

**CERTIFICATION, ANNUAL MAINTENANCE AND RENEWAL CRITERIA  
CERTIFIED ENVIRONMENTAL SITE ASSESSOR  
(CESA)**

**INTRODUCTION**

The Quebec Association of Environmental Verification (QAEV) (Association québécoise de vérification environnementale) issues two types of certification, one for environmental auditors and another for environmental site assessors. This document defines the certification criteria for practitioners who currently work in the field of **environmental site assessment** as well as criteria for the annual maintenance and renewal of the certification. It is the QAEV's objective to ensure that environmental site assessors, as defined in this document, are able to conduct environmental site assessments and sign the related reports.

This document

- sets the scope of the certification;
- specifies the reference standards;
- defines the requirements for the recognition of certified environmental site assessors;
- defines the requirements for certification renewal and annual maintenance.

To prepare this document, the QAEV took reference to the criteria and orientations of the organizations specified in Appendix G.

**1. SCOPE**

The QAEV recognizes that environmental site assessment is a multidisciplinary activity and therefore cannot be related to a single profession. It should be mentioned that activities falling exclusively within the scope of practice of a professional corporation should be conducted by the concerned professionals.

QAEV certification does not bring exclusivity to the environmental site assessment field. Certification is associated with various aspects such as qualifications, standards, public protection, credibility and promotion of good environmental site assessment practices. The accreditation itself, along with a broad distribution of the CESA directory, offers a good market guidance.

**1.1 Lead Assessor**

The QAEA recognizes that an environmental site assessment should be conducted by a lead assessor having the personal qualities and relevant experience to ensure good leadership and efficient management throughout the environmental site assessment process. In certifying environmental site assessors, the QAEA considers the latter capable of managing environmental site assessments and signing the reports.

## 2. REFERENCE TO STANDARDS

The QAEV recognizes that environmental site assessment must be based on generally accepted standards regarding the practice and subject matter of an environmental site assessment. Without being limited or exclusive, an environmental site assessment should be conducted in compliance with the standards identified in Appendix E. Any departure from these standards will have to be clearly specified in the environmental site assessment report.

## 3. DEFINITIONS

### 3.1 ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment is a systematic process by which an assessor seeks to determine if a property or a particular site is or may be subject to actual or potential contamination (CAN Z-768-01). The Phase II Environmental Site Assessment consists of a systematic and iterative process upon which an environmental site assessor attempts to characterize or delineate concentrations or quantities of problematic substances related to a site, and compare these levels to the established criteria (CAN Z-769-00)

### 3.2 ENVIRONMENTAL SITE ASSESSOR

An individual who carries out an environmental site assessment as above-mentioned according to approved field practice.

### 3.3 SUITABLE WORK EXPERIENCE

Professional activities within more than one of the following areas (see Appendix A for further details):

- environmental science and technology;
- technical and environmental aspects of facility operations;
- hydrogeology, geology, biology, geography and land-use planning;
- application of environmental laws and regulations;
- verification and assessment methodology and techniques.

During their work experience, it is expected that candidates will have demonstrated the following qualities and skills:

- ability to clearly express concepts and ideas, both orally and in writing;
- good interpersonal skills: tact, diplomacy and the ability to listen to others;
- ability to remain independent and objective;
- appropriate methods and work organization to obtain efficient results during site assessments;
- ability to identify objective evidence and to determine root causes to the problems identified;

- good judgement;
- respect and sensitivity for the local context.

### 3.4 ENVIRONMENTAL SITE ASSESSMENT EXPERIENCE

Environmental site assessment days are days dedicated to one or more of the following activities: supervision, program management, preparation, execution, research and the writing of an environmental site assessment report.

### 3.5 ACADEMIC BACKGROUND

Academic background (or basic training) refers to the candidate's university education (example: bachelor's degree or its equivalent).

### 3.6 CONTINUING TRAINING

Continuing training refers to the core specific training, related to environmental site assessment, as defined in Appendix B.

### 3.7 PROFESSIONAL PRACTICE

Professional employment as a consultant or for prime contractors when the job allows direct supervision of environmental site assessment-related activities.

### 3.8 PROFESSIONAL DEVELOPMENT

Professional development activities must either be associated with environmental site assessment or considered relevant by the QAEV. The following activities are recognized as professional development activities: participation in conferences, symposiums, seminars, specific training courses, association meetings, a visit scheduled within a conference program, committee attendance, authoring public presentations, article publication, training material development, training dissemination.

## 4. CERTIFICATION CRITERIA

### CERTIFIED ENVIRONMENTAL SITE ASSESSOR (CESA)

The criteria are defined according to academic training, suitable work experience including, environmental site assessment experience, continuing training and the QAEV exam. The criteria described in this section lead to the certified environmental site assessor title.

To obtain certification, candidates must meet the following requirements (see table presented in Appendix C):

**A.**

The candidate will have a university bachelor's degree in an appropriate field (ex: engineering, natural sciences, environmental science) or a relevant equivalence. He or she will have suitable work experience of at least five (5) years in the environmental field, and will have participated in at least eight (8) complete environmental site assessments for a minimum of forty (40) days of environmental site assessment. He or she will have successfully completed the core QAEV continuing training (or the equivalent), in the years prior to certification. Moreover, a minimum score of 60 % is required for the QAEV exam.

**Or**

**B.**

The candidate will have a university bachelor's degree. He or she will have suitable work experience of at least six (6) years in the environmental field and will have participated in at least eight (8) complete environmental site assessments for a minimum of forty (40) days of environmental site assessment. He or she will have successfully completed the core QAEV continuing training (or the equivalent), in the years prior to certification. Moreover, a minimum score of 60 % is required for the QAEV exam.

**Or**

**C.**

The candidate will have a university bachelor's degree and a master's degree (or higher) in an appropriate field (ex: engineering, natural sciences, environmental science). He or she will have suitable work experience of at least four (4) years in the environmental field and will have participated in at least eight (8) complete environmental site assessments for a minimum of forty (40) days of environmental site assessment. He or she will have successfully completed the core QAEV continuing training (or the equivalent), in the years prior to certification. Moreover, a minimum score of 60 % is required for the QAEV exam.

**Or**

**D.**

The candidate will have a university bachelor's degree and a master's degree (or higher) in an appropriate field (engineering, natural sciences, environmental science). He or she will have suitable work experience of at least five (5) years in the environmental field and will have participated in at least eight (8) complete environmental site assessments for a minimum of forty (40) days of environmental site assessment. He or she will have successfully completed the core QAEV continuing training (or the equivalent), in the years prior to certification. Moreover, a minimum score of 60 % is required for the QAEV exam.

## 5. CERTIFICATION RENEWAL CRITERIA

In order to renew his or her certification, the CESA must meet the following professional activity AND professional development criteria.

### A. RELEVANT PROFESSIONAL ACTIVITIES:

#### PROFESSIONAL PRACTICE

A minimum of 240 hours of professional practice in the past three (3) years

OR

#### ENVIRONMENTAL SITE ASSESSMENT EXPERIENCE

Participation in at least six (6) environmental site assessments, representing a minimum of 30 days within a period of three (3) years.

### B. PROFESSIONAL DEVELOPMENT

Have cumulated a minimum of 45 hours of professional development during the past three years among the activities mentioned in Appendix D, while observing the maximum hours recognized for certain categories. Note that for candidates wishing to maintain both the CESA **and** CEA designations, a total of 60 hours is required for both titles

## 6. CERTIFICATION TERM, MAINTENANCE AND RENEWAL

Certification is valid for a period of three (3) years (from September 1 to August 31), after which it can be renewed for another term of three (3) years. The CESA who wishes to renew his or her certification must prove that he or she continues to adequately satisfy the renewal criteria provided in Section 5 above. In order to maintain his or her certification on an annual basis within the three-year validity period, the CESA must demonstrate that he or she will be able to satisfy the renewal criteria at the end of the three (3) year term, by means of relevant professional activities. CESAs are responsible for keeping an updated record or any other type of document regarding their training and experience as supporting evidence for certification maintenance and renewal.

### 6.1 ASSOCIATION DIRECTORY

The QAEV has put together a directory of CESAs. It is available on the QAEV's Website ([www.aqve.com](http://www.aqve.com)) and is updated once a year.

## **7. CERTIFICATION APPLICATION, MAINTENANCE OR RENEWAL**

A candidate wishing to obtain a QAEV certification needs to submit a written request to the QAEV office before the deadline by completing the certification application form and providing all the required documents, as well as the file processing fees.

In order to maintain and renew their certification, environmental site assessors will have to complete the annual maintenance form (FR-2005-03) that will be sent by the administration along with the invoice for the annual maintenance. At the end of the third year of their certification, the CESAs will be required to complete the certification renewal form (FR-2006-15), that will be sent by the administration along with the invoice for the certification renewal.

## **8. PROFESSIONAL COMPETENCE AND CODE OF GOOD PRACTICE**

Certified environmental site assessors must demonstrate professional competence in their activities in a way that promotes respect for their profession and for other professions.

Assessors are environmental professionals with adequate training and experience to perform environmental site assessments, carry out interviews along with other related activities, with respect to recognised practices in this field of expertise.

Environmental site assessors must have the knowledge, aptitudes and relevant experience that will allow them to assume the position responsibilities.

Certified environmental site assessors are committed to respecting the QAEV's code of good practice (Appendix F). Any deviation from the code of good practice will be investigated by an ad hoc discipline committee appointed by the QAEV's board of directors.

However, the good practice code does not replace professional corporation applicable codes of ethics. The QAEV will forward complainants to their respective professional corporation for any complaint involving a CESA that is a member of a professional corporation. These complaints will have to be submitted to the QAEV discipline committee once they have been analyzed by the relevant professional corporation.

## **9. WORKING LANGUAGE**

It is recommended for certified environmental site assessors to avoid carrying out assessments without independent translation assistance if they lack communication skills in the language used by the organization being assessed.

## APPENDIX A SUITABLE ENVIRONMENTAL WORK EXPERIENCE

The QAEV defines “ suitable work experience” as work or internship activities:

**in the following areas:**

- the private sector;
- the institutional sector (teaching and research);
- non-governmental organizations;
- public and para-public sectors;

**in the following professions:**

- auditor or assessor;
- inspector;
- specialist;
- engineer;
- consultant or adviser;
- lawyer;
- planner;
- scientist;

**in the following fields of expertise:**

- environmental assessment;
- risk assessment;
- environmental consulting role;
- environmental law;
- impact assessment;
- environmental control;
- environmental protection;
- law/regulation development and application;
- research and development;
- environmental technologies;
- environmental science training.

It should be noted that successfully completing the short university program entitled «*Microprogramme de 2e cycle de vérification environnementale*» offered by Sherbrooke University is equivalent to one year of experience.

**APPENDIX B CORE TRAINING**

Mandatory training (required by the QAEV):

<b>ENVIRONMENTAL SITE ASSESSMENT</b>
<b>General Verification Principles – Methodological and Operational Aspects (3.5 hours)*</b>
<ul style="list-style-type: none"><li>• History and Types of Verification</li><li>• The Environmental Site Assessor Profession The Environmental Site Assessment (ESA)</li><li>• General Principles</li><li>• ESA Objectives of the ESA and its different phases</li></ul>
<b>Legal Aspects (11 hours)*</b> Environmental Law (municipal, provincial, federal and international) Professional Law
<b>Theoretical and Practical Content of Environmental Site Assessment – Phase 1,2,3 (12 hours)*</b> Investigative Work Characterization Risk Analysis Report Site Rehabilitation
<b>Case Study (7 hours)*</b> Simulation of an Environmental Site Assessment, Phase 1, 2, 3.

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*\* Training hours are for reference purposes*  
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Optional training for all participants (35 hours):

Environmental Law
Principles <ul style="list-style-type: none"><li>• Concept of environment</li><li>• Nature of Environmental Law</li><li>• Environmental Law and Management</li></ul>
Application Mechanisms <ul style="list-style-type: none"><li>• Prevention Mechanisms</li><li>• Remedial and Punitive Mechanisms</li></ul>
Environmental Law <ul style="list-style-type: none"><li>• Federal Legislation</li><li>• Provincial Legislation</li></ul>
Professional Law
<ul style="list-style-type: none"><li>• Notion of Professional Responsibility</li><li>• Sources of Professional Responsibility</li><li>• Protection Against Responsibility</li><li>• Duties of an Environmental Auditor</li></ul>
Case Study

**APPENDIX C CERTIFICATION CRITERIA TABLE**

	A	B	C	D
<b>ACADEMIC TRAINING</b>	Bachelor's degree (or the equivalent) in an appropriate field	Bachelor's degree (or the equivalent)	Bachelor's degree (or the equivalent) and master's degree (or higher), both in an appropriate field	Bachelor's degree (or the equivalent) and master's degree (or higher) in an appropriate field
<b>SUITABLE WORK EXPERIENCE*</b>	5 years	6 years	4 years	5 years
<b>ENVIRONMENTAL SITE ASSESSMENT EXPERIENCE</b>	8 assessments 40 site assessment days			
<b>CONTINUING TRAINING</b>	Completion of core training or equivalent			
<b>EXAMINATION</b>	Passing grade of 60% on the examination			

It should be noted that successfully completing the short university program entitled «*Microprogramme de 2e cycle de vérification environnementale*» offered by Sherbrooke University is equivalent to one year of experience. It should however be noted that in any case, at least 4 years of relevant work experience is required.

**APPENDIX D CERTIFICATION RENEWAL CRITERIA**

CESAs must meet relevant professional activity AND professional development criteria in order to renew their certification.

**RELEVANT PROFESSIONAL ACTIVITIES**

Professional practice: 240 hours

**OR**

Environmental site assessments: 6 assessments and 30 days

**AND**

**PROFESSIONAL DEVELOPMENT:** 45 hours (one certification) or 60 hours (two certifications)

**-Participation in conferences, symposiums, seminars:** unlimited

**-Participation in course/training:** unlimited

**-Association meeting:** recognized maximum: 5 hours

**-Organized conference visit:** recognized maximum: 2 hours

**-Committee participation:** recognized maximum: 10 hours

**-Public presentations:** recognized maximum: 10 hours

**-Article publication:** recognized maximum: 10 hours

**-Development of training material:** recognized maximum: 20 hours

**-Training distribution:** recognized maximum: 20 hours

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**APPENDIX E STANDARDS**

- CAN Z-768 Environmental Site Assessment – Phase 1
- CAN Z-769-00 Environmental Site Assessment – Phase 2
- ASTM E 1527-00, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process
- NF 150 14015-02, Environmental Assessment of Sites and Organizations
- Guide de caractérisation des terrains – Publication du Québec

## APPENDIX F CODE OF GOOD PRACTICE

*During the practice of environmental site assessment, every QAEV member must strive to apply the following criteria:*

- a) be honest and sincere, and provide professional services with integrity and diligence;*
- b) have the necessary skills, competences, knowledge and experience to perform the requested services;*
- c) continually seek to improve professional knowledge and skills;*
- d) serve the client in a conscientious, diligent, and efficient manner;*
- e) hold in strict confidence, except as required by law, all client matters and business-related information gathered during professional practice, and not use this information for personal gain;*
- f) remain free of any influence, interest or relationship that impairs judgement, independence or objectivity when providing professional services;*
- g) commit to honest, thorough and straightforward communication in the performance of professional duties;*
- h) not be associated to any false or misleading report, statement, or representation;*
- i) act with courtesy and good faith toward other professional site assessors;*
- j) abstain from advertising that could be misleading or counterproductive for the practice;*
- k) continuously strive to enhance public regard for the environmental site assessment profession;*
- l) imperatively inform their clients if they do not hold insurance covering professional responsibility. Professional association members who are QAEV members are imperatively insured under the Professional Code.*

## APPENDIX G ORGANIZATIONS

In preparing this document, the QAEV has drawn from the criteria and orientations of the following organizations:

- International Society of Accredited Safety Auditors Inc. (Licensing Requirement), (U.S.A);
- Certification of Industrial Hygienists (American Board of Industrial Hygienists), (U.S.A);
- European Union - Regulations introducing a community management system and environmental audits (Eur.) (EMAS);
- National Environmental Auditors Registration Board (U.K);
- California EPA Registered Environmental Assessor Program, (U.S.A);
- *Institut français des auditeurs et vérificateurs de l'environnement*, (Fr.);
- Report of the Canadian Institute of Chartered Accountants (Can);
- National Registry of Environmental Professionals, (U.S.A);
- National Association of Environmental Professionals, (U.S.A);
- National Environmental Training Association, (U.S.A);
- QAEA , (Certification Criteria- Certified Environmental Auditor, 2005 Revision)
- Association of Professional Engineers of Ontario: Guideline Professional Engineers Providing Services in Environmental Site Assessment, Remediation and Management – 1996;
- Standards Council of Canada, Criteria regulating the accreditation of a personnel certification body CAN-P-9. (ISO 17024:2003).