

Development of the  
Policies and Procedures for a  
National Environmental Program Accreditation  
System

Final Report  
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# **National Environmental Program Accreditation (NEPA) Project**

## **Background**

Environmental Careers Organization (ECO) Canada is a national sector council established to bring employers, workers, educators and governments together to address human resource issues facing the environmental sector and to develop a national strategy.

ECO Canada's mission is:

*“To ensure an adequate supply of people with the demonstrated skills and knowledge required to meet the environmental human resource needs of the public and private sectors”.*

Since 1991, ECO Canada has made great strides to further its mission and to establish a national standard of environmental employment. This has included the development of the National Occupational Standards for Environmental Employment and the certification of environmental practitioners through the Canadian Environmental Certification Approvals Board (CECAB). Certification provides the mechanism for practitioners to measure their competencies against a national standard.

Although there are approximately 400 environmental related education programs in Canada, there has been to date no system of accreditation for these programs. Accreditation would assure prospective students, counselors, parents and employers that the skills and knowledge acquired through post-secondary education are adequate to meet a national standard. Therefore, two national academic affinity groups – the Canadian College Environmental Network (CCEN) and the Canadian University Environmental Science Network (CUESN) - requested that ECO Canada establish and administer an accreditation process. They also formally agreed that the National Occupational Standards would be the foundation of this accreditation process for environmental programs in Canada.

To this end, the National Environmental Program Accreditation (NEPA) project was initiated. The second phase has now been completed by the project's second contractor, Evelyn McNee & Associates. The preliminary framework for an accreditation system developed in the first phase and based on the best-practices research of five accreditation organizations in Canada and a review of international models, was used as an initial reference.

The primary objective, the development of a functional accreditation process for post-secondary environmental programs in Canada, was achieved. Developmental work encompassed not only the accreditation process but also its supporting structures, policies and procedures. ECO Canada plans to pilot test the accreditation process and then refine it as required. Further review and refinement will also follow completion of the first cycle of accreditation.

## Project Team

This project was under the project management and leadership of Evelyn McNee, principal of *Evelyn McNee & Associates*. The team members included Brian Henderson (Ontario), Sherry Rainsforth (Alberta), and Evelyn McNee, Michael Ross and Marg Penney (British Columbia). This group of independent consultants came together to create a virtual team for this project. Collectively the team possesses vast years of experience working in the Canadian accreditation, certification and regulatory systems, program evaluation, board governance, new business development, business measurement, marketing and communications, policy development, stakeholder consultations, strategic planning and education. The team had previously been involved in developing and administering a national accreditation system, governance structures, evaluation processes, marketing and communications strategies, manuals, guidelines, policies and procedures. The team worked collaboratively with ECO Canada and representatives of environmental training programs from across the country.

## Project Plan and Objectives

Increased mobility and reciprocity for trained workers in Canada is a goal for ECO Canada and is one of the attainable benefits of a valid accreditation process.

The objectives of this project were to:

- Develop policies and procedures to add to the existing preliminary framework for a national accreditation system for post-secondary environmental programs in Canada.
- Develop the application process, defining eligibility criteria and the evaluation process.
- Determine if a portion of the National Occupational Standards could be used in the accreditation criteria dependent on a competency/learning outcome profile.
- Define the accreditation requirements and criteria for a comprehensive accreditation system.
- Develop draft manuals, guidelines and forms for the accreditation process.
- Develop a draft governance structure, within ECO Canada's structural and financial realities, based on reports and recommendations from Phase 1, *Terms of Reference and Code of Conduct* for all members, volunteers and staff.
- Recommend training methods and appropriate training materials for volunteers.
- Recommend organizations to approach outside Canada for reciprocal agreements
- Recommend content for the accreditation website/online component.
- Include a marketing and communications strategy for all phases of the project to ensure positive dialogue with the academic community, industry and stakeholders and to keep them informed and involved in the development phase.
- Provide ongoing updates on the accreditation project to ECO Canada.

## Methodology

One of the challenges of this project was to define a template for the accreditation requirements and criteria with adequate flexibility to accommodate the diverse range of environmental programs available across Canada and the various methods of curriculum development employed. In addition, it should be kept in mind that accreditation is a quality control process

and it must reference a clear definition of the competencies expected of graduates. The process of setting out a schedule for this project was complicated by the fact that, as the project began, there was no consensus among educators and stakeholders on the competencies expected of graduates of environmental programs.

Another consideration is that this is a rapidly changing sector. Employers need graduates with the knowledge and skills required to adapt to developing needs and respond to changing circumstances. Educators, who face the challenge of producing such graduates, demand an accreditation process that accommodates such dynamic movement. Accordingly, a further challenge facing this project was to define a generic approach to accreditation, with enough flexibility to be readily adaptable as needs develop and change over time.

One way to meet these challenges was to develop a proposed structure, along with detailed templates, for the components of the accreditation process that are not dependent upon specific competencies. To accomplish this, the methodology for the development of the accreditation process included three phases with some concurrent areas of activity:

Phase 1: Accreditation Process

Phase 2: Governance Structure and Processes

Phase 3: Accreditation Requirement/Criteria Development

In order to include expertise from the environmental educational programs, the following activities were conducted:

- ECO Canada September 2008 Survey of post-secondary programs.
- Consultation with members of the National Working Group on Accreditation, including a two-day workshop in November 2008.
- Work with a subcommittee of the National Working Group on Accreditation (ongoing).
- Presentation and workshop with the National Steering Committee in February 2009.
- One-day workshop with representatives of the National Working Group on Accreditation, its subcommittee and educators, in May 2009, to review draft Accreditation requirements.
- Postings on the ECO Canada website including surveys requesting feedback from environmental practitioners/professionals and educators on draft documents.

## **ECO Canada September 2008 Survey**

In order to obtain expert knowledge from the colleges and universities with environmental programs, the ECO Canada September 2008 Survey was circulated to key contact people in the post-secondary education system in Canada.

The objectives of the ECO Survey were:

- To communicate with the educational institutions offering environmental programs, to introduce the National Environmental Program Accreditation project and to seek assistance in the developmental phase for the national accreditation process.

- To provide an opportunity for the educators to determine how their program(s) fit within the ECO Canada National Occupational Standards for Environmental Employment sectors and sub-sectors.
- To determine what is used to develop curriculum for environmental programs and request copies of lists of competencies, learning outcomes or performance indicators.
- To offer the institutions the opportunity to be contributing institutions for Phase 2 of the National Environmental Program Accreditation (NEPA) project.
- To promote ECO Canada and its services.
- To provide background information for the November 2008, workshop for the ECO Canada National Working Group on Accreditation.

#### Survey findings and conclusions:

- The response rate of 23% was better than the average response for surveys that ECO Canada has conducted in the past.
- The programs indicated an average of 11.3 National Occupational Standards sub-sectors related to their programs. This reveals that the programs do not teach to one specific sector or sub-sector and calls into question the use of the standards (in its current form) as a tool to categorize post-secondary environmental programs.
- When discussing curriculum development, 82% of the college respondents used the language of learning outcomes and/or competencies compared to 51% of the university respondents.
- University personnel relied more heavily on faculty expertise (45%) than did college personnel (15%) when setting curricula. Industry input was used by 70% of the college respondents and 38% of the university respondents.
- The National Occupational Standards is not routinely used for curriculum development in universities or colleges, therefore, the NOS sectors and sub-sectors cannot be utilized as a foundation for accreditation requirements/criteria. Only 7% of the universities and 4% of the colleges used the ECO Canada National Occupational Standards in curriculum development. The standards reflect the competencies a practitioner would acquire after five years of relevant environmental work experience whereas accreditation deals with entry-level competencies. Further analysis by the project team and the National Working Group took place at the workshop in Toronto, November 10<sup>th</sup> & 11<sup>th</sup>, 2008.
- Approximately 50% of the respondents identified their willingness to be a ‘contributing institution’ in the development of an accreditation process for environmental programs.
- The image of ECO Canada and its services was enhanced by the survey and the pre-survey telephone connections, and the Compendium of educational programs was updated.
- The survey provided valuable information for the National Working Group on Accreditation’s November 2008 workshop.

A complete report of the findings of this survey is available from ECO Canada.

## National Working Group on Accreditation Workshop

The objective of the National Working Group meeting, held in November 2008, was to conduct an in-depth stakeholder review of challenges associated with building a national environmental program accreditation system for post-secondary educational institutions/programs in Canada. It was essential to ensure that environmental educators had an opportunity to provide their expertise towards the accreditation structures, processes and criteria that had been drafted to that point.

The workshop included presentations, group discussions and small group activities that dealt with the following:

- Review of preliminary Accreditation Process and Overview of Development Work.
- The Accreditation Process: Contemporary Generic Challenges and Responses.
- Survey Report from the September ECO Canada Environmental Programs survey.
- Setting up the Process, some Non-generic Challenges.
- Key Considerations to Developing Accreditation Requirements.
- Eligibility Requirements for Accreditation.

At this meeting:

- Challenges and points to consider in the development of the accreditation process for environmental programs in Canada were identified.
- A list of potential stakeholders was drafted.
- It was confirmed that programs, not institutions, were to be accredited.
- There was consensus that one accreditation process could be used for environmental programs in Colleges, Technical Institutes, CEGEPs and Universities referencing similar accreditation requirements/criteria.
- It was decided that there was some potential for competency mapping against the National Occupational Standards but that it was a challenging process because the standards are designed at a level beyond entry level and are comprised of terminology not used in academia.
- Accreditation requirements and criteria were identified for environmental programs, further developed in consultation with a subcommittee of two college and two university members from the working group. A revised draft of *Eligibility Requirements* was developed and incorporated into the accreditation process.
- Two articles - "*Towards a Curriculum Standard*" and "*The NOS and Accreditation*" - were written and appended to the report.

A complete report of the workshop is available from ECO Canada.

## Governance Model

The Governance Model and processes were developed and approved in principle by the National Steering Committee (NSC) meeting and the ECO Canada Board.

Numerous sources contributed to the development of the model, including the Best Practices Report and supporting documents from the five accreditation organizations researched in the first

phase of this project, as well as information from the Accreditation Board for Engineering and Technology (ABET) and other accrediting organizations.

The accreditation organization is referred to as the Canadian Environmental Accreditation Commission (CEAC or the Commission). The word "Commission" is used to give it status comparable to the certification board and to eliminate confusion with another 'board' or 'council'. Once fully functional, it is recommended the Commission membership be thirteen to match the certification board membership. For implementation during the pilot project, and until the business of the Commission warrants more members, it is recommended that some positions remain dormant.

The Governance Model defines the mandate and purposes of the Commission, and describes the wide range of programs for which it would be responsible. It proposes a process for nominating members to the Commission and suggests detailed *Terms of Reference* (including terms of office, powers and duties of the CEAC) and a standing committee structure.

Dr. Sherry Rainsforth, the governance expert on the consulting team, states a very important recommendation:

"The accreditation process has been developed for a fully functional accreditation process. It has been designed to 'stand the test of time'. While it is understood that ECO Canada will require flexibility during the developmental stages of CEAC, some elements of the process may be designated as dormant initially and activated at a later date as the process matures.

A fully developed accreditation process requires autonomy, transparency and collaboration to be included as essential elements. Nominating and Finance Committees are integral to achieving these goals. It is recommended that ECO Canada include these committees in the process but put a caveat on their implementation. This caveat would state that "In the initial stages of development of the Accreditation Process, ECO Canada will assume the roles of the nominating and finance committees until they deem it necessary to activate these committees."

Thus, the model remains intact and these committees can be activated in the future without having to revise the model. Also presented are some options for activating some of the positions on the accreditation commission and its committees, which allows for growth of the organization and a means to control costs until the organization is functioning at a level requiring a full complement of members.

It defines the accreditation classifications a program may achieve (from Preliminary Recognition to Approved) and recommends time frames for the accreditation process. It details procedures to follow if a program's accreditation is withdrawn and lays out an appeals and complaints process. It provides a process for ongoing revision of accreditation requirements over time, defines the

role of the Commission Administrator, and lays out a schedule and suggested procedures for CEAC meetings. It also delineates draft policies and a code of conduct for all those involved in the accreditation process.

A detailed description of the Governance Model is given in the *CEAC Handbook on Accreditation*.

## **National Occupational Standards for Environmental Employment**

The National Environmental Program Accreditation (NEPA) project originally considered using the ECO Canada National Occupational Standards for Environmental Employment as the foundation for the accreditation process for environmental programs in Canada. Using the standards as the foundation was not supported by the results of the September 2008 ECO Canada survey of environmental programs, nor the November 2008 workshop with the National Working Group on Accreditation (see *conclusions* in the ECO Canada September 2008 Survey section of this report).

A number of additional conclusions were drawn at the November workshop relating to points on the core curriculum as it relates to the development of a curriculum requirement including one section of the standards – the 11 categories and 36 subcategories (formerly functions and clusters). All agreed that accreditation of educational programs in the environmental sector cannot rely upon convenient competency frameworks as the foundation for curriculum building in all areas of program concentration. The workshop discussion groups, however, identified that the core curriculum of environmental programs to be accredited reflects three common areas of concentration:

1. *Generic Enabling Knowledge and Skills*: soft skills/essential employability skills/enabling competencies such as communications, numeracy, etc.
2. *Generic Higher Level Knowledge and Skills*: thinking as an environmental practitioner/scientist
3. *Vocational / Professional Knowledge and Skills*: for example, land, air and water quality

The National Occupational Standards for Environmental Employment were developed in relation to the performance of a worker or practitioner with five years of experience in the field. Accreditation deals with the skills of a worker just entering the field. Therefore, it was suggested that the 36 subcategories of the standards be rewritten in entry-level terminology as a reference for the third category, *Vocational/Professional Knowledge and Skills*, in the curriculum requirement.

A project to revise the 36 subcategories to entry-level terminology was launched. To facilitate this process, revision to the 36 subcategories was made with reference to *Bloom's Taxonomy*, a standard reference for educators. Bloom's Taxonomy defines three types of learning: *Cognitive* – mental skills (Knowledge, Comprehension, and Thinking Skills), *Affective* – growth in feelings or emotional areas (Attitude), and *Psychomotor* – manual or physical skills (Skills). This taxonomy of learning behaviors outlines the goals of the learning process. That is, after a series of classes or course of study, the student should have acquired new knowledge, new attitudes

and/or new skills. A working group of educators provided environmental expertise and guided the process. It was concluded that the reference to Bloom's Taxonomy was appropriate and helpful, and that this revised version of the standards' 36 subcategories would be easily translated into the environmental curriculum.

The project was completed in April 2009 and the revised 36 subcategories will be used as a reference document in the curriculum requirement of the accreditation process. Programs are not expected to utilize all 36 subcategories. Use of the revised NOS is a selective process at the program level. Programs will select which of the 36 subcategories apply to their particular program of study.

Subject matter described within the 36 entry-level subcategories may be incorporated differently by different programs. What may be a separate course in one program may be part of a more comprehensive course in another. The environmental curriculum must be presented in a manner that fosters analytical and critical reasoning skills, including systematic problem solving and decision making. The environmental curriculum must provide a variety of educational experiences including lectures, discussion, simulations, computer applications, individual and group laboratory projects, and multiple field experiences. The purpose of these experiences is to enable students to apply scientific methodologies necessary to attain the skills required for entry-level positions as an environmental practitioner.

This reference document (the revised National Occupational Standards for Environmental Employment's 36 subcategories) elaborates on the fundamental, key components of a core curriculum, while acknowledging the autonomy and uniqueness of each environmental program. The academic department of each program is encouraged to be creative and innovative in the design and implementation of its curriculum. The document is referenced in the accreditation requirements (Requirement 5 – Curriculum) under section 5.3 Environmental Relevance (Appendix 3 and 6 of the *Application and Self-study Manual*). It is hoped that in future, environmental programs will also use the revised standards' 36 subcategories as a reference document during curriculum revision and development.

## **Accreditation Process**

The preliminary accreditation process has been developed by synthesizing best practices from other fields and has been vetted with the National Working Group at its November 2008 meeting. It has been further revised throughout the developmental phase as processes were drafted and validated.

The accreditation process will begin with an online application from the program wishing to be accredited. If the program meets the eligibility requirements (discussed in the following section), a Self-study Questionnaire will be completed, addressing all the requirements and criteria (discussed in the *Accreditation Requirements and Criteria* section of this report), and the self assessment submitted in a Self-study Report, along with supporting documentation to the Commission. A site visit evaluation team will then be selected from amongst a pool of trained volunteers and a two to three day site visit will be scheduled. The team members will interview faculty and administrative staff, as well as students, employers, and graduates. They will also

review instructional materials, facilities and resources with a view to confirming the conclusions of the Self-study Report. An exit interview at the conclusion of the visit will allow the Dean/Program Director an opportunity to supply any additional information needed by the team. The accreditation team will file its report with the Canadian Environmental Accreditation Commission within two months of the visit. After review, the Commission will decide the accreditation status and forward this information to the program and to ECO Canada.

Various outcomes are possible:

- Preliminary approval
- Provisional Approval
- Approved with reporting requirements
- Approved without reporting requirements
- Accreditation withdrawn

A formal appeal/complaint process will be available.

More detail on the proposed accreditation process can be found in the *CEAC Handbook on Accreditation*, also available from ECO Canada.

## **Eligibility Requirements**

The draft eligibility requirements were validated at the November 2008, workshop with the National Working Group on Accreditation and have been revised based on the final draft of the accreditation requirements and criteria.

In summary, to be *eligible* for accreditation, a full-time environmental program must be located at a public institution that:

- Is legally authorized to grant certificates, diplomas, or degrees.
- Is board governed and has an appropriate administrative or academic position whose full-time, or major, responsibility is to the program.
- Provides facilities appropriate for the delivery of the program.
- Has adequate library and learning resources support.
- Has a sustainable funding base.
- Complies with Canadian Occupational Health & Safety standards as well as Human Rights and Immigration policies.
- Can provide audited financial statements from an external and independent public/chartered accountant or an authorized provincial auditing agency.
- Has a suitable student admission policy.

More detail on the eligibility requirements can be found in the *CEAC Application and Self-Study Manual*, available from ECO Canada.

# Evaluation Model

## Method of Evaluation

Programs that request accreditation by the Canadian Environmental Accreditation Commission (CEAC) will be evaluated on the basis of data submitted in the:

- Application for accreditation.
- Self-study Report with supporting documentation.
- Site Visit Evaluation Report (SVE report), prepared after a site visit by a carefully selected team of external evaluators representing the Commission.

A goal of the commission is to ensure, through objective, valid and reliable evidence-based evaluation processes, that CEAC accreditation requirements are being met by environmental programs that seek CEAC recognition. This involves due process characterized by openness, transparency, fairness, equality and consistency in the determination of a program's compliance with accreditation requirements.

## Compliance with the CEAC accreditation requirements

The program is enabled to document its own assessment of compliance with the accreditation requirements in a Self-study Report with supporting documentation. These submissions by the program will form the basis of the subsequent evaluations carried out by members of the Site Visit Evaluation Team, Academic Program Committees and the Commission. This process allows for validation of the program's self assessment and determination of the appropriate accreditation status.

For each accreditation requirement, there are a number of criteria of assessment for the program's compliance with the requirement. Particular attention should be paid to the wording of each requirement. The word *shall* or *must* indicates definite obligatory requirements and indicate the requirement to be critical or mandatory. A program must meet or exceed the critical criteria in order to achieve compliance with that requirement. The word *should* indicates a more permissive recommendation and implies that compliance with the requirement is highly desirable. The words *may* or *could* are permissive and imply liberty to follow a suggested alternative to the requirement.

## Assessment of Compliance

The program must assess its performance against the criteria for each of the accreditation requirements and provide supporting documentation. Within the report, lists of suggested evidence are provided for each criterion in the sections: "*Documents Required*" and "*Self-study Analysis and Appraisal*". These should not be considered as exclusive or mandatory lists.

These lists of suggested evidence are meant to assist the programs in providing clear, appropriate evidence to demonstrate compliance with each criterion. If a program determines that it does not meet a given criterion, it must describe a solution or action (underway or planned) which will

help the program meet the criterion, as well as suggest a projected completion date for the activity.

Programs may submit other documentation in addition to, or instead of, the suggested lists of evidence. For example, programs may submit existing documents prepared for other purposes such as a program evaluation report for a provincial organization. This needs to be cross-referenced with the criteria to show how it provides evidence of compliance with the CEAC accreditation requirements. Some of the documentation may be submitted for more than one criterion, and the program should ensure that all documents are cross-referenced to the relevant criteria.

The program's ability to candidly assess its strengths and opportunities for improvement is vital to the accreditation process. The Self-study Report should include materials that demonstrate evidence of critical thinking, planning, development and implementation over a specific period of time.

The subsequent evaluation of the program's self study against each criterion is based on the evidence provided by the program (Self-study Report and supporting documentation).

This peer review is designed to validate the Self-study Report and to collect evidence of the effectiveness of program processes through:

- Interviews with program participants, faculty, administrators, graduates and employers.
- Appraisal of physical facilities.
- Further document review (eg. course outlines, minutes of meetings, program evaluation data, etc.).

A site visit evaluation team will review all documentation submitted and then visit the program to:

- Assess factors beyond those described in the Self-study Report, such as intangible qualitative factors difficult to document in a written statement (e.g., intellectual atmosphere, morale of faculty/students, physical facilities, etc.).
- Assist in the program/institution's self assessment of strengths and opportunities for improvement.
- Examine, in further detail, the material compiled by the program relating to the accreditation requirements and criteria.

The team will also focus on how effectively the overall learning experiences in the program are managed and coordinated to produce the desired learning outcomes and to contribute to an integrated learning experience for the students. This will include analysis of the program's strengths and opportunities for improvement, the quality of its performance, the effectiveness of its procedures, and the adequacy of its resources for sustaining its performance.

The team then prepares a report which includes detailed assessments on the program's compliance with the Canadian Environmental Accreditation Commission (CEAC) requirements and policies, noting areas where improvements are needed or where standards have been met or exceeded, and includes a list of any recommendations or suggestions needed to improve the

quality of the program. In a separate document, the team may recommend an accreditation status.

Great emphasis is put upon the Site Visit Evaluation Report in the evaluation/assessment process. However, as described later, the Commission makes the final decision. It is expected that the team members' independent insights, based on careful reading of the program's self assessment and other documentation, can serve to:

- Confirm and validate the conclusions of the program's Self-study Report.
- Identify any areas in which the program is in questionable compliance with the CEAC requirements.
- Call attention to opportunities for program improvement.
- Assure the CEAC that the institution has been responsive to recommendations resulting from previous reviews, and reinforce the program's commitment to the continuing pursuit of excellence.

The documentation and the Site Visit Evaluation Team report will be forwarded to the Commission for review by the relevant Academic Program Committee. This committee will evaluate program compliance against the seven accreditation requirements, determining the extent to which outcomes are being achieved or what actions will be necessary to improve the program.

The Academic Program Committee may substitute its judgment for that of the site visit evaluation team in instances where the Committee feels the supporting documentation fails to substantiate the Team's findings or analysis, or where additional facts have come to light since the site visit.

The Academic Program Committee will forward its evaluation report, including a recommendation for an accreditation status to the Commission. The final decision on the accreditation status, its term, and the list of recommendations and suggestions will be made by the members of the Canadian Environmental Accreditation Commission (CEAC).

All evaluations will be by consensus.

## **Accreditation Requirements and Criteria**

The draft accreditation requirements have been developed in consultation with the subcommittee of the National Working Group on Accreditation. The standards and criteria are, in many ways, the heart of the accreditation system. They are the benchmarks against which the program will conduct its self assessment and against which the site visit team will evaluate the evidence of compliance provided by the program. Standards must be flexible enough to allow for educational innovation and autonomy, but specific enough to provide a common metric for a wide range of programs.

Drafts of the accreditation requirements and criteria have been reviewed by the National Working Group on Accreditation, its subcommittee and the National Steering Committee (NSC) for accreditation. In addition, ECO Canada facilitated a one-day workshop on May 22, 2009 allowing representatives to review the draft requirement prior to the seven requirements being posted on the ECO Canada website.

The following proposed accreditation requirements/criteria will be presented to the ECO Canada Board in August 2009 for consideration for use in the pilot project from September 2009–June 2010:

## **REQUIREMENT 1: MISSION AND OBJECTIVES**

### **1.1 Mission Statement/Program Goals/Program Plan**

- 1.1.1 An environmental program must have a current mission statement and/or a formal statement of overall program goals/program plan which is in alignment with the Institution's current mission statement and strategic plan.
- 1.1.2 The current mission statement and/or formal statement of overall program goals/program plan must demonstrate that the program's purposes are appropriate as an environment-focused academic program or one focused on the preparation and training of environmental practitioners/professionals.

### **1.2 Development, Re-evaluation and Revision of the Mission Statement and Program Goals/Plan**

- 1.2.1 The current mission statement and/or formal statement of overall program goals/program plan are the starting point or foundation for all of the program's activities, services and policies. They give direction for strategic planning, curriculum and allocation of resources.
- 1.2.2 The current mission statement and/or formal statement of overall program goals/program plan are developed -and when necessary, revised- in a collaborative process with representatives from the program's administration, faculty, students and/or industry. They are adopted or accepted by the institution's governing board and/or approved by an external credential validation service or government agency.

## **REQUIREMENT 2: FACULTY**

### **2.1 Faculty Composition and Leadership**

- 2.1.1 The development and recruitment of the environmental program's faculty should take into account its mission/program objectives, the communities it serves and the need to support and ensure the continuing relevance and viability of the program and its curriculum.
- 2.1.2 Faculty members must have appropriate education, professional credentials, work, field and/or research experience, skills in teaching and learning methodologies (including

assessment methodologies), communication skills and current technological knowledge for their teaching positions in the environmental program.

- 2.1.3 The overall composition and the combined experience of faculty members must adequately reflect the environmental orientation of the academic program and field experiences. This should contribute to the program's ability to produce graduates capable of integrating environmental principles, philosophy and theory into environmental practice.
- 2.1.4 The program must have effective leadership, and a full-time faculty member with defined leadership responsibilities must be in charge. Reasonable efforts should also be made to develop leadership skills in others to ensure that the program's survival does not become critically dependent on one individual.
- 2.1.5 Faculty performance evaluation procedures must be in place. When deficiencies are identified during the review process, professional development opportunities are available to address them.
- 2.1.6 Opportunities for professional development and faculty renewal must be provided to enhance faculty members' skills and leadership abilities, as well as their effectiveness in meeting the mission and/or program goals/program plan. There must be evidence of reasonable support for such efforts (eg. funding of some professional development activities, study leave, facilitation of secondments, sabbaticals, etc.).

## **2.2 Faculty Numbers and Commitment**

- 2.2.1 There must be a sufficient number and appropriate balance of faculty members (full-time and non full-time) and technical support to meet the needs of the academic program. The faculty members must cover by experience and interest all areas of the institution's environmental curriculum. There must be enough faculty members to provide program and course continuity, appropriate lab/field experiences and appropriate levels of student-faculty interactions. Measures should be in place to determine the impact of non full-time faculty on the program and the students.
- 2.2.2 A reasonably stable core group of full-time or near full-time faculty with a primary commitment to the program and/or institution is required to provide for coherent academic planning, coordination of instruction and curriculum development.

## **2.3 Faculty Participation in Professional Development and Academic Administration**

- 2.3.1 The faculty, within the administrative and financial limits of the institution, must have an appropriate role in the development of the program's curriculum and academic policies including the opportunity to define, implement, revise and achieve program and/or course objectives and outcomes.
- 2.3.2 Faculty meetings must be scheduled on a regular basis and include opportunities to discuss program, curriculum and current environmental issues. Structures and mechanisms must be in place to facilitate communication among faculty and between faculty and administration.

## **REQUIRMENT 3: STUDENTS**

### **3.1 General Provisions**

- 3.1.1 The institution/administration delivering the program shall provide student services and support activities that promote student engagement, retention and success, as well as professional growth and the transition to the workplace or further education. All student services must promote equitable treatment of individuals, regardless of race, gender, age, ethnicity, sexual orientation, socio-economic status or physical challenges.
- 3.1.2 The institution/administration delivering the program shall provide a means for systematically obtaining student views and input towards institutional and programmatic planning, which shall include, but not be limited to, provision for student evaluations of courses and faculty, as well as for representation on student councils and advisory committees.

### **3.2 Admissions**

- 3.2.1 Admissions must be based on specific approved selection criteria, which shall be published prior to consideration of applicants. The criteria must reflect the program's mission/goals and clearly specify the educational prerequisites and minimum qualifications of applicants that the program considers necessary for academic and professional success.
- 3.2.2 The admissions policies and procedures must involve planning and periodic review to determine whether the policy is adequately serving the needs and interests of the students, faculty, program and the environmental sector.
- 3.2.3 The number of students accepted in the program must be consistent with the resources available (i.e. physical facilities, laboratories, opportunities for co-op and field placement, faculty members and technical support staff).
- 3.2.4 The program must adhere to its published admissions policies. Marketing content and any representations made to prospective students must be clear and accurate.
- 3.2.5 Specific admissions policies (e.g. policies pertaining to Prior Learning Assessment recognition, transfer credit, advanced standing, re-admittance into the program) shall be clearly stated in institutional publications.

### **3.3 Student Services**

- 3.3.1 Students must have timely access to personal, academic and career counseling which should include services to assist students in finding work experiences and employment upon graduation. Provision for academic counseling must reinforce, and be tied in with, the efforts of faculty members, program administration and student affairs officers.
- 3.3.3 Prospective and current students should receive information on the expected costs of the program including field experiences, text books, living expenses, lab and educational fees, plus opportunities and requirements for financial aid prior to admission.
- 3.3.4 The institution or department delivering the program shall make available to students and to the general public a catalogue, calendar and/or student handbook or

comparable official publication(s) that accurately sets forth information on its current mission and educational objectives, admissions requirements and procedures, opportunities for financial or other student services, as well as policies and procedures applicable, or of special interest, to students.

## **REQUIREMENT 4: PHYSICAL/LEARNING RESOURCES**

### **4.1 General Facilities**

- 4.1.1 The physical facilities and equipment must be appropriate for the delivery of the program, realization of program outcomes and support of student achievement within program goals.
- 4.1.2 Access to the facilities and availability of equipment for faculty and students must be sufficient in relation to student enrolment and not adversely affected by the demands of other programs using the same facilities or equipment.
- 4.1.3 Institutional administration must ensure that facilities providing major components of the program are securely committed to the program. External facilities must have affiliation agreements that provide for sufficient notice of termination to allow reasonable time for the program to make alternative arrangements.
- 4.1.4 The institution must have policies/provision for the maintenance or replacement of laboratory and field equipment, software/hardware, supplies, teaching aids and reference materials.

### **4.2 Library Services and Information Resources**

- 4.2.1 A professionally administered resource center must be available and accessible to students and faculty during, and after, scheduled hours of instruction.
- 4.2.2 Available learning resources must include electronic equipment, networked computers, software and supporting subscriptions adequate to support faculty scholarly activity and essential student research and learning. Quiet individual work areas should be available in convenient proximity to these resources.
- 4.2.3 The adequacy and use of the library and learning resources should be regularly evaluated.
- 4.2.4 There are sufficient staff members available with appropriate training, experience, and qualifications to carry out professional and technical operations to manage resources and services of the library that are assigned/available to students/faculty in the environmental program(s).
- 4.2.5 The library and its staff must be supportive of, and responsive to, the research and teaching activities of the program (e.g. acquisition process for books and journals; available, secure and reliable remote access) and the changing roles and services in an evolving technological environment.

## **REQUIREMENT 5: PRELIMINARY CURRICULUM STANDARD**

### **5.1 Program Type**

5.1.1 A program must apply for accreditation as a public program that falls within one of the following categories:

#### **Type 1:**

- Programs of at least *one* academic year in length providing vocationally unified didactic/theoretical instruction and related experience in the application of practical skills, commonly producing graduates with *technician* qualifications.
- Skills are practiced and developed with guidance and feedback, and graduation requires familiarity with didactic content and ability to demonstrate the required skills.
- The cognitive ability of typical graduates, using terminology from Bloom's Taxonomy, would encompass Knowledge, Comprehension and Application. Gifted graduates might additionally demonstrate Analysis.

#### **Type 2:**

- Programs of at least *two* academic years in length that provide vocationally unified didactic/theoretical instruction and related experience in the application of practical skills, commonly producing graduates with *technologist* qualifications.
- Skills are practiced and developed with guidance and feedback, and graduation requires familiarity with didactic content and ability to demonstrate the required skills. The range of skills presented is broader and more complex, and a greater degree of independence is required of students.
- Graduates may be expected to identify and apply the appropriate skill (from a range of learned skills) as required by specific circumstances. Students should be able to complete a task with a moderate degree of complexity, utilizing a range of skills while coping with variables normally encountered in the field.
- The cognitive ability of typical graduates, using terminology from Bloom's Taxonomy, would encompass Knowledge, Comprehension, Application and Analysis. Gifted graduates might additionally demonstrate Synthesis.

#### **Type 3:**

- Programs of at least *three* academic years in length providing advanced didactic/theoretical instruction and emphasizing the development of higher level skills, commonly producing graduates with *degree* qualifications.
- Graduates are expected to be able to draw on their instruction, experience and skill development and to use their skills in a variety of different circumstances and contexts without guidance.
- Graduates are expected to be able to adapt and be creative in the ways in which they approach the context for, and use of, particular skills, as well as cope with the unexpected.
- Reflection on performance will be a key aspect. At this level, individually or within a group, a student should be able to think like an environmental scientist or practitioner and

to complete a complex task for a knowledgeable and critical audience by utilizing appropriate elements from a range of skills.

- The cognitive ability of typical graduates, using terminology from Bloom's Taxonomy, would encompass Knowledge, Comprehension, Application, Analysis, and Synthesis.

## 5.2 Generic Curricular Criteria

- 5.2.1 The program curriculum reflects and implements an overall program of study with explicitly defined and measurable goals and objectives. These goals and objectives provide a basis for curriculum development and for the evaluation of the performance/effectiveness of the program.
- 5.2.2 A curriculum review committee, or equivalent, regularly reviews, evaluates and revises, as needed, the content and instructional methodology of the program; required competencies, expected outcomes and the supporting academic and lab/field experiences – taking into account findings identified by the program's or institution's outcomes assessment processes. There is a process in place at the institution that will facilitate the professional review and see that the recommendations are received and implemented.
- 5.2.3 The program is clearly and accurately described in published materials. A syllabus must be prepared for each course or major unit of instruction, distributed to each student in the course, and maintained in the program's curriculum files. The syllabus should contain the following information, or the equivalent, as defined by institutional policy:
- The purpose of the course.
  - The learning objectives of the course in outcome-based terms, and the educational competencies/learning outcomes to be attained.
  - An outline of the content of the course and laboratory instruction in enough detail to permit the student to see its full scope.
  - The method(s) of instruction and assessment.
  - The requirements of the course with important dates (e.g., papers, projects, examinations).
  - The type of grading system used.
  - The required and recommended reading.
- 5.2.4 The program ensures that each student has access to adequate learning opportunities for each component of the program. Where applicable, academic and lab/field/work experiences are carefully coordinated, interwoven and integrated, and are mutually reinforcing.
- 5.2.5 The program ensures that each student possesses or develops the *National Occupational Standards for Environmental Employment Transferable Competencies* necessary to support targeted learning.
- 5.2.6 For all three program types, Instructional Methodology (the approaches taken to the presentation of didactic/theoretical and experiential course components) must be congruent with, or supportive of, the targeted learning objectives or competencies.
- 5.2.7 The program utilizes formative (informally graded, not-for-credit/contributing to the student's knowledge of results of learning) and summative (formally graded, for-credit/determination of success in learning) evaluation processes for evaluating student

learning. Some evaluation should take place early enough in the program to allow time for students to access remedial options open to them.

### **5.3 Environmental Relevance**

- 5.3.1 Program goals/objectives must include a primary objective to prepare a graduate to function effectively as a practitioner within the environmental field and the program curriculum must illustrate adequate provision to achieve this objective.
- 5.3.2 When a program targets higher level skills, it must identify the higher level skills the curriculum is intended to help develop:
- Recognizing and using subject-specific theories, paradigms, concepts and principles.
  - Analyzing, synthesizing and summarizing information critically, including research.
  - Collecting and integrating lines of evidence to formulate and test hypotheses.
  - Applying knowledge and understanding to complex and multidimensional problems in familiar and unfamiliar contexts.
  - Recognizing moral and ethical issues of investigations and appreciating the need for professional codes of conduct.
- 5.3.3 Programs that deal with higher level knowledge and skills must map their program's treatment of any of themes and sub-themes to their own program curriculum as applicable. In addition, for those themes /sub-themes identified as covered within the program, the program must identify any performance indicators employed.

## **REQUIREMENT 6: FINANCIAL RESOURCES**

### **6.1 Sufficiency of Resources**

- 6.1.1 The institution in which the program is located must have adequate financial resources to support the program. Actions in response to financial pressures must not compromise the quality of the program or result in having more students enrolled than the program's total resources can reasonably accommodate.

### **6.2 Financial Management**

- 6.2.1 The program must have sufficient input into financial and strategic planning to ensure that its current and developing needs will be met and sustained over time.
- 6.2.2 The program's annual budget process (including how resources are allocated) must be clearly defined and consistently implemented. The annual budget must be reviewed and ultimately approved by the institution's governing board.
- 6.2.3 The program must have a mechanism to review its current operating budget.

## **REQUIREMENT 7: RESEARCH /SCHOLARLY/LIAISON ACTIVITY**

### **7.1 Research and Scholarly Activity Policies and Practices**

7.1.1 The program/faculty must demonstrate an appropriate commitment to academic or applied research and/or scholarly activity, including an external liaison that is consistent with the mission, goals and educational objectives of the program.

### **7.2 Support for Research/Scholarly Activity**

7.2.1 The institution should provide, secure or arrange adequate funding, facilities, information technology, equipment, staff, library and other resources to accommodate the research/scholarly/liaison activity of the program.

7.2.2 Where an institution or program/faculty has a commitment to research/scholarly/liaison activity, this is reflected in such areas as the teaching load and assignment of full-time faculty responsibilities, the provision of stipends and other remuneration for research/scholarly/liaison activity, support for seeking external funding, opportunities for faculty leave to conduct and participate in appropriate research/scholarly/liaison activity programs, and professional development opportunities to increase research/scholarly/liaison activity capabilities.

7.2.3 The institute/program with active research programs should facilitate mentored opportunities for interested faculty and students to participate in research/scholarly/liaison activity.

7.2.4 Research/scholarly/liaison activity resulting from active program/faculty initiatives should be used to enhance the quality of the program and student learning experiences.

## **Next Steps and Recommendations**

### **Reciprocal Agreements**

It is important in today's global economy to encourage prosperity by reducing barriers to employment. One method to accomplish this goal is for accreditation organizations to develop 'Reciprocal Agreements' with accreditation organizations in other countries. This type of international agreement will benefit environmental professionals, educators and the Canadian Environmental Accreditation Commission (CEAC).

The accreditation process is regarded as an objective way of determining whether an environmental program in one country meets the standards in another country. Under a reciprocal agreement, each accrediting organization recognizes the accreditation of educational programs in specified categories accredited by the other agency. Therefore, the accrediting organizations agree that the educational programs accredited by the other agency are equivalent to their own.

This type of agreement will have certain responsibilities for each accrediting organization to ensure the reciprocal agreement is maintained and equivalent as accreditation requirements and policies are expanded and revised. Commissioners and staff of the accrediting organizations must regularly attend the meetings of the other agency and its standing committees. It is

recommended that a commissioner and/or staff participate annually in at least one site visit conducted by the other agency. This cross-participation is important in maintaining an understanding of the accreditation process in each country and in ensuring that the accreditation processes in each country continue to be equivalent.

If reciprocal agreements are established, Canadian environmental programs accredited by CEAC will not only meet the Commission's requirements, but will also meet international requirements in various countries, thus promoting mobility of Canadian graduates. Increased mobility and reciprocity for trained workers in Canada is a goal for ECO Canada and establishing reciprocal agreements with other countries will assist in achieving this goal.

CEAC should consider seeking reciprocal agreements with organizations in countries that educate environmental practitioners/professionals who have a history of immigrating to Canada. The Canadian Environmental Certification Approval Board (CECAB) may have statistics that would be helpful in this regard.

Some suggestions for organizations that CEAC could approach to investigate development of reciprocal agreements are:

1. Accrediting Board for Engineering and Technology (ABET) – United States
2. The Institution of Environmental Sciences (IES) and the Committee of Heads of Environmental Sciences (CHES) – United Kingdom
3. Environmental Education Associations – AAEE – Australian Association for Environmental Education; NZAEE – New Zealand Association for Environmental Education; EEASA – Environmental Education Association of South Africa

## Use of Technology

The accreditation process is an "information-based" process, and it should employ currently available information technology (IT) as effectively as possible. Two current IT processes may be utilized -- the ability to receive digitized versions of self study reports and documentation on CD-Rom and DVD's (or electronically as attachments to email), as well as the ability to utilize online processes.

Programs can provide digitized copies of their self study reports and documentation on digital media or by email. This is very helpful to site evaluators, who can quickly search the digitized documents and cut and paste from them as they assemble their Site Visit Evaluation Reports. It is also helpful to the CEAC administrator for storing official records conveniently and in following up on site visit recommendations. This type of information technology can readily be introduced and utilized with new and developing accreditation organizations.

Many organizations use online software or their own web pages to provide places to post reports and allow joint editing of documents of interest to site visitors, members of the accreditation commission and committees or task forces. Online resources can greatly assist processes such as annual review processes related to accreditation and the periodic revision of accreditation requirements.

While new accreditation organizations may require time to determine their specific needs, password-protected and secure online processes can be used as an alternative to paper processes. The U.S. Council on Naturopathic Medical Education (CNME) now employs an online residency education database maintained by the participating universities and their affiliated residency sites. The database expedites the storing and retrieving of all information required for ongoing monitoring of Post Doctoral residency programs. CNME's Committee on Post Doctoral Medical Education can retrieve and print data as required to discharge its responsibility to monitor how the universities are ensuring that their residency programs maintain designated standards. As the new CEAC accreditation process develops and its needs become more clearly defined, on-line information technology resources should be high on the list of potential responses.

## Marketing Framework

It is in the opinion of the project team that marketing the accreditation process would benefit diverse target audiences and user groups in three ways:

- It establishes immediate credibility for the accreditation process with the various target audiences.
- It creates a bridge to all user groups.
- It provides a vehicle that can benefit all user groups in the future.

In looking at the Marketing Framework it was determined that there were five distinct target audiences with several sub-groups:

- Employers
- Students
- Graduates from environmental programs
- Academics
- ECO Canada

Among employers, there are subcategories broadly labeled Industry, Government and Non Profit agencies who specialize in environmental work. Among students, the subcategories are *potential students* (currently graduating high school or adults undergoing retraining), *parents* (who have a vested interest in ensuring their education largess is being put to good use), and *graduate students*. Graduates from environmental programs are interested in self development, certification and career development. In Academia there are subcategories of *Institutions* (colleges, universities, technical institutes, CEGEPS, etc.) as well as distinct programs and academics seeking publishing and developmental opportunities. ECO Canada is an entity that is establishing itself to act for various parties and could be construed as the bridge between them.

The challenge in developing the marketing framework for the accreditation process was to determine when the various target user groups should be approached, how they should be approached (format), and what message would be conveyed to encourage their participation in the process (eg. benefits for the target groups).

A four phase approach is recommended, namely:

1. Phase 1: Pilot
2. Phase 2: Initial and Preliminary Accreditation
3. Phase 3: Expanded Accreditation
4. Phase 4: Capitalization

In the early stages of the project it became clear that a phased approach would have to be taken due to the sheer potential of candidate programs and the manpower constraints not only to approach them but also to ensure the process is solidly built and to ensure both the independence and completeness that all participants desire.

In Phase 1 (Pilot), it is recommended that four programs be targeted for initial accreditation after the CEAC has been appointed and trained. This will ensure that the process developed by the team is structurally sound and is rigid enough for integrity. The benefit is getting the process right. This process, now underway, allows initial participants to influence the process and establish credibility and buy-in.

In Phase 2 (Initial and Preliminary Accreditation), it is recommended that a broader base of applicants be developed from the database accumulated during ECO Canada's accreditation development project phase, currently being used for project progress reports in a monthly newsletter format. This will start to become the bridge linking the various sub-groups in the target user communities. This phase will position the benefits of a program with National Accreditation to parents and potential students while ensuring that the learning outcome skills required by the various sub-groups of employers are being met by that program. These can take the form of articles in professional journals promoting the benefits of national accreditation. The time frame is June 2010 to June 2011.

In Phase 3 (Expanded Accreditation), it is recommended that the bridging opportunities become more transparent to all user groups and that ECO Canada take the lead in ensuring that a cooperative effort is developed. Marketing messages need to be placed in front of the remaining potential accreditation applicants, potential students and parents extolling the benefits of accredited programs. Graduates will be seeking advanced learning outcomes and career development that accredited program academics will need to be aware of, so they can seek to fulfill this need. Finally, employers will be seeking superior quality candidates for job openings and entry level positions and ECO Canada can create that bridge, not only through their job posting boards but also through initiatives in becoming the glue, bringing all these constituents together through future environmental conventions and establishing user groups to identify needs and find solutions to meet them. The time frame for this phase is 2011 to 2013.

In Phase 4 (Capitalization), it is recommended that a more overt marketing campaign be undertaken to establish the pre-eminent position of accredited programs in the minds of potential students, parents, graduates, academics and employers. It will be time to gain consensus on defined job entry learning outcomes desired by employers and delivered by accredited programs, as well as to develop new and groundbreaking learning skills required by employers. It will be time to initiate cooperative advertising and vehicles such as developmental conferences and

conventions that will benefit all user groups. It is clear that a visionary leader will be required to initiate and establish these programs and ECO Canada is in a unique position to fulfill that need.

## Pilot Project

The purpose of the pilot project of the Canadian Environmental Accreditation Commission (CEAC) accreditation process is to evaluate its application in order to identify necessary revisions and changes.

Four programs representing a diverse range of full-time, certificate/diploma/degree, public environmental programs and industry sectors should be selected for participation in the pilot. If possible, these should include one Type 1 program (certificate); one Type 2 program (diploma); and two Type 3 programs (degree – one university and one college/university). These programs will serve as sources of information that the CEAC and its Standards and Documentation Committee will use to revise or enhance the accreditation process and requirements/criteria in preparation for its implementation in 2010-2011.

All handbooks, manuals, policies, procedures, forms and worksheets used in the accreditation process will be assessed by the program faculty and the site visit team evaluators involved in the pilot. This will result in recommendations for improvements and revisions which will be considered by the Commission at its first annual meeting in June 2010. In this way, these first program faculty and the site visit team evaluators will contribute to the enhancement and relevancy of the proposed accreditation process. In addition, information will be shared with the CEAC Requirements and Documentation Committee if any recommendations specifically address the content/terminology of the accreditation requirements/criteria.

ECO Canada should consider providing some incentives to programs who participate in the pilot. This could take the form of a reduced fee for accreditation or increased visibility for the program by virtue of being included in ECO Canada and CEAC advertisements/articles about the introduction of the accreditation process. ECO Canada could also point out that program faculty/administration who participate in the pilot will have an opportunity to contribute to the development of the accreditation process which will enhance the quality of environmental education programs in Canada.

*A key element for the success of the pilot project will be to engage environmental programs that have the capacity to succeed and achieve accreditation.*

For details of the methodology for the pilot project, please see Appendix 1.

# **Appendix 1**

## **Methodology for Pilot Project**

### **Goals**

The pilot project will provide information that can be used to:

1. Finalize the online process and manuals/guidelines that applicants will follow in their application for accreditation. All forms, worksheets, manuals will be assessed. In addition, information will be sought regarding proposed annual timelines for applications, receipt of Self-study Report and supporting documentation, schedules for site visits, committee and Commission meetings against the academic calendar, etc.
2. Determine what information and specific documents applicants need to provide as part of the self study and what additional self study guidelines, if any, are needed to assist program faculty in the preparation of their report and to evaluate compliance with the accreditation requirements.
3. Determine what constitutes sufficient compliance with the requirements, including what types of practices are appropriate or inappropriate.
4. Finalize procedures that the Accreditation Commission, its committees and the Site Visit Evaluation Team members will follow to receive and evaluate applications, determine eligibility, conduct on-site visits, review and evaluate program Self-study Reports with supporting materials and Site Visit Evaluation Reports, and to make a determination of accreditation status. (This will include the role of staff and volunteers, schedule of site visits, use and training of site visit evaluation teams, feedback to applicants and the public during and following the application process site visits, plus the review and decision-making process of the Accreditation Commission and its Committees.)
5. Determine the most challenging issues encountered by:
  - Potential applicants accessing information on the ECO Canada or CEAC website.
  - Applicants when completing the application and Self-study Report with supporting documentation.
  - Members of the Site Visit Evaluation Team, the Accreditation Commission and Committee members when reviewing applications and the Self-study Reports and supporting documentations.
  - CEAC when making decisions on eligibility or compliance with the accreditation requirements.
6. Develop a process to ensure appropriate feedback is received throughout the application and accreditation process with sufficient advice and assistance for applicants and volunteers during the implementation.
7. Seek recommendations for improvements to the accreditation process, manuals/guidelines/forms/worksheets, decision-making process and staff support.
8. Establish appropriate and workable annual timelines for the Accreditation Commission, from the application deadlines through to the Commission meeting.

## **Timelines**

1. Set deadline for submission of “Letters of Interest” (August 2009 ECO Board meeting).
2. Approve the accreditation process/requirements for use in the pilot project (August 2009 ECO Board meeting).
3. Appoint the Implementation Accreditation Commission and Committees, including pool of volunteers for site visit teams (August or November 2009 ECO Board meetings).
4. Appoint Selection Committee and schedule a meeting to review and select the four programs to participate in the pilot (September or October 2009).
5. Receive “Letters of Intent” and Self-study Reports with supporting documentation.
6. Appoint and train site visit team members (November 2009 – January 2010).
7. Schedule the four site visits (February – March 2009).
8. Receive final Site Visit Evaluation Team reports (minimum of 6-8 weeks prior to Commission and Academic Program Committee meetings).
9. Accreditation Commission meeting to be preceded by the Academic Program Committee meetings (could be same day or same weekend).
10. Requirements and Documentation Committee meeting may also be required.

## **Sources of Feedback for Pilot Project**

1. Program faculty/administration
2. Site Visit Evaluation Team members and Chair
3. CEAC staff support
4. Members of the Accreditation Commission, Academic Program Committees and Requirements and Documentation Committee
5. ECO National Working Group on Accreditation

## **Final Selection Criteria for the Pilot Programs**

The following are suggested as draft criteria for selection of the program to participate in the pilot project:

- The full-time environmental program is offered at a public university, college, technical institute or CEGEP and complies with the proposed Eligibility Requirements.
- The program has consistently produced graduates for the past \_\_\_(5?) years with a class size of a minimum of \_\_\_ students. (optional)
- The credential awarded is a degree, diploma or certificate, and the program is representative of a specific type of environmental program; TYPE 1, 2 or 3, as defined in the CEAC Curriculum Requirement.
- The corporate authority of the programs selected for the pilot project must make a full commitment to participate in the pilot project through a letter of intent.
- Programs must be able to comply with the time frames for the pilot project – application, eligibility, Self-study Report and documentation preparation, site visit review and consideration by the Implementation Commission in June 2010.
- Programs must declare any denial or withdrawal of accreditation status from other accreditation organizations within the last five years.

- Four programs will be selected and will represent diversity in terms of location/geography, size, type of program (1,2 or 3 as defined in CEAC Curriculum Requirement: one Type 1, one Type 2 and two Type 3; one university and one college/university), environmental sector and range of maturity.
- Consideration should be given to have 1 or 2 additional programs complete the application and self study in the event that one of the four programs selected: cannot complete the self study, drops out of the pilot, has its self study rejected as incomplete and cannot revise it in time for the site visit, etc. If these additional programs are not included in the pilot, they would be the first programs accepted for accreditation in the initial cycle of accreditation (2010 – 2011 term).

Example of an invitation to participate in the PILOT:

*“ECO Canada is currently seeking a ‘Letter of Interest’ from any environmental program that wishes to participate in a pilot project of the newly developed accreditation process. Inclusion as a pilot accreditation program requires the applicant to agree to abide by requirements in the selection criteria, including compliance to designated timelines.*

*Program faculty/administration will need to become familiar with the CEAC application and Self-study Manual which includes the Eligibility Requirements and Accreditation Requirements, and the CEAC Handbook of Accreditation which outlines the accreditation governance model and decision-making process. You must be reasonably confident that your program can demonstrate that it complies with the CEAC Accreditation Requirements, complete its Self-study Report by the January 1, 2010 deadline, and be ready to schedule a site visit between February and March 2010.*

*More information about the CEAC process and accreditation requirements will be provided during the detailed preparations/assistance from the CEAC secretariat for those programs selected as pilot accreditation programs. Further information on the Eligibility Requirements and Accreditation Requirements are included in the CEAC Application and Self-Study Manual. Participation in the pilot project will count towards achieving CEAC accreditation for those public environmental programs that can demonstrate compliance with all elements of the Accreditation requirements and criteria. The first meeting of the CEAC and its Program Review Committees is anticipated to be in June 2010.*

*Respondents should ensure that their ‘Letter of Interest’ clearly addresses each of the selection criteria listed above.*

*We anticipate that there will more programs interested in participating in the pilot project than we will be able to accommodate. Therefore, we have organized a Pilot Selection Work Group to select 4-6 programs (4 pilot and 2 back-up programs) based on the criteria specified above. Programs not selected at this time will be encouraged to apply once the CEAC Accreditation Process is fully operational in early 2011.*

*Please note that all completed ‘Letters of Interest’ for inclusion into the pilot project must be returned to ECO Canada by close of business on September 1st, 2009.”*