

GEOSCIENTISTS NEWSLETTER

Prepared by the
Committee for the Professional Registration of Geoscientists in Ontario (CPRGO)



Association of
GEOSCIENTISTS
of Ontario

No.15a
March 2000

Update

THE NEWSLETTER OF THE ASSOCIATION OF GEOSCIENTISTS OF ONTARIO

THE WINDING PATH TO LICENSURE OF GEOSCIENTISTS IN ONTARIO

Bill 86

Projet de loi 86

(Chapter 13
Statutes of Ontario, 2000)

A Look Back 25 Years Later

(Chapitre 13
Lois de l'Ontario de 2000)

An Act to establish
the Association of Professional
Geoscientists of Ontario

Loi visant à établir
l'Ordre des géoscientifiques
professionnels de l'Ontario

By Dr. Bill N. Pearson. P.Ge., Founding President, Association
of Professional Geoscientists of Ontario (APGO).



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Introduction

It is remarkable that 25 years have passed since the Professional Geoscientists Act, 2000 received Royal Assent on June 23, 2000, officially forming the Association of Professional Geoscientists of Ontario (APGO). The Honourable Tim Hudak, then Minister of Northern Development of Mines (MNDM) appointed the Transitional Council on August 23, 2000 and the new Council began on September 8, 2000 the long process of developing regulations, by-laws and a registration procedure to implement the Act culminating in registration of the first P.Geos in May 2002. By the end of the Transitional period in May 2003, a total of 820 practicing members had been registered, with APGO on the path to a self sustaining financial footing having an elected Council in place. Today Professional Geoscientists Ontario (PGO)¹ is the largest geoscience-only self-regulatory organization in Canada with a membership of 3,656 including 2,558 practicing P.Geos, a strong balance sheet and a bright future – a truly impressive achievement which is important to celebrate. Registrants come from 81 countries reflecting the global reach of PGO.

Twenty-five years is a significant anniversary and an important time to reflect on the history and the important contributions of the many geoscientists and those that gave generous financial support which built APGO into what is a major success story. The path to success, however, had many twists and turns and much was learned; these lessons are important to keep in mind for the future.

Growth of Licensure of Geoscientists in Canada and First Steps in Ontario

Licensure of geoscientists in Canada is a relatively recent global phenomenon that began gradually to become the standard across Canada starting in the late 1980s. Alberta was the first province to license geologists and geophysicists due to the high

concentration of these professionals in the oil and gas industry. The Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) began licensing geoscience professionals in 1966. It was not, however, until 1978 that the next geoscientists were registered in the Northwest Territories (and later including Nunavut), and subsequently in Newfoundland in 1989. Momentum for licensure of geoscientists grew in the 1990s so that now in the first part of the new millennium, the only jurisdictions lacking licensure in Canada are Yukon Territory and Prince Edward Island.

In Ontario prior to the 1980s, many geoscientists became members of the Association of Professional Engineers of Ontario (APEO) now Professional Engineers Ontario (PEO). However when the Professional Engineers Act was amended in 1984 and the definition changed to exclude natural scientists, it became very difficult for geoscientists to qualify for membership in APEO unless they had an undergraduate engineering degree. The lack of a satisfactory avenue for geoscientists to become licensed became a major concern to senior geoscientists who were P.Engs. This led to a meeting being held at the Engineers Club in Toronto on January 5, 1989 that was organized by Ron McMillan, P.Eng., and included John Drury, P.Eng., Owen White, P.Eng., Jack McOuat, P.Eng., and myself. We all agreed that this was an important issue and that we should form a committee to pursue a solution. Ron commented that *“the Chair of this committee should really be a geoscientist, not a P.Eng. Bill, I think that you are the only one here that is not a P.Eng.”* That is how I got the job of being Chair of the Committee for the Professional Registration of Geoscientists in Ontario (CPRGO). Little did I know at the time that this would turn into an 11 year marathon until legislation was finally achieved.

The inaugural meeting of CPRGO was held March 5, 1989 at the Royal York Hotel in conjunction with the Prospectors and Developers Association (PDAC) Annual Convention. Committee members were chosen to cover a range of disciplines in geoscience including

¹ The business name Professional Geoscientists Ontario (PGO) was adopted by APGO on June 14, 2019. The legal name set out in the Act continues to be the legal name.

the expanding field of environmental geoscience as well as provide good regional representation across the province. Presentations were made at this meeting by Rex Gibbons, Chair of the Professional Registration Committee in Newfoundland, John Maher, Councillor of APEGGA and myself on behalf of CPRGO. Newfoundland was to soon after achieve legislation and John Maher was particularly effective at debunking many of the myths about registration.

The first task of the Committee was to survey geoscientists in Ontario to gauge their views on seeking registration and to ensure that the Committee had a mandate from the geoscience community to pursue registration on their behalf. The survey was sent out to almost 3,000 geoscientists in the summer of 1989. The response to the survey, which was published in November 1989, was overwhelmingly in favour of seeking professional registration. Eighty-six percent (86%) of the 1,042 respondents were in favour of professional registration. A lower percentage of 51%, albeit still a majority, favoured seeking registration in conjunction with the professional engineers. At the time, this was the most practical route and was in keeping with precedents already set in other provinces. With this strong mandate from the geoscience community in Ontario, CPRGO began work to achieve legislation for registration of geoscientists in Ontario. A newsletter was started in March 1991 to keep geoscientists informed on progress (Figure 1).

Founding and Importance of the Canadian Council of Professional Geoscientists (CCPG)

In 1984, John Maher, P.Geol., then President of the Canadian Society of Petroleum Geologists, wrote the Geological Association of Canada (GAC) and the Canadian Geoscience Council (CGC) about the need to establish a national geology syllabus to facilitate professional registration of geologists as well as mobility amongst jurisdictions. This led to the formation of the Professional Registration Committee (PRC) of CGC which was chaired by Dr. John Gale, P.Eng., from Newfoundland. I joined this committee in

1989 representing Ontario through CPRGO. This was an enormously important committee as it connected me with like minded individuals across the Canada all working to achieve registration of geoscientists in their respective jurisdictions.

By 1994, the PRC had recognized the need for a new national umbrella organization to serve Canadian professional geoscientists and the growing number of professional associations that registered them. In May, 1995, on the initiative of APEGGA, the Canadian Council of Professional Engineers (CCPE), voted to support the formation of a Canadian Council of Professional Geoscientists (CCPG) to act as the umbrella organization for those associations that register or certify geoscientists. The purposes of the CCPG would be to facilitate transferability of professional membership by encouraging common registration standards; to promote mobility of geoscientists and reciprocity of practice among registering associations; to provide for national geoscience syllabi; to evaluate academic programs; and to represent professional geoscientists at the national and international level.

A task force was established by the CCPE to examine and advise on areas of potential common interest and activity between CCPE and CCPG and to develop procedures, mechanisms and a business plan for implementing activities in these common areas. Nine of the thirteen members of the task force were geoscientists, including five from the PRC (Michel Bouchard (Quebec), Hugh Miller (Newfoundland), Phil Reeves (Saskatchewan), Gordon Williams (Alberta) and myself (Ontario). The task force concluded its deliberations in November, 1995, and its recommendations were accepted by the CCPE at its Annual Meeting that same month. Those recommendations were to establish a new group, the CCPG Implementation Task Force (CCPG-ITF) which, within a two-year time frame, would formally establish the Canadian Council of Professional Geoscientists under federal charter, with the cooperation and assistance of the CCPE. The CCPE Board of Directors committed funds to the CCPG-ITF for two years in the amount of the annual fees paid to CCPE by its constituent provincial and territorial associations on

GEOSCIENTISTS NEWSLETTER

Prepared by the
Committee for the Professional Registration of Geoscientists in Ontario (CPRGO)

FIRST ISSUE

We are pleased to present the inaugural issue of our Geoscientists Newsletter to help keep you informed on the status of professional registration in Ontario and across Canada. Since our committee held its first meeting on March 5, 1989, two new jurisdictions - Newfoundland and B.C. are now registering geoscientists. Saskatchewan and Manitoba also appear to be well on the way to achieving registration.

In Ontario we have also made considerable progress which is reported on in this issue. We also hope that the newsletter can provide a forum for debate of many of the important issues facing our profession.

SUDBURY COMMITTEE ACTIVE

The Sudbury Branch of CPRGO, organised by Dave Comba and Bob Cameron has been very active since its inception this fall. On November 14, 1990 about 100 people attended an information forum on professional registration of geoscientists. Vic Preto, a member of the Earth Science Task Force of the Association of Professional Engineers and Geoscientists of British Columbia (APEGO) gave an excellent overview of the new B.C. Act and the steps being taken to implement regulations. Bill Pearson updated the situation in Ontario and noted that we can learn much from B.C.'s experience as well as our colleagues in Alberta, N.W.T. and Newfoundland.

NEW BRANCH IN TIMMINS

Following up on the successful information forum held in Timmins on November 15, 1990, a local committee branch has been formed. Chaired by Bryan McKay, the Timmins Branch will liaise with both the main Committee and the Sudbury Branch to provide feedback from geoscientists in northern Ontario. A poster display is planned for the upcoming Kirkland Lake Geoscience Seminar on April 6, 1991.

Members of the Timmins group include Rick Bonner, Don Pudifin, Ted Mahoney, Randy Maass, Dave Hunt and John Reddick.

Please note our new address:

APEO FORMS TASK FORCE

On September 6, 1990, our Committee submitted a brief to the Association of Professional Engineers of Ontario (APEO) outlining the broad range of fields in which geoscientists practise and the important contribution that geoscientists make to the health of the Ontario and Canadian economies. Geoscientists are also increasingly being called on to fulfil a vital role in understanding the effects of human activity on the Earth in response to growing public and governmental concern about the environment.

The brief emphasised that geoscientists and engineers have for many years had a very close working relationship in which the engineer relies on the competence of the geoscientist's input. Having both groups of professionals in the same organization operating under the same set of rules and regulations would be of benefit to everyone including the public.

We were advised in a letter dated October 11, 1991 that the brief had been well received at a meeting of the Mining and Energy Minerals Committee of the APEO. This committee prepared a report which was completed late last year and circulated within their organization.

The Mining and Energy Minerals Committee has now been given a mandate by the APEO to form a task force to review the proposal for Professional Registration of Geoscientists. It is anticipated that this task force, which is currently being assembled, will consider all aspects of the proposal and make its recommendations later this year. Our committee will liaise with this group and keep you advised on progress through this newsletter.

POSITIVE SURVEY RESULTS IN MANITOBA

A Subcommittee on Professional Registration of Geoscientists in Manitoba was formed in the fall of 1990 under the chairmanship of Bill Brisbin of the Department of Geological Sciences, University of Manitoba. This subcommittee sent a questionnaire to 353 geoscientists in Manitoba to assess the degree of interest in professional registration. The response was strongly in favour of registration. Of a total of 174 respondents, 168 or 97% favoured registration and 152 or 87% favoured registration under an amended version of the Engineers Act.

Concerns expressed in the survey included portability, both nationally and internationally; importance of having committees dealing with geoscience matters to be composed of geoscientists; P.Geos should be in equivalent in every way to P.Eng; and preference for some form of national body.

Future plans for the Subcommittee include formulation of a proposal acceptable to Manitoba geoscientists and then to make a formal submission to the Association of Professional Engineers of Manitoba (APEM).

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Figure 1: First newsletter of CPRGO issued March 1991

behalf of their geoscientist members. At the end of the two year life of the CCPG-ITF, this funding would be permanently allocated to CCPG. The CCPG-ITF began operations in 1996.

The CCPG-ITF had one representative appointed by each provincial or territorial association which registers geoscientists. In the absence of such a body, a representative was appointed by the association best representing the professional interests, from a licensing perspective, of geoscientists in that particular jurisdiction. Bob Leech was the member from CPRGO for Ontario.

The influence of this overall process and particularly the wise counsel from Dr. Gordon Williams, P.Geol. who had been involved in professional registration in Alberta since the 1960s and had developed the first geology syllabus in Canada, was transformative. Gordon was a fountain of knowledge on all aspects of professional registration and a terrific mentor. I learned a tremendous amount from Gordon as well as from my other provincial and territorial colleagues. The support of APEGGA was critical to making all this happen. When we were later researching legislation, John Bowlby and I spent 3 days at APEGGA's offices in Calgary where they went through the entire registration process as well as complaints and discipline with us to ensure we have a full understanding of governance of the Act which was invaluable.

CCPG, which was renamed Geoscientists Canada (GC) in 2010, has done important work in establishing National Geoscience Knowledge and Experience Requirements for professional registration in Canada and developing harmonization of admissions standards for registration and licensure in Canada for internationally trained geoscientists. While the P.Geol. registration in one jurisdiction is readily recognized in another due to the national standards, the mobility issue of incidental practice and the need to pay full registration fees outside one's home jurisdiction still is a major issue that needs to be addressed. I hope that the current political focus on a Made-In-Canada solution to remove interprovincial barriers will provide the impetus to finally resolve this vexing problem.

PEO Mining and Energy Minerals Committee

Governments do not like creating new Acts if they can avoid it so the logical first avenue to achieve registration of geoscientists in Ontario was through a combined act with engineering following the well established precedent in other provinces and territories.

CPRGO's initial contact with Professional Engineers Ontario (PEO) was through one of PEO's Standing Committees known as the Mining and Energy Minerals Committee (MEMC) which was chaired by Orval Leigh, P.Eng., a well known mining consultant with Derry, Michener, Booth & Wahl (DMBW) which I was working for at the time. PEO President George Piper, P.Eng., briefed PEO Council on September 8, 1989 in his President's Report on the desire by geoscientists to obtain licensure. While professional engineers in the mining sector were well aware of geoscientists and their work, geoscientists were a little known commodity through much of the engineering community. CPRGO recognized that considerable work needed to be done to educate engineers about what geoscientists do and the importance of their work to both the public and engineers. At the same time, it was also recognized that the level of understanding amongst geoscientists of the rights and obligations of being licensed professionals also needed to be raised considerably.

Dr. Duncan Derry, P.Eng., co-founder of DMBW and a highly respected geologist who was in the first group of inductees in the inaugural Canadian Mining Hall of Fame in 1988, was a staunch supporter of the move to seek registration of geoscientists and was happy to provide secretarial support to CPRGO. On many occasions, he commented to me that even though he was registered as a P.Eng., *"I am a geologist, not an engineer."* He would have been very proud to see how PGO has evolved to place geologists on a high professional level.

On March 15, 1990, CPRGO sponsored a very successful "Symposium on the Status of Professional Geoscientists in Canada" that was attended by 175

people in the Metro Toronto Convention Centre. Generous financial support for the symposium was provided by the MNDM, Toronto Geological Discussion Group, Cominco Limited and Teck Corporation. Production and mailing of the proceedings was supported by Falconbridge Ltd. Presenters were John Maher, Alberta; Hugh Miller, Newfoundland; Aime Bensoussan, Quebec; Mike Cunningham, Northwest Territories; Phil Reeves, Saskatchewan; Vic Preto, British Columbia and myself for Ontario. John Bates, P.Eng., President of PEO and Peter Large, P.Eng., Executive Director of PEO, were in attendance as observers. Presented papers were assembled in a handout that was distributed to all attendees (Figure 2). This was a very important meeting for CPRGO. The attendees learned a lot about professional registration, particularly the difference between licensure (restricted practice) and right-to-title (restricted use of title only). The event also had an important impact on the attendees from PEO who realized that we were a disciplined professional group.

On February 5, 1991, the MEMC voted to create a subcommittee to investigate admitting geoscientists into PEO. Subsequently on March 5, 1991, the PEO Executive Committee was briefed on the work of the MEMC subcommittee, and on April 3, 1991 was further briefed on the proposed membership and terms of reference of the "PEO Task Force on Geoscientists" which was to produce a report in early 1992. This Task Force consulted regularly with CPRGO but by November 1991 a number of concerns has arisen about whether poor geoscience practice had the potential to have a major negative impact on the public.

I realized at the time that I needed to change the messaging so rather than speaking conceptually I went into the next Task Force meeting with specific examples of poor geoscience practice that were a major risk to the public. In particular, I highlighted the role of geoscientists in the environment which was a major growth area in our profession. One example I presented was a quarry permit application in which there was a major fault with artesian water (water seeping in under pressure) that went through the centre of the quarry which would obviously be a major

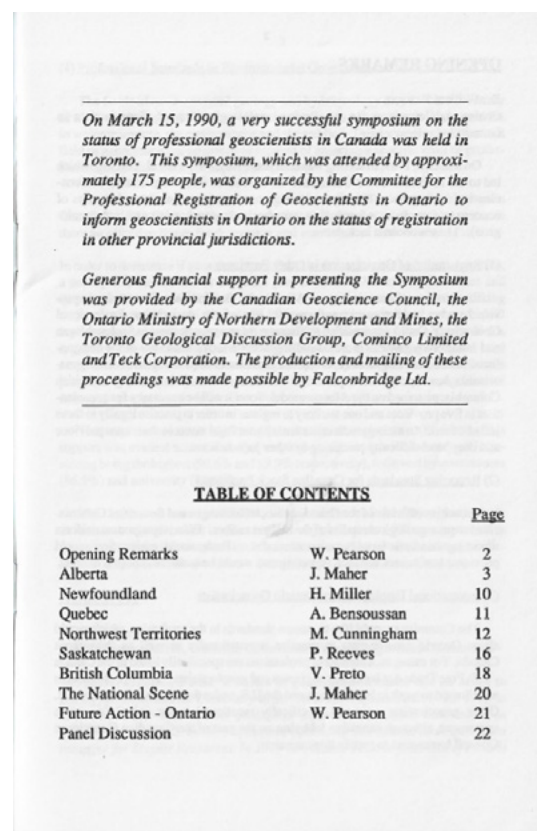
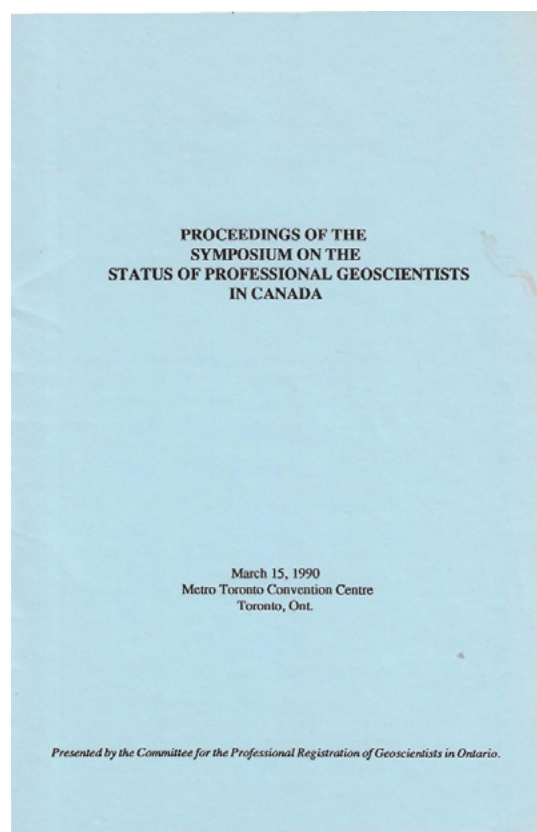


Figure 2. Proceeding volume and contents for symposium on Status of Professional Geoscientists in Canada, Metro Toronto Convention Centre, March 15, 1990

problem but went unnoticed in the application – this work, to the embarrassment of the attendees, was done by an engineering firm. I followed with several other examples provided to me by geotechnical engineers that recognized the importance of geoscience then finished by displaying a newly released map of the Geology of Ontario by the Ontario Geological Survey. I highlighted a prominent north-south trending fault through Lake Ontario whose trace went right through Pickering and extended some 80 km to the north. I noted that potential movement along this fault would be of public interest and understanding the geology of this fault would be very important. I recall the PEO lawyer leaning back in his chair and commenting “Yes, *that would be of public interest*”.

That meeting got things back on track so I felt optimistic at the time that the Committee would come up with a positive recommendation which they did. The Task Force recommended that:

1. PEO work with the geoscientists to prepare “arguments to show how the public interest would be better served by expanding the Professional Engineers Act to include the licensing of geoscientists” and

2. PEO conduct its own investigation on the regulation of the environmental field of practice.

The final Task Force report was presented to the PEO Executive Committee on February 3, 1993, who approved the following motion:

“That the Case for Professional Regulation of Geoscientists be received and that it be submitted to the Fundamental Review Task Force to aid in defining the jurisdictions of the applied scientists in multi-disciplinary areas, such as the environment, under the Professional Engineers Act.”

On February 26, 1993, PEO Council approved the same motion approved at the February 3rd Executive Committee meeting. The report was then referred to the Fundamental Review Working Group and, subsequently, to the External Networks Task Group set up under its auspices.

PEO Fundamental Review and the “Last Dinner”

Little happened for the balance of 1993 and the first half of 1994 pending completion of PEO’s Fundamental Review. This was a major study undertaken by PEO Council to determine a roadmap for the future of engineering in Ontario and specifically the role that PEO should play. As this review progressed, it was evident that there was a large divergence of opinion in the engineering community on what direction to take.

In June 1994, CPRGO representatives were invited to meet with Peter Large, P.Eng., Executive Director and Debra Delio, P.Eng., Registrar of PEO, at PEO’s office. The assembled group of geoscientists was told in very clear terms that “Geoscientists do not fit into the proposed new model for engineering.” This meeting was dubbed the “Last Dinner” because we were then told after the announcement that “*Since you’re here, you may as well stay for dinner*”. This marked an abrupt end to the first major phase of studies and deliberations with PEO.

Formation of Association of Geoscientists of Ontario (AGO) and PEO/ CPRGO Task Force on Geoscientists

In June 1994, following the “Last Dinner”, the mood of CPRGO was very low. The avenue to professional registration through the Professional Engineers Act appeared to be cut off and the government had shown little interest in pursuing an independent act. However, the Committee did not have to wait long until a major issue arose that brought licensure of geoscientists back to the forefront with not only PEO but also the government. In August 1994, the Ministry of the Environment (MOE) released recommendations for sign-off on contaminated sites. It was proposed that only P.Eng.s be recognized which brought a storm of protest from environmental geoscientists, especially hydrogeologists. PEO’s response to MOE acknowledged that other groups of professionals may be qualified to sign-off on contaminated sites

and highlighted geoscientists as the most significant of these other groups (Figure 3) PEO offered to provide leadership in resolving this issue which was immediately taken up by CPRGO. In December 1994, discussions with PEO were re-started in conjunction with re-assessment of the Fundamental Review document which was not well received by the PEO membership. Discussions with PEO resumed on incorporating geoscientists under the Professional Engineers Act with several meetings being held with the PEO External Networks Task Force.

While CPRGO had played an important role in lobbying for licensure of geoscientists from 1989 to 1995, it was evident by early 1996 that the organization could no longer operate as an ad hoc committee. It was necessary to have a more formal association and begin the process of building a nascent professional association. In this regard and in spite of the many frustrations dealing with PEO, CPRGO had learned an enormous amount over this period from PEO staff about how to set up and manage a professional association and especially the major activities

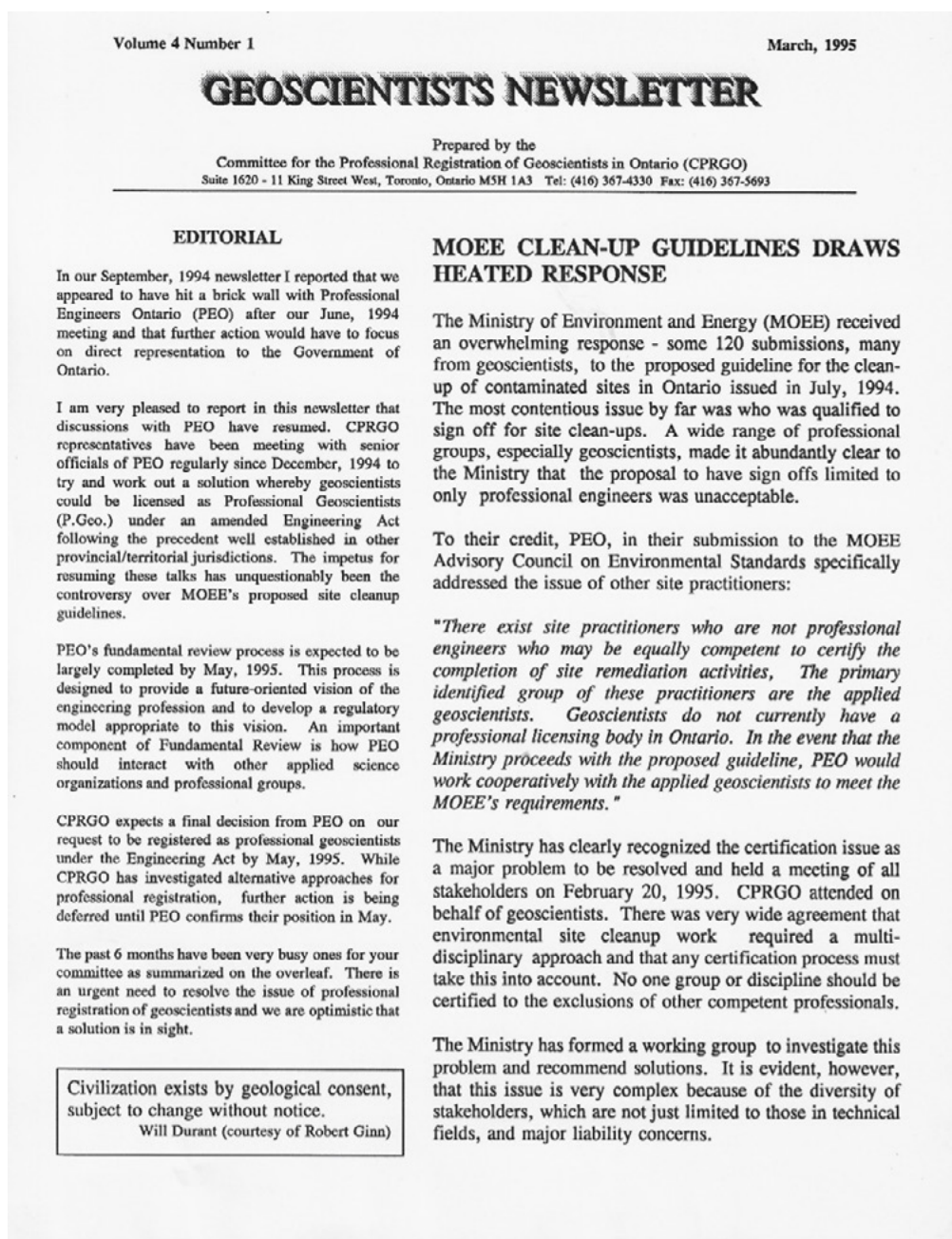


Figure 3. CPRGO Newsletter of March 1995 highlighting heated response to proposed MOEE Clean-up Guidelines

including registration, complaints and discipline and enforcement. In particular Peter Large, P.Eng., Debra Delio, P.Eng., Ian Eng, P.Eng., and John Currie, P.Eng., spent considerable time with CPRGO representatives educating us about the realities of managing a professional self-regulatory organization.

This knowledge, gained working on the joint committees with PEO, would prove invaluable in the next five years. The Association of Geoscientists of Ontario (AGO) was formed on March 19, 1996 at a meeting held in conjunction with the annual PDAC Convention almost seven (7) years to the day after the first meeting that formed CPRGO. The founding Board consisted of Bill Pearson, President; John Bowlby, Vice President; Janet Haynes, Secretary-Treasurer; Linda Bloom; Andy Cooper; Mike Cosec; Bob Leech; Brian McKay; Gary Pringle; and Bill Stiebel. AGO was formally incorporated on July 29, 1996. The operation of AGO was much more formalized than CPRGO with issuance of paid memberships to those who were practising geoscientists. Over the next three years, membership would grow to over 1000, giving AGO considerable credibility in presenting the case for licensure of geoscientists to both PEO and the government.

The initial meeting of the PEO/AGO (originally PEO/CPRGO) Joint Task Group on Geoscientists was held in January 1996. Task Group members were John Fisher, CET (Chair); John Bowlby; Boris Boyko, P.Eng.; Andy Cooper; Chris Montague (PEO legal counsel); Owen White, P.Eng.; Debra Dileo, P.Eng.; Ian Eng, P.Eng., Peter Large, P.Eng., and myself. PEO provided significant staff time to support the work of the Joint Task Group. It was agreed that AGO would contribute \$10,000 to assist in financing the project. These funds were raised by AGO through membership fees and member contributions. In the February/March 1996 issue of the PEO Link, there was a front page news item on formation of the Fundamental Review Task Groups including a task group working on licensure for geoscientists.

The May/June 1996 issue of Engineering Dimensions included an advertisement inviting comments on the licensure of geoscientists under the

PEO regulatory umbrella. A progress report on the Fundamental Review Task Groups, including the PEO/AGO Task Group on Geoscientists, was presented to PEO Council on June 20-21, 1996. At the September 19-21, 1996 PEO Council meeting, the Chair of the PEO/AGO Task Group, J. Fisher, CET, presented the report entitled “A Proposal for Licensure of Geoscientists in Ontario” to Council. PEO Council unanimously approved the following motion:

“That the Professional Engineers Act be amended to include a definition of the practice of geoscience and licensure of geoscientists; and that the revision create a licensing regime for professional geoscientists in Ontario that is parallel to the licensing of professional engineers in Ontario and to the licensing of geoscientists in professional practice in other Canadian jurisdictions.”

Preparation of Proposed Amended Professional Engineers Act

After many years of lobbying, it appeared that geoscientists were finally on track to achieving licensure. The October/November issue of The Link had a lead news item that described the PEO/AGO Task Group on Geoscientists’ presentation to Council’s September workshop, Council approval and the next steps. The President’s Message in PEO’s 1996 Accountability Report published in April/May 1997 Engineering Dimensions, included a section on PEO Council approval of the PEO/AGO Task Group on Geoscientists’ recommendations, describing what was approved and the rationale. The Ontario government was also very supportive.

At a presentation to PEO Council on June 20, 1997, the Hon. Jim Flaherty, then Parliamentary Assistant to the Attorney General, stated that a detailed proposal from PEO to license geoscientists would likely be well received by the government. PEO Council was briefed on the plan to submit amendments to the Professional Engineers Act to enable licensure of geoscientists; and in the fall of 1997, separately from other proposed changes to the Act. Council approved the following motions:

“That Council support and approve using the Ontario Government’s Red Tape Improvement Bill approach to proceed with the Act and Regulation changes to provide licensure of geoscientists in Ontario; and

That Councillors forward to the Registrar comments and/or concerns about the proposed amendments to the Act no later than July 31, 1997 so that alteration may be considered and Council approval secured in time to accommodate the government’s Red Tape Improvement Bill timetable.”

Over the summer of 1997, the AGO Executive worked with PEO to develop a draft Amended Professional Engineers Act. This was relatively easy to do following precedents in other provinces with combined Acts requiring a definition of the practice of professional geoscience and the licensing term for professional geoscientist (P.Geo.) but other requirements were the same as for professional engineers. A major sticking point, however, was how much professional geoscientists would have to contribute towards equity in PEO which had built up considerable resources over its long history.

On August 12, 1997, PEO Council approved a Memorandum of Understanding between PEO and AGO setting out the basis for proceeding with proposed amendments to the Professional Engineers Act to incorporate licensure of geoscientists. However, Council declined to approve the proposed changes to the Act, deciding to defer consideration to September so Councillors could have more time to review the detailed text. PEO Council on September 20, 1997, by a vote of 16 in favour and 10 opposed, approved the proposed Act amendments to enable licensure of geoscientists under the PEO regulatory umbrella. The Recommendations for Preparation of An Act to Amend the Professional Engineers Act were sent to the Ministry of the Attorney General by PEO on September 26, 1997. Maureen Jensen at the time was on PEO Council as a representative for geoscientists. I recall meeting her shortly after the vote at a function at the Hockey Hall of Fame where she congratulated AGO and myself on the result. I remember feeling unsure if we really had won as there seemed to be storm clouds brewing.

Storm Clouds Brewing and the End of the Combined Act

It was at this time that two separate events occurred that would have a major impact on the direction of licensure for geoscientists in Ontario. The first was the Bre-X scandal which broke in March 1997 and rocked the Canadian mining industry causing a catastrophic collapse in confidence in everyone involved in the industry including exploration geologists. The second was the rise of a group of dissident engineers known as “Engineers for Engineers” who were strongly opposed to the changes recommended by the PEO Fundamental Review Committee, particularly to bringing in outside groups such as geoscientists.

On October 1, 1997, the PEO Executive Director received a “*Notice of Motion on Incorporating Geo-Scientists in the APEO*” moved by President-Elect Walter Bilanski, P.Eng., and seconded by Councillor Nick Volf, P.Eng., as follows:

“Be it resolved that confirmation by membership be obtained through referendum on this issue of incorporating Geo-Scientists in the APEO and resulting changes in the name and title.”

At the PEO Council meeting of November 21, 1997, this motion was narrowly passed by a margin of one vote. While technically not binding, it was clear that in order for the legislation to proceed, the support of PEO membership would be required. The period of the referendum marked a low point in the relations between AGO and PEO with several insulting articles and letters being published in the Engineering Dimensions vehemently opposing incorporation of geoscientists under the Professional Engineers Act. The letter ballot was mailed to PEO members on January 30, 1998 with the results published in the April/May issue of The Link – the referendum to incorporate geoscientists had been defeated by a vote of 60% against. The Northern Miner highlighted that this campaign had been a low blow to geologists (Figure 4). The new PEO Council moved quickly to overturn the previous motions to incorporate geoscientists and the proposal for an amended Act was

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The Northern Miner

NORTH AMERICA'S MINING NEWSPAPER

1450 Don Mills Rd, Don Mills, Ontario M3B 2X7

March 23-29, 1998

We are, we are, we are, — you're not

Campaign a low blow to geologists

Ontario's engineers have returned their ballots in a referendum on changes to the Engineers' Act. The changes provide for professional registration of geologists and geophysicists. If the engineers approve the changes, the Act will prescribe minimum standards of education and experience to be met by anyone practising in the earth sciences. It will also give the professional body, Professional Engineers Ontario (PEO), the power to discipline geoscientists for misbehavior or incompetence.

The surprise is that these proposals were forced to a referendum at all. Across Canada there has been a movement to bring about professional registration, springing from a recognized need to ensure earth scientists working in mining, construction and environmental protection are doing their jobs capably and ethically. The majority of the geological fraternity was anxious to have a formally recognized code of practice, backed up by legal recognition of earth science as a self-regulating profession.

It was already possible for geologists with accredited engineering degrees to register as professional engineers. The proposed changes open the door to geologists with science degrees as well.

Registration had long been a fixture in Alberta and the Northwest Territories, where geologists and geophysicists were registered by the same professional body as the engineers.

Other provinces developed registration systems on the Alberta model in the early 1990s, and legislation is awaiting passage in three others.

It looked as though Ontario would follow: the Association of Geoscientists of Ontario and the Professional Engineers Ontario had jointly placed a request for revisions to the Engineers' Act before the government, with the approval of a strong majority of the PEO's council. Then a group calling itself "Engineers for Engineering" stepped in.

At a PEO council meeting last Nov. 21, a motion putting the changes to a referendum of the whole membership passed by one vote. Consulting the membership on the changes is reasonable, but the group's campaign against registration of geoscientists has turned into a circus of name-calling and falsehoods.

PEO Councillor Nicolae Volf wrote in the January issue of *Engineering Dimensions* that the changes would compromise the PEO's commitment to protect the public interest, create discipline and enforcement problems, and turn the organization into "a storefront for licence." He suggested earth scientists were "not mentally developed to provide practical solutions." Patrick Quinn, the PEO's vice-president, argued that "if geoscientists had university curricula acceptable to our association, they could be classed, as many are, as geotechnical engineers," a claim also

echoed by Volf.

Both opponents raise the spectre of Bre-X Minerals. "Geoscientists," writes Volf, "have nothing to offer to the engineering profession except Bre-X." Quinn chimes in, "To associate engineers with these types of scandals is something we should avoid."

Too late, gentlemen: engineers are liberally plastered with the muck of Bre-X. The mining engineers at Kilborn SNC Lavalin missed abundant clues that Bre-X's Busang deposit was a fraud; so did metallurgical engineers at the Australian consulting firm Normet.

On the other hand, geologists without engineering degrees played a large part in exposing the fraud: we can cite Freeport geologists David Potter and Steven Van Nort, and Strathcona Mineral Services geologists Henrik Thalenhorst and Reinhard von Guttenberg.

Volf and Quinn are practising professionals; by now, they should have outgrown such campus-bar taunts and badly-informed innuendo.

When a committee of Ontario geologists first approached the PEO in 1989, it was a signal from the profession that it wanted all geologists, whether their degrees were in engineering or science, to submit themselves to the discipline of the Engineers' Act. That a minority of engineers should now be trying to block that with insults and untruths is a curious way of serving the public interest.

Figure 4. Article written by Jim Whyte in *Northern Mining* March 23-29, 1998 "Campaign a low blow to geologists".

dead. In August 1998, the Northern Miner published an article entitled “Is Anyone Listening?” highlighting the need for a champion to achieve licensure of geoscientists in Ontario (Figure 5).

Many geoscientists had commented to me over the years before the collapse of the joint Act, that they would much prefer to have a separate Act. My standard response was always “*Only if all options with*

engineers are exhausted.”. As events unfolded in the coming weeks and months, it was evident that with the combined Act being dead, the only viable route forward was an independent Act. We knew that our membership was likely large enough to financially sustain an independent association but how could we achieve this politically? We didn’t have to wait long for the major push we needed to make legislation a reality.

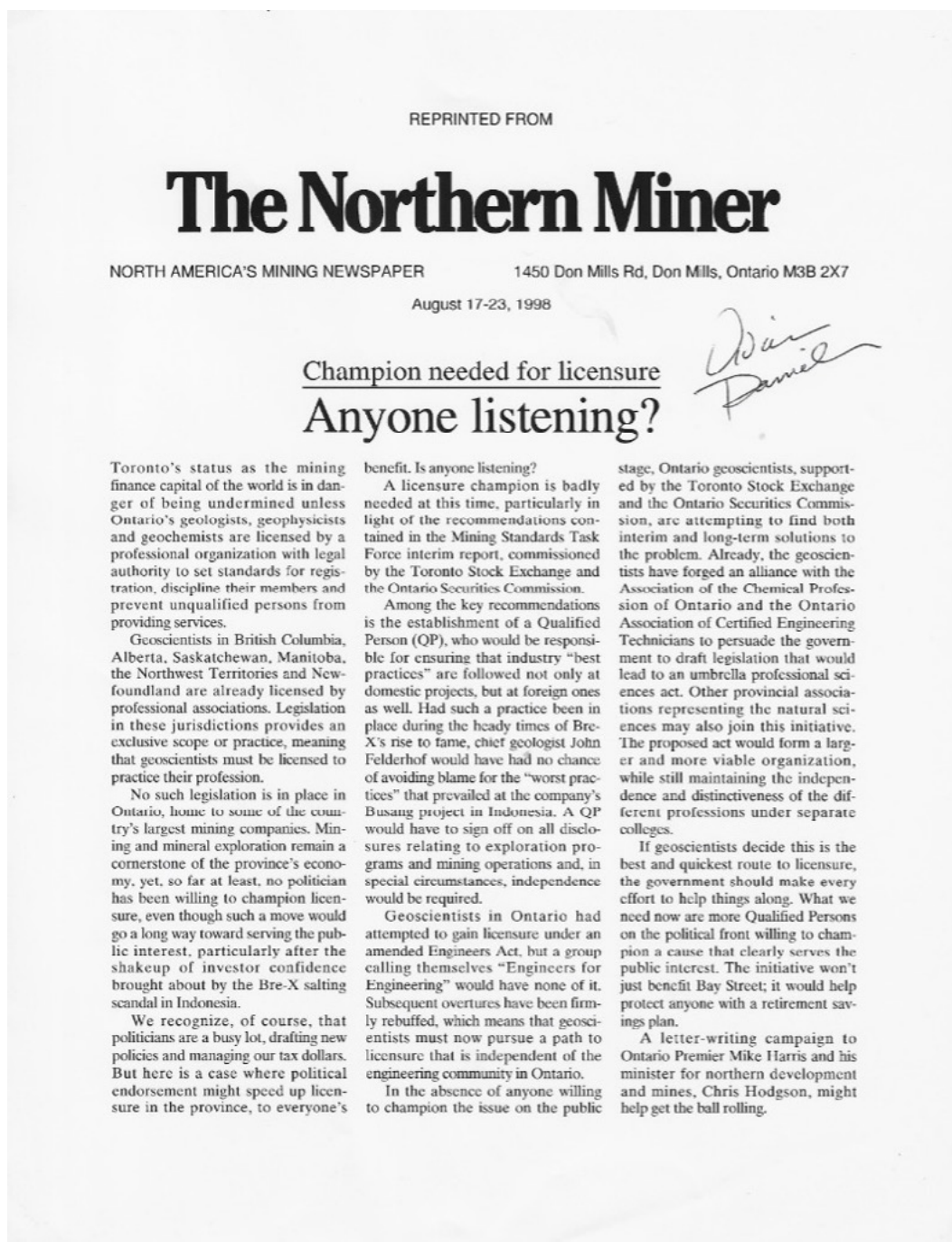


Figure 5. Article in Northern Miner written by Editor Vivian Daniels “Anyone Listening” highlighting the need for a champion for licensure of geoscientists August 17-23, 1998

Bre-X and The Mining Standards Task Force (MSTF)

As Virginia Heffernan reported for CIM in March 2019, *“Even for a convention known for its parties, the 1997 PDAC was a grand affair. The March event in Toronto attracted a record number of participants, cash was flowing into exploration, and Canadian junior Bre-X Minerals was winning awards for finding one of the largest gold deposits in the world. Champagne corks could be heard popping throughout the hallways of the Royal York hotel as the industry succumbed to Bre-Xphoria.”*

But shortly after the revellers disbanded, Bre-X’s exploration manager fell to his death from a helicopter. Mounting evidence suggested that the junior’s Busang project in Indonesia was a hoax and that samples had been salted with gold from other sources. In May 1997, Bre-X was delisted from the Toronto Stock Exchange (TSE), wiping out \$3 billion in investments as the company’s shares – trading for nearly \$200 apiece a year earlier – became worthless.”

A scam on this scale was unprecedented and was a major black eye on the Canadian mining industry and capital markets. The Toronto Stock Exchange (TSE) and the Ontario Securities Commission (OSC) moved quickly once the scam was exposed to form the Mining Standards Task Force (MSTF) bringing together industry and government experts to instill professionalism and restore investor confidence in the Canadian mining industry and public markets. Maureen Jensen who joined the TSE in 1998 and was a member of MSTF commented at the time: *“Before Bre-X, the public rules for disclosure were very nebulous. When it came to reporting on technical matters, it wasn’t necessary for companies to use any common definitions and there were no standards.”*

MSTF solicited feedback from industry, regulators, government and investors, issuing an interim report in June 1998 with a number of key recommendations, of which the most important was the introduction of the Qualified Person (QP) concept. A cornerstone of National Instrument 43-101 is the Qualified Person (QP) who writes the technical reports and is responsible for signing off on any news releases or other public disclosure. The QP has to be a qualified

engineer or geoscientist with experience relevant to the project and in good standing with a professional organization.

In their interim report, MSTF noted that no such professional bodies existed in some provinces, most notably in Ontario and Quebec, the two largest mining jurisdictions in Canada. Once the Interim report was released, I wrote the Minister of MNDM urging him to proceed with licensing of geoscientists. The letter in response was rather lukewarm which surprised me. It seemed clear to both Maureen Jensen and me that the importance of the situation had not been fully appreciated. A meeting with the Minister’s policy advisor soon cleared this problem up. The government asked me if the QP recommendation would change – when I met with the Assistant Deputy Minister in the fall of 1998, I had letters from the President of the Toronto Stock Exchange and the Manager of MSTF clearly stating that it would not change in the final report. We were finally heading to the finish line.

The final report of the MSTF *Setting New Standards: Recommendations for Public Mineral Exploration and Mining Companies* was issued on February 2, 1999. On the same day, the Ontario Government announced that it would work with the province’s geoscience community to establish a self-regulatory professional association for geoscientists in Ontario (Figure 6).

The recommendations of this task force would be incorporated into National Instrument NI 43-101 which became law on February 1, 2001. Fortunately the rigorous membership process that we had established for AGO was accepted by the Ontario Securities Commission until APGO was able to establish licensed geoscientists which were first registered in March 2002.

When the final MSTF report was released, Peter Foster of the Financial Post wrote that the report had *“landed with a muffled thud”* with *“arguably....little that is useful”*. I wrote a rebuttal to his article (Figure 7) in which I argued that *“the process will ensure that that only qualified individuals carry out and report on exploration and mining activities”*. Twenty-five years later NI 43-101 is recognized worldwide as a leading standard for reporting by public mining and mining exploration companies. The instrument also continues to evolve with feedback from industry, regulators and the public.

President's Message

By Bill Pearson, President, AGO

On February 2, 1999, the Toronto Stock Exchange-Ontario Securities Commission Mining Standards Task Force (MSTF) released its Final Report entitled *Setting New Standards**. Over 100 submissions were received to the interim report released on June 8, 1998. This extensive consultation period has led to a number of refinements in the final report, the most notable of which are a clearer explanation on how the Qualified Person ("QP") concept will work, more accountability for analysts, and improvements to the proposal for accreditation of laboratories. This is a landmark report that sets new benchmarks for reporting by mining exploration and mining companies.

The final MSTF report reaffirmed the importance of licensing geoscientists for implementing the QP concept. Indeed the report notes, "*It is clear that to fully implement the QP concept, it is essential that geoscientists in Ontario and Quebec be licensed and given professional status.*" The report strongly recommends that geoscientists in Ontario join AGO in support of this process.

The Honourable Chris Hodgson, Minister of Northern Development and Mines (MNDM), in response to this recommendation, announced that, "*The Government will work with the province's geoscience community to establish a self-regulating professional association for geoscientists in Ontario.*" He further went on to say, "*We will help the Association of Geoscientists of Ontario to further consult with the people affected by this initiative, Ontario is among the*

last provinces that do not provide registration for geoscience professionals. It's time we caught up with the rest of the country."

Your Board will be working very closely with personnel from the MNDM to develop the consultation process and prepare legislation including proposed admission requirements. In addition, I am pleased to advise you that we have formed an independent Advisory Committee to work with the Board of Directors of the AGO and officials at the MNDM. The Advisory committee, composed of experienced senior mining, environmental, financial and legal professionals, will provide advice on preparing legislation, developing a business plan and ensuring that the resulting self regulatory organization will enable geoscientists to fully meet the requirements of the *Qualified Person* concept. Once legislation is fully implemented the SRO will administer the regulations and will ensure high standards of entry, discipline and enforcement in the profession. (See page 2 for the members of the Advisory Committee including biographies)

1999 will be an exciting year for the geoscience profession in Ontario as we continue to grow our profession. Your continued support and input is critical as the process towards establishing a self-regulatory process proceeds. In the next two months, we have scheduled a series of public presentations including the annual meeting which are listed on the back page. Make sure you regularly check AGO's website at <http://www.geosci.on.ca> for breaking news.

* Copies of the final MSTF Report can be obtained from TSE Publications, 2 First Canadian Place, The Exchange Tower, Toronto, ON M5X 1J2; Tel: 416-947-4681 and Fax: 416-947-4708. The cost is \$20 per copy including GST and orders must be prepaid.

Government Supports Task Force Recommendation on Mining

The following reprint is a Press Release from the Ministry of Northern Development and Mines, February 2, 1999.

The Government will work with the province's geoscience community to establish a self-regulating professional association for geoscientists in Ontario, Northern Development and Mines Minister Chris Hodgson announced today.

Hodgson was responding to a recommendation from the Mining Standards Task Force report released today by the Toronto Stock Exchange (TSE) and the Ontario Securities Commission (OSC). The task force was formed in April 1997 with a view to recommending approaches to reinforce public and investor confidence in the mining industry and securities markets.

"We will help the Association of Geoscientists of Ontario to further consult with the people affected by this initiative," said Hodgson. "Ontario is among the last provinces that do not provide registration for geoscience professionals. It's time we caught up with the rest of the country."

Geoscientists include a wide range of earth science professionals such as geologists, geophysicists, geochemists and hydrogeologists.

"Ontario is open for business. It's one of the best places for mining investments in the world. By supporting the TSE/OSC Mining Standards Task Force recommendation to regulate geoscientists, this government is showing its commitment to make Ontario an even better place to invest," said Hodgson.

Figure 6. Special Edition of AGO Update Newsletter highlighting the announcement of the Ontario government to work with the province's geoscience community to establish a self-regulatory professional association for geoscientists in Ontario

LETTERS

Geoscientists reply

Peter Foster, in his Feb. 5 editorial (Bre-X Plus Two: Still Caveat Emptor) takes the view that the TSE-OSC Mining Standards Task Force has wasted the last two years producing a report that has "landed with a muffled thud" with "arguably . . . little that is useful." He presents the same tired old argument that no amount of regulation will prevent fraud but misses the whole point of the exercise, which is to make fraud far more difficult to perpetrate.

There can be no doubt that if the reporting standards proposed by the MSTF had been in place, the Bre-X scam would have been caught at a much earlier stage. Society has laws against crimes, but crimes still occur. Does that mean we should stop passing laws? Obviously not, and fraud is no different.

Mr. Foster notes that companies with a legitimate story to tell have no reason to "obfuscate." He is absolutely right — the vast majority of Canadian mining companies and professionals do a very good job, but the industry finds itself faced with a major credibility problem caused by these scams. Are we as an industry supposed to sit around and do nothing?

The MSTF report documents and requires what reputable companies already practice — cheerleading analysts and promoters need not apply. Professionals who are doing their job do not have to fear being a QP; far from being a permanent noose, the process will ensure that only qualified individuals carry out and report on exploration and mining activities. This places qualified professionals in Ontario who know the industry in the forefront of ensuring adequate standards, a move that will bring this province in line with other Canadian and international jurisdictions.

The Association of Geoscientists of Ontario is committed to improving standards in the profession and restoring investor confidence in an industry that continues to be important to Ontario and Canada.

Bill Pearson, president, Association of Geoscientists of Ontario.

Development and Passing of the Professional Geoscientists Act, 2000

Once the Ontario government had agreed to proceed with an independent act to license geoscientists, the pace increased considerably. In March – April 1999, AGO carried out a consultation, financially supported by the Ministry of Northern Development and Mines (MNDM), with the Ontario geoscience community to determine a consensus on qualifications that should be required for licensure and features that should be incorporated into an independent act. Meetings were held across the province to obtain input directly from geoscientists and individuals were encouraged to send in submissions.

Based on input from the consultation and an extensive review of legislation and procedures in other jurisdictions in Canada licensing geoscientists, AGO prepared and released a Backgrounder document in October 1999 outlining a detailed proposal for licensure of professional geoscientists in Ontario. Included in this document were detailed knowledge requirements based on an extensive consultation led by John Bowlby from 1996-1999 with the Ontario university geoscience departments.

At the request of MNDM, a meeting was held with the President of PEO, Peter DeVita, P.Eng., in September 1999 with Neil Westoll, P.Eng., and Andy Cooper, representing AGO. While both sides agreed that a combined Act was no longer an option, PEO agreed to support AGO in seeking an independent act for licensure of geoscientists provided that there would be no impact on professional engineers who practiced in the area of geoscience. This was a pivotal meeting that brought the important support of PEO on-side and began the process of building a strong relationship between PEO and the future new association that would license geoscientists in Ontario.

The other organizations that we consulted about the impact of the proposed legislation were the local prospectors' associations. I held a call with a number of the different prospector associations and assured them that nothing in the proposed Act would affect

Figure 7. My letter to the Editor, Financial Post, February 15, 1999

their rights under the Mining Act, a position that the government confirmed by putting a specific statement to that effect in the Professional Geoscientists Act, 2000. The Ontario Prospectors Association (OPA) ended up loaning us \$10,000 which was most appreciated.

During the same period, AGO worked on developing a detailed business plan for formation of the Association of Professional Geoscientists of Ontario (APGO). This work was aided immensely by the AGO Advisory Committee, appointed on February 9, 1999. Members of this committee included a diverse cross-section of seasoned industry and regulatory professionals to provide experiential advice to the nascent professional association. This committee was also instrumental in helping raise much needed financing for AGO and APGO. Members were Neil Westoll, P.Eng.; (Chair), Michael Bourassa, LL.B.; John Gartner, P.Eng.; Gerald Harper, P.Eng.; Maureen Jensen; Bernie Haystead; Paul Severin; and Howard Stockford, P.Eng.

The Advisory Committee was directly responsible for raising the initial \$100,000 seed capital with a kick-off donation of \$25,000 from Falconbridge through Paul Severin. This was followed by donations of the same amount from INCO and the Toronto Stock Exchange. Over the next two years this committee would help AGO and APGO raise over \$300,000 for the startup financing of APGO.

On January 15, 2000 the phone rang in our office at Watts, Griffis & McOuat who kindly provided AGO with office space – it was the Corporate Policy arm of MNDM – *Can you develop a draft Act and Regulations for a proposed Professional Geoscientists Act?* We said, “Yes we can, when do you need it by?” The response was “January 30th would be good.” We got on the phone right away to Michael Bourassa, a top mining lawyer and a member of our Advisory Committee, then with Aird & Berlis (now with Fasken) who had been advising us through the entire process of seeking legislation on

a pro-bono basis. Michael jumped in on the task and along with our extensive review of legislation in other professions and jurisdictions, we were able to produce a draft act and regulations in the requested time frame. All professional geoscientists in Ontario owe Michael an enormous debt for his tremendous contribution to make the Act a reality. This process was helped too by an excellent articling law student Craig Bridgman who wrote much of the draft regulations and bylaws and that we could afford at \$25 per hour. From there things started to really move. I had my first meeting in MNDM Minister Hudak’s office and Legislative counsel took over the work of drafting the legislation. What I learned from this process was make sure your intent is very clear – legislative counsel will change your wording. In April 2000, I went around the province for a series of consultations on the Act which overall was well received. I was in the drawing room of Cabinet when the Act was presented to Cabinet for approval which I am told is a rare privilege. Mr. Ouellette, Parliamentary Secretary, on behalf of Minister Hudak rose in the House to introduce Bill 86, The Professional Geoscientists Act, 2000, for 1st reading on June 20, 2000 (Figure 8 - see full text of Minister Hudak’s enthusiastic introduction to Bill 86 at the end of this paper).. I was out of town at the time but a number of our AGO members were in the gallery for this important moment. I was there for second reading on June 20, 2000 and was recognized in Hansard. I had hoped it would get third reading that day but it was held back until the final day of the legislative session on June 22, 2000 when it was unanimously passed and received Royal Assent on June 23, 2000. The whole final process by the Speaker took all of about 38 seconds – I thought at the time that 11 years of my life had been compressed into just 38 seconds!

We soon learned however that the real work was about to begin.



1ST SESSION, 37TH LEGISLATURE, ONTARIO
49 ELIZABETH II, 2000

Bill 86

*(Chapter 13
Statutes of Ontario, 2000)*

An Act to establish the Association of Professional Geoscientists of Ontario

The Hon. T. Hudak
Minister of Northern Development and Mines

1st Reading	June 8, 2000
2nd Reading	June 20, 2000
3rd Reading	June 22, 2000
Royal Assent	June 23, 2000

Printed by the Legislative Assembly
of Ontario

1^{re} SESSION, 37^e LÉGISLATURE, ONTARIO
49 ELIZABETH II, 2000

Projet de loi 86

*(Chapitre 13
Lois de l'Ontario de 2000)*

Loi visant à établir l'Ordre des géoscientifiques professionnels de l'Ontario

L'honorable T. Hudak
Ministre du Développement du Nord et des Mines

1 ^{re} lecture	8 juin 2000
2 ^e lecture	20 juin 2000
3 ^e lecture	22 juin 2000
Sanction royale	23 juin 2000

Imprimé par l'Assemblée législative
de l'Ontario



Figure 8. Cover of Bill 86, the Professional Geoscientists Act, 2000

Appointment of Transitional Council

Minister Hudak appointed the Transitional Council on August 23, 2000 and the first meeting of the Council was held on September 8, 2000 in the offices of Gartner Lee. Members of this First Council were Adriana Benoit; John Bowlby; Andy Cooper; Shirley Cordiner; Mike Cosec; Maureen Jensen; Dean MacEachern; Greg Finn; Sandra Garofolo; Arsalan Mohajer; Ken Petersen; Bill Stiebel; Val Spring; Steve Usher; Neil Westoll; John Buckle; Richard Puntis and myself; Scott McLean was later appointed to the Transitional Council to replace Dean MacEachern, who resigned. Council appointed myself President, John Bowlby Vice President, Andy Cooper Treasurer and Val Spring Secretary. Thus the work began to fully implement the Professional Geoscientists Act, 2000, pass required regulations and bylaws to build a self sufficient regulatory organization (Figure 9).

Implementation of The Professional Geoscientists Act, 2000

The Annual Report of 2000-2003 goes through the details of the key points of the Act which the reader is referred to for details. The Act, Regulations and Bylaws are available on the PGO website at www.pgo.ca

2000-2001 was spent intensely working on developing regulations for registration and complaints-discipline along with corporate bylaws and

registration procedures. There were some eventual delays waiting for passage of regulations but by spring 2002 the registration process was in progress with the first registrants being admitted in May 2022 (Figures 10 and 11). My own registration came shortly after in June 2002 but I insisted on having number 0001 as Founding President which I proudly display on the wall of my office at home.

One of the most difficult challenges to forming APGO was to raise sufficient startup capital and to build up the membership to ensure that the Association would be financially self-sufficient once fully established. Council found that as work proceeded on developing APGO, the original business plan had to be constantly revised. Council was able to reduce overall operating costs by \$100,000: however revenue projections were still significantly lower than those in the original business plan because of the slower than anticipated buildup of membership.



Figure 10. First registration packages with APGO staff (Left to right, Bill Pearson, John Bowlby, Interim Registrar, Marilyn Barton Office Manager, Melinda Semkiw, Registrar's Assistant), December 2001



Figure 9. First meeting of the Transitional Council with Minister Hudak, September 8, 2000



Figure 11. One of the many working meetings of the APGO's Transition Council during the busy start-up period, November 2002

In September 2002, the membership numbers had improved considerably but the financial picture was still grim. Council held its first meeting in Northern Ontario in Sudbury and finances dominated the agenda. It was evident that the original membership fee set at \$275 had to increase because the membership numbers were much lower than projected in the original business plan. In addition, it was determined that the application fee was not set high enough to cover costs of the registration process. Council made the tough decision to increase the annual membership fee to \$400 per year and to significantly increase application fees. Arsalan Mohajer, one of our Transitional Council members, helped immensely by loaning us \$25,000 which allowed us to continue operations while we worked on raising additional funds.

While there was a predictably negative reaction amongst the membership, many accepted that this rate increase was essential to ensuring a successful startup. APGO had to be properly funded to ensure that it could meet its mandate. A year and a half later this would prove to be one of the most pivotal decisions made by the Transitional Council which paved the way for reaching financial stability by the end of the First Elected Council's term.

From 2000-2003, APGO was able to raise almost \$600,000 in donations and in-kind contributions from senior and junior mining companies, the Toronto Stock Exchange (TSE), technical and industry associations and many individuals to whom APGO is enormously grateful. All donations helped considerably including several which came at very critical times in APGO's development:

- Initial seed capital of \$75,000 cited above from Falconbridge, INCO and the TSE in March 2000
- \$100,000 from Placer Dome Inc. in March 2001 which allowed APGO to complete implementation of the membership process and to function when membership revenue was very limited. Jim Gowans, President of Placer Dome, was a major supporter and was involved

in registration of geoscientists in the Northwest Territories (now including Nunavut).

- \$25,000 grant from MNDM in December 2001 to support sending out application packages
- Grant by MNDM of \$50,000 in December 2002, which was matched by a \$50,000 loan from PDAC in January 2003, which allowed APGO to get "over the finish line"

In September 2002, the previously separate positions of Executive Director and Registrar were combined and a full time Executive Director/Registrar, Oliver Bonham, P.Geo. was appointed after a wide ranging search process. This marked a significant maturing of the organization.

The final task of the Transitional Council was to hold the first elections for Council in the spring of 2003. All councillors except public appointees were required to stand for election with staggered terms of office so that in subsequent elections only one-third of councillors would be changed in each election. As set out in the Act, two Lieutenant Governor Appointees (LGA) and one non-member LGA were appointed by the government.

In May 2003, at the end of the term of the Transitional Council, APGO was now a fully established self-regulatory professional association with an elected Council three (3) years after the



Figure 12. My receiving a plaque for service to APGO from Bill Stiebel, P.Geo., President of the first elected Council on my completion of my term as Past President at the Annual Meeting June 3, 2004.

Act was given Royal Assent. The mandate of the Transitional Council was now complete.

While there were many challenges along the way, overall the Transitional Council believes that the job was very well done, a testament to the hard working men and women on Council, the dedicated staff and strong support from the membership (Figure 12).

At the time I wrote: *“The foundation had been laid to develop what the Transitional Council believes will become one of the strongest professional geoscience Associations*

in Canada and one of the best in the world. It was now up to the members and their elected Council to take APGO forward and build on the successes of the Transitional Council.”

25 years later I look back with great pride on what we all collectively accomplished. Today PGO is a thriving self-regulatory professional organization serving the public very well with a bright future ahead of us just as I had hoped for those many years ago.

References

Association of Professional Geoscientists of Ontario (APGO) Transition Period (2000-2003) and 2003 Annual Report.

Final Report of the TSE/OSC Mining Standards Task Force, Setting New Standards: Recommendations for Public Mineral Exploration and Mining Companies, February 9, 1999.

Virginia Heffernan – Standard Bearers, CIM Magazine March 1, 2019.

Appendix A

Summary: The Winding Path to Licensure of Geoscientists In Ontario From 1980-2003

1980s	ACROSS CANADA Movement for licensure of geoscientists accelerates in provinces and territories across Canada.
1984	PEO ACT AMENDED The Professional Engineers Ontario (PEO) Act is amended to exclude natural scientists, causing problems for geoscientist registration in Ontario.
1989	CPRGO FORMED In response, a group of geoscientists and engineers form the Committee for the Professional Registration of Geoscientists (CPRGO). They survey geoscientists and find 86% of respondents in favour of professional registration.
1990	CPRGO PRESENT THEIR CASE 150 people attend the "Symposium on the Status of Professional Geoscientists in Canada" at the Metro Toronto Convention Centre. CPRGO presents papers about the importance of registration. Attendants from PEO see that CPRGO may have a point.
1991	TASK FORCE CREATED The Mining and Energy Minerals Committee vote to create a subcommittee, the Peo Task Force on Geoscientists, to investigate admitting geoscientists into PEO. Engineers are generally still unconvinced of the importance of geoscience regulation.
1992	WHY DOES IT MATTER? At a Task Force meeting, Bill Pearson presents concrete evidence of the importance of licensure-- using examples of poor geoscience practice and it's potential to harm the public.
1993-94	ONE STEP FORWARD The PEO Task Force submit a positive recommendation to the PEO Executive Committee to include geoscientists in the Professional Engineers Act and a motion is passed to that effect.
1994	TWO STEPS BACK PEO propose a new model for engineering, one that does not include geoscientists. Deliberations with PEO come to an end over a meal, dubbed the Last Supper. Later this year, the Ministry of the Environment propose that only P.Eng's be allowed to sign-off on contaminated sites, leading to backlash from environmental geoscientists.
1996	CPRGO BECOMES AGO In March 1996, CPRGO formalizes to become the Association of Geoscientists of Ontario (AGO), 7 years after its formation. PEO agrees to join with AGO to form a Task Force to research licensure of geoscientists after backlash on the new PEO act.
1997	AN UNDERSTANDING PEO Council approve a motion to proceed with regulation changes to provide licensure of geoscientists in Ontario under the PEO Act. A Memorandum of Understanding is established between PEO and AGO to go ahead with proposed act amendments.
	ALL HOPE IS LOST PEO members vote 60% against the referendum, influenced in part by a group called Engineers for Engineers who vocally oppose the change. PEO overturn previous motions and abandon the proposal for an amended Act. AGO decide that an independent act for geoscientists is the only way forward.
1997-98	BRE-X SCANDAL Bre-X, a young mining company, fake gold findings and \$3 billion in investments are lost. This scandal rocks the geoscience world. In response, the Mining Standards Task Force (MSTF) introduce the concept of a Qualified Person to sign off on all public disclosure, in order to restore lost confidence in the Canadian mining industry.
1998	OPINIONS START TO CHANGE MSTF notes the lack of a professional geoscience act in Ontario. Talks are held with the Assistant Deputy Minister and the Ministry of Northern Development and Mines to urge them to proceed with creating an independent act for Ontario.
1999	RESEARCH AND PLANNING The AGO consult the Ontario geoscience community to determine what qualifications should be required for licensure and release a document detailing their proposal. They develop a business plan for the formation of the Association of Professional Geoscientists of Ontario (APGO) and raise much needed funds. PEO agree to support AGO in this endeavour.
2000	SPRINT TO THE FINISH LINE In just 15 days, the AGO creates a draft of the proposed Professional Geoscientists Act. Consultations with geoscientists garner support and on June 23, 2000, the Professional Geoscientists Act is unanimously passed in the Ontario legislature and receives Royal Assent. 11 years of work is compressed into 38 seconds!
2000-02	THE REAL WORK BEGINS Ministry of Northern Development and Mines Minister Hudak appoints the Transition Council to implement the new Act on August 23, 2000. The rest of 2000 to early 2002 is spent working intensely on developing regulations for registration/complaints and discipline along with corporate bylaws and registration procedures for AGO/APGO.
2002-03	THE START OF AN ERA By spring 2002, the registration process is well underway with the first registrants being admitted in May 2002. AGO/APGO raises over \$600,000 from companies, government, industry organizations and members to fund development. At the end of the Transitional period in May 2003, a total of 820 practicing members have been registered with an elected Council and a full-time Executive Director/Registrar in place.
2025	PRESENT DAY Today APGO, now renamed PGO, is the largest geoscience-only self regulatory organization in Canada with a membership of 3,656 including 2,558 practicing P.Geo.s, a strong balance sheet, a global reach with registrants from 81 countries, and a bright future serving the public well – a truly impressive achievement.

Appendix B

The following is the official Hansard transcript of the introduction of Bill 86 for First Reading in the Legislative Assembly of Ontario.

June 20, 2000
Legislative Assembly of Ontario
37th Parliament, 1st Session
Hansard Transcripts

PROFESSIONAL GEOSCIENTISTS ACT, 2000 / LOI DE 2000 SUR LES GÉOSCIENTIFIQUES PROFESSIONNELS

Mr Ouellette, on behalf of Mr Hudak, moved second reading of the following bill:

Bill 86, An Act to establish the Association of Professional Geoscientists of Ontario / Loi visant à établir l'Ordre des géoscientifiques professionnels de l'Ontario.

I rise to speak in support of the bill to establish the Association of Professional Geoscientists of Ontario as the governing body for professional geoscientists. I am proud to have had the opportunity to play a role in bringing it to this House and honoured to have worked with a large number of geoscientists, engineers, prospectors, investment and mineral industry personnel and other stakeholders who have made such valuable contributions to the public consultation process which preceded the introduction of this bill.

This bill seeks, first of all, to address the recommendations of the Mining Standards Task Force that was established by the Ontario Securities Commission and the Toronto Stock Exchange following the Bre-X scandal. The key objectives of the bill are to bring Ontario into line with other Canadian provinces in moving to a system of licensing for its geoscientists; to restore public and investor confidence in the province's mining investment environment; to assist the province's mining industry by reinforcing Ontario's reputation as a safe and attractive place for mining investment; and to meet the commitment made to Ontario's geoscientists that the government would help them establish a self-regulating organization that would enhance their professional standing in mining and environmental geoscience.

To achieve this end, the bill proposes to establish the Association of Professional Geoscientists of Ontario as the governing body for professional geoscientists. The objects of the association include regulating the practice of geoscience, governing its members, establishing standards of knowledge and skills among members, developing and maintaining standards of qualification, practice and professional ethics and promoting mobility of its membership.

Membership in the association will give geoscientists the right to practise professional geoscience that concerns safeguarding the welfare of the public and life, health or property, including the natural environment. The bill also gives us the opportunity to highlight the important role played by geoscientists in the environmental field.

The geoscience practitioners in Ontario dealing with and addressing matters related to environmental geoscience are a diverse group of professionals. They comprise, but are not limited to, hydrogeologists, geochemists, terrain and coastal geomorphologists, geophysicists and exploration and economic geologists. These professional geoscientists provide services to the public, government and business in several areas.

It is apparent from the diverse activities of professional geoscientists that they are involved in many activities affecting public safety and the environment. Geoscientists also work across the spectrum of Ontario's economy, including consulting firms, construction firms, environmental departments in industry, mining companies, oil and gas firms and municipalities as well as provincial and federal government departments.

The mineral exploration and mining sectors are major drivers of the Ontario economy. Mining exploration, development and production alone accounted for more than \$5.4 billion in economic activity in Ontario in 1999. More than 17,000 Ontarians are employed by the industry, averaging a salary of more than \$60,000 a year. Another 65,000 people are indirectly employed as a result of the activity in these sectors.

In terms of mining activity, Ontario ranks second in the world in terms of nickel and cobalt production and third in the world in platinum production. There are over 100 consulting firms in Ontario employing geoscientists and providing geoscience advice and reports to industry, government and the public. It is estimated that approximately 45% of Ontario geoscientists work in or from the mining sector, 35% work in the environmental sector and 20% are employed by various levels of government or in education. The number of geoscientists in Ontario, estimated to be between 3,000 and 4,000, is equivalent to or greater than the memberships of the joint geoscientists/engineers associations of Manitoba, Saskatchewan, New Brunswick and the Northwest Territories.

Geoscience is a very significant discipline in the province. For several years, the Association of Geoscientists of Ontario has been asking the Ontario government to implement a self-regulatory body governing professional geoscience standards and practices. Minister Hudak made a commitment to work with the province's geoscience community to this end and to help the Association of Geoscientists of Ontario consult with people affected by this initiative. The Professional Geoscientists Act is a result of that collaboration and consultation.

The proposed draft legislation was unveiled March 7 at the Mining Millennium 2000 convention in Toronto, where it attracted significant favourable attention from the mining community. This announcement was followed by a consultation period lasting until April 20. The Ministry of Northern Development and Mines posted the text of the proposed draft legislation on the environmental registry and on the MNDM Web site. I conducted public information sessions in Toronto, Ottawa, Thunder Bay, Sudbury and Kirkland Lake, and accepted submissions by mail, e-mail and fax. We encouraged widespread comments on the proposed draft legislation by mailing copies to more than 100 key stakeholder groups, faxing notices of the sessions to any group that might have an interest in the proposed draft legislation and holding information sessions in conjunction with major regional mining industry events. The information sessions drew numerous participants, and a further 75 written submissions were received.

Concerns expressed were generally technical in nature, dealing with the specific provisions of the proposed draft legislation. The proposed draft legislation also received statements of support from the Toronto Stock Exchange, the Association of Geoscientists of Ontario and the Association of Professional Engineers of Ontario. This process has shown that the proposed legislation is welcome and supported by key stakeholder groups. I am pleased to note too that, to my knowledge, the proposed legislation has the support of all parties in the House.

With the passage of this bill, Ontario geoscientists will be able to demonstrate their professional qualifications and status to other jurisdictions, regulators and users of geoscience services outside of Ontario. Ontario geoscientists will be able to meet the requirements under consideration by securities regulators for "qualified persons" for the purpose of reviewing and approving all mineral exploration results intended for public release. In addition, this legislation will protect the public against unskilled and unethical actions.

Appendix C

In deep appreciation to everyone who made the drive to achieve professional registration of geoscientists in Ontario a reality.

On behalf of its members, the APGO (PGO) would like to express its deepest appreciation to the many volunteers who donated countless hours to make APGO a reality. Many thanks to employers who generously allowed the volunteers to spend time working for the benefit of the geoscience community. Thank you!

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