residence:

_____

(Street Address, P.O. Box, etc.)

_____

(City, Town, Village) (Province/State) (Country) (Postal Code)

_____

(Telephone) (Facsimile) (Cell Phone) (E-mail)

C. Name of Employer:

_____

(Street Address, P.O. Box, etc.)

_____

(City, Town, Village) (Province/State) (Country) (Postal Code)

_____

(Telephone) (Facsimile) (Cell Phone) (E-mail)

Mailing Address [Please check one.] [ ] Residence [ ] Business

Return the Completed Form, Supporting Documents and Payment to:

The Registrar
Association of Professional Geoscientists of Nova Scotia
P.O. Box 91, Main Station,
Enfield, NS B2T 1C6

RECOMMENDATION OF THE ADMISSIONS BOARD		Application Number: A-15-
[ ] Recommended for Member, Member-in-Training, or License to Practice		[ ] Not Recommended
Date:	Meeting Number:	Chairperson:
Admissions Board Members:		

D. GEOSCIENCE DISCIPLINE

I wish to be registered in one of the following geoscience "streams" of specialization:

[ ] Geology [ ] Geophysics [ ] Environmental Geoscience

Note that the "stream" must be consistent with academic qualifications and geoscience experience.

E. CANDIDATE'S QUALIFICATIONS

1. Post Secondary Education (College, University, Technical Institute). *(Uses additional pages as needed.)*

Institution and Address	Course or Option	Year Completed
Bachelor's Degree (*Indicate if degree is 3 or 4 year, major or honours, and whether the degree is geology, geophysics or environmental geoscience.)*		
Graduate Degree *(Master's, PhD)*		
Professional Development Courses (*Use additional pages if necessary)*		

Please note the following:

1. An "official transcript" sent directly from the Registrar of the institution of graduation is required.
2. Transcript must be sent directly to APGNS at the address on page 1.
3. The Admissions Board may request additional information from the candidate about the academic courses and/or record. Applicants are encouraged to provide additional course information including, but not limited to, course number, course name, length, class / lab hours, syllabus and description of the content.
4. All non-Canadian trained applicants must provide government or professional translations into English of all non-English language documentation as part of the submission of this application.
5. The ***Geoscience Knowledge and Experience Requirements for Professional Registration in Canada*** is intended as a guide to evaluate academic achievements, not necessarily degrees granted. Applicants are encouraged to provide, in a cover letter, an explanation of why you believe you are eligible for registration as a professional geoscientist.
6. Please attach additional page(s) as needed.

2. References

- Applicants for registration **must** list the names and contact information (address, email, etc.) of at least **four Professional Geoscientists or Professional Engineers** who have known you for at least one year and are familiar with your professional geoscience work. No more than **two** of these references may be associated with the same organization (i.e. at least two must be from outside your immediate office).
- At least **three** of these references must be a registered **Professional Geoscientist (P.Geo.)**.
- These references will be contacted by APGNS under confidential cover to supply letters of reference.
- You may list any additional references on a separate page or provide letters of reference or support.
- MIT applicants **must** list the names and contact information (address, email, etc.) of at least **two Professional Geoscientists or Professional Engineers** who have known you for at least one year and are familiar with your geoscience work.
- At least **one** of these references must be a registered **Professional Geoscientist (P.Geo.)**.
- On application for transfer from MIT status to Member status, the applicant must supply **four** references as above.

1

(Name) (Position Title)

(Address)

(City, Town, Village) (Province/State) (Postal Code)

(Telephone) (Fax) (E-mail)

The reference is registered as: [ ] geoscientist; [ ] engineer; or [ ] other (specify):_____

2

(Name) (Position Title)

(Address)

(City, Town, Village) (Province/State) (Postal Code)

(Telephone) (Fax) (E-mail)

The reference is registered as: [ ] geoscientist; [ ] engineer; or [ ] other (specify):_____

3

(Name) (Position Title)

(Address)

(City, Town, Village) (Province/State) (Postal Code)

(Telephone) (Fax) (E-mail)

The reference is registered as: [ ] geoscientist; [ ] engineer; or [ ] other (specify):_____

4

(Name) (Position Title)

(Address)

(City, Town, Village) (Province/State) (Postal Code)

(Telephone) (Fax) (E-mail)

The reference is registered as: [ ] geoscientist; [ ] engineer; or [ ] other (specify):_____

3. Language

What is your first language(s)? _____

If English is not your first language, please describe your ability in English for:

Writing _____Reading _____and Speaking _____ .

4. Work in Canada

Are you legally entitled to work in Canada? [ ] Yes [ ] No

What is your legal basis for working in Canada?_____

Please include a photocopy of a document that shows legal right to Canadian residency.
You may use a photocopy of a passport or citizenship card or landed immigrant papers or Minister's Permit or birth certificate or provincial health card**.**

5. Present Employment

(a) What is your present job title? _____

(b) Please describe your job responsibilities: _____

_____

_____

6. Employment History (*Add additional sheet if necessary*)

Please provide the following information about current and previous employment:
a) name of employer(s),

b) dates (**Month and Year**) of employment, and

c) full particulars of relevant geoscience work experience, including position title, supervisor's name, responsibilities, location, for all relevant engagements, chronologically, since leaving college or university to the present.

List the dates (Month and Year), names(s) and positions(s) of your immediate supervisor in each case.

Applicants for Member-in-Training should also provide details of the applicable geoscience work experience.

Please type or print legibly.

A DATED, SIGNED, DETAILED, CURRENT RESUME (CURRICULUM VITAE) MUST BE ATTACHED TO SUPPLEMENT THIS INFORMATION.

Employment History (cont'd)

THIS TABLE MUST BE COMPLETED – ATTACH ADDITIONAL PAGES AS NEEDED

Employer, Employer's Address; Position Title (*Briefly describe experience.*)	**Start M/Yr**	**Finish M/Yr**	**Name and Position of Supervisor**	**Additional Information or Comments** (*e.g.* reason for leaving, etc.)
Employment Prior to Completion of Knowledge Requirements (Undergraduate degree)				
Employment during Post-Graduate Work (MSc and/or PhD)				
Employment after Completion of Knowledge Requirements (Undergraduate or graduate degree)				

F. STATEMENTS AND DECLARATION

1. Professional Geoscience Association(s)

Have you ever made application for registration of any category in this or any other Association of

Professional Geoscientists in Canada? [ ] Yes [ ] No Where?_____

If yes, are you a member-in-good standing? [ ] Yes [ ] No Number?_____

Were you assigned an examination program? [ ] Yes [ ] No

Give Details:_____

_____

2. Present Membership in a Professional Geoscience Association(s)

Are you presently a member of another Provincial Geoscience Association(s)? [ ] Yes [ ] No

Province: _____

Class of Membership_____ Membership Number _____
(Member or Member-in-Training or Licensee)

Have current dues been paid? [ ] Yes [ ] No

Until what date? _____

3. Professional Practice Exam

Have you successfully completed the National Professional Practice Examination (NPPE)?

[ ] Yes [ ] No Date taken and passed:_____

4. Disciplinary Action

Are you, or have you ever been, subject to investigation or disciplinary action or sanction by a civil or criminal court, an employer, an academic institution or a Professional Association? [ ] Yes [ ] No

Association Name: _____

If yes, please give details. _____

_____

_____

4. Other Information

Is there anything else that we should know about you? [ ] Yes [ ] No Please explain. Attach additional pages as necessary.

_____

5. Declaration

I declare that the statements made on this form are true and correct to the best of my knowledge and belief. I understand that any false or misleading statements, willful omissions or misrepresentations on this form shall be considered as sufficient cause for refusal of admission and/or registration to or dismissal from the Association.

By signing this form, I authorize the Association to investigate the accuracy and completeness of this information, to check my background, to make inquires necessary to qualify me for admission to the Association.

I release from liability all previous and current employers and/or regulators who provide information relating to my character and/or employment history and/or work experience and/or prior and/or current employment.

If admitted to registration, I agree to be governed by the ***Geoscience Profession Act,*** the ***Geoscience Practice Regulations,*** the ***by-laws*** and the ***Code of Ethics*** of the ***Association of Professional Geoscientists of Nova Scotia***.

Print Name: _____Date: _____

Signature:_____

Questions about Knowledge Requirements and Geoscience Work Experience

If you have questions about the knowledge requirements or geoscience work experience, please read the material at the Geoscientists Canada (CCPG) website: **http://geoscientistscanada.ca**.

If you have questions, please contact:
David C. Carter, P.Geo, FGC, Executive Director and Registrar
registrar@geoscientistsns.ca or Phone (902) 420-9928

Mailing this Form

Mail the completed application form, supporting documents, and a cheque for fees and dues to:

The Registrar, Association of Professional Geoscientists of Nova Scotia
P.O. Box 91, Main Station
Enfield, Nova Scotia, B2T 1C6

Application fees and dues may be paid by cheque (payable to: ***Association of Professional Geoscientists of Nova Scotia***) or on-line at **www.geoscientistsns.ca** (please attach a copy of the on-line payment receipt).

Fees and Dues are for the 2015 Calendar Year. *Note that fees and dues are subject to change from year to year*. Please check the website at www.geoscientistsns.ca for the current schedule of applicable fees and dues.

1. Applicants for Member must enclose a payment for the **Total of $862.50.**
   (Annual Dues $450.00, Stamp fee $50.00 and Assessment fee $250.00 plus HST@15%)
2. Applicants for Member-in-Training must enclose a payment for the **Total of $316.25**.
   (Annual Dues $175.00 and Assessment fee $100.00 plus HST@15%)
3. Applications for License to Practice must enclose a payment for the **Total of $862.50.**
   (Annual Dues $450.00, stamp fee $50.00 and Assessment fee $250.00 plus HST@15%)

Please note that Fees and Dues are payable at the time of application.
The Application for Registration Fees and Due

Appendix 2. Applicant Assessment – Academic Requirements Guide

Association of Professional Geoscientists of Nova Scotia

Applicant Assessment – Academic Requirements Guide

EXECUTIVE SUMMARY

The APGNS "**Applicant Assessment - Academic Requirements Guide**" is a reference document developed by the APGNS Admissions Board (the 'Board') for the evaluation of applications for professional geoscience registration. It is also the supporting document for the APGNS "**Applicant Academic Self-Assessment Worksheet"**.

This Guide and the Self Assessment Worksheet Tool are made available to applicants for professional geoscience registration (member and/or member-in-training) for information purposes.

The educational requirements detailed here are based on the ***Geoscience Knowledge and Experience Requirements for Professional Registration in Canada*** (GKE).

The GKE has been approved by APGNS as the fundamental reference in the evaluation of applicants for professional geoscience registration. The GKE sets the minimum academic requirements as equivalent to a typical four (4) year degree in geoscience at a Canadian university. The GKE also defines the minimum geoscience work experience requirement for professional registration as a period of forty-eight (48) months of professionally supervised, practical, cumulative and progressive, geoscience work experience (the GKE document is available on the Association website www.geoscientistsns.ca).

The GKE identifies three 'streams' of professional geoscience registration:

- Geology,
- Environmental Geoscience, and
- Geophysics.

Each registration stream has a common set of fundamental science requirements as well as specific geoscience requirements.

The basic academic evaluation unit of the GKE is the 'educational unit' (EU). This is defined as the equivalent of a one term course, meeting (lecture time) three hours per week, with or without a laboratory component, for 13 weeks, in a 120 credit-hour, 4-year degree program and which is acceptable for academic credit in a science or engineering curriculum.

The EU, as used here, does not address the manner in which material in each subject area is presented in university or college programs. Its purpose is to provide a qualitative statement about the knowledge expected, when both knowledge and experience qualifications are evaluated for the purpose of professional registration.

The determination of what is acceptable as an academic credit or EU, is at the discretion of the Board and will be determined based on the evaluation of the total of the information presented in the application file.

DISCLAIMER

To the users of this document:

This Applicant Assessment – Academic Requirements Guide has been developed, is published and distributed by the Association of Professional Geoscientists of Nova Scotia (APGNS) as a reference for the APGNS Admissions Board. It is also made available to applicants for professional geoscience registration in the evaluation of their academic training.

Persons relying on this tool should be aware that it is intended as an aid and a reference and that it does not constitute a guarantee of professional registration.

In all cases, the applicant or candidate for professional registration bears the onus and sole responsibility of meeting the requirements for professional registration to the satisfaction of APGNS.

Determination of the acceptability of any EU will be determined individually and based on the information made available for the evaluation and is at the discretion of the Board.

TABLE OF DEFINITIONS AND ACRONYMS

Applicant	A person who has applied for professional registration (membership) in APGNS.
Candidate	A person who is considering applying for professional registration (membership) in APGNS.
APGNS	The official legislated name of the Association, established by the Geoscience Profession Act is "Association of Professional Geoscientists of Nova Scotia"; the Association is also known by the 'brand' name "Geoscientists Nova Scotia".
Geoscientists Canada	A national body comprised of the professional geoscience regulators, the constituent associations of professional geoscientists from most jurisdictions in Canada; formerly known as the "Canadian Council of Professional Geoscientists" (CCPG).
Canadian Geoscience Standards Board	'CGSB' - A standing committee of Geoscientists Canada made up of representatives from each constituent association with a mandate to facilitate standardization of admissions requirements and mobility of professional geoscientists across Canada.
Admissions Board	The standing committee or board of APGNS, comprised of members and advisors tasked by APGNS Council with ensuring that those individuals admitted to the Association as professional geoscientists (members and/or members-in-training) have the necessary qualifications, education, and experience.
Council	The management board that establishes the policies and directs the activities of APGNS.
Geoscientists Nova Scotia	The 'brand' name of the Association; it may not be abbreviated
GKE	The Geoscience Knowledge and Experience Criteria for Professional Registration in Canada; a guideline document produced by the CGSB, and used by each constituent association to assess registration qualifications of applicants, or to establish their own requirement qualifications for membership.

NPPE	National Professional Practice Exam; successful completion is required by APGNS for professional geoscience registration
EU's	The basic academic evaluation unit as described by the GKE.

INTRODUCTION

The applicant for professional geoscience registration must first understand and identify the appropriate 'stream' of professional geoscience registration in which they have trained, will practice and, therefore, will be applying under.

Based on the GKE, in Nova Scotia, three streams of geoscience practice are recognized:

- Geology,
- Environmental Geoscience, and
- Geophysics.

It is important to understand that the selection of which 'stream' to apply under can significantly influence the success or failure of the application. The appropriate 'stream' should be determined based on the applicant's academic training, their geoscience work experience, and their planned career path.

If the applicant's academic training and work experience are in the field of geology, environmental geoscience, or geophysics, they should apply under the corresponding 'stream' because it best fits his/her career path. In some cases, the Board may require additional academic training or supplemental courses, or additional work experience to fulfill the requirements of a specific stream. For example, an applicant who has completed the academic requirements under the geology stream, but is working or intends to work in environmental geoscience, may be required to complete additional academic courses or gain additional work experience to demonstrate that they have fulfilled the requirements for professional registration.

If the applicant's academic training is in the field of environmental science, and he/she does not have a substantial 'geoscience component', they may not have the academic training required for registration as a professional geoscientist, and therefore they should consider an alternative designation perhaps as an 'environmental scientist'.

If the applicant is uncertain about the appropriate application 'stream', they should contact the Registrar and request assistance (registrar@geoscientistsns.ca or 902-420-9928).

In addition to the three 'streams' identified above, there are two registration categories which are considered by the Board:

- Member-in-Training (MIT), and
- Member (P.Geo).

Registration as a Member-in-Training (MIT)

Applicants who are recommended for registration as a Member-in-Training (MIT) will have satisfied the academic requirements for professional registration, but will not have gained the required minimum of forty eight (48) months of acceptable geoscience work experience. (Applicants should refer to the APGNS MIT Program Guide and the Components of Acceptable Geoscience Work Experience for information regarding the work experience.)

MIT's may be eligible for assistance from a mentor in the preparation of their work experience diaries. The diaries must document the professional and personal development of the MIT through their supervised work experience. The diaries and accompanying documentation must be prepared and submitted in the approved form and format.

On completion of twenty four (24) months of geoscience work experience, the MIT may be apply to write the National Professional Practice Exam (NPPE), which is also a requirement for registration as a P.Geo.

Registration as a Member (P.Geo.)

Applicants, who have satisfied the academic training and work experience requirements, as well as the successful completion of the NPPE, may be recommended for registration as a professional geoscientist (P.Geo).

The academic requirements, specific to each registration 'stream' are summarized in Figure 1.

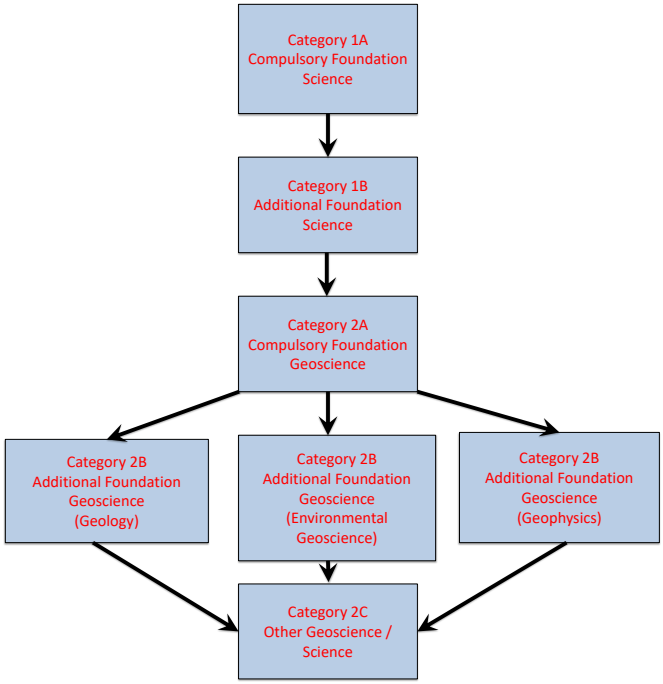

Figure 1.Summary of the path to professional geoscience registration – academic requirements and the three 'streams' of professional practice.

EDUCATIONAL REQUIREMENTS

Each registration 'stream' (Geology, Environmental Geoscience, and Geophysics) requires a minimum of twenty-seven (27) educational units (EU's) to satisfy the academic training requirements of the GKE. Collectively, these may or may not constitute the requirements for an undergraduate (bachelors) degree in geoscience.

These EU's are broken down into three (3) categories and five (5) groups. The table below shows the number of EU's required from each. The categories and groups are:

Category 1 - Foundation Science
• 3 EU's are required from Compulsory Foundation Science (Group 1A) • 6 EU's are required from Additional Foundation Science (Group 1B)
Category 2 - Foundation Geoscience
• 4 EU's are required from Compulsory Foundation Geoscience (Group 2A)

• 5 EU's are required from Additional Foundation Geoscience (Group 2B)
Category 3 - Other Geoscience / Science
• 9 EU's are required from Other Geoscience / Science (Group 2C)

All of the EU's are equivalent in duration to a one-semester course (usually 13 weeks), offered at a university or community college. Collectively, these academic requirements comprise the science courses that are typically required for an undergraduate (bachelors) degree in Geology, Environmental Geoscience, or Geophysics from a Canadian university.

Some of the material identified in the 27 EU's may be obtained via 'non-traditional' courses or training which would be evaluated individually by the Board, based on information and supporting materials provided by the applicant, to determine if they are acceptable as alternatives.

Notes:

- ***In all cases, it is the responsibility of the applicant to demonstrate or provide sufficient background and/or supporting information for the Board to conclude that their academic training is equivalent to the EU's required by the Board.***

- ***In many of the descriptions provided herein, and where appropriate for the purpose of clarity, the term 'course' has been used interchangeably with the term 'EU'.***

- ***In all of the requirements, the preferred courses have a laboratory component to their instruction. For Chemistry, Physics, and Biology courses in categories 1A and 1B, these are considered 'traditional' laboratories.***

- ***In Mathematics, Statistics, and Computer Science courses to be considered in categories 1A and 1B, the laboratory component is typically offered as a tutorial involving the completion of quantitative exercises under the supervision and assistance of the instructor or teaching assistant***

- ***Laboratory components for Geoscience courses may take many forms, and include the more traditional laboratory components as noted above, as well as microscope laboratories, afternoon or weekend fieldtrips, and multi-week-long field schools.***

- ***Some advanced geoscience courses may not include a laboratory component. This would not necessarily preclude their potential to satisfy an EU as required by the Board, provided that the majority of geoscience courses include laboratory instruction as part of their curriculum.***

- ***Acceptability of any EU will be determined individually and based on the information made available for the evaluation and is at the discretion of the Board.***

CATEGORY 1. FOUNDATION SCIENCE

The subject of geoscience builds on scientific principles that are central to a number of other science subjects, notably chemistry, physics and mathematics. A geoscientist must have basic knowledge in these foundation sciences to practice geoscience. The sections below provide detailed descriptions of the individual course requirements.

Group 1A – Compulsory Foundation Science

Chemistry, physics, and mathematics are fundamental to geoscience, and thus a foundation in these disciplines is considered necessary to be able to understand geoscience principles and practice as a geoscientist.

University curricula typically offer two overall introductory courses in chemistry and physics that provide an appropriate overview of these subjects and serve as pre-requisites both to advanced courses in chemistry and physics, and to other degrees in science and applied science. These introductory courses, typically offered as 1st year, one semester, general overview classes, with a laboratory component, satisfy the EU's in the Group 1A (Compulsory Foundation Science) because they provide the foundation of the chemistry and physics theory that is built on in geoscience curricula, and thus are necessary to understand material in upper level geoscience courses.

In contrast, university mathematics curricula typically have a different format, as no single pair of mathematics courses provides an overall introduction to all parts of the mathematics discipline. Rather, analogous pairs of introductory mathematics courses in the sub-disciplines of calculus, probability and statistics, and linear/matrix algebra (and possibly others) are typically offered. Courses in any of these sub-disciplines may be useful to the geoscientist, providing an appropriate mathematical foundation that can be used in upper-level geoscience courses. Because no single pair of first year mathematics courses provides an overview of the entire discipline of mathematics, and because most first year mathematics courses offered are relevant to geoscience, any pair of first year mathematics courses (not necessarily calculus) can be used to demonstrate that applicants have sufficient numeracy to be able to understand and use quantitative information in geoscience applications.

Chemistry

An introductory chemistry class, with laboratory, that, together with a second similar subsequent chemistry course, covers all of the basics of chemistry and which, with the second subsequent course, represents a pre-requisite for future chemistry courses and other science degrees.

Physics

An introductory physics class, with laboratory, that, together with a second similar subsequent physics course, covers all of the basics of physics and which, with the second subsequent course, represents a pre-requisite for future physics courses and other science degrees.

Mathematics

A 1st year, one semester, mathematics class in calculus, probability & statistics, or linear/matrix algebra that, together with a second similar subsequent calculus, probability & statistics, or linear/matrix algebra course, covers all of the basics of these sub-disciplines and which, with the second subsequent course, represents a pre-requisite for future mathematics courses in its sub-discipline.

Group 1B – Additional Foundation Science

Although chemistry, physics, and mathematics are foundational sciences to geoscience, knowledge of other sciences may be necessary to understand many geoscience principles. As a result, geoscientists should also have basic knowledge in this broader array of scientific disciplines.

Chemistry, Physics, Mathematics

The chemistry, physics, and mathematics courses described in Group 1A typically have a second semester course that follows on from the first course to complete presentation of the first year curriculum in chemistry, physics, calculus, probability & statistics, and linear/matrix algebra.

A geoscientists general science background will be more complete if they take both of these introductory courses, if the applicant intends to submit one or two chemistry, physics, or mathematics course in the Group 1B category, the Board prefers that the first of those courses be these second chemistry, physics and mathematics courses. A second chemistry or physics course can then be a second year course that requires the introductory chemistry or physics courses described above as pre-requisites. The second mathematics course can be another first year, introductory course in another mathematics sub-discipline (calculus, probability & statistics, linear/matrix algebra), or a second year course that requires the two introductory mathematics sub-discipline courses described above as pre-requisites.

Biology

Geoscience practice may, because of interactions between the biosphere and geosphere, require basic, foundational knowledge of topics traditionally included in a university biology curriculum.

If a applicant wishes to submit one or more courses in Biology in Group 1B category, the Board requires that the first of, or a pair of, biology courses that provide an introductory overview of biology, covering all of the basics of the discipline at both macro- (organismal and ecological) and micro- (molecular, cell and genetics) scales; these courses should serve as pre-requisites for subsequent, second year biology courses, and should include a laboratory.

Computer Programming

The software to undertake specific geoscience applications is not always available; as a result, the geoscientist may be required to write or develop computer software to undertake specialized, geoscience-oriented, computer applications; courses in computer programming offer the geoscientist a skill-set that may be of significant use in their geoscience career.

If a applicant wishes to submit one or more courses in computer programming in Group 1B, the Board requires the first of, or a pair of, computer programming courses that present an introduction to the method of writing computer programs; these courses need not involve any specific computer programming language, but rather should present the operational algorithms and data structures used by programmers to achieve specific results, and include algorithm performance analysis; if two computer science courses are to be offered to satisfy Group 1B requirements, these do not necessarily have to involve the same computer programming language (although they must include different algorithmic and data structure curriculum).

Note:

- ***Eligible computer programming courses are not courses that teach students the basics of word processing and/or spreadsheet calculations, or that overview the use of computers and the organization of computer systems in society.***

Statistics

Because:

i) statistics curricula in many universities are offered through mathematics departments,

ii) probability curricula are intimately related to the statistics curricula, and

iii) because students taking both probability and statistics courses enhance their scientific numeracy;

the Board makes no distinction between probability and statistics courses and mathematics courses in the GKE, using them inter-changeably in the 1A and 1B Groups; as a result, probability, statistics, calculus, and linear/matrix algebra courses can all serve mathematics EU requirements in Groups 1A or 1B; additionally, probability & statistics courses can serve as statistics EU requirements in Group 1B.

Notes:

- ***The intent of the Group 1B EU requirements is to ensure that a professional geoscientist has a broad scientific background. As a result, the Board will not accept more than three numerically-oriented courses that satisfy mathematics and statistics requirements in Group 1B (for a total of four numerically-oriented courses). This is because two mathematics and two statistics courses would not provide the applicant with a broad background in the foundation sciences, because too few other science courses would have been completed***.

- ***At many universities, fundamental science courses are sometimes offered in specialized sections tailored to various student groups (e.g., calculus for physical sciences, physics for engineers, chemistry for pre-med students, etc.). The intent is to make the course relevant to these various student groups.***

- ***Modifications within these courses range from merely using class, laboratory, or exercise examples with particular relevance to the corresponding student groups (e.g., using a genetics problem in a probability course), to the emphasis of certain traditionally-included course components of the science to the exclusion of others (e.g., focusing on the mechanics of limb motion during walking in a physics course for biology majors, requiring the exclusion, due to time constraints, of electromagnetic induction theory).***

- ***Such courses may not be designated or acceptable for geoscience or engineering students or acceptable for a geoscience or engineering degree program. Therefore, these courses may not satisfy the EU requirements in Groups 1A and 1B.***

CATEGORY 2. FOUNDATION GEOSCIENCE

The streams of professional geoscience registration (Geology, Environmental Geoscience, Geophysics) have certain knowledge requirements that are common to each stream. These are described in Group 2A. However, each stream also has certain knowledge requirements that are specific to the stream. These are described in Group 2B.

Group 2A – Compulsory Foundation Geoscience

Four compulsory foundation geoscience courses, shown in Group 2A below, are common to the three geoscience streams, and so every applicant for professional geoscience registration must have background in these fields. These courses must be one semester in duration (or equivalent) taught at a level of 2nd year or higher and including a laboratory component.

Field Techniques

A field-based course that presents the basics of geoscience data collection, including the collection of strike and dip information, the construction of geological maps, cross sections, and stratigraphic columns.

This course should provide the geoscientist with exposure to the mapping and measuring of as wide a variety of rock types, ages, structures, sedimentary and metamorphic facies, and igneous phases, and contact relationships as geographically possible.

This course should be the equivalent of a one semester university course, but can be a full-time course taken within a confined time period (*e.g*., 8 hrs/day for 14 days = 112 contact hours; note that a traditional course with 3 hours of lecture and laboratory (each), plus 3 hours of study per week for 13 weeks = 117 total hours).

Mineralogy and Petrology

A one-semester course, with laboratory, presenting the basics of mineralogy and petrology, including crystallography (crystal classes and systems), the optical theory necessary for petrographic mineral identification, the classification and hand-sample identification of minerals, mineral compositions and structures, the principles and uses of X-ray diffraction, and basic petrologic classification using mineral modes.

Sedimentation and Stratigraphy

A one-semester course, with laboratory, presenting the basics of sedimentation and stratigraphy, in a plate tectonic framework, including principles of topography, the law of superposition, cross-cutting relationships, the rule of V's, layer-cake geology, igneous bodies, and contact relationships such as structures, unconformities, disconformities, and igneous intrusions, sedimentary facies, and depositional environments.

Structural Geology

A one-semester course, with laboratory, presenting the basics of structural geology, including geological structure identification and geometry, plane and line measurement, the principles of stress and strain, brittle and ductile deformation, folding, faulting, shearing, and foliation, tensional and compressive strength, Mohr's circle, formation mechanisms, structural data analysis, and map interpretation.

Group 2B – Additional Foundation Geoscience

Additional foundation geoscience courses differ for each of the three geoscience streams, precisely because geoscientists must have different academic training to effectively practice in these different streams.

In this section, a number of the required courses are common in the Geology and Environmental Geoscience streams with others specific to the Geophysics stream. They are presented in the table below followed by detailed descriptions for each course.

The Board requires that each of the courses presented in the sections below requires a 2nd year or higher, one-semester course, with laboratory component. Of the detailed descriptions presented in the following sections, it is anticipated that, the majority of these topics will be addressed by the course material and the acceptance of the course as a required EU will be at the discretion of the Board.

Group 2B – Geology and Environmental Geoscience Streams

2B Geology stream	2B Environmental Geoscience stream
Geochemistry	Geochemistry
Geophysics	Geophysics
********	********
Igneous Petrology	Hydrology
Metamorphic Petrology	Hydrogeology
Sedimentary Petrology	********
********	Geomorphology or Soil Science
Sedimentology	Glacial Geology
Glacial Geology or Geomorphology	Remote Sensing
Remote Sensing	

Geochemistry

The course should present an overview of concepts involving geochemistry, including equilibrium, saturation, precipitation, crystallization, partitioning, fractionation, dissolution, buffering, pH, and redox processes as these relate to the geochemistry of the ocean and atmosphere, and the origin, distribution and geochemical cycles of elements in/on the Earth.

This can be achieved as a course focused in applied, aqueous, thermodynamic, or general geochemistry; unfortunately, courses dealing with isotope geochemistry, lithogeochemistry, and petrogeochemistry typically do not provide this background, and should be used to satisfy requirements in Group 2C as advanced geochemistry courses.

Geophysics

The course should present concepts involving applied geophysics, including the theory, survey design, instrumentation, applications, interpretation, and limitations of seismic, gravity, magnetic, radiometric, resistivity, induced polarization,

self potential, electromagnetic, ground penetrating radar, LIDAR, etc, surveys applied to mineral and petroleum exploration, environmental assessment, monitoring, and remediation, and engineering geology, as appropriate.

Igneous Petrology

The course should present an overview of concepts involving igneous petrology, including magma origin and evolution, solid solution, liquidus, solidus, cotectic, peritectic, eutectic, solvus, equilibrium, and fractional crystallization, the application of physical and chemical principles to the origin and occurrence of igneous rocks, liquid immiscibility, filter pressing, heat transfer, mineral phase equilibria, and igneous activity through time.

Metamorphic Petrology

The course should present an overview of concepts involving metamorphic petrology, including the nature, origin, and textural, compositional, and metamorphic grade classification of metamorphic rocks, heat flow, partial melting, isograds, isobars, metamorphic facies, and metamorphic and metasomatic phase equilibria.

Sedimentary Petrology

The course should present an overview of concepts involving sedimentary petrology, including hand sample and microscope description, classification, and interpretation of ancient and modern sediments and sedimentary rocks, and their composition, texture, sorting, diagenesis, and the geochemistry and mineralogy of clastic, carbonate, and (other) chemical sedimentary rocks.

Sedimentology

The course should present an overview of concepts involving sedimentology, including the depositional environment and processes, facies architecture, basin structure and evolution, and an introduction to sequence stratigraphy.

Glacial Geology

The course should present the study of the mass balance of glaciers, the characteristics of flow, erosion and deposition by active and stagnant ice masses, facies relationships in processes and products of glaciated terrain; it should include an assessment of terrain from air photos, maps, geophysical and sample (core) data.

Geomorphology

The course should present an overview of the processes and principles responsible for landscape development; it should include an introduction to induced and natural hazards, such as landslides, coastal erosion, etc., with a practical introduction into air photo and satellite imagery interpretation and terrain analysis in land development and resource applications.

Remote Sensing

The course should introduce the physical principles and geodetic theory, principles, designs, and acquisition of data from various remote sensing platforms, methods of mapping, enhancing, analyzing and interpreting images for study of geological, hydrological, biological, and oceanographic processes and human activities using computer-based visualization methods.

Hydrology

The course should present an introduction to hydrological processes and resulting spatial patterns at various scales, including precipitation, evaporation, transpiration, infiltration, runoff, surface water quality and hydrogeological data analysis.

Hydrogeology

The course should present an introduction to physical hydrogeology, including groundwater flow theory, flow nets, acquifer testing, groundwater quality, and controls on groundwater contamination transport.

Soil Science

The course should present an introduction to the physical, chemical, and biological properties of soil, weathering and pedogenesis, principles of identification and classification of soils, and the nature and distribution of soil classes and their relationship to climate and geomorphology.

Note:

- ***The laboratory components of the three petrology courses described above should include transmission microscope petrography of relevant rocks that will allow student to formally name the rock, document its mineralogy, and describe its textural, structural, and other salient characteristics.***

Group 2B – Geophysics Stream

As noted above, additional foundation geoscience courses, Group 2B, differ for the Geophysics stream.

2B Geophysics stream
Digital Signal Processing
****
Global Geophysics / Physics of the Earth
****
Seismology / Seismic Methods
****
Exploration Geophysics
****
Radiometrics /Gravity & Magnetics
****
Electrical & Electromagnetic Methods

In this section, the EU requirements of the geophysics stream, Group 2B, are listed in the table above and the detailed course descriptions follow. Of the detailed descriptions presented in the following sections, it is anticipated that, the majority of these topics will be addressed by the course material and the acceptance of the course as a required EU will be at the discretion of the Board. To satisfy the requirements of the Board, each of the courses presented in the section below must be a 2nd year or higher, one-semester course, in most cases with a laboratory, however in some cases, at the discretion of the Board, a tutorial or special session may be substituted for the laboratory component.

Digital Signal Processing

The course should present the application of time series analysis and image processing techniques to large geophysical data sets; topics should include sampling, the problem of aliasing, time and frequency domains, 1D and 2D Fourier transforms, the Z transformation, spectral analysis, windows, filtering and deconvolution.

Global Geophysics

The course should present an overview of concepts involving global (pure) geophysics, including earthquake seismology, gravity, the geoid, geomagnetism, paleomagnetism and geodynamics, heat flow, radioactivity and geochronology, with applications to global tectonics and deep (crustal, mantle, core) structural investigation.

Physics of the Earth

The course should present an overview of concepts involving the physics of the earth, including an introduction to physics of the Earth's interior, with emphasis on Earth's structure, evolution and current dynamic state, at different temporal and special scales and using seismic observations, heat flow, the physics of minerals under high pressures and high temperatures, elasticity, fluid mechanics, equation of state, and seismological, thermal, and compositional models.

Seismology

The course should present an overview of concepts involving seismology, including Hooke's law for isotropic continua, elastic wave equation, reflection and refraction methods for imaging the Earth's internal structure, plane waves in an infinite medium and interaction with boundaries, body wave seismology, inversion of travel-time curves, generalized ray theory, crustal seismology, surface waves and earthquake source studies.

Seismic Methods

The course should present an overview of seismic methods used in geophysical surveys, including concepts and techniques of seismic imaging (migration), practical considerations such as algorithm characteristics and data geometry, post-stack and pre-stack migration, and DMO methods examined from Kirchhoff, Fourier, and downward continuation perspectives.

Exploration Geophysics

The course should present an overview of exploration geophysics, including the theory, survey design, instrumentation, applications, interpretation, and limitations of seismic, gravity, magnetic, radiometric, resistivity, induced polarization, self potential, and electromagnetic surveys applied to mineral and petroleum exploration, environmental assessment, monitoring, and remediation, and engineering geology, as appropriate.

Radiometrics

The course should present an overview of concepts involving radiometric geophysical applications, including the theory of radioactive decay, radiometric dating, survey design, measurements, quality control, and data processing and interpretation.

Gravity & Magnetics

The course should present an overview of concepts involving gravity and magnetic (potential field) geophysical applications, including theory, terrestrial field characteristics, surveying, and the processing, modeling and interpretation of gravity and magnetic data.

Electrical & Electromagnetic Methods

The course should present an overview of concepts involving electrical and electromagnetic geophysical applications, including theory, terrestrial field characteristics, surveying, and the processing, modeling and interpretation of conductivity/resistivity, induced polarization, self potential, ground penetrating radar, and tilt-angle-, phase shift-, and amplitude-based electromagnetic data.

CATEGORY 3. OTHER GEOSCIENCE / SCIENCE

Group 2C – Other Geoscience / Science

There are nine other geoscience / science courses that are required to complete the academic requirements for professional registration. These courses must serve to 'round out' the academic training of a professional geoscientist. Therefore, these are not prescriptively identified as being specific to any one stream, but they should complement and reinforce the curriculum and academic training obtained through the remainder of the 'stream'.

For these other geoscience / science courses, the Board typically requires a 2nd year or higher, one-semester course, with a laboratory component or an alternative where appropriate to the content of the course, in a geoscience field, or a related scientific discipline, in any case provided that the field and the course are relevant to the applicant's stream. Up to two of these nine courses may be selected from another related scientific discipline and the Board will determine if the course is acceptable to the applicant's academic training stream.

Appendix 3. Academic Self-Assessment Worksheet (for use by the Board and/or for use by the applicant)

Association of Professional Geoscientists of Nova Scotia

Applicant Academic Assessment Worksheet
to be completed by the Admissions Board

The three (3) "streams" of professional geoscience registration in Nova Scotia are:

- Geology,
- Environmental Geoscience, and
- Geophysics.

Each stream requires minimum total of 27 EU's:

- 3 EU's are required from Compulsory Foundation Science (Group1A);
- 6 EU's are required from Additional Foundation Science (Group 1B);
- 4 EU's are required from Compulsory Foundation Geoscience (Group 2A);
- 5 EU's are required from Additional Foundation Geoscience (Group 2B); and
- 9 EU's are required from Other Geoscience / Science (Group 2C).

Note: This applicant assessment self-assessment worksheet tool is effective as of October, 2015 and it supersedes all previous versions.

Part I - Applicant / Application Information	
Date	
Full Name	
Application Category **Member (P.Geo)** **Member-in-Training (MIT)** **License to Practice (LTP)**	
Geoscience Stream **Geology** **Geophysics** **Environmental Geoscience**	

Part II - Required Geoscience Knowledge	
Requirement	**Applicant's Record**
Category 1 – Foundation Science **All Streams**	**Note: These requirements, Foundation Science (1A and 1B), are common to the Geology, Environmental Geoscience and Geophysics Streams.**

Group 1A – Compulsory Foundation Science, & **Group 1B – Additional Compulsory Foundation Science** **(total of 9 EU's required)**	**1 EU = 1 semester, 13 week, or term course**
Group 1A. Chemistry Mathematics Physics	**Total of 3 EU's are required - 1 EU in each subject** 1..... 2..... 3.....
Group 1B. Biology Chemistry Computer Programming Mathematics Physics Statistics	**Total of 6 EU's are required - no more than 2 in any subject** 1..... 2..... 3..... 4..... 5..... 6.....

Proceed either to the Geology Stream Group 2A and 2B, or to the Environmental Geoscience Stream Group 2A and 2B, or the Geophysics Stream, Group 2A and 2B.

Geology Stream **Group 2A - Compulsory Geoscience; Group 2B - Additional Geoscience and Group 2C - Other Geoscience** **total of 18 EU's required - 1 EU = 1 semester, 13 week or term course**	
<u>Category 2 – Foundation Geoscience</u> **Geology Stream (Only)** **Group A – Compulsory Geoscience** **Group B – Additional Geoscience** **Group C – Other Geoscience** **(total of 18 EU's required)**	
Group 2A. Field Techniques Mineralogy and Petrology	**Total of 4 EU's are required - 1 EU in each subject** 1..... 2.....

Sedimentation and Stratigraphy Structural Geology	3..... 4.....
Group 2B. Geochemistry Geophysics Igneous Petrology Metamorphic Petrology Sedimentary Petrology Sedimentology Glacial Geology or Geomorphology Remote Sensing	**Total of 5 EU's are required - minimum of 1 & at most 2 from each sub-group, but no more than 1 in each subject** 1..... 2..... 3..... 4..... 5.....

Environmental Geoscience Stream **Group 2A - Compulsory Geoscience; Group 2B - Additional Geoscience and Group 2C - Other Geoscience** **total of 18 EU's are required; 1 EU = 1 semester, 13 week or term course**	
Group 2A. Field techniques Mineralogy and Petrology Sedimentation and Stratigraphy Structural Geology	**Total of 4 EU's are required - 1 EU in each area required** 1..... 2..... 3..... 4.....
Group 2B. Geochemistry Geophysics Hydrogeology or Hydrology Geomorphology or Soil Science Glacial Geology Remote Sensing	**Total of 5 EU's are required - minimum of 1 & at most 2 from each sub-group, but no more than 1 in each subject** 1..... 2..... 3..... 4.....

	5.....

Geophysics Stream **Group 2A - Compulsory Geoscience; Group 2B - Additional Geoscience and Group 2C - Other Geoscience** **total of 18 EU's required - 1 EU = 1 semester, 13 week or term course**	
Group 2A. Field techniques Mineralogy and Petrology Sedimentation and Stratigraphy Structural Geology	**Total of 4 EU's are required - 1 EU in each area required** 1..... 2..... 3..... 4.....
Group 2B. Digital Signal Processing Global Geophysics / Physics of the Earth Seismology / Seismic Methods Exploration Geophysics Radiometrics / Gravity & Magnetics Electrical & Electromagnetic Methods	**Total of 5 EU's are required - minimum of 1 & at most 2 from each sub-group, but no more than 1 in each subject** 1..... 2..... 3..... 4..... 5.....

Proceed to the Geology, Environmental Geoscience or Geophysics Stream Group 2C.

Geology, Environmental Geoscience and Geophysics Stream **Group 2C – Other Geoscience** **Note: these requirements (Group 2C) are common to the Geology, Environmental Geoscience and Geophysics Streams.** **total of 9 EU's required - 1 EU = 1 semester, 13 week or term course**	
Group 2C. Other Geoscience / Science (see the GKE document for a suggested list); minimum total of	**Minimum total of 9 EU's are required - no one single EU course can be used to cover more than one requirement; EU's must be chosen from at least 4 subject areas**

9 EU's; note: extra EU's from A & B can be used in C; must be at a second level or higher acceptable for science credit toward a degree and relevant to geoscience.	1..... 2..... 3..... 4..... 5..... 6..... 7..... 8..... 9.....

Part III - Language and Character	
Requirement	**Candidate's Record**
1. Language – is the applicant conversant in English? written? / oral?	**yes / no**
2. Character – has the applicant demonstrated good character, reputation and conduct?	**yes / no**
3. Is there any evidence or appearance of misrepresentation(s) on or omission(s) from the application form?	**yes / no**
5. Has the applicant applied to or a member of another professional association?	**yes / no**
6. Are there any past, current or pending complaints or disciplinary actions or have professional sanctions been imposed?	**yes / no**
5. Has the applicant been convicted of a criminal offence,	**yes / no**

or, at fault in a civil action, or other?	
6. P.Geo / P.Eng. References	
(1)	
(2)	
(3)	
(4)	
other references	
7. NPPE successfully completed? date / location	**yes / no**
8. Comments	

Part IV - Admissions Board Recommendation / Action	
1. Board Member's Assessment and Recommendation to the Admissions Board: ***I recommend that the applicant:***	
(a) be registered as a professional geoscientist (P.Geo)	
(b) be registered as a Member-in-Training (MIT)	
(c) be referred back to the Registrar for additional information and re-assessment	
(d) that the application be rejected	
2. Reviewer's comments	
Date:	**Reviewer (name / signature):**
Meeting no. / Date	**Chair (name / signature):**

Additional comments

Appendix 4A. Sample, Redacted Rejection Letter

date **PRIVILEGED AND CONFIDENTIAL**

name and address of applicant

Dear …,

The Admissions Board has considered your application for registration as a professional geoscientist.

The Board utilizes the **Geoscience Knowledge and Experience Requirements for Professional Registration in Canada** as a reference in reviewing applications. This document is available on the website (www.geoscientistsns.ca) and it outlines the combination of academic training, combined with practical (cumulative and progressive) geoscience work experience, which is considered a requirement for professional registration. Based on the review of your academic transcripts it was concluded that you are missing four credits, specifically:

- two (2) additional courses in the Section 1B Additional Foundation Science; (any 1 or 2 of biology or statistics and any 1 of chemistry, computer programming, math, physics); and

- two (2) additional courses in Section 2B Additional Geoscience; (one of these would be geophysics; the second would be sedimentology, glacial geology / geomorphology or remote sensing).

In addition to the missing academic credits, it was noted that you have not completed the National Professional Practice Exam. Also, although you have provided excellent professional references and appear to have cumulative work experience, your resume suggests that your experience is primarily laboratory work and not necessarily progressive

In conclusion, if is your intent to meet the registration requirements, it is recommended that you request a further review of your application to discuss recommendations for acceptable courses, examinations and/or interviews to address these requirements.

Please contact the undersigned if you have questions and please advise us of your intentions in this regard.

Sincerely,

David C. Carter, P.Geo, FGC.
Executive Director and Registrar

Appendix 4B. Sample, Redacted NPPE Individual Mastery Report

NPPE INDIVIDUAL MASTERY REPORT

Association: APGNS
For: ----------
ID: -------
NPPE administration date: ----------
Your equated exam score: 63
Result: Fail

To assist you in studying for your next writing of the National Professional Practice Examination (NPPE) please find below an individual mastery report. This report provides a summary of how you performed in each of the syllabus areas of the NPPE. This report is intended to assist you in identifying the weak areas in which you need to focus your study to improve in the future.

It is suggested that in preparing for the next examination you focus most on the syllabus areas listed in the mastery report that you did not master and those that you borderline mastered. For example, if the report below shows that you did not master the syllabus area 'C. Professional Practice' the topic areas covered within this syllabus area should be studied in depth before attempting the examination again because you selected the correct answer for less than 55% of the questions in this area. If the report shows that you borderline mastered the area "B. Ethics" this means that you came close to mastering the material but did not answer enough questions correctly to have fully mastered this area. You will be required to retake the entire NPPE (all syllabus areas) and pass the exam in a future attempt.

Some study techniques that can be effective in preparing for the next examination administration:

- Reading the chapters in the textbook resources and making notes regarding what you learned, writing;
- in your own words about the material covered;
- Discussing with mentors and peers what the textbook resource content means in practical terms to a professional
- Completing the chapter questions, discussion topics, and assignments at the end of each chapter of the textbook resources will ensure that you have understood the material
- Although the NPPE is not a test of English language competence a minimal level of English language competence is required to read and comprehend the questions composing the NPPE. Improving your English language reading and comprehension skills may help improve performance on the examination

Mastery report:

Syllabus area	**Percentage correct**	**Your performance***
A. Professionalism	60	Borderline Mastered
B. Ethics	65	Borderline Mastered
C. Professional Practice	63	Borderline Mastered
D. Communication	0	Not Mastered
E. Law for Professional Practice	70	Mastered
F. Professional Law	38	Not Mastered
G. Regulation & Discipline Processes	73	Mastered

*

Mastered = 70% or more of questions in a syllabus area were answered correctly;
Borderline mastered = 55-69% of questions in a syllabus area were answered correctly;
Not Mastered = Less than 55% of the questions in a syllabus area were answered correctly.

Appendix 5. Guideline for Applicant Interviews

Guideline for Applicant Interviews Conducted by the Admissions Board Concerning the Fulfillment of Geoscience Knowledge Requirements

The Association of Professional Geoscientists of Nova Scotia

Forward
This guideline presents a suggested process for conducting an interview with an applicant for professional registration regarding the completion or fulfillment of the geoscience knowledge requirements. This suggested process is designed to demonstrate the due diligence of the APGNS Admissions Board. It is also to demonstrate consistency with policies and procedures applied by other geoscience regulatory organizations. The suggested process may be "tailored" by the Registrar and / or the Admissions Board to suit the specific situation and / or participants.

1. List of identified knowledge requirement gaps
The starting point of the interview process is the determination by the Admissions Board that the applicant has a deficiency in the academic training / knowledge requirement (Educational Units (EUs)) as defined by the Geoscience Knowledge and Experience Criteria (GKE). The Board may recommend an interview to further evaluate the deficiency.

The Registrar and / or the Admissions Board may also wish to document any concerns they may have concerning the identified knowledge gap area(s) and any items of interest or concern noted during the consideration of Prior Learning Assessment and Recognition (PLAR).

2. Identifying the Interview Subject Matter Experts
The Registrar and the Admissions Board shall identify the interview panel members. Experts may be members of the Admissions Board or may be invited interviewers. The members should be registered in good standing by APGNS or a similarly constituted professional association. Other professional experts, in the area(s) identified and to be reviewed during the interview may be appointed to the panel.

At least one of the interviewers should be an experienced practitioner in the applicant's area of practise. A panel of three to four interviewers is recommended to provide a legally defensible position should an issue arise after an interview. A minimum of two interviewers are possible.

3. Set a date for the interview with the applicant and interviewers.
The Registrar will establish a date, time and location that is acceptable to the applicant and the members of the interview panel.

4. Information to be Provided to the Applicant Concerning the Interview
The applicant should be informed of the knowledge requirement areas that will be assessed during the interview.

The applicant should be advised of the type of information she or he may bring to the interview:

1. a copy of the academic assessment work sheet, if available, completed by the applicant;

2. any reports authored or partially authored by the applicant which concern the EU gap areas, clearly identifying the applicant authored portions;

3. a brief presentation to the interview panel concerning the EU gap areas identified (the Registrar will identify the amount of time that would be allotted for the presentation, if appropriate);

4. any course outlines that may provide evidence with regards to knowledge gained concerning the EU gap areas; and

5. any other information that the Registrar and/or the Admissions Board deems appropriate.

Any documentation to be reviewed by the panel should be provided to the Registrar in advance of the interview so that the members of the panel may review the information prior to the interview date.

The Registrar should indicate to the applicant that a decision concerning a recommendation regarding registration will not be provided at the end of the interview process. The results of the interview will be presented to the Admissions Board and a decision concerning registration will be forthcoming to the applicant from the Registrar.

5. Instructions and Materials to be Provided to the Interviewers

Instructions should be provided to the interviewers in advance of the interview date in order to allow time for interviewers to seek any clarification required from the Registrar or the Board.

The interviewers should be supplied with a copy of the application as well as a copy of the academic assessment work sheet identifying the EU gaps, the work experience record, and the transcript(s).

Individual interviewers may be requested to focus on specific EU gaps in order that they each may prepare appropriate questions prior to the interview. A lead interviewer may either be selected by the Registrar and / or the Board or the interviewers may be instructed to select a lead interviewer themselves.

The interviewers should be informed that all documents concerning the applicant and the interview are considered confidential and must be returned to the Registrar. As well, the interviewers should be informed that all discussions and reports concerning the applicant/application are also to be treated as confidential.

Each interviewer should prepare questions in the EU gap area(s) of his / her expertise, as identified by the Registrar and / or the Board, to be asked of the applicant. The initial two to four questions for an identified EU gap should be extremely foundational and relatively simple. Progressively harder and more in-depth questions should also be prepared; possibly as many as another five to ten questions. Knowledge gaps identified in the applicant's area of practice should, in particular, have additional in-depth questions.

When interviewing for EU gap fulfillment, the panel should consider the applicant's stage in their career and degree(s) obtained. For example, an international applicant with 30 years of geoscience experience and a PhD in geology may need to provide evidence of knowledge in several EU areas in which his / her practise is focused because some of the course titles on the transcripts did not clearly identify the knowledge gained. However, seeking to confirm knowledge of first year calculus may be unnecessary and / or inappropriate at this stage of his / her career, depending on their specific area of practise. A recent graduate would need to demonstrate knowledge in all the requirement areas.

Clarity must be provided to the interviewers by the Registrar and/or the Board to assist them with focusing the interview on the appropriate areas.

6. The Interview

By this time, a lead interviewer should have been selected. The lead interviewer is responsible for chairing the meeting and writing the final report which will be presented to the Registrar and / or the Board.

At the beginning of the interview, the lead interviewer:

- introduces him / herself and the other interviewers;
- informs the applicant of the purpose of the interview (i.e. to determine the applicant's knowledge in the knowledge requirement (EU) gap area(s) identified);
- informs the applicant of the general amount of time the interview will take;
- inquires as to whether the applicant has prepared a presentation or supporting materials;

- indicates whether the interview will be recorded, notes taken;
- indicates that smart phone or similar devices may not be consulted or used to look up information, and preferably they should be turned off during the interview;
- indicates that no decision will be supplied at the end of the interview; a report on the interview will be presented to the Registrar and/or Board and a decision will be made by the Admissions Board at a later date.

The lead interviewer then initiates the interview. The lead may ask the applicant to begin his / her presentation, if there is one; to introduce themselves; may ask another interviewer to identify the EU they will be seeking information on and ask that interviewer to begin his/her questions; or may him / herself identify the EU for which she / he will be seeking information and begin his/her questions.

The interviewer asking the questions begins with their simplest questions. Notes should be taken on the applicant's response including;

- familiarity with the topic;
- comfort level with the material;
- confidence in the answer provided;
- level of detail provided; and
- whether the answer was appropriate/correct.

In general, it is usually readily apparent whether applicant understands the question asked and whether he or she has an appropriate understanding of the material to provide a correct and appropriately detailed answer. Should the answers to the first few questions be correct and have sufficient detail to satisfy the interviewer, the interviewer may move on to the more in-depth questions. Should the applicant be unable to answer the initial questions, the interviewer may:

- attempt to rephrase the questions, or
- determine that there is no evidence that the knowledge has been gained and move on to the next EU gap area or indicate to the lead interviewer that s/he is finished with the questions.

As above, notes are taken on the applicant's responses. After the interviewer has completed his / her questions, the interviewer provides his / her opinion of the applicant's understanding of the EU gap identified, **but in his/her notes only – not verbally to the applicant**.

Each interviewer takes their turn asking questions of the applicant in their area of expertise. Generally, as the questions are asked, it should become readily apparent to the interviewers whether the applicant has an appropriate professional level understanding of the EU gap areas identified.

While one interviewer is asking questions, the other interviewers may choose to ask the applicant clarifying questions concerning the same subject matter. This is a decision for the panel to make.

7. Concluding the Interview

As the interview process concludes, the applicant should be offered an opportunity to provide a closing comment if she / he wishes. The applicant should then be thanked for their time, reminded that a decision will be forthcoming from the Admissions Board, and excused.

8. Interview Panel Discussion and Report

The interview panel then reviews their notes and discusses the results. The notes may be supplied to the lead interviewer at this time or typed up and supplied to the lead interviewer at an agreed upon time. The lead interviewer then completes a final report, indicating the opinions of the interviewers, and any details thought appropriate, to the Admissions Board.

The panel must conclude that some, all, or none of the noted EU gap areas may have been satisfied through the interview process. Once the Admissions Board has received the interviewers' final report, the Board may determine, based the interviewers' recommendation(s):

- that some or all of the EU gaps have been satisfied and the application should proceed;
- that the EU gaps have not been addressed and additional evaluation of the applicant is required (e.g. a second interview; confirmatory exams; etc.); or
- that the required knowledge has not been completed or gained by the applicant and the application should be rejected or that remedial action should be recommended.

General Notes on Interviewing

It is generally desirable to make the applicant as comfortable as possible since the interview process can be quite stressful for the applicant.

A closed door for privacy and an offer of a glass of water, coffee, or tea can help lower the stress level.

The interview should be kept at a professional level. The topics of family, recent holidays, country of origin, religion, etc., should **not** be introduced by the interviewers. The discussion should remain focused on knowledge acquired by the applicant. Should the applicant bring these topics forward, allow the applicant to express him / herself (unless the topic is inappropriate) and then return to the business of the interview.

Appendix 6. Policy Regarding Accommodation of Applicants with Physical and Mental Disabilities

Policy Regarding Accommodation of Applicants
with Physical and Mental Disabilities

the Association of Professional Geoscientists of Nova Scotia

FORWARD

The Association of Professional Geoscientists of Nova Scotia (APGNS; Geoscientists Nova Scotia) has developed this policy as a companion document to the **APGNS, Admissions Board Policy and Procedures** and the **Guidelines for Attendance and Procedures at Meetings of the Council of the Association of Professional Geoscientists of Nova Scotia.**

7. Request for Accommodation

Requests for accommodation must be made in writing to the Registrar. A request for an accommodation must include:

- the nature of the disability;
- the type of accommodation being requested; and
- where available, a description of what accommodations the applicant has received in the past.

Depending on the nature of the disability and the type of accommodation being requested, the Registrar may request that the applicant provide additional evidence to support their request. Such additional evidence may include, but is not limited to, a formal medical diagnosis, or documentation from a health practitioner explaining the need for the accommodation being requested.

8. Types of Accommodation

The Registrar is not required to provide the applicant with their preferred type of accommodation. In cases where the applicant's specific request cannot be accommodated, the Registrar will work with the applicant to determine a reasonable accommodation that will enable the applicant to overcome the discriminatory effect of the application process.

If the requester and APGNS cannot agree on what type of accommodation is appropriate in any case, the Registrar will make a determination as to what accommodation, if any, is to be provided.

Examples of accommodation that can be made include, but are not limited to:

- assistance in completing application forms;
- methods of communication that differ from APGNS's regular process; and
- alternate times / locations for in-person meetings / interviews / hearings.

Examples of accommodations that may be made for an applicant who wishes to undertake or has been assigned technical and / or law and ethics or other exams include, but are not limited to:

- additional time to complete the exam;
- alternative times / locations for the exam (e.g. private room, special lighting, etc.);
- translation assistance (e.g. reader, recorder, interpreter for the hearing impaired; voice output software for the visually impaired);

- modification of test materials (e.g. large format font, computer-based testing).

Typically, special accommodation requests are made for medical reasons (e.g., visual disability that requires more time) and, as noted above, approval of the accommodation may require supporting documentation from the applicant. In cases where an approved special accommodation includes extra fees to be charged to APGNS, (e.g., extra room fees, reader or scribe fees, etc.), these additional fees will be the responsibility of the applicant. Special accommodations that are not pre-approved by APGNS will not implemented during an examination session (e.g., if a candidate comes to an exam centre on exam day requesting extra time, and this special accommodation was not approved and communicated in advance, the accommodation will not be able to be made for the applicant).

The Registrar may decline to provide any accommodation when doing so would circumvent a bona fide requirement for professional registration as defined by the ***Geoscience Profession Act*** or occupational requirement.

Notes related to the accommodation request are kept separate from other file materials in order to avoid inappropriate disclosure of personal health information.

Appendix 7. Special Accommodations Application Form

Please print clearly.			
Last Name	First Name	Dr./Mr./Ms./Mrs	Member/Application #
Mailing Address *Please check one* ☐ Business ☐ Residential			Applications must be submitted prior to the examination registration deadline).
E-Mail Address:			
Phone Number: ( )			
Examination (NPPE) ☐ _____			Please submit this form and the accompanying documentation via regular mail, or e-mail to registrar@geoscientistsns.ca
Date and Location of Examination ☐ Date: _____ ☐ Location:_____			
Nature of Disability _____ _____ _____ _____ _____			Requested accommodations are subject to approval by APGNS. You will receive confirmation in writing indicating whether your accommodations have been granted.
Accommodations Requested for the Examination (select all that apply): ☐Extended testing time (specify time need) ☐Extra break(s) ☐ Larger font exam ☐Reduced-distraction testing room ☐Other (please specify) _____ _____ _____ _____			**Any information submitted regarding your disability is confidential and will not be**

Comments:	**shared with any outside party other than APEGA.**
Date: _____ Signature: _____	

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Appendix 8. Special Accommodation Documentation

This section is to be filled out by an appropriate professional (e.g., physician, psychologist, rehabilitation counsellor, special educator, or other professional).		
Last Name	First Name	Title

Tel: ( )

E-Mail Address:

How many years have you know the candidate in the capacity of your current profession?

Describe the nature of the candidate's disability:

The candidate should be accommodated by the following (select all that apply):
☐ Extended testing time (specify time needed) ☐ Extra break(s) ☐ Larger font exam
☐ Reduced-distraction testing room ☐ Other (please specify)

_____
_____
_____
_____

Comments:

Date: _____ Signature: _____

Any information submitted regarding the disability of the candidate is confidential and will not be shared with any party outside of APGNS.

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Appendix 9. Access to Records and Privacy Policy

Access to Records and Privacy Policy

FORWARD

The following reflects the current policy and practice of the Association based on and applied under the ***Geoscience Profession Act of 2002*** and the by-laws of the Association. Council has approved the following procedure as policy.

1. INTRODUCTION

Since January 1, 2004, rules that apply to all organizations that collect, use and disclose personal information about individuals came into effect. The Association of Professional Geoscientists of Nova Scotia (APGNS; Geoscientists Nova Scotia), as a professional geoscience regulatory organization, adheres to an access to records and privacy policy and provides this information to outline its responsibilities under the Nova Scotia ***Freedom of Information and Protection of Privacy Act (FOIPOP)*** and the ***Fair Registration Practices Act (FRPA)*** as well as the ***Personal Information Protection and Electronic Documents Act, (PIPEDA)*** an Act of the Government of Canada.

2. APGNS PERSONAL INFORMATION AND PRIVACY POLICY STATEMENT

APGNS respects the privacy of its individual and corporate applicants and registrants and is committed to protecting their personal information.

In this privacy statement "personal information" means information that reveals a distinctive trait, helps to identify an individual or corporate body and is not available in the public domain. This does not include business contact information, or the information provided to issue and maintain professional registration / licensure status or any other class or category of registration under the ***Geoscience Profession Act***.

Any activity under the ***Geoscience Profession Act*** is subject to the obligations set out in the Act and the ***Freedom of Information and Protection of Privacy Act***.

APGNS adheres to the privacy standards of the Canadian Standards Association (Model Code for the Protection of Personal Information – CAN/CSA-Q830-96) regarding collection, use, disclosure and retention of personal information. Compliance with these principles will be revised as needed. Individual contact information is collected, maintained and disclosed to approved providers of member services with consent in keeping with the following principles.

2.1. ACCOUNTABILITY

APGNS is responsible for personal information under its control and has designated the Registrar as the individual responsible for ensuring compliance with the principles.

2.2. IDENTIFYING PURPOSE

The purpose for which personal information is collected shall be identified by APGNS at or before the time the information is collected.

2.3. CONSENT

The knowledge and consent of an individual is required for the collection, use, or disclosure of personal information, except where inappropriate. In its investigation of member conduct or the investigation of an applicant's suitability for registration, specific information may be kept confidential from the applicant or registrant in order to protect the integrity of the investigation process.

2.4. LIMITING COLLECTION

The collection of personal information will be limited to that which is necessary for the purposes identified by APGNS. The information will be collected by a fair and lawful means.

2.5. LIMITING USE, DISCLOSURE AND RETENTION

Personal information will not be used or disclosed for purposes other than those for which it was collected, except with the consent of the individual or as required by law. Personal information shall be retained as part of the applicant's or registrant's confidential file.

2.6. ACCURACY

Personal information will be as accurate, complete, and up-to-date as is necessary for the purpose for which it is to be used. It is considered an obligation of the applicant or registrant to ensure that their contact information is current. It is also considered an obligation that a corporate registrant (Certificate holder) to ensure that their contact information and the designation of a registered professional who takes responsibility for geoscience work is current.

2.7. SAFEGUARDS

Personal and corporate information will be protected by security safeguards appropriate to the sensitivity of the information.

2.8. OPENNESS

APGNS will make readily available to individuals specific information about its policies and practices relating to the management of personal information.

2.9. INDIVIDUAL ACCESS

Upon request, an individual will be informed of the existence, use, and disclosure of his or her personal information and shall be given access to that information. An individual will be able to challenge the accuracy and completeness of the information and have it amended as appropriate.

Requests for access to an applicant's or registrant's records must be made to the Registrar in writing. Requests for access to an applicant's or registrant's records may be made by the applicant or registrant or by a person, authorized in writing to communicate with APGNS on their behalf. Requests for access to records shall be accommodated in a timely manner.

2.10. EXCLUSIONS

APGNS will not provide access to the following documents that may form part of an applicant's or registrant's file:

- any information that is subject to a legal privilege;
- reference letters, unless the provider explicitly and in writing, authorizes disclosure;
- documents that are prohibited from disclosure pursuant to an Act or Regulation;
- where another enactment or court order or order as part of an APGNS investigation, discipline or enforcement or a similar quasi-judicial tribunal prohibits disclosure of the file or any information in the file; or
- where granting access could negatively affect public safety or could undermine that integrity of the registration process;

2.11. FEES

APGNS will charge a flat fee as defined by the current Schedule A. APGNS Professional Fees and Service Charges for making an applicant's or registrant's file, or portion thereof, available for review.

2.12 ACCESS

The applicant's or registrant's file may be viewed in-person at the main APGNS office or at a location designated by APGNS, by appointment, during regular business hours.

2.13 CORRECTIONS

If the applicant or registrant believes that the information held by APGNS is inaccurate, they may request the APGNS correct its records by making a request in writing to the Registrar with documentation in support of the request.

2.12. CHALLENGING COMPLIANCE

An applicant, registrant or their designate may address a challenge concerning compliance with the above principles to the Registrar.

Appendix 10. Access to Records and Privacy Policy

Policy Regarding Appeal of a Registration Decision

the Association of Professional Geoscientists of Nova Scotia
October 2018

FORWARD

The Association of Professional Geoscientists of Nova Scotia (APGNS; Geoscientists Nova Scotia) has developed this policy as a companion document to the **APGNS, *Geoscience Profession* Act** and by-laws of the Association, and in preparation for the revision of the ***Geoscience Profession Act*** and the development of **Geoscience Practice Regulations.**

Request for an Appeal regarding a Registration Decision by the Council or the Admissions Board

The Admissions Board shall provide the Council with a recommendation regarding the rejection of an application for professional registration with reasons and, if the recommendation is approved by Council, the Registrar shall inform the applicant of the decision and the right to appeal to the Registration Appeal Committee

The Registration Appeal Committee shall be appointed by Council and shall consist of:

(a) at least one public representative; and

(b) at least two members who are not currently serving on Council or the Admissions Board.

A quorum of the Registration Appeal Committee consists of a majority of the members appointed.

Failure of one or more Registration Appeal Committee members to receive any notice of a meeting does not invalidate the proceedings at the meeting or hearing, and nothing precludes the members from waiving notice of the meeting.

All Registration Appeal Committee decisions require a majority vote from the persons serving on the Committee.

Where a proceeding is commenced before the Registration Appeal Committee and the term of office of any person sitting on the Committee expires, the Chair of the Registration Appeal Committee may extend the term of office of such person until the proceeding is concluded.

The Registration Appeal Committee shall determine the process to be used for the appeal, and shall determine whether the appeal process will include written submissions or oral submissions before the Registration Appeal Committee.

The Registration Appeal Committee may, in its discretion, allow the introduction of new evidence that was not before the Admissions Board, under such terms as the Registration Appeal Committee determines.

The Registration Appeal Committee, in accordance with the information it receives, may make any determination that, in its opinion, ought to have been made by the Council.
The Registration Appeal Committee shall give its decision in writing to the Registrar and the Registrar shall send the applicant a copy of the written decision by registered mail or personal service.

The decision of the Registration Appeal Committee is final.

Appendix 11. Re-Instatement Policy

APGNS Policy and Procedures with Respect to
Re-Instatement of Registration

Introduction

The following reflects the current policy and practice of the Association based on and applied under the ***Geoscience Profession Act of 2002*** and the by-laws of the Association. Council has approved the following procedure as policy, originally as an addendum to the by-laws of the Association.

Applications for re-instatement

1. An application for re-instatement of registration / licensure must be sent in writing to the Registrar together with the applicable assessment or application fee(s).

2. An application must include any information the Registrar requires in determining whether the objects of the professional conduct process will be met if re-instatement is granted.

Investigation concerning re-instatement application

3. On receiving a re-instatement application, the Registrar may gather additional information with respect to the re-instatement application or request that an investigation be conducted to gather relevant and appropriate information concerning the application.

4. Any information gathered by the Registrar or through an investigation shall be provided to the applicant.

5. The re-instatement application, together with any information gathered through an investigation or by the Registrar, shall be provided to the Admissions Board and Council by the Registrar.

6. The parties to a re-instatement application are the Association, represented by the Registrar, and the applicant for re-instatement.

Decision of the Admissions Board on re-instatement

7. After considering the evidence and the representations from the applicant for re-instatement and the Association, the Admissions Board must recommend for Council to decide to accept or reject the applicant's re-instatement application and communicate its decision, together with reasons, in writing to the applicant and to the Registrar.

8. If the Council accepts a re-instatement application, the Council may impose any terms and conditions it considers appropriate relating to the re-instatement of the applicant, and the applicant must satisfy all criteria required for a licence.

9. A decision of the Council concerning a re-instatement application is final.

10. An applicant may resubmit a re-instatement application after 1 year has passed since the date of the Council's initial decision to reject their application, or after a longer period determined by the Council that rejected the initial application.

Costs of reinstatement application

11. For purposes of this Section, "costs" includes all of the following:

    (a) application and assessment fees;

    (b) expenses incurred by the Association in the investigation of a re-instatement application;

(c) the Association's solicitor and client costs, including disbursements and applicable taxes relating to a re-instatement application, including those of Association counsel and counsel for the Council;

(d) travel costs and reasonable expenses of any witnesses, including expert witnesses, required to appear at a re-instatement application.

12. An applicant for re-instatement is responsible for all expenses incurred in the re-instatement application.

13. Whether the application is accepted or rejected, the Association may recover costs from the applicant.

14. The Registrar may suspend the registration / licensure of any person whose registration / licensure is being re-instated and who fails to pay the costs within the time ordered, until payment is made or satisfactory arrangements for payment are made.

Appendix 12. Code of Ethics

THE ASSOCIATION OF PROFESSIONAL GEOSCIENTISTS OF NOVA SCOTIA

CODE OF ETHICS

(Section 66 of the By-Laws of the Association of Professional Geoscientists of Nova Scotia)

Professional Geoscientists shall conduct themselves in an honourable and ethical manner. They shall uphold the values of truth, honesty and trustworthiness and safeguard human life and welfare and the environment. In keeping with these basic tenets, Professional Geoscientists shall:

a. hold paramount the safety, health and welfare of the public and the protection of the environment and promote health and safety within the workplace;

b. offer services, advise on, or undertake assignments only in areas of their competence and practice in a careful and diligent manner;

c. act as faithful agents of their clients or employers, maintain confidentiality and avoid conflicts of interest;

d. keep themselves informed in order to maintain their level of competence, strive to advance the body of knowledge within which they practice, and provide opportunities for the professional development of their subordinates;

e. conduct themselves with fairness, courtesy and good faith toward clients, colleagues and others, give credit where it is due, and accept, as well as give, honest and fair professional criticism;

f. present clearly to employers and clients the possible consequences if geoscience decisions or judgements are overruled or disregarded;

g. report to their Association or other appropriate agencies any illegal or unethical geoscience decisions or practices by geoscientists or others;

h. be aware of and ensure that clients and employers are made aware of, societal and environmental consequences of actions or projects, and endeavour to interpret geoscience issues to the public in an objective and truthful manner;

i. shall sign and seal only such plans, documents or work as he/she has prepared or carried out or as have been prepared or carried out under his/her direct professional supervision;

j. shall not accept compensation, financial or otherwise, from more than one interested party for the same service or for service pertaining to the same work, without the consent of all interested parties;

k. shall co-operate in extending the effectiveness of the geoscience profession by interchanging information and experience with other professionals and students and by contributing to the work of geoscience societies, schools and the scientific geoscience press; and

l. shall not use the advantages of a salaried position to compete unfairly with another practitioner.