



## EXAMINATION GUIDE FOR EXAM CANDIDATES

### ROSTER OF APPROVED PROFESSIONALS EXAMINATION REGULATORY PART

#### Roster Qualifications and Functions

The Roster of Approved Professionals (the Roster) is a roster of individuals who have proven, through examination and experience, their expert knowledge in contaminated site assessment, management, and remediation.

Members of the Roster are authorized, under section 49.1 of the Contaminated Sites Regulation (CSR), to recommend to the BC Ministry of Environment and Climate Change Strategy (BC ENV) issuance of Approvals in Principle, Certificates of Compliance, Determinations that a site is or is not contaminated, Contaminated Soil Relocation Agreements and approval of background release exemptions (as per Table 1 and Table 2 of Protocol 6 - Eligibility of Applications for Review by Approved Professionals).

There are two categories of Approved Professionals: Standards Assessment Specialists, whose recommendations are based on application of the numerical standards of the CSR; and Risk Assessment Specialists, whose recommendations are based on application of the risk-based standards of the CSR.

The qualifying examination is offered in three parts: Technical – Standards Assessment, Technical – Risk Assessment, and Regulatory. To be appointed to the Roster, candidates must achieve a pass in both the regulatory part and the technical part associated with the category in which they seek appointment. Candidates must satisfy all minimum requirements in the year of appointment.

More information on the Roster is available at [www.csapsociety.bc.ca](http://www.csapsociety.bc.ca). Please email [admin@csapsociety.bc.ca](mailto:admin@csapsociety.bc.ca) for the Approved Professional Roster Pack.

#### Examination Format

**The examination is offered in a computer-based format and is held in a computer lab.** The Regulatory part of the examination consists of approximately **70 multiple-choice questions** worth 1 point each. Candidates will be given **4 hours** to complete the Regulatory part of the examination. A basic, non-programmable calculator (Texas Instruments TI-30Xa Solar), a #2 mechanical pencil, an eraser, writing papers and a package of page markers (eg *Post-it Brand* flags) will be provided to, and retrieved from, candidates with their examination paper. Candidates will not be permitted to use their own calculator or writing instruments.

Candidates will be provided with a list of reference materials (*see Attachment 2*) to help prepare for the examination. Candidates are expected to prepare their own **printed** reference materials which can be brought into and used during the examination. Laptops or electronic materials are **NOT** permitted. The examination is not limited to testing knowledge of only those materials in the reference list.

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### **Objectives of the Regulatory Part of the Examination**

The objectives of the Regulatory part of the Examination include testing of the understanding and application of the statutes, regulations, guidance documents, protocols, policies and procedures governing the identification and remediation of contaminated sites. Successful candidates will also have a detailed understanding of how the identification, investigation and remediation of contaminated sites is regulated not only by the province but also by the federal government and will be able to understand and apply all conventions, provincial or federal, that pertain to contaminated sites practice in BC.

### **Examination Content and Guide to Preparation**

This Guide to Examination Candidates is intended to give candidates guidance in their preparation for the exam. The information contained in this document and its attachments is to assist only and is subject to change. Areas and materials not specifically mentioned may also be examined.

Information useful in preparing for the exam is included in the following attachments:

1. Syllabus
2. List of Reference Materials

## ATTACHMENT 1 – SYLLABUS

Candidates should read the Guide to Examination Candidates – Roster of Approved Professionals Examination – Regulatory before reading this syllabus. The percentage in brackets indicates the approximate percentage of the examination that will cover each major content area. **Any statute, regulation, guidance document, protocol, policy, procedure or other applicable convention pertaining to contaminated sites practice in BC is examinable.** However, particularly important areas of knowledge include:

- I. Site Identification & Notification (20%)**
  - a. Notifications
    - i. Offsite Migration
    - ii. Consultation Process
  - b. Independent Remediation
  - c. Site Risk Classification
  - d. Site Profile
  - e. Site Registry
  
- II. Site Investigation (30%)**
  - a. Identification of Potential Contamination
  - b. Confirmation of Contamination
    - i. Applicable Standards
    - ii. Background
    - iii. Exemptions
    - iv. Statistical and Modelling
    - v. Definition of a Contaminated Site
  - c. Delineation of Contamination
  
- III. Remediation (20%)**
  - a. Remediation Standards
  - b. Regulatory Remediation Processes
  - c. Remediation Plans
  - d. Confirmation of Remediation
  - e. Risk Assessment
  
- IV. Regulatory Instruments (20%)**
  - a. Determination
  - b. Approval in Principle
  - c. Certificate of Compliance
  - d. Contaminated Soil Relocation Agreement
  - e. Ministry only instruments (e.g. ORDERS and VRAS)
  - f. Authorizations or Approvals (other than AIP)
  
- V. Review Process (10%)**
  - a. Administrative Forms
  - b. Ministry Process
  - c. CSAP Process
  - d. Performance Assessment

## ATTACHMENT 2 – LIST OF REFERENCE MATERIALS

Candidates should read the Guide to Examination Candidates–Roster of Approved Professionals Examination–Regulatory before reading this attachment. While many questions will be drawn from the following list of reference materials, questions may be drawn from any statute, regulation, guidance document, protocol, policy, procedure or other applicable convention pertaining to contaminated sites practice in BC.

### 1) LEGISLATION, REGULATIONS, GOVERNANCE AND FEDERAL GUIDANCE

- a) Provincial <https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/lawsregulations-compliance>
  - i) *Environmental Management Act*
  - ii) Contaminated Sites Regulation
  - iii) Hazardous Waste Regulation  
([http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/63\\_88\\_00](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/63_88_00))
  - iv) *Water Sustainability Act* (<http://www.bclaws.ca/civix/document/id/complete/statreg/14015>)
  - v) Groundwater Protection Regulation  
([http://www.bclaws.ca/civix/document/id/complete/statreg/39\\_2016](http://www.bclaws.ca/civix/document/id/complete/statreg/39_2016))
  - vi) *Islands Trust Act*
  - vii) *Land Title Act* (only section 85)
  - viii) *Water Sustainability Act*
  - ix) *Local Government Act* (only sections 946.1 and 946.2)
- b) Federal
  - i) *Fisheries Act* (only definitions and sections 34, 35 and 36)  
<http://laws-lois.justice.gc.ca/eng/acts/F-14/>
  - ii) Transportation of Dangerous Goods Regulation (only part 2)  
<http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm>
- c) CSAP <http://www.csapsociety.bc.ca;>  
<https://csapsociety.bc.ca/members/guidance-documents/>
  - i) CSAP Bylaws (June 2015)
  - ii) CSAP Rules (April 2016)
  - iii) CSAP Submissions Procedures, Submissions 101
  - iv) CSAP Submissions Fee Schedule 139e

### 2) PROCEDURES, PROTOCOLS, and POLICIES

- a) BC ENV. Procedure Documents – up to and including Aug 24<sup>th</sup> 2018.  
<https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/guidanceresources/procedures>
  - i) Procedure 2: Procedures for Managing the Site Registry
  - ii) Procedure 3: Ministry Procedures for the Roster of Approved Professionals. Eff. date Nov 12, 2009
  - iii) Procedure 4: Procedure Regarding Exercise of Powers to Require Additional Remediation Eff. date Aug 30, 2001
  - iv) Procedure 6: Establishing the Boundaries of a Site. Eff. date Oct 24, 2008
  - v) Procedure 8: Definitions and Acronyms for Contaminated Sites. Eff. date April 1, 2021
  - vi) Procedure 10: Requirements for Service Application Resubmissions, Withdrawals and Amendments. Eff. date April 1, 2013
  - vii) Procedure 16: Procedures for determining if a Director should require the submission of a Site Risk Classification Report under Protocol 12. Eff. date April 1, 2013

- b) BC ENV. Protocol for Contaminated Sites Documents - up to and including Aug 24th 2021.  
<https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/guidanceresources/protocols>
- i) Protocol 1: Detailed Risk Assessment
  - ii) Protocol 2: Site-Specific Numerical Soil Standards
  - iii) Protocol 3: Blending, Mixing, or Dilution as a Remediation Approach
  - iv) Protocol 4: Establishing Local Background Concentrations in Soil
  - v) Protocol 6: Applications with Approved Professionals Recommendations and Pre-approvals
  - vi) Protocol 8: Security for Contaminated Sites
  - vii) Protocol 9: Determining Local Background Groundwater Quality
  - viii) Protocol 10: Hardness Dependent Site-Specific Freshwater Water Quality Standard for Zinc
  - ix) Protocol 11: Upper Cap Concentrations of Substances
  - x) Protocol 12: Site Risk Classification System, Reclassification and reporting
  - xi) Protocol 13: Screening Level Risk Assessment
  - xii) Protocol 14: Requirements for Determining Barite Sites
  - xiii) Protocol 15: Soil Treatment Facility Design and Operation for Bioremediation of Hydrocarbon Contaminated Soil
  - xiv) Protocol 16: Determining the Presence and Mobility of Nonaqueous Phase Liquids and Odorous Substances
  - xv) Protocol 17: Remediation Forms
  - xvi) Protocol 18: Criteria for Establishing Multiple Land Uses at Sites
  - xvii) Protocol 20: Detailed Ecological Risk Assessment Requirements
  - xviii) Protocol 21: Water Use Determinations
  - xix) Protocol 22: Application of Vapour Attenuation Factors to Characterize Vapour Contamination
  - xx) Protocol 27: Soil Leachate Tests for Use in Deriving Site-Specific Numerical Soil Standards
  - xxi) Protocol 28: Standard Derivation Methods
  - xxii) Protocol 30: Classifying Substances as Carcinogenic
- c) BC ENV. Policies and Standards Documents.  
<https://www2.gov.bc.ca/gov/content/environment/airland-water/site-remediation/guidance-resources/policies-standards>
- i) Overview of CSST Procedures for the Derivation of Soil Quality Matrix Standards for Contaminated Sites
  - ii) Contaminated Sites Soil Task Group Workshop on the Development and Implementation of Soil Quality Standards for Contaminated Sites
  - iii) CSST Record of Response to Major Results and Recommendations Forthcoming from Eco-Workshop

### 3) GUIDANCE

- a) BC ENV. Technical Guidance on Contaminated Sites Documents - up to and including Aug 24th 2018.  
<https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/guidanceresources/technical-guidance>
- i) TG1: Site Characterization and Confirmation Testing
  - ii) TG2: Statistical Criteria for Characterizing a Volume of Contaminated Material
  - iii) TG3: Environmental Quality Standards
  - iv) TG4: Vapour Investigation and Remediation
  - v) TG5: Sampling and Determining Soil pH at Soil Relocation Receiving Sites
  - vi) TG6: Assessment of Hydraulic Properties for Water Use Determination
  - vii) TG8: Groundwater Investigation and Characterization
  - viii) TG9: Chlorophenol Aquatic Life Water Quality Standards

- ix) TG10: Guidance for a Stage 1 Preliminary Site Investigation
  - x) TG11: Guidance for a Stage 2 Preliminary Site Investigation and Detailed Site Investigation
  - xi) TG12: Statistics for Contaminated Sites
  - xii) TG 13: Groundwater Protection Model - (Version 2 – Eff date Nov 1, 2017)
  - xiii) TG14: Operations of Soil Treatment Facilities for the Bioremediation of Hydrocarbon Contaminated Soil
  - xiv) TG15: Concentration Limits for the Protection of Aquatic Receiving Environments
  - xv) TG20: Applicability of Sodium (Na+) and Chloride (Cl-) Soil Relocation Standards to Marine and Estuarine Dredge Materials
  - xvi) TG22: Use of Monitored Natural Attenuation for Groundwater Remediation DRAFT
  - xvii) TG24: Site Specific Numerical Soil Standards Model Parameters
- b) BC ENV. Administrative Guidance on Contaminated Sites Documents - up to and including Aug 24th 2018. <https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/guidanceresources/administrative-guidance>
- i) AG7: Completing and Submitting and Application for a Soil Relocation Agreement
  - ii) AG9: Independent Remediation of Contaminated Sites
  - iii) AG10: Site Risk Classification
  - iv) AG17: Completing Summaries of Site Condition
  - v) AG22: Application of Wildlands Land Use
- c) Ancillary Guidance
- i) BC Approved Water Quality Guidelines (December 2021) [Approved Water Quality Guidelines - Province of British Columbia \(gov.bc.ca\)](https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/guidanceresources/fact-sheets)
- d) Fact Sheets <https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/guidanceresources/fact-sheets>
- i) FS21: Requirements for Independent Remediation
  - ii) FS31: Remediation of Sites Contaminated by a Spill
  - iii) FS32: Residential Heating Oil Storage Tanks
  - iv) FS33: Obtaining Information from the SWIS, AMS and Compliance and Enforcement Databases
  - v) FS41: Relocation of Soils from Contaminated Sites
  - vi) FS45: Site Risk Classification
  - vii) FS46: Contaminated Sites Legal Instruments
  - viii) FS47: Environmental Management Areas
  - ix) FS48: Remediation Liability and Combining Parcels with Different Owners
- e) External Guidance <https://www2.gov.bc.ca/gov/content/environment/air-land-water/siteremediation/guidance-resources/external-guidance>
- i) Site Registry User's Guide
- e) Forms [Site remediation forms - Province of British Columbia \(gov.bc.ca\)](https://www2.gov.bc.ca/gov/content/environment/air-land-water/siteremediation/guidance-resources/external-guidance)
- i) Site Disclosure Statement
  - ii) Contaminated Sites Services Application
  - iii) Protocol 6 Preapproval Application
  - iv) Summary of Site Condition Form
  - v) Site Information Request Application
  - vi) File Contents Retrieval Application
  - vii) Notification of Independent Remediation
  - viii) Notification of Likely or Actual Migration

- ix) Contaminated Soil Relocation Agreement
- x) Site Risk Classification Report
- xi) Detailed Ecological Risk Assessment Checklist

#### **4) ANALYTICAL METHODS**

[B.C. Environmental Laboratory Manual - Province of British Columbia \(gov.bc.ca\)](#)

#### **5) ROSTER OF APPROVED PROFESSIONALS FORM PACK**

Please contact [admin@csapsociety.bc.ca](mailto:admin@csapsociety.bc.ca) for the Roster form pack

#### **7) CCME (Canadian Council of Ministers of Environment). Environmental Quality Guidelines.**

[Resources | CCME](#)

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