



A P E G S

*Association of Professional Engineers
& Geoscientists of Saskatchewan*

*Suite 104, 2255 - 13th Avenue, Regina, Saskatchewan S4P 0V6
T (306) 525 9547 F (306) 525 0851 Toll Free: 1 800 500 9547
E-mail: apecs@apecs.sk.ca*

CONTINUING PROFESSIONAL EXCELLENCE

Members' Guidelines

JANUARY 2002

Members not resident in Saskatchewan are requested to refer to page 10.

CONTINUING PROFESSIONAL EXCELLENCE MEMBERS' GUIDELINES

The APEGS Continuing Professional Excellence initiative establishes a benchmark against which members will evaluate their ongoing professional development activities and provides tools for analyzing needs, planning programs, and recording and reporting activities. Most APEGS members already undertake a greater level of effort than set out in this guideline. Indeed, merely meeting the benchmark level may not be adequate in many circumstances. You, perhaps assisted by your employer, will be better able to assess and meet your Continuing Professional Excellence needs using this guideline.

The Continuing Professional Excellence initiative provides a great deal of flexibility. Members' special circumstances can be accommodated. Programs are tailored to meet each member's situation. You are encouraged to undertake activities that provide the greatest benefit to you in the practice of your profession. It will take a minimal amount of effort to set up your program, and to record and report activities.

SETTING UP A PROGRAM

The structure and content of your Continuing Professional Excellence (CPE) program is up to you. To set up an effective program you will need to:

Identify where you are	What combination of professional responsibilities, knowledge, skills and abilities do you currently have?
Decide where you want or need to be	What knowledge, skills and abilities are required for your current career or a future one? Your plan could include not only what you do now, but what you would like to do in the future.
Plan your program	What knowledge, skills and abilities do you need or want to gain or enhance? Should your program address changes in knowledge bases, work environments and technology?
Record and report your activities	What activity categories are covered? Which categories need more attention? Is greater balance or specialized attention to activities required?

This process requires a candid personal assessment of your current knowledge, skills, and abilities. It asks you to define what you need to know to competently execute your responsibilities. You may find consultations with your peers and supervisors helpful.

INDIVIDUAL SCOPE OF PRACTICE

Each member's CPE program must have a well-defined individual scope of practice. Except for a scope of practice that is also used to define a member's Permission to Consult, this can be a description of current or anticipated practice. Members who use their individual scope of practice for both their CPE program and their Permission to Consult will need to obtain approval for their scope of practice when the Permission to Consult is initially approved or renewed. Members who do not have Permission to consult will not need to obtain this approval. A member with Permission to Consult who wishes to change their scope of practice could have a slightly different CPE program scope in order to accommodate the learning that would be required for the new scope of practice.

You should provide some flexibility within your individual scope of practice. A narrowly defined or restrictive scope will actually hamper an effective CPE program. In the event you assume a new position, or take on significant new responsibilities within your existing role, you may need to review and modify your CPE program plan.

You should remember that APEGS recognizes the practice of engineering and the practice of geoscience in the broadest sense to include the teaching of engineering and geoscience, the management of engineering and geoscience, and everything from low-technology to leading edge, high-technology engineering and geoscience.

To define your scope of practice, describe your current position and, if appropriate, your anticipated career. Then define the knowledge, skills and abilities that you require or will require. Many members will have completed this exercise already for their employer. Possible components of an individual scope of practice are:

i) Duties and Responsibilities

A current and comprehensive list of your primary duties, tasks and responsibilities is essential.

ii) Level of Responsibility and Impact of the Individual Scope of Practice

You should state your level of responsibility such as Municipal Department Head, Manager of Electrical Department, Chief Design Engineer, etc. The APEGS Salary Survey descriptions may help determine this level. Identify the professional and technical positions under your direct supervision. Describe the impact of your work and that of your immediate subordinates on the public, the environment, your employer, other clients, and stakeholders.

iii) Knowledge, Skill and Judgment Requirements

You should review the specific knowledge, skill and judgement requirements for your practice or desired practice. You might use your job description, employer core

competency analysis, or the APEGGS Salary Survey point system to help determine these requirements. Elements to consider include, but are not restricted to:

- technical
- legal
- managerial
- financial
- safety
- project management
- mentoring/developmental
- supervisory
- administrative
- ethical behaviour
- environmental
- training
- advisory
- teaching

PROGRAM PLAN AND CONTENT

Your next step is to develop a CPE program that will help you gain or refine required knowledge, maintain or improve required skills, or acquire new abilities. In effect, this requires developing a personalized development program. The most important principle to remember is that **your Continuing Professional Excellence activities must relate to your individual scope of practice**. The following section provides categories of activity and levels of effort suitable for a CPE program. The activities listed are not inclusive; rather, they are intended to give general guidance for the selection of activities. These lists also identify activities that comprise lifelong learning. Given the diversity of member practice, some activities may be more appropriate for you than others. Use your own judgment in selecting activities that relate to your individual scope of practice and that work best for your continued learning. The activities you select may also embody some or all of the following concepts:

- application or development of technical theory,
- learning of new concepts,
- practical experience,
- management of engineering, geological or geophysical practice,
- communication and interpersonal skills, and
- public, community and professional service.

ACTIVITY CATEGORIES AND LEVELS OF EFFORT

A credible CPE program must meet minimum levels of effort. The unit of measure has been designated as a “credit.” Six general activity categories have been recognized as contributing to continuing professional development. They are:

- i) Professional Practice
- ii) Formal Activity
- iii) Informal Activity
- iv) Participation
- v) Presentations
- vi) Contributions to Knowledge

A baseline of 80 credits has been established as a reasonable minimum level of effort for members to demonstrate suitable Continuing Professional Excellence. This is comparable with other Canadian and U.S. engineering organizations, and will be useful for transferability and mobility of membership. Members in some industries will require a great deal more – double or even triple this amount – to remain abreast of their areas of expertise. Knowledge-based and rapidly changing industries, for example, require continuous professional development for survival.

Credits must be obtained from at least three of the six activity categories. This demonstrates that members are taking a balanced approach to Continuing Professional Excellence, rather than concentrating all their efforts into one specific area.

Conditions and Recommendations for Counting Credits

- To encourage planning over a few years, your CPE program has a three-year rolling time period.
- Each member must accumulate at least 240 credits over three years. Once you are in the third or subsequent year of the program, you must maintain a rolling total of 240 credits over a three year period.
- You are strongly encouraged to accumulate at least 80 credits per year.
- You must be active in at least three of the six categories each year.
- You should note the maximum allowed credits in each category when developing your plan.
- You must be careful not to count the same effort in more than one activity. If an activity falls under two general categories, you must count it only once and in the most appropriate category.

A detailed description of each of the six activity categories follows:

i) Professional Practice

Active professional practice is known to be a significant factor contributing to maintaining and improving skills. It is appropriate for a member to receive credit for professional practice since it is recognized that significant learning occurs “on the job.” It is reasonable to assume that one hour of learning is achieved for every 20 hours of professional practice.

One credit will be earned for each 20 hours of professional work within a member’s scope of practice. A maximum of 50 credits per year towards the annual 80 credit total requirement (or 150 credits over three years) may be claimed for professional practice.

ii) Formal Activity

Formal activities are those provided as a structured course or program, often for credit, occasionally with an evaluation process. Although formal activity is not specifically required, all members should strive to include some formal activities within their CPE program. Delivery methods might include traditional classroom settings, and remote techniques such as written correspondence, video, Web or Internet based courses. Formal activities could include:

- under-graduate or graduate courses provided through universities, technical institutes and colleges,
- industry sponsored courses, programs and seminars,
- employer training programs and structured on-the-job training, and
- short courses provided by technical societies, industry or educational institutions

Every hour spent in attendance at a course (contact hour) earns one credit. For courses offering Continuing Education Units (CEUs), each CEU equates to 10 credits. A maximum of 30 Credits per year towards the annual 80 credit total requirement (or 90 Credits over three years) may be claimed for formal activities.

iii) Informal Activity

These are activities not normally offered by an educational institution or other formal organizations, but that nevertheless expands your knowledge, skills or judgment. They include:

- self-directed study such as reading technical journals, books, manuals; learning new software,
- attendance at conferences, technical sessions, talks, seminars, workshops and industry trade shows,
- attendance at meetings of technical, professional or managerial associations or societies, and
- structured discussions (such as technical paper critiques or discussions) of technical or professional issues with one's peers.

Each hour of informal activity earns one credit. A maximum of 30 credits per year towards the annual 80 credit total requirement (or 90 credits over three years) may be claimed for informal activities.

iv) Participation

Activities that promote peer interaction and provide exposure to new ideas and technologies both enhance the profession and serve the public interest. These activities include:

- acting as a mentor to a Member-in-Training or other less experienced professional member or technologist,

- serving as a supervisor to a graduate student in preparation of a thesis,
- acting as a mentor to an undergraduate in an engineering or geoscience university program accredited by CEAB/CGAB,
- presenting to schools, career days, judging science fairs, etc.,
- serving on public bodies that draw on professional expertise (i.e., planning board, development appeal board, investigative commissions, review panels or community building committees),
- service on standing or ad-hoc committees of technical, professional or managerial associations, or societies,
- community service activities that contribute to the community which require professional and ethical behaviour, but not necessarily the application of technical knowledge, including active service for professional, service, charitable, community or church organizations, coaching league sports teams, or elected public service on municipal, provincial or federal levels or school boards.

Each hour of service earns one credit. A maximum of 10 credits per year (or 30 credits over three years) may be claimed for community service activities. A maximum of 20 credits per year towards the annual 80 credit total requirement (or 60 credits over three years) may be claimed for participation.

v) **Presentations**

These activities are either technical or professional presentations made outside a member's normal job functions. Both preparation and presentation of material could be counted. Eligible presentations might occur at:

- a conference or meeting, and
- a course, workshop or seminar either for an educational organization, within the member's company, or at an event sponsored by a technical or professional organization.

Each hour of preparation and delivery earns one credit. A maximum of 20 credits per year towards the annual 80 credit total requirement (or 60 credits over three years) may be claimed for presentations.

vi) **Contributions to Knowledge**

Activities that expand or develop the technical knowledge base in the disciplines of engineering and geoscience must be recognized although not every member is able to make such a contribution outside his or her normal job functions. Contributions could include:

- development of published codes and standards
 - 1 credit per hour of committee work
- patents
 - 15 credits per patent registered
- publication of papers in a peer-reviewed technical journal
 - 15 credits per paper published

- publication of articles in non-reviewed journals
 - 10 credits per article, to a maximum of 10 credits per year
- reviewing articles for publication
 - 1 credit per hour of review, to a maximum of 10 credits per year
- editing papers for publication
 - 1 credit per hour of editing, to a maximum of 10 credits per year

A maximum of 30 credits per year towards the annual 80 credit total requirement (or 90 credits over three years) may be claimed for contributions to knowledge.

CARRY OVER

Credits earned in excess of the annual maximums in any category may be carried forward for a maximum of two years from the date of completing the activity (see examples in Appendix).

APPLICABILITY TO MEMBERS

The PCE activity levels indicated in this document apply to regularly employed P.Eng. or P.Geo. members. Special consideration may apply to these members as outlined in section i) below. Two other groups, Members in Training and Members with "Permission to Consult" (P to C), are treated differently. These differences are also outlined below.

i) Special Considerations

Members who are retired or not working in Saskatchewan, in accordance with Section 13 of the APEGGS Regulatory Bylaws, may have the requirement for their CPE program activity levels temporarily reduced. Such members must prepare CPE programs that outline their circumstances and capabilities and consult APEGGS annually to discuss their situations and develop suitable revised programs. Generally, members in special situations may be expected to accumulate at least 30 credits per year or 90 credits over three years.

ii) Members in Training

Members in training currently report their work experience on a semi-annual basis until they become registered as a P.Eng. or a P.Geo. This reporting will continue so members in training will not be expected to participate in the PCE program.

iii) Members Requiring Permission to Consult

There are engineers and geoscientists who have, or are required to obtain, a license for permission to consult (P to C) because their services will be offered, directly or indirectly, to the public. These members are required to have their qualifications in their field(s) of practice reviewed by a committee representing clients and consultants. The Consulting Practice Committee (CPC) reviews the academic background and professional experience of these members with respect to competency in their field(s) of practice, and recommends to the Registrar whether an applicant should be granted P to C.

The Task Group recommends that all applicants for P to C (new applications and renewals) be required to submit the following documents as part of their application package:

- Their CPE program; and
- Their Annual CPE credits earned.

Applicants not submitting both of the CPE documents will be notified and the application will not be processed until the CPC receives the CPE documents.

An applicant applies for a “verbatim renewal” when the applicant’s field(s) of practice remain unchanged. The CPC, in conjunction with this Task Group, has recommended that the work history portion of the verbatim renewal application be replaced by the review of an applicant’s CPE program and annual reporting statistics (see: CPC Position Paper, available from APEGS). The CPC believes that an applicant’s CPE Program may provide a better representation of the applicant’s ongoing professional development activities than a work history. (Applicants applying for revised field(s) of practice will still be required to submit a work history as part of the application package.)

ROLE OF AN EMPLOYER

Each member’s employer has a role to play in Continuing Professional Excellence and an obligation to ensure that professionals in their employ maintain and improve their skills. Every employer of professionals is encouraged to support the Continuing Professional Excellence efforts of members. Members are encouraged to discuss their programs and plans with their employers or mentors. Through discussion and mutual agreement, the employer and professional can create a suitable CPE program and select an appropriate type and level of employer support. Employer support results in an employee with an ongoing interest in lifelong learning. This, in turn, provides increased value and commitment to the company

Among other things, employer support can include:

- consultation with the employee during development of the employee’s program,
- provision of learning opportunities,
- assistance in developing job expectations and responsibilities,
- periodic review of employee performance and progress,
- assistance in documenting activities and levels of effort through company performance management systems,
- financial support of activities,
- allowing time to participate in activities,
- encouragement of professional development of employees, and
- encouragement of employee lifelong learning.

It is important to note that even though the employer has a role to play in defining requirements, the primary responsibility for a CPE program and maintaining competence rests with the individual professional. Members should be aware that APEGS can only encourage employers to support the Continuing Professional Excellence initiative. Some companies already have

existing corporate training or professional development programs that will assist members to meet these requirements.

MONITORING AND REPORTING

The Continuing Professional Excellence initiative is monitored by APEGS to provide an assessment of member activities and provide information required to review the initiative's effectiveness.

You will be asked, at the time of your membership renewal each year, to report the number of credits you have earned in the previous year within each of the six activity categories. By entering these six numbers and your total credits on the APEGS Biographical Update Form, and returning the form to the APEGS office with your annual fee, you will be meeting the reporting requirements.

Aggregate statistics will be compiled. **Data from individual forms will not be made public.** This information may also be used to develop further monitoring and audit measures based on statistical and risk analysis methods.

MEMBERS NOT RESIDENT IN SASKATCHEWAN

Non-residents of Saskatchewan, who participate in a similar program, will not be required to participate in our program. You will be asked to indicate on your annual Biographical Update Form that you are involved in a program and provide the name of the Association.

RECORD KEEPING

Each member is expected to maintain a complete record of his or her CPE program for at least three years. Sample forms are attached to this document. These records will not normally be submitted to APEGS, except for those members applying for approval or renewal of Permission to Consult. It is expected that your records would contain the following information:

- your individual scope of practice,
- your program plan, and
- your record of completed activities and number of credits earned.

FOR MORE INFORMATION

If you have specific questions or concerns that are not addressed by this guideline, or you wish to discuss your program with another member, please call or e-mail the APEGS office (apegs@apegs.sk.ca). The Professional Development Committee has offered to undertake, as time permits, to help members define their individual scope of practice or CPE programs.

Start on your program now. Remember, our Act and our bylaws require that each of us remain competent.