Board of Canadian Registered Safety Professionals

Conseil Canadien Des Professionnels En Sécurité Agréés

2019

BCRSP Examination Candidate Handbook

Our Vision:

Safe and healthy workplaces through certification.

Our Mission:

The Board of Canadian Registered Safety Professionals sets certification standards for occupational health and safety professionals.

BCRSP Examination Candidate Handbook

This *Handbook* contains current information about the BCRSP certification examinations developed by an *Examination Committee* of the Board of Canadian Registered Safety Professionals (BCRSP).

It is your responsibility to read and understand the contents of this *Candidate Handbook* before writing the certification examination.

All previous versions of this Handbook are null and void.

BCRSP certification are offered to all eligible candidates regardless of age, gender, race, religion, national origin, marital status or disability.

Who We Are

On February 10, 1976 a Canadian corporation was formed for the purpose of certifying qualified safety professionals. With the appointment of the first Board of Governors, the certification of safety professionals became a reality through the new organization. The Board of Canadian Registered Safety Professionals is a public interest, not-for-profit association whose certificants are dedicated to the principles of health and safety as a profession in Canada.

The CRSP® certification is a widely accepted form of recognition by industry and government in Canada. A CRSP® is an individual who has met the requirements for registration established by the Governing Board. A CRSP® applies broad based safety knowledge to analyze and develop systems that will achieve optimum control over hazards and exposures detrimental to people, equipment, material and the environment. A CRSP® is dedicated to the principles of loss control, incident prevention and environmental protection as demonstrated by their daily activities.

A CRST supports a safe working environment by maintaining OHS administrative processes, conducting training and using a range of state-of-the-art tools, processes and common practice solutions to OHS risks. They oversee and drive monitoring and compliance in relation to technical and behavioral risk controls.

- In 2005, the CRSP® certification was granted accreditation to ISO/IEC 17024 (Certification of Persons) by the Standards Council of Canada.
- In 2008, the BCRSP was certified to ISO 9001 (Quality Management System) by BSI Management Systems.

Communication

As an examination candidate you are solely responsible to keep the BCRSP informed of your current mail and email address. You could lose your eligibility status if you miss important notifications related to your application. Please direct all correspondence, address changes, requests for information about a BCRSP certification program to:

BCRSP, 6700 Century Avenue Suite 100
Mississauga, ON L5N 6A4

Tel: 905-567-7198 / Toll free: 1-888-279-2777
E-mail: info@bcrsp.ca

All eligible candidates will receive notification of the next scheduled BCRSP Examination prior to the writing windows. **It is the candidate's responsibility to schedule their examination appointment.** BCRSP is not responsible for expenses incurred by the candidate for their examination appointment.

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Program Overview

Introduction to the CRSP® & CRST Certification Programs

The purpose of certification in the occupational health and safety (OHS) field is to promote excellence and professionalism. BCRSP certifications recognize individuals who have met the program pre-requisites and who demonstrate that they have acquired a minimum level of knowledge and expertise in this field by passing a Board's examination.

The CRSP® credential represents a personal benchmark that validates knowledge, skill and practice. It also provides a transferrable credential, either domestically or internationally within the profession through Memoranda of Understanding (MOUs) with the Board of Certified Safety Professionals (BCSP) (United States), the Institution of Occupational Safety and Health (IOSH) (UK, the Safety Institute of Australia SIA) (Australia) and NEBOSH (UK).

A CRSP® is an individual who has met the requirements for registration established by the Governing Board. A CRSP® applies broad based safety knowledge to analyze and develop systems that will achieve optimum control over hazards and exposures detrimental to people, equipment, material and the environment. A CRSP® is dedicated to the principles of loss control, incident prevention and environmental protection as demonstrated by their daily activities.

The CRST certification was introduced in 2018 to support the evolving needs of industry. The CRST certification process requires individuals to meet qualification standards, including education and experience requirements, pass the *CRST Examination*, and stay up to date through a continuous professional development process.

A CRST is an individual who has met the requirements for registration established by the BCRSP Governing Board. A CRST supports a safe working environment by maintaining OHS administrative processes, conducting training and using a range of state-of-the-art tools, processes and common practice solutions to OHS risks. They oversee and drive monitoring and compliance in relation to technical and behavioral risk controls.

The CRST credential represents a personal benchmark that validates knowledge, skill and practice. It also provides a transferrable credential, either domestically or internationally within the profession through Memoranda of Understanding (MOUs) with NEBOSH (UK).

BCRSP certification programs are not designed to determine who shall engage in OHS activities. The goal is to promote excellence and professionalism by documenting individual performance as measured against a predetermined level of knowledge about OHS. BCRSP utilizes the support of experts in examination development, psychometrics, and examination delivery to support the development of the certifications and examinations. This cooperative effort by the BCRSP, it's consultants, and practicing OHS professionals and technicians has resulted in defining the body of knowledge significant to the practice of OHS.

Consultants

Management Services

The BCRSP contracts with an independent association management company (AMC), Fletcher Wright Associates Inc. (FWA), to provide administrative support for the certification process and Board operations. Visit www.fw.ca for more information.

Testing Services

Yardstick Assessment Strategies Inc (YASI) is an independent testing company that performs professional assessment services. YASI provides examination services to professional associations and credentialing agencies and independent certification boards. YASI carefully adheres to industry standards for development of practice-related, criterion-referenced examinations to assess competency. Visit www.asinc.ca for more information.

Pearson VUE offers innovative computer-based testing solutions through secure, electronic test delivery. Visit www.pearsonvue.com for more information.

Objectives of Certification

The objectives of the certification program for the OHS profession are to:

- Promote professional standards and improve the practice of OHS;
- Provide recognition to those professionals who demonstrate an acquired body of knowledge and expertise in the field through successful completion of the application, interview and examination process;
- Identify for employers, the public and members of allied professions, individuals with acceptable knowledge of the principles and practice of OHS; and
- Foster continuing competence and maintain the professional standard in OHS through a mandatory continuous professional development (CPD) program.

Definition of a Canadian Registered Safety Professional (CRSP)®/Professionnel En Sécurité Agree Du Canada (PSAC)®

A CRSP® is an individual who has met the requirements for registration established by the Governing Board. A CRSP® applies broad based safety knowledge to analyze and develop systems that will achieve optimum control over hazards and exposures detrimental to people, equipment, material and the environment. A CRSP® is dedicated to the principles of loss control, incident prevention and environmental protection as demonstrated by their daily activities.

The practice of OHS occurs in all sectors of business, industry and government, is performed by professionals with diverse educational and experience backgrounds and involves the knowledge, skills and abilities needed to perform the tasks significant to practice in the CRSP® Examination content outline (refer to the *Blueprint for the Canadian Registered Safety Professional Examination* (Appendix A).

The Examination Committee's goal is to produce examinations that test concepts that may be applied to any setting. Candidates who pass the CRSP® Examination must understand how each of the domains (subject matter) – Applied Safety Fundamentals, Auditing, Ergonomics, Fire Prevention and Protection, Health and Wellness, Law and Ethics, Management Systems, Occupational Hygiene, and Risk Management, integrate together to produce an effective and efficient OHS system.

Definition of a Canadian Registered Safety Technician/Technicien En Sécurité Agree Du Canada (TSAC)

A CRST is an individual who has met the requirements for registration established by the BCRSP Governing Board. A CRST supports a safe working environment by maintaining OHS administrative processes, conducting training and using a range of state-of-the-art tools, processes and common practice solutions to OHS risks. They oversee and drive monitoring and compliance in relation to technical and behavioral risk controls.

The practice of OHS occurs in all sectors of business, industry and government, is performed by professionals with diverse educational and experience backgrounds and involves the knowledge, skills and abilities needed to perform the tasks significant to practice in the CRSPEX content outline (refer to the *Blueprint for the Canadian Registered Safety Technician Examination* (Appendix B).

The Examination Committee's goal is to produce examinations that test concepts that may be applied to any setting. Candidates who pass the CRST Examination must be able to apply knowledge from each of the domains (subject matter) – Applied Safety Fundamentals, Auditing, Ergonomics, Fire Prevention and Protection, Health and Wellness, Law and Ethics, Management Systems, Occupational Hygiene, and Risk Management, for effective health and safety practice.

BCRSP Certification Processes

To become certified, eligible candidates must pass a certification examination. The CRSP® and CRST Examinations are administered via computer-based testing (CBT) for set timing during the year. Once approved by the Governing Board, certified individuals are entitled to use the credential granted to them by the BCRSP Governing Board – either CRSP® or CRST. Certifications are valid from the date of approval by the Governing Board through to the end of the current calendar year. The certification is renewed annually by completing the Declaration of Continuing Practice and by paying an annual fee and every five years (or less as per cycle) by submitting documented proof of continuing professional development (CPD).

Each successful candidate receives a certificate that is suitable for framing, identification card, lapel pin and a copy of the *Certificant Reference Manual*.

CRSP® Eligibility Requirements – Effective July 1, 2018

Applications for the CRSP® certification received on or after July 1 2018 will be required to have the following:

- A minimum of a Bachelor's degree (4-year) in any field* <u>OR</u> a 2-year diploma (or certificate) **(minimum of 900 hours or 60 credits)** in occupational health and safety or a closely related field from a recognized academic institution.
- At least four (4) years of experience where occupational health and safety is at least 50%, preventative, professional level with breadth and depth of health and safety duties

**if applying with a Bachelor's degree, applicant must also demonstrate sufficient professional development in OHS to qualify.

Please see the BCRSP website at www.bcrsp.ca for more information.

CRST Eligibility Requirements

The Governing Board has approved the eligibility criteria for the CRST as follows:

Pathway A:

- Formal Education Requirement: Have successfully completed a one-year OHS certificate program from a recognized educational institution.
- Technical Practice: Have had one year of OHS work experience (at least 35% OHS duties) immediately before submitting an application.

Pathway B:

- Formal Education Requirement: Have successfully completed a two-year NON-OHS formal education program from a recognized educational institution (Community College or University) OR is qualified to journeyman status in a trade.
- Technical Skills Development: Have completed professional development courses or training related to the nine competency categories before submitting an application.

- Technical Practice: Have had one year of OHS work experience (at least 35% OHS duties) immediately before submitting an application.

Pathway C – For Graduates of Recognized OHS Programs

- Formal Education Requirement: Graduates from an approved 2-year (900 hour) OHS program from a recognized educational institution are eligible to write the Technician Certification examination immediately upon graduation, and if successful hold the Technician level certification.
- Upon obtaining 4 years' relevant OHS experience (professional level), they will be eligible to apply for the CRSP® certification.

Please see the BCRSP website at www.bcrsp.ca for more information.

CRSP® Certification Process

Overview of the Certification Process:

Step 1	**Review Eligibility Requirements**

Step 2	**Submit Application, Fee & Required Documentation**

- Additional documentation may be requested if your application is incomplete.

Step 3	**First review of application by Qualifications Review Committee (QRC)**

- Additional documentation and/or verification may be requested if your application is incomplete.
- QRC will either approve for examination, or recommend interview

Step 4	**If required, second review of application through Regional Screening Centre (RSC) Interview**

- Additional documentation and/or verification may be requested if your application is incomplete.

Step 5	**Determined Eligible for CRSP Examination (CRSPEX)**

- Candidate has 1 year from the date of approved eligibility to write the examination for the first time

Step 6	**Purchase & Self-Schedule Examination**

Step 7	**Take CRSPEX at Pearson VUE Computer-Based Testing Centre**

Step 8	**Pass Examination**

- If unsuccessful, return to step 6.

Step 9	**Board Approval & Confirmation**

- Certification Fee and Rules of Professional Conduct (Code of Ethics) declaration

Step 10	**Maintain Certification - Annual Renewal Fee & Five Year Recertification via CPD**

To proceed to the writing of the CRSP® Examination, candidates must have successfully passed through the Qualifications Review Committee's application assessment and if required, a Regional Screening Centre interview.

Effective January 1, 2018, upon the recommendation of the Regional Screening Centre, candidates have one (1) year to write the CRSPEX for the first time. If a re-write is required, candidates will have a one-year window from the time of first writing to rewrite the examination. A maximum of three (3) examination writings will be permitted. (This rule will apply to applicants/candidates approved for the examination after January 1 2018 - if you are already approved for the examination, the existing rule will apply).

Extensions may be granted based on special circumstances (i.e. disability leave, bereavement, illness, act of God, etc.) at the discretion of the Executive Director. Request for examination extension must be in writing.

Each candidate must take the time to assess and judge his/her own readiness to write the CRSPEX.

A careful review of the nine domains identified in the *Blueprint for the Canadian Registered Safety Professional Examination* is essential before you make the decision to write.

The Examination Committee develops the CRSPEX in conjunction with Yardstick Assessment Strategies Inc. to test the minimum level of knowledge of OHS professionals on the competencies identified in the *Blueprint for the Canadian Registered Safety Professional Examination*. The CRSPEX is designed to test candidate's knowledge of the competencies expected of a certified OHS professionals.

CRST Certification Process

Overview of the Certification Process:

| Step 1 | **Review Eligibility Requirements** |

| Step 2 | **Submit Application, Fee & Required Documentation** |

•Additional documentation may be requested if your application is incomplete.

| Step 3 | **First review of application by Qualifications Review Committee (QRC)** |

•Additional documentation and/or verification may be requested if your application is incomplete.
•QRC will either approve for examination, or recommend interview

| Step 4 | **Determined Eligible for CRST Examination** |

•Candidate has 1 year from the date of approved eligibility to write the examination for the first time

| Step 6 | **Purchase & Self-Schedule Examination** |

| Step 7 | **Take Examiation at Pearson VUE Computer-Based Testing Centre** |

| Step 8 | **Pass Examination** |

•If unsuccessful, return to step 6.

| Step 9 | **Board Approval & Confirmation** |

•Certification Fee and Code of Conduct declaration

| Step 10 | **Maintain Certification - Annual Renewal Fee & Five Year Recertification via CPD** |

To proceed to the writing of the CRST Examination, candidates must have successfully passed through the Qualifications Review Committee's application assessment. Candidates have one (1) year to write the CRST Examination for the first time. If a re-write is required, candidates will have a one-year window from the time of first writing to rewrite the examination. A maximum of three (3) examination writings will be permitted.

Extensions may be granted based on special circumstances (i.e. disability leave, bereavement, illness, act of God, etc.) at the discretion of the Executive Director. Request for examination extension must be in writing.

Each candidate must take the time to assess and judge his/her own readiness to write the CRST Examination.

A careful review of the nine domains identified in the *Blueprint for the Canadian Registered Safety Technician Examination* is essential before you make the decision to write.

The Examination Committee develops the CRST Examination in conjunction with Yardstick Assessment Strategies Inc. to test the minimum level of knowledge of OHS professionals on the competencies identified in the *Blueprint for the Canadian Registered Safety Technician Examination*. The CRST

Examination is designed to test candidate's knowledge of the competencies expected of a certified OHS technician.

About BCRSP Examinations

BCRSP Examinations are criterion-referenced examinations (a test that measures the degree of command of a specified content/skills domain or list of instructional objectives. Scores are interpreted in comparison to a predetermined performance standard or as a degree of mastery of a defined domain independently of the results obtained by other candidates). A fundamental component of the development of the examination is a comprehensive description of the content domain being measured.

In the case of the examination, the content domain of interest consists of the competencies (behaviour statements that reflect the combined knowledge, abilities, skills, attitudes and judgment) a certified OHS professional is required to possess to practice safely and effectively. These competencies form the basis of the examination.

A BCRSP certification examination will consist of between 190 and 210 operational multiple-choice questions, i.e., questions appearing on the examination that have been approved by an Examination Committee. The CRSP® certification examination has 113 competencies; and the CRST certification examination has 81 competencies. The examinations consist between 190 and 210 operational questions, which is sufficient to make both reliable and valid decisions about an examinee's readiness to practice safely and effectively.

The multiple-choice questions on a BCRSP examination are presented in one of two formats, case-based (a set of questions associated with a brief scenario) or independent questions (stand-alone examination questions that contain the information necessary for responding).

Candidates should thoroughly review the applicable *Examination Blueprint*.

The BCRSP Examination Committees are responsible for determining the examination content and the examination specifications, maintaining an item bank of approved examination questions, approving individual examinations for administration and setting the passing score.

The Examination Committee members form a representative group of practitioners. This committee reviews all examination questions before they are used and helps to provide the practice-related perspective that underlies valid examinations.

The BCRSP has contracted with YASI, a professional testing company, to provide psychometric guidance for BCRSP examinations. YASI is responsible for the scoring, statistical analysis, and test misconduct analysis.

Preparing for a BCRSP Examination

Self-Study Reference Material

The BCRSP published a list of reference texts, and the published references provide reasonable coverage on the subject matter associated with the CRSP® Examination Blueprint and the CRST Examination Blueprint. Examination items are not necessarily taken directly from these sources. After carefully reviewing the test blueprint and identifying learning needs, examination candidates should identify those references determined to be most valuable based on their individual learning needs. A listing of reference texts can be found on the BCRSP website.

Preparatory Courses & Study Groups

Several professional membership organizations, colleges, universities, and private companies offer study courses and materials to assist candidates when preparing for a BCRSP examination. Because candidates for examination often ask where to locate these providers, BCRSP maintains an online list of preparatory course providers for information only.

Beyond the written materials BCRSP publishes, **BCRSP has no involvement** in the development, content, or distribution of any courses or materials associated with preparing for a BCRSP examination or evaluating readiness. BCRSP neither endorses the providers shown on the online list nor evaluates the providers or the providers' materials for consistency with the *CRSP® Examination Blueprint*, the *CRST Examination Blueprint*, or with any aspect of any BCRSP examination.

Candidates must contact the sources directly about materials, course schedules, fees, or matters related to satisfaction with their products or services. You are not accepted or approved to take a BCRSP Examination by registering for a preparatory course offered by any provider.

Developing an Examination Strategy

Candidates who pass a BCRSP Examination must understand how each of the nine domains (subject matter) – Applied Safety Fundamentals, Auditing, Ergonomics, Fire Prevention and Protection, Health and Wellness, Law and Ethics, Management Systems, Occupational Hygiene, and, Risk Management, integrate together to produce an effective and efficient OHS system. It takes time to adequately prepare for an examination. There are no shortcuts. While study tips and examination writing tips can help you prepare, there is no replacement for taking the time to build a solid base of knowledge.

Scheduling Study Time
Develop a methodical approach to studying each domain. This can be accomplished by organizing your study time. Candidates report they spend between 60 and 200 hours on average preparing for BCRSP examinations.

Part of controlling anxiety involves being prepared for what to expect. Here are some tips:

Prior to the examination:

- Know your material. Spend adequate time studying for the examination.
- Ensure you get enough sleep, good nutrition, exercise, personal down time, etc. Think positively.

On the day of the examination

- Allow yourself plenty of extra time to arrive at the testing centre so you have adequate time to park, register, etc.
- Dress comfortably – you will be seated for 3 ½ hours.

During the examination

- Relax. Practice relaxation techniques such as deep-breathing.
- Do not focus on any anxiety you may be experiencing.
- Do not expect to know all the answers. It is unlikely that a candidate will answer all questions correctly. Use your reasoning ability to analyze the question and identify the best possible answer.

Know What to Expect at a Testing Centre

The BCRSP has partnered with Pearson VUE to deliver computer-based certification examinations. Pearson VUE offers resources on their website to help prepare you.

- **Pearson VUE testing tutorial and practice exam**. This computer-based testing tutorial and practice exam software provides the opportunity for you to learn how to navigate your way through computer-based examinations. It includes a practice exam that gives you an opportunity to become familiar with the operations of computer-based testing. http://pearsonvue.com/athena/athena.asp
- **Information on Palm Vein Collection**. Some test centres utilize palm vein pattern recognition as a level of security for examination programs. Find out more about this state of the art technology: https://home.pearsonvue.com/Documents/Deliver-your-exam/palm-vein.aspx
- **What to Expect in a Pearson VUE test centre**. Short video on security measures utilized at Pearson VUE testing centres: https://home.pearsonvue.com/test-taker/security.aspx

Please note that there are no scheduled breaks during a BCRSP Examination so examination candidates must monitor their time accordingly.

Approval Process To Write a BCRSP Examination

Once your application is approved, you will receive an **examination authorization email** from the BCRSP. This letter will contain your candidate identification number that you will require to book your examination. The Board of Canadian Registered Safety Professionals (BCRSP) has contracted with Pearson VUE to deliver all of its certification examinations at Pearson VUE test centres.

The Examination Authorization Letter you receive from BCRSP, will include information on an upcoming examination writing window and instructions on how to schedule and pay for your examination. You

must make an appointment and sit for your examination before the Authorization Expiration date. If you do not schedule an examination, and you remain eligible for the next examination writing window, a new Examination Authorization Letter will be issued to you prior to the next writing window.

Please note that when you receive your first examination authorization letter, registration may not have opened for the examination. Registration periods typically open approximately 6 weeks prior to a writing window.

Examination Registration Process

Appointment Scheduling

You are responsible for scheduling and keeping your examination appointment with Pearson VUE. BCRSP recommends you schedule your appointment well in advance of your preferred appointment date. There are two options for scheduling your examination:

Online:

You may schedule, pay for and change your examination appointment over the Internet. Visit www.pearsonvue.com/BCRSP. You will need your Candidate ID from your Examination Authorization Letter to schedule or change your examination appointment online.

Phone:

To schedule your examination appointment, you may also contact a call centre at

+1 866-893-1303; 8:00AM-8:00PM EST, M-F
TDD: +1 866-893-1303; 9:00AM-6:00PM EST, M-F

You will need your Candidate ID from your Examination Authorization Letter to schedule or change your examination appointment over the phone.

NOTE: There may not be a testing centre in your immediate geographic location, or availability of testing times may be limited, which may require travel to write the examination. **Any expenditures related to attending an examination appointment are the candidate's responsibility.**

If you fail to schedule an appointment and sit for your examination, you forfeit your Examination Authorization. You must wait to receive another Examination Authorization, if eligible, from the BCRSP for the next writing window.

BCRSP Examinations are administered via Pearson VUE Testing Centres during specified writing windows. **No alternate writing locations or times are permitted**. Please note the availability of examination writing times at most test centre locations is Monday-Friday during regular business hours.

Candidates should arrive at the writing location no later than 30 minutes prior to the scheduled start time. Unscheduled or late candidates will not be admitted.

Please give yourself ample time to arrive at the test centre location. As many test centres are located within urban areas, parking may be limited and/or have a pay lot. Please plan accordingly. Some travel may be required as there may not be a test centre in your area.

The BCRSP strongly recommends that candidates do not schedule appointments immediately after the examination.

You are responsible for directly scheduling and keeping your examination appointment with Pearson VUE. BCRSP recommends you schedule your appointment as soon as you receive the Examination Authorization letter.

Save all examination appointment confirmation e-mails until after you complete your examination.

If you have been issued an Examination Authorization letter by BCRSP for the next writing window, and you fail to schedule an appointment and sit for your examination, you forfeit the examination writing opportunity.

If you have scheduled an examination and fail to sit for your examination, you forfeit the examination writing opportunity and fees. You must register and pay for another CRSPEX, if you are eligible. If it is your last writing opportunity your file will be closed.

Special Accommodations and Assistive Devices

If you require special examination facilities or arrangements because of one or more documented disabilities, you must inform BCRSP of these needs by completing the BCRSP Examination Accommodation Form (Appendix D) a minimum of 90 days in advance of the examination date. For your testing accommodation to be approved and appropriate arrangements with the testing centre to be made, we require this advance notice.

If you routinely use (or expect to use) external assistive devices or equipment such as crutches, a wheelchair, a cane, an optical prosthetic, or a hearing aid, you must inform BCRSP of your need to use these devices in the secure testing room a minimum of 90 days in advance of the test date by completing the BCRSP Examination Accommodation Form. If you fail to inform BCRSP of your need to use external assistive devices, you may not be permitted to use those devices in the secure testing room.

Rules for Your Examination Appointment

To change an existing examination appointment, you must follow strict rules. If you fail to follow these rules, you forfeit your Examination Authorization.

You must contact Pearson VUE to make any changes to your examination appointment.

You may change your appointment only if there are one (1) or more full business days before your existing appointment date. Appointments being rescheduled are subject to availability at the testing centres.

You cannot reschedule your appointment to a date outside of the writing window, or beyond your approved authorization dates.

Missed Examinations

If you fail to keep your scheduled examination appointment, if you arrive more than 30 minutes beyond the starting time of your scheduled appointment, or if you fail to present acceptable identification when you arrive for your scheduled appointment, you may be refused admission, and you may forfeit your examination writing. To sit for the examination after having been refused admission, you must register and pay for another examination writing. If it is your last writing opportunity your file will be closed.

Inclement Weather or Emergency

In the event of inclement weather or unforeseen emergencies on the day of the examination, test centre personnel will determine whether circumstances warrant the cancellation of the examination writing. The examination will usually not be cancelled if the test centre personnel can open the test centre.

Every attempt will be made to administer examinations as scheduled. However, should an examination be cancelled by Pearson VUE, all scheduled candidates will be granted one writing extension if the examination is not able to be rescheduled within the writing window.

You cannot reschedule your appointment to a date beyond the writing window.

Admission to the Examination Testing Area

Plan to arrive early for your appointment. If you are 30 or more minutes late for your appointment, you may not be able to write your examination and you may forfeit your examination writing.

Identification Requirements
The examination candidate is required to present two forms of original (no photo copies), valid (unexpired) IDs; one form as a primary ID (government issued with name, photo, and signature) and one form as a secondary ID (with name and signature).

The **Primary ID** must be a valid, unexpired government-issued identification document bearing both your picture and signature. Your name on this identification document must exactly match the name used when you applied for certification with BCRSP. Examples of acceptable identification for testing within the country of your citizenship include your valid, unexpired passport or your valid, unexpired, non-temporary provincial driver's license/identification card, military identification card, government issued health identification card (if it bears a photo), or permanent resident card.

Any government issued ID missing a visible signature or that has an embedded signature, can be supplemented with an original (no photo copies), valid (unexpired) ID that has at least a matching name and signature. This would be in addition to any secondary ID requirement.

The **Secondary ID** must be any identification (original, valid) containing at least your name and signature.

If you are not a citizen of the country in which you are testing, the only acceptable identification document is your valid, unexpired passport.

If you fail to bring the appropriate identification and/or examination confirmation email you will forfeit your examination writing.

Some testing centres employ palm vein scanning technology to gain admittance to the testing area. For more information on this technology, visit http://www.pearsonvue.com/bcrsp/ and refer to the Palm Vein Collection document under related links.

Personal Belongings
All candidates will be required to leave their personal belongings outside the testing area. While the testing centre will make available to you a secure area to store your belongings, the BCRSP assumes no responsibility for lost, stolen, broken or misplaced personal property and candidates should plan appropriately.

Before entering the testing area, an unobtrusive visual inspection of personal items will be conducted by the examination proctors.

As you sign in, the testing centre staff provides you with materials for working out calculations by hand.

Prohibited items include:

- Mechanical or electronic devices including but not limited to computers, cellular phones, smart phones, personal digital assistants, pagers, calculators, wireless email and reading devices, electronic paging devices, recording or filming devices, cameras, tape recorders, headphones, headsets, mp3 players and radios.
- All forms of outerwear, including but not limited to hats, scarves, gloves, jackets, coats.
- All forms of luggage, including but not limited to book bags, backpacks, handbags, purses, suitcases and briefcases
- Writing and marking supplies, including but not limited to pens, pencils, erasers, post-it notes, note paper
- Props such as copyholders or clipboards
- Food and beverage
- Weapons of any kind, including but not limited to sharp objects, firearms, explosive devices, razor blades, box cutters and knives
- Hats or headwear of any kind unless provision has been made for specific religious apparel.

Objects worn, or brought into the testing area, because of the candidates sincerely held personal religious belief, practice or observance will be permitted, subject to prior notification and authorization by the BCRSP.

The BCRSP is not responsible for lost, stolen, broken or misplaced property and strongly recommends that candidates do not bring personal, valuable or non-examination items with them to the examination.

You may access stored medicine or food or drinks outside the secure testing room. You may not access other personal belongings until you complete your examination.

Examination Misconduct

Candidates observed doing any of the following, or engaging in similar, dishonest practices during a BCRSP examination, will be considered to have engaged in test misconduct and both their application and examination administration may be dismissed. Candidates engaged in test misconduct may be disqualified from sitting any future BCRSP examination..

Such test misconduct includes, but is not limited to, the following:

- Disclosing BCRSP examination questions and/or any BCRSP examination subject matter.
- Aiding or abetting anyone in a cheating offence.
- Speaking or communicating with other candidates about specific BCRSP examination content or questions before, during, or after the examination administration.
- Improperly obtaining through theft, bribery, collusion, or otherwise any test form prior to the date and time of the test's administration.
- Falsifying your identity or impersonating another candidate.
- Using any books, memoranda, calculators, audio or visual players or electronic devices including electronic watches, organizers, Smartphones, iPads, pagers or other cell phones,

or other memory aid devices or communication devices other than those authorized by the BCRSP.
- Looking at another candidate's responses.
- Copying another candidate's responses.
- Removing or attempting to remove BCRSP examination material electronically or otherwise from a test centre.
- Violating the Pearson VUE computer-based testing (CBT) examination agreement in any way.
- Falsifying BCRSP examination scores.

Prior to the BCRSP examination Examination launching, candidates must agree to a non-disclosure agreement. It states:

I understand that the BCRSP has expended a considerable amount of time, effort and expense in the development of the examination that I am about to challenge. I further understand that the validity and integrity of the examination depends on the questions remaining undisclosed to other potential certification candidates. I hereby agree that I will not disclose any information concerning the content of this BCRSP examination.

If you do not agree to the non-disclosure agreement, the examination will not launch, and your examination appointment will end.

Where proctors/invigilators have issued an incident report on a candidate engaging in test misconduct, the candidate affected may have their score voided.

Failure to abide by these rules and regulations may be determined as test misconduct. The BCRSP will investigate any report of test misconduct or suspected test misconduct. Affected candidates will be contacted to provide their response to the report. The investigation will include an assessment of the appropriate penalty. After the investigation, the Board's Professional Conduct Committee will review the information, make a finding and decide on a penalty.

Taking Your Examination

The on-site proctor at the Pearson VUE Test Centre will familiarize you with the computer-delivered examination process. When the examination is first launched, you must agree to comply with BCRSP's examination security and nondisclosure rules.

The time remaining for your examination appears on your computer screen (top right). You may choose to hide the time clock during your examination if you find it distracting. One examination item at a time appears on the computer screen. You may select an answer for the item, skip the item, or answer the item and flag it for review. After viewing every item, you are presented with a review screen showing the item numbers and status of all items on your examination. By selecting an item on this screen, you can go directly to it and verify or change your answer selection.

If you experience any technical difficulties with the examination software or hardware during the testing event, please notify your proctor immediately so they may try to resolve the issue.

If you need to use the washroom, or when you leave your workstation for any reason, you must sign out and sign back in -- the on-site proctor will log your activity. **Your examination clock continues to run during this time.** You are not allowed to leave the building (or part of the building) controlled by Pearson VUE for any reason while your examination clock is running.

The BCRSP will endeavor to ensure that the environment for writing the examination is acceptable. Please be aware that on occasion, candidates may be exposed to minor distractions and the temperature in the testing area may vary. Candidates who are easily distracted by noise may request earplugs or noise-cancelling headphones from the proctor.

BCRSP examinations are closed book, except for materials provided by testing centre staff or on-screen test aids as part of the examination. Once your examination clock starts, access to any materials beyond those given to you by testing centre staff is prohibited. BCRSP invalidates examinations and pursues disciplinary charges if you access prohibited materials, have contact with anyone except testing centre staff, leave the building while your examination clock is running, or engage in unethical, disruptive, or unprofessional conduct at a testing centre.

BCRSP examinations are proctored examinations. Any incidences of test misconduct may result in the examination results being withheld or a determination of ineligibility. By participating in a BCRSP examination you further agree to NOT disclose any information, content, examination questions or response keys from the BCRSP's examinations by any means. If it is determined at any time that you have accidently or deliberately disclosed information relating to a BCRSP examination, it may result in your results being withheld, a determination of ineligibility for the designation, or if the designation has already been awarded, you may be subject to investigation by the Board's Professional Conduct Committee which may result in suspension or termination of your certification.

Security

The BCRSP, YASI and Pearson VUE maintain test administration and test security standards that are designed to assure that all candidates are provided the same opportunity to demonstrate their abilities.

The BCRSP reserves the sole right to cancel or withhold any test scores if, in its opinion, there is adequate reason to question their validity.

Obtaining Your Results

Once you complete your examination the official notification of your results will be issued to you by the BCRSP within 6-8 weeks of the last date in the examination writing window. These results are issued via regular mail (Canada Post) and will **not** be issued over email, by telephone, or by fax. If you do not pass, you receive instructions on how to retake the examination or when you may reapply if you have reached your last writing opportunity. If you pass, you will receive information on the necessary steps to complete the certification requirements. Please note that passing the examination does not mean you are certified by BCRSP, the Governing Board must approve your certification and the process is not complete until the *Code of Conduct* and certification payment have been received by the BCRSP office.

If you owe any outstanding fees to the BCRSP related to the application or examination process, your examination results may be withheld until your account is up-to-date.

Following an Examination

An *Examination Survey* will be sent to you after the writing window closes. You are encouraged to complete the survey and submit your feedback.

Approximately six to eight weeks following the examination administration, you will be mailed your results. You will be provided with your overall score and your score for each of the subject areas (domains).

To assure confidentiality, no candidate test scores will be reported over the telephone, by electronic mail or by facsimile.

The BCRSP will not release a copy of individual score results to third parties without your written authorization.

Passing Score Determination

The standard or pass mark is set in reference to the content and the difficulty of the examination questions. The standard is set by a panel of content from across Canada who work closely with the Board's examination consultants, Yardstick Assessment Strategies Inc. to ensure that the examination meets the Examination Blueprint guidelines.

The pass mark is set at a level that represents the performance expected of a certified competent safety professional. The standard setting method used to establish the pass mark for BCRSP examinations is the modified-Angoff method. Using this method, a panel of representative content experts from across the country and from various areas of practice reviews each examination question and produces ratings based on a common understanding of a competent registered safety professional who has met the eligibility requirements to write a BCRSP examination. In addition to these ratings, a variety of relevant data (for example, information on the preparation of candidates, data on results from previously administered examinations) are carefully considered to ensure the standard that candidates must achieve on the examination is valid and fair. Based on this information, an appropriate standard or pass mark is set. This procedure is repeated for every newly-created examination form.

For more information on the Angoff Method, review the article on our website at http://bcrsp.ca/prospective-certificants/crsp-examination.

Appeals

Because the performance of each question on a BCRSP examination included in the final score has been pretested, there is no appeal process to challenge individual examination questions, answers, or a failing score. The BCRSP will not release or discuss individual questions with candidates following the CRSPEX. To do so would require elimination of that question from the item bank of pretested questions and deplete the number of pretested questions required to develop future versions of examinations.

Assessments by the Qualifications Review Committee and Regional Screening Centres affecting the eligibility of a candidate or the points awarded in Factors 1, 2 and 3, may be appealed.

Additionally, appeals may be considered for alleged inappropriate examination administration procedures or environmental testing conditions severe enough to cause a major disruption of the examination process which were not satisfactorily resolved at the test centre.

All appeals must be submitted in writing. Eligibility appeals must be received within thirty (30) days of the notification of your assessment results. Appeals for alleged inappropriate administration procedures or severe adverse environmental testing conditions must be received within thirty (30) days of the release of examination results.

Upon Successful Completion of an Examination

If you pass a BCRSP examination, there are a number of administrative details that must be completed before you may begin using a BCRSP certification mark.

Once approved to use either the Canadian Registered Safety Professional and acronym CRSP®, or Canadian Registered Safety Technician and acronym CRST, you are encouraged to use the credential on correspondence, business cards and all forms of address. Certification is for individuals only. The CRSP® and CRST credentials may not be used to imply than an organization is certified.

If Your Examination Writing Is Unsuccessful

Effective January 1, 2018, if you do not pass a BCRSP examination on your first attempt, you may have up to two supplementary writings over the following one-year period. If you do not pass the BCRSP examination after three attempts, your file will be closed and you must wait two years before submitting a new application. A candidate may attempt a BCRSP examination a maximum of three times within the specified time period.

Achieving Certification

Benefits of Obtaining a BCRSP Certification

Wall Certificate. When you achieve certification, BCRSP issues a wall certificate suitable for framing. Should you lose or damage your wall certificate, BCRSP will replace it for you.

Wallet Card. Each year when you pay the required annual renewal fee, a wallet card is issued to you which shows you are certified. The card identifies you as a title holder for the calendar year (unless declared invalid).

BCRSP Governors' Table eNewsletter Subscription. As a certificant, you will receive Governors' Table three times per year via email. Governors' Table contains information about important changes which may affect certificants, information about certificants, updates on BCRSP activities and other items of interest. Current issues and back issues are located on the BCRSP website.

BCRSP Annual Report. The BCRSP Annual Report is another important publication. It contains summarized data about BCRSP activities over the last year and the annual audited financial report. It can be found on the BCRSP website.

BCRSP Events & Activities. The BCRSP hosts a meet and greet reception during each Governing Board meeting. Certificants in the area of the meeting will be notified about the details of the reception. We encourage you to attend. **BCRSP Connect Events** are networking receptions held across Canada and certificants are encouraged to attend when an event is held in your area. Watch for details on the website. **Item Writing Workshops** are a certificants opportunity to contribute to the examination process by contributing to the item bank. Attendees are trained in the item writing process and contribute to the item bank through these workshops. The **Annual General Meeting** is held in June of each year and certificants are encouraged to attend in person or to return their proxy form.

BCRSP Verification. BCRSP publishes directories of individuals who currently hold a BCRSP certification. An abbreviated format, containing names, cities, and states, appears on the BCRSP website and allows viewers to confirm if a person currently holds a BCRSP certification. **Please note that you may opt out of this listing.**

Additional BCRSP benefits and activities are outlined in the Certificants' Reference Manual which is available from the BCRSP website.

Recertification

Following successful completion of a BCRSP examination, each certificant is required to maintain certification by fulfilling the requirements of the Continuous Professional Development (CPD) Program (CMP). The full details of the CPD Program are posted on the website (www.bcrsp.ca).

Appendices

Appendix A: 2015 CRSP® Examination Blueprint

Appendix B: 2019 CRST Examination Blueprint

Appendix C: Process for the Development of Questions (items) for the Certification Examination

Appendix D: BCRSP Examination Accommodation Form

Appendix A: 2015 CRSP® Examination Blueprint

Executive Summary

As part of its commitment to ongoing testing excellence, the BCRSP is pleased to provide this revalidated blueprint document that will serve as the basis for the Canadian Registered Safety Professional Examination (CRSPEX). This document outlines the content domain that will be tested on the national examination beginning in 2015.

Compared to the 2010 CRSPEX Blueprint, the following document differs in a number of ways. First, several content domains have been enhanced to provide additional guidance to item writers and to candidates who are preparing to write the CRSPEX. The Accident Theory and Environmental Practices domain have been eliminated, however, several of the competencies have been maintained in other domain areas. The domain of Safety Techniques and Technology has been renamed to Applied Safety Fundamentals. The content areas of Risk Management, and Applied Safety Fundamentals figure more prominently in this document compared to 2010, and as a consequence, are given more weight on the CRSPEX.

Although the basic structure of this document remains consistent with the 2010 document, many of the competencies have been restated or combined, resulting in a reduction in the total number of competency areas from 147 to 113.

Blueprint For The Canadian Registered Safety Professional Examination (CRSPEX)

RELEASE DATE: JULY 2014

Preface

The Board of Canadian Registered Safety Professionals (BCRSP) is pleased to present the *Blueprint for the Canadian Registered Safety Professional Examination* (CRSPEX). Administration of the first examination developed from the new Blueprint is targeted for February 2015.

The Blueprint was developed to guide those involved in the development of the *Canadian Registered Safety Professional Examination* and to provide the public (e.g., examinees, educators, administrators) with practical information about the examination.

The Blueprint has two major components: (1) the content domain to be measured and, (2) the explicit guidelines on how this content is to be measured. The content domain consists of the CRSPEX set of competencies (i.e., the competencies expected of entry-level registered safety professionals), and the guidelines are expressed as structural and contextual variables. The Blueprint also includes: a *Summary Chart* that summarizes the examination guidelines; a *Glossary* that provides definitions of terms appearing in bold throughout the document.

BCRSP wishes to thank all the individuals who have contributed to the creation of this Blueprint. In particular, thanks are extended to registered safety professionals across Canada who responded to the competency validation survey.

A comprehensive review of this first edition of the *Blueprint for the Canadian Registered Safety Professional Examination* is planned for 2018. In addition, the Blueprint will be evaluated annually to reaffirm that the competencies and the guidelines for examination development continue to reflect what is expected of an entry-level registered safety professional beginning to practice.

BCRSP encourages all users of this document to provide feedback which may be useful in future revisions of the Blueprint. Please forward all such comments to:

Executive Director
Board of Canadian Registered Safety Professionals
6700 Century Ave, Ste. 100
Mississauga, ON L5N 6A4

Introduction

The Board Canadian Registered Safety Professionals develops the Canadian Registered Safety Professional Examination (subsequently referred to as the CRSPEX) for registering purposes. It fulfills this service by working in collaboration with Canadian Registered Safety Professionals (CRSP's) from across Canada who serve as the content experts in developing and validating the examinations.

Registration/licensure/certification examinations have a well-defined purpose: to protect the public by ensuring that those who are licensed possess sufficient knowledge and skills to perform important occupational activities safely and effectively (Canadian Psychological Association, 1987). In the case of the CRSPEX, the purpose is to determine whether or not examinees are prepared to practice occupational health and safety, without risk to the public and to the environment.

THE PURPOSE OF THIS BLUEPRINT IS TO DESCRIBE HOW THE EXAMINATION IS TO BE DEVELOPED.

The primary function of the Blueprint for the Canadian Registered Safety Professional Examination is to describe how the examination is to be developed. Specifically, this Blueprint provides explicit instructions and guidelines on how the **competencies**[1] (e.g., knowledge, abilities, skills, attitudes, and judgment) are to be expressed within the examination in order for accurate decisions to be made on the ability of examinees to practice safely and effectively.

Prior to producing this Blueprint, BCRSP undertook an extensive study to identify the competencies required for the safe and effective practice of registered safety professionals in Canada. Individual registered safety professionals from across the country were active participants in all phases of the investigation, which served to identify and validate a comprehensive set of 113 competencies expected of the registered safety professional. With this set of competencies, and the validation data obtained, the essential components of the CRSPEX could be clearly described.

The periodic and comprehensive review of the competencies measured by the CRSPEX assists the BCRSP in maintaining the validity of the CRSPEX, and to develop psychometrically sound and legally defensible registration examinations. Because of changes that occur in the practice of health and safety professionals, a validation study of the competencies is conducted at least every five years, or as needed. In addition to the periodic comprehensive review and validation study, the competencies are reviewed and evaluated annually by content experts. _____

[1] The terms appearing in bold are defined in the Glossary.

Technical Specifications

The following section presents the technical specifications that are to guide the development of the CRSPEX. In the first part, issues related to the competencies are addressed. The second part describes the guidelines to be followed in addressing the structural and contextual variables of the CRSPEX.

The CRSPEX is a **criterion-referenced examination**. That is, a fundamental component of the development of the CRSPEX is a comprehensive description of the content domain being measured. In the case of the CRSPEX, the content domain of interest consists of the competencies a registered safety professional is required to possess in order to practice safely and effectively. These competencies form the basis of the CRSPEX.

This section describes the competencies that were obtained as a result of the validation process, the way they have been grouped, and the manner in which they are to be sampled in the examination development process.

THE COMPETENCIES WERE EVALUATED BY APPROXIMATELY 1,350 CANADIAN REGISTERED SAFETY PROFESSIONALS.

Developing The Set Of Competencies

As a starting point for developing a set of competencies, a Committee on Competencies was formed that was representative of all areas of practice of registered safety professionals in Canada. This committee reviewed various competency lists prepared for health and safety professionals. Using the competency lists, the committee developed a preliminary national set of competencies, and a nine-category classification to group these competencies. The competencies in this initial set were then evaluated by a sample of approximately 1350 Canadian Registered Safety Professionals (CRSPs), including practitioners, educators, and administrators, who were asked to rate each competency in terms of its applicability, importance and frequency for the registered safety professional. The Committee on Competencies reviewed the results of the survey. The CRSPEX Set of Competencies has the primary purpose of providing the content domain for the examination.

Competency Categories

The initial classification of the competencies consisted of the following nine categories defined below (the number and the percentage of competencies are indicated in parentheses following the category name):

Applied Safety Fundamentals (25 competencies or 22% of the set of competencies)

Auditing (9 competencies or 8% of the set of competencies)

Ergonomics (9 competencies or 8% of the set of competencies)

Fire Prevention and Protection (8 competencies or 7% of the set of competencies)

Health and Wellness (11 competencies or 10% of the set of competencies)

Law and Ethics (11 competencies or 10% of the set of competencies)

Management Systems (17 competencies or 15% of the set of competencies)

Occupational Hygiene (13 competencies or 11% of the set of competencies)

Risk Management (10 competencies or 9% of the set of competencies)

Some of the competencies lend themselves to being placed in one or more of the categories, so these nine categories should be viewed simply as an organizing framework. It should be recognized that the competency statements vary in scope, with some representing global activities and others more discrete and specific actions.

Structural Variables

THERE WILL BE 190 TO 210 OPERATIONAL MULTIPLE CHOICE QUESTIONS ON THE CANADIAN REGISTERED SAFETY PROFESSIONAL EXAMINATION.

In addition to the specifications related to the competencies, other variables must be considered during the development of the CRSPEX. Structural variables include those characteristics that determine the general appearance and design of the examination. They define the length of the examination, the format/presentation of the examination questions (e.g., multiple-choice format). The weightings of the nine categories are also included as structural variables.

Examination Length and Format: The examination will consist of between 190 and 210 operational multiple choice questions. With 113 competencies to measure and a sound sampling approach for these competencies, an examination of between 190 and 210 operational questions is sufficient to make both reliable and valid decisions about an examinee's readiness to practice safely and effectively.

<u>Question Presentation</u>: The multiple choice questions of the CRSPEX are presented in one of two formats, case-based or independent questions

Contextual Variables

In addition to structural variables, Contextual Variables: Contextual variables qualify the content domain by specifying the contexts in which the examination questions will be set (i.e., professional context).

It is recognized that practice environment of entry-level registered safety professionals can be any setting of circumstance within which occupational health and safety can be practiced. The competencies assessed by the examination are not setting dependent. The practice environment will be specified when necessary.

In each setting, the CRSP may act a consultant or as an in-house safety professional. This will be considered in forming the context of examination items.

Competency Weightings

To ensure that the examination accurately reflects the profile of the registered safety professional, the competencies were weighted according to their relative importance and frequency based on the survey ratings and a quantitative review by content experts.

These weightings were used to establish the relative emphasis the competencies will receive on the examination. The competencies have been weighted using the importance and frequency ratings obtained in the competency validation study.

Based on the applicability, importance and frequency data extracted from the 2013 Competency Survey, and with the guideline that the CRSPEX will consist of between 190 and 210 questions, the sampling scheme presented in the table below was developed. The distribution of weights in this sampling scheme was selected: (1) to provide differentiation on the rating variables (importance and frequency); and (2) to conform with the examination length requirement. The following table presents the percentage range of questions in each of the nine categories of competencies.

Competency Categories	Percentage of Questions on the CRSPEX
1. Applied Safety Fundamentals	21-27%
2. Auditing	6-10%
3. Ergonomics	4-8%

4. Fire Prevention and Protection	4-8%
5. Health and Wellness	4-8%
6. Law and Ethics	11-15%
7. Management Systems	11-15%
8. Occupational Hygiene	10-14%
9. Risk Management	10-14%

Conclusion

The *Blueprint for the Canadian Registered Safety Professional Examination* is the product of a collaborative effort between BCRSP and Canadian Registered Safety Professionals (CRSPs). Their efforts have resulted in a compilation of the competencies required of the entry level registered safety professional to practice and of the guidelines on how the competencies will be measured on the CRSPEX. A summary of these guidelines can be found in the CRSPEX Examination Development Summary Chart.

It is recognized that the health and safety profession will continue to evolve. As this occurs, the Blueprint (i.e., the competencies and the test development guidelines) may require revision so that it accurately reflects the scope of practice, roles, and responsibilities of the entry level safety professional. CRSPEX will ensure this revision takes place in a timely manner and will communicate it in updated editions of this document.

Summary Chart: CRSPEX Development Guidelines

Examination Length and Format	190–210 operational multiple choice questions. Three and a half (3.5) hours will be allocated for the completion of the examination.
Question Presentation	Independent questions 70-90% Case-based questions 10-30%
Competency Categories and Weightings	1. Applied Safety Fundamentals — 21-27% 2. Auditing — 6-10% 3. Ergonomics — 4-8% 4. Fire Prevention and Protection — 4-8% 5. Health and Wellness — 4-8% 6. Law and Ethics — 11-15% 7. Management Systems — 11-15% 8. Occupational Hygiene — 10-14% 9. Risk Management — 10-14%
Item Taxonomy	This exam includes questions falling under three item taxonomy categories: knowledge/comprehension, application and critical thinking.

Glossary

case-based questions: A set of questions associated with a brief scenario.

competencies: The behaviour statements which reflect the combined knowledge, abilities, skills, attitudes, and judgment expected of an entry-level registered safety professional.

criterion-referenced (C-R) examination: A test that measures the degree of command of a specified content/skills domain or list of instructional objectives. Scores are interpreted in comparison to a predetermined performance standard, or as a degree of mastery of a defined domain (e.g., percent correct and mastery scores), independently of the results obtained by other candidates. (Brown, 1983)

independent items: Stand-alone objective examination items which contain the information necessary for responding.

operational questions: Questions appearing on the examination that have been pre-tested and that are suitable for the examination. The answer to these questions count in the candidate's score.

CRSPEX Competency Profile

	Applied Safety Fundamentals (ASF)
ASF1	Demonstrate an understanding of workplace inspections.
ASF2	Demonstrate an understanding of incident investigations.
ASF3	Demonstrate an understanding of statistical analysis (e.g., mean, percentage, standard deviation, time weighted average, etc.).
ASF4	Demonstrate an understanding of task analyses/job hazard analyses/job safety analyses.
ASF5	Demonstrate an understanding of material/process flow analyses.
ASF6	Demonstrate an understanding of process hazard analyses (e.g., fault tree analyses, event tree analyses, etc.).
ASF7	Demonstrate an understanding of facility safety (e.g., design, construction, maintenance, etc.).
ASF8	Demonstrate an understanding of the importance of safety in the design and procurement process for tools, equipment and materials.
ASF9	Demonstrate an understanding of the fundamentals of safe use, handling, storage, disposal and risks associated with chemicals, explosives and radioactive material in the workplace (i.e., WHMIS/GHS).
ASF10	Demonstrate an understanding of safeguarding machinery (e.g., point-of-operation, light curtains, interlocks, etc.).
ASF11	Demonstrate an understanding of personal protective equipment.
ASF12	Demonstrate an understanding of electrical safety (e.g., bonding, grounding, circuit interrupter, etc.).
ASF13	Demonstrate an understanding of safe material handling and storage.
ASF14	Demonstrate an understanding of hoisting and conveying equipment safety (e.g., ropes, chains, slings, cranes, conveyors, etc.).
ASF15	Demonstrate an understanding of powered mobile equipment and vehicle safety (e.g., forklifts, scissorlifts, bucket trucks, pickup trucks, vans, fleet safety, etc.).
ASF16	Demonstrate an understanding of hand and portable tool safety.
ASF17	Demonstrate an understanding of shop machinery safety (e.g., lathes, table saws, drill presses, etc.).
ASF18	Demonstrate an understanding of hazards and controls associated with hot work (e.g., welding, cutting, brazing, etc.).
ASF19	Demonstrate an understanding of the control of hazardous energy and harmful substances (e.g. lockout/tagout of hydraulic, pneumatic, steam, mechanical, electrical hazards, etc.).
ASF20	Demonstrate an understanding of hazards and controls associated with automated systems, equipment and processes (e.g., robotics, remote starts, computer controlled systems, nanotechnology, etc.).
ASF21	Demonstrate an understanding of process safety (e.g., chemical, manufacturing, etc.).
ASF22	Demonstrate an understanding of the hazards and controls related to confined space entry.
ASF23	Demonstrate an understanding of the hazards and controls related to elevated work (e.g., ladders, fall protection, platforms, scaffolds, etc.).
ASF24	Demonstrate an understanding of laboratory safety.
ASF25	Demonstrate an understanding of the hazards and controls associated with working alone and working remotely.
	Auditing (AUD)
AUD1	Demonstrate an understanding of auditing principles and techniques.
AUD2	Demonstrate an understanding of how an audit is used to evaluate a management system.
AUD3	Demonstrate an understanding of the role of an auditor (e.g., interviews, verifies, communicates, reports, etc.).
AUD4	Demonstrate an understanding of internal and external audits.
AUD5	Demonstrate an understanding of the audit process (e.g., preparation, pre and post meetings, communication, reporting, continuous improvement, etc.).
AUD6	Identify appropriate audit data collection techniques (e.g., interviews, records, observations, etc.).
AUD7	Demonstrate an understanding of inspections, compliance audits and management system audits.
AUD8	Demonstrate an understanding of how to develop an action plan from an audit report.
AUD9	Demonstrate an understanding of the audit requirements of management systems (e.g., CSA Z1000, OHSAS 18001, etc.).
	Ergonomics (ERG)
ERG1	Demonstrate an understanding of ergonomics (e.g., anatomical, physiological, biomechanical, etc.).
ERG2	Identify the signs and symptoms of musculoskeletal injuries.
ERG3	Apply appropriate ergonomic assessment tools (e.g., surveys, checklists, direct observation, interviews, etc.).
ERG4	Evaluate ergonomic hazards and identify appropriate control measures.

ERG5	Demonstrate an understanding of the abilities and limitations that affect human performance (i.e., cognitive, sensory, and psychomotor).
ERG6	Demonstrate an understanding of regulatory requirements related to ergonomics (e.g., regulations, guidelines, standards, etc.).
ERG7	Demonstrate an understanding of the components of an ergonomics program (e.g., CSA Z412, etc.).
ERG8	Demonstrate an understanding of the role of ergonomics in design and procurement (e.g., workspace layout, tools, equipment, materials, etc.).
ERG9	Demonstrate an understanding of the role of an ergonomist.
Fire Prevention and Protection (FPP)	
FPP1	Demonstrate an understanding of the roles and functions of standard-setting bodies (e.g., National Fire Prevention Association, Underwriters Laboratory, Factory Mutual, Canadian Standards Association, European Union, etc.).
FPP2	Demonstrate an understanding of codes and standards as applied to fire safety (e.g., National Building Code, National Fire Code, etc.).
FPP3	Demonstrate an understanding of life safety (e.g., building design, construction, location, materials, etc.).
FPP4	Demonstrate an understanding of fire chemistry and behaviour.
FPP5	Demonstrate an understanding of fire safety programs.
FPP6	Demonstrate an understanding of fire prevention.
FPP7	Demonstrate an understanding of fire detection systems and devices (e.g., design, application, maintenance, inspection, etc.).
FPP8	Demonstrate an understanding of fire control systems and devices (e.g., design, application, maintenance, inspection, etc.).
Health and Wellness (HW)	
HW1	Demonstrate an understanding of workplace health promotion.
HW2	Demonstrate an understanding of injury, illness, and disease prevention programs (e.g., immunizations, personal protective equipment, hand hygiene, medical screening, etc.).
HW3	Demonstrate an understanding of employee and family assistance programs.
HW4	Demonstrate an understanding of wellness programs (e.g., stress management, physical fitness, weight management, etc.).
HW5	Demonstrate an understanding of disability management programs (e.g., modified work, rehabilitation, return to work, etc.).
HW6	Demonstrate an understanding of addiction control programs (e.g., tobacco, alcohol, drugs, gambling, etc.).
HW7	Demonstrate an understanding of the factors that impact health and wellness (e.g., environmental, social, economic, physiological, lifestyle, etc.).
HW8	Demonstrate an understanding of how factors in the workplace impact worker well-being (e.g., culture, multiple generations, diversity, aging workforce, etc.).
HW9	Demonstrate an understanding of the effects of fatigue on worker health and performance (e.g., shift work, fitness for work, overtime, etc.).
HW10	Demonstrate an understanding of the influence of the psychosocial work environment on worker health and wellness (e.g., leadership, expectations, civility, respect, etc.).
HW11	Demonstrate an understanding of the influence of work/life balance on worker health and wellness.
Law and Ethics (LE)	
LE1	Demonstrate an understanding of the principles of law (e.g., common law, compensation law, product liability, property liability, privacy law, etc.).
LE2	Demonstrate an understanding of occupational health and safety law in Canada (e.g., Internal Response System (IRS), due diligence, criminal liability, general duty clause, etc.).
LE3	Demonstrate an understanding of environmental legislation (e.g., Canadian Environmental Protection Act, Hazardous Products Act, Transportation of Dangerous Goods Act, WHMIS/GHS, etc.).
LE4	Demonstrate an understanding of the duties of workplace parties (e.g., supervisors, workers, joint health and safety committees/representatives, etc.).
LE5	Demonstrate an understanding of the application of ethical theories (e.g., utilitarianism, Kantianism, natural law, etc.).
LE6	Demonstrate an understanding of worker rights (i.e., right to know, right to participate and right to refuse).
LE7	Demonstrate an understanding of the duties and powers of enforcement agencies (e.g., orders to comply, prosecutions, ticketing, administrative penalties, the appeal process, etc.).
LE8	Demonstrate an understanding of the obligations of a CRSP (e.g., with respect to employers, co-workers, public, fellow professionals, contractors, etc.).

LE9	Demonstrate an understanding of the CRSP's obligations with respect to *The Rules of Professional Conduct* (Code of Ethics).
LE10	Demonstrate an understanding of consequences of professional errors and omissions.
LE11	Demonstrate an understanding of the role of the CRSP and limits of professional practice (e.g., interaction with government agencies, scope of practice, boundaries of competence, etc.).
	Management Systems (MS)
MS1	Demonstrate an understanding of the influence of accident theories on the development of management systems.
MS2	Demonstrate an understanding of the integration of health and safety into organizational structure, function, culture and design.
MS3	Demonstrate an understanding of quality management (e.g. ISO 9001, total quality management, etc.).
MS4	Demonstrate an understanding of the functions of management (e.g., planning, organizing, leading, measuring performance, controlling, etc.).
MS5	Demonstrate an understanding of financial and business processes (e.g., budgeting, business case development, management by objectives, policy and procedure development, etc.).
MS6	Demonstrate an understanding of problem solving processes.
MS7	Demonstrate an understanding of conflict management.
MS8	Demonstrate an understanding of labour relations.
MS9	Demonstrate an understanding of strategic planning.
MS10	Demonstrate an understanding of leadership styles (e.g., directive, supportive, consultative, etc.).
MS11	Demonstrate an understanding of change management.
MS12	Demonstrate an understanding of motivation models.
MS13	Demonstrate an understanding of how to develop, implement, evaluate and continuously improve management systems (e.g., CSA Z1000, OHSAS 18001, ISO 14001, ISO 9001, etc.).
MS14	Demonstrate an understanding of sustainability (e.g., occupational health and safety indicators, resource conservation, resource management, etc.).
MS15	Demonstrate an understanding of training needs analyses (e.g., development, delivery and evaluation, etc.).
MS16	Demonstrate an understanding of adult learning principles.
MS17	Demonstrate an understanding of consultation, facilitation, mediation and arbitration.
	Occupational Hygiene (OH)
OH1	Demonstrate an understanding of anatomy and physiology related to occupational hygiene (e.g., lungs, ears, eyes, skin, etc.).
OH2	Demonstrate an understanding of occupational toxicology and routes of entry (i.e., inhalation, absorption, ingestion, injection).
OH3	Demonstrate an understanding of the characteristics, hazards and controls associated with gases, vapours, solvents, fumes, mists, nanomaterials and dusts.
OH4	Demonstrate an understanding of physical hazards and controls (e.g., noise, ionizing and non-ionizing radiation, thermal stress, vibration, etc.).
OH5	Demonstrate an understanding of biological hazards and controls (e.g., mold, mycotoxins, influenza, viruses, etc.).
OH6	Demonstrate an understanding of indoor air quality.
OH7	Demonstrate an understanding of occupational hygiene measurement and sampling (e.g., air, noise, radiation, chemical, etc.).
OH8	Demonstrate an understanding of ventilation (e.g., local, general, supply, exhaust, etc.).
OH9	Demonstrate an understanding of occupational hygiene prevention and protection programs (e.g., respiratory, hearing, thermal stress, medical surveillance, etc.).
OH10	Demonstrate an understanding of occupational exposure limits (e.g., Threshold Limit Values (TLVs), Biological Exposure Indices (BEIs), action levels, etc.) .
OH11	Demonstrate an understanding of hazards and controls associated with lasers.
OH12	Demonstrate an understanding of occupational illness and disease (e.g., asthma, chemical and environmental sensitivity, dermatitis, cancer, etc.).
OH13	Demonstrate an understanding of the role of an occupational hygienist.
	Risk Management (RM)
RM1	Demonstrate an understanding of risk management principles.
RM2	Demonstrate an understanding of risk assessments (e.g., inventory, risk matrix, prioritization, etc.).
RM3	Demonstrate an understanding of the risk control process (e.g., weight of evidence, precautionary principle, ALARA, etc.).
RM4	Demonstrate an understanding of residual risk management (e.g., monitoring, reassessment, etc.).
RM5	Demonstrate an understanding of emergency preparedness and response planning (e.g., CSA Z731, NFPA 1600, etc.).

RM6	Demonstrate an understanding of incident command systems (ICS).
RM7	Demonstrate an understanding of business continuity planning (e.g., CSA Z1600, ISO 22301, NFPA 1600, etc.).
RM8	Demonstrate an understanding of workplace violence and harassment prevention programs.
RM9	Demonstrate an understanding of the hierarchy of controls.
RM10	Demonstrate an understanding of hazard communication (e.g., symbols, safety data sheets, labeling, database research resources, hazard awareness training, etc.).

Appendix B: 2019 CRST Examination Blueprint

The Board of Canadian Registered Safety Professionals (BCRSP) is pleased to present the *Blueprint for the Canadian Registered Safety Technician Examination* (CRSTEX). Administration of the first examination developed from the Blueprint is targeted for February 2019.

The Blueprint was developed to guide those involved in the development of the *Canadian Registered Safety Technician Examination* and to provide the public (e.g., examinees, educators, administrators) with practical information about the examination.

The Blueprint has two major components: (1) the content domain to be measured and, (2) the explicit guidelines on how this content is to be measured. The content domain consists of the CRSTEX set of competencies (i.e., the competencies expected of entry-level registered safety technicians), and the guidelines are expressed as structural and contextual variables. The Blueprint also includes: a *Summary Chart* (p.10) that summarizes the examination guidelines; a *Glossary* (p. 12) that provides definitions of terms appearing in bold throughout the document.

BCRSP wishes to thank all the individuals who have contributed to the creation of this Blueprint. In particular, thanks are extended to registered safety professionals who participated in the development of the competency framework and to those who responded to the competency validation survey.

The Blueprint will be evaluated regularly to reaffirm that the competencies and the guidelines for examination development continue to reflect what is expected of an entry-level registered safety technician beginning to practice, and is differentiated from that of entry-level registered safety professionals.

BCRSP encourages all users of this document to provide feedback which may be useful in future revisions of the Blueprint. Please forward all such comments to:

Executive Director
Board of Canadian Registered Safety Professionals
6700 Century Ave, Ste. 100
Mississauga, ON L5N 6A4

Introduction

The Board Canadian Registered Safety Professionals develops the Canadian Registered Safety Technician Examination (subsequently referred to as the CRSTEX) for registering purposes. It fulfills this service by working in collaboration with certified OHS practitioners from across Canada who serve as the content experts for developing and validating the examinations.

Registration/licensure/certification examinations have a well-defined purpose: to protect the public by ensuring that those who are licensed possess sufficient knowledge and skills to perform important occupational activities safely and effectively (Canadian Psychological Association, 1987). In the case of the CRSTEX, the purpose is to determine whether or not examinees are prepared to practice occupational health and safety, without risk to the public and to the environment.

The primary function of the Blueprint for the Canadian Registered Safety Technician Examination is to describe how the examination is to be developed. Specifically, this Blueprint provides explicit instructions and guidelines on how the **competencies**[1] (e.g., knowledge, abilities, skills, attitudes, and judgment) are to be expressed within the examination in order for accurate decisions to be made on the ability of examinees to practice safely and effectively.

The purpose of this Blueprint is to describe how the examination is to be developed.

Prior to producing this Blueprint, BCRSP undertook an extensive study to identify the competencies required for the safe and effective practice of registered safety technicians in Canada. Individual registered safety professionals from across the country were active participants in all phases of the investigation, which served to identify and validate a comprehensive set of 81 competencies expected of the registered safety technician. With this set of competencies, and the validation data obtained, the essential components of the CRSTEX could be clearly described.

The periodic and comprehensive review of the competencies measured by the CRSTEX assists the BCRSP in maintaining the validity of the CRSTEX, and to develop psychometrically sound and legally defensible registration examinations. Because of changes that occur in the practice of health and safety technicians and professionals alike, a validation study of the competencies is conducted at least every five years, or as needed. In addition to the periodic comprehensive review and validation study, the competencies are reviewed and evaluated on a regular basis by content experts. This helps to ensure that the CRSTEX remains differentiated from the registration examination used for safety professionals in Canada, the CRSTEX.

_____
[1] The terms appearing in bold are defined in the Glossary.

Technical Specifications

The following section presents the technical specifications that are to guide the development of the CRSTEX. In the first part, issues related to the competencies are addressed. The second part describes the guidelines to be followed in addressing the structural and contextual variables of the CRSTEX.

The CRSTEX is a **criterion-referenced examination**. That is, a fundamental component of the development of the CRSTEX is a comprehensive description of the content domain being measured. In the case of the CRSTEX, the content domain of interest consists of the competencies a registered safety technician is required to possess in order to practice safely and effectively at the technician level. These competencies form the basis of the CRSTEX.

This section describes the competencies that were obtained as a result of the validation process, the way they have been grouped, and the manner in which they are to be sampled in the examination development process.

DEVELOPING THE SET OF COMPETENCIES

The competencies were evaluated by approximately 1170 Canadian Registered Safety Professionals.

As a starting point for developing the competencies, a Committee on Technician Competencies was formed that was representative of all areas of practice of registered safety professionals in Canada. This committee began by reviewing the competency lists, the nine category classification used in the 2014 CRSPEX Blueprint, and other reference materials that outline the competencies of a safety technician). The competency lists and domains were then systematically reviewed by a focus group of safety professionals using the Delphi method to identify which competencies where deemed appropriate for technician level certification, and what additional or new competencies should be included. This resulting set of competencies were then evaluated by a sample of approximately 1170 Canadian Registered Safety Professionals (CRSP's), including practitioners, educators, and administrators, who were asked to rate each competency in terms of its applicability, importance and frequency for the registered safety technician. The Committee reviewed the results of the survey. The CRSTEX Set of Competencies has the primary purpose of providing the content domain for the examination.

COMPETENCY DOMAINS

The classification of the competencies consisted of the following nine domains defined below (the number and the percentage of competencies are indicated in parentheses following the category name):

1. Applied Safety Fundamentals (23 competencies or 28% of the set of competencies)
2. Auditing (3 competencies or 4% of the set of competencies)
3. Ergonomics (6 competencies or 7% of the set of competencies)
4. Fire Prevention and Protection (8 competencies or 10% of the set of competencies)
5. Health and Wellness (9 competencies or 11% of the set of competencies)
6. Law and Ethics (9 competencies or 11% of the set of competencies)

7. Management Systems (4 competencies or 5% of the set of competencies)
8. Occupational Hygiene (12 competencies or 15% of the set of competencies)
9. Risk Management (7 competencies or 9% of the set of competencies)

Some of the competencies lend themselves to being placed in one or more of the domains, so these nine domains should be viewed simply as an organizing framework. It should be recognized that the competency statements vary in scope, with some representing global activities and others more discrete and specific actions.

STRUCTURAL VARIABLES

In addition to the specifications related to the competencies, other variables must be considered during the development of the CRSTEX. Structural variables include those characteristics that determine the general appearance and design of the examination. They define the length of the examination, the format/presentation of the examination questions (e.g., multiple-choice format), and the cognitive objective that each question measures (e.g., basic knowledge/comprehension). The weightings of the nine domains are also included as structural variables.

There will be 190 to 210 operational multiple choice questions on the Canadian Registered Safety Technician Examination.

- Examination Length and Format: The examination will consist of between 190 and 210 operational multiple choice questions. With 81 competencies to measure and a sound sampling approach for these competencies, an examination of between 190 and 210 operational questions is sufficient to make both reliable and valid decisions about an examinee's readiness to practice safely and effectively.

- Question Presentation: The multiple choice questions of the CRSTEX are presented in one of two formats, case-based or independent questions.

The Canadian Registered Safety Technician Examination represents the different areas of practice of registered safety technicians.

- Cognitive Objective: This examination will include questions that fall under three cognitive taxonomy categories: knowledge/comprehension, application and critical thinking. Knowledge/comprehension questions test a candidate's ability to recognize previously learned material and to understand its meaning; and know and understand definitions, facts, concepts and principles. Application questions test a candidate's ability to apply knowledge and learning to new or practical situations; can apply rules, methods, principles and theories; and identify consequences from a given situation. Critical thinking questions test a candidate's ability to make a correct decision and identify correct practices based upon information given; and can judge the relevance of data, evaluate the effectiveness of different actions, and solve problems.

CONTEXTUAL VARIABLES

In addition to structural variables, contextual variables qualify the content domain by specifying the contexts in which the examination questions will be set (i.e., technician context).

It is recognized that the practice environment of <u>entry-level</u> registered safety technicians can be any setting or circumstance within which occupational health and safety can be practiced, and is distinct from that of registered safety professionals. The competencies assessed by the examination are not setting dependent. The practice environment will be specified when necessary.

In each setting, the safety technician may serve as a practitioner, technologist, or advisor). This will be considered in forming the context of examination items

COMPETENCY WEIGHTINGS

To ensure that the examination accurately reflects the profile of the registered safety technician, the competencies were weighted according to their relative importance and frequency based on the survey ratings and a quantitative review by content experts.

These weightings were used to establish the relative emphasis that the competencies will receive on the examination. The competencies have been weighted using the application, importance and frequency ratings obtained in the competency validation study. The weightings represented in the 2014 CRSPEX Blueprint were also used as a guide.

The CRSTEX Set of Competencies presents the competencies grouped on the basis of the ratings from the validation survey.

Based on these sources, and with the guideline that the CRSTEX will consist of between 190 and 210 questions, the sampling scheme presented in the table below was developed. The distribution of weights in this sampling scheme was selected: (1) to provide differentiation on the rating variables (importance and frequency); (2) to provide comparison and differentiation from the weights in the registered safety professional examination (the CRSPEX); and (3) to conform with the examination length requirement. The following table presents the percentage range of questions in each of the nine domains of competencies.

Competency Domains	Percentage of Questions on the CRSTEX
1. Applied Safety Fundamentals	30%-40%
2. Auditing	10%-13%
3. Ergonomics	3%-5%
4. Fire Prevention and Protection	4%-8%
5. Health and Wellness	3%-5%
6. Law and Ethics	11%-15%
7. Management Systems	3%-5%
8. Occupational Hygiene	10%-13%
9. Risk Management	13%-17%

Conclusion

The *Blueprint for the Canadian Registered Safety Technician Examination* is the product of a collaborative effort between BCRSP and Canadian Registered Safety Professionals (CRSP's). Their efforts have resulted in a compilation of the competencies required of the entry level registered safety technician to practice and of the guidelines on how the competencies will be measured on the CRSTEX. A summary of these guidelines can be found in the CRSTEX Examination Development Summary Chart, on page 10.

It is recognized that the health and safety profession will continue to evolve. As this occurs, the Blueprint (i.e., the competencies and the test development guidelines) may require revision so that it accurately reflects the scope of practice, roles, and responsibilities of the entry level safety technician, and that these remain differentiated from the registered safety professional. CRSPEX will ensure this revision takes place in a timely manner and will communicate it in updated editions of this document.

CRSTEX Examination Development Summary Chart

Examination Length and Format	190 to 210 operational multiple choice questions. Three and a half (3.5) hours will be allocated for the completion of the examination.
Question Presentation	Independent questions 80-90% Case-based questions 10-20%
Competency Domains and Weightings	1. Applied Safety Fundamentals 30-40% 2. Auditing 10-13% 3. Ergonomics 3-5% 4. Fire Prevention and Protection 4-8% 5. Health and Wellness 3-5% 6. Law and Ethics 11-15% 7. Management Systems 3-5% 8. Occupational Hygiene 10-13% 9. Risk Management 13-17%
Cognitive Taxonomy	The specific competency determines which cognitive taxonomy a question falls under. This is specified in the CRSTEX Competency Profile, on pages 13-16. For the entire examination, the percentage of questions that represent each cognitive taxonomy is as follows: Knowledge/Comprehension 75% Application 23% Critical Thinking 2%* *pertains only to competencies LE7 and LE9, see the CRSTEX Competency Profile, on page 15.

Glossary

case-based questions: A set of questions associated with a brief scenario.

competencies: The behaviour statements which reflect the combined knowledge, abilities, skills, attitudes, and judgment expected of an entry level registered safety technician.

criterion-referenced (C-R) examination: A test that measures the degree of command of a specified content/skills domain or list of instructional objectives. Scores are interpreted in comparison to a predetermined performance standard, or as a degree of mastery of a defined domain (e.g., percent correct and mastery scores), independently of the results obtained by other candidates. (Brown, 1983)

independent items: Stand-alone objective examination items which contain the information necessary for responding.

operational questions: Questions appearing on the examination that have been pre-tested and that are suitable for the examination. The answer to these questions count in the candidate's score.

CRSTEX Competency Profile

		Cognitive level 1 = Knowledge/ Comprehension 2 = Application 3 = Critical Thinking
Applied Safety Fundamentals (ASF)		
ASF1	Ability to conduct basic workplace inspections.	2
ASF2	Ability to conduct basic incident investigations.	2
ASF3	Basic knowledge/comprehension of statistical analysis (e.g., mean, percentage, standard deviation, time weighted average, etc.).	1
ASF4	Ability to conduct basic task analyses/job hazard analyses/job safety analyses.	2
ASF5	Basic knowledge/comprehension of material/process flow analyses.	1
ASF6	Basic knowledge/comprehension of the importance of safety in the design and procurement process for tools, equipment and materials.	1
ASF7	Ability to apply the fundamentals of safe use, handling, storage, disposal and risks associated with chemicals, explosives and radioactive material in the workplace (i.e., WHMIS/GHS).	2
ASF8	Ability to assess the hazards and controls of machinery safeguarding (e.g., point-of-operation, light curtains, interlocks, etc.).	2
ASF9	Ability to assess the appropriate use of personal protective equipment.	2
ASF10	Basic knowledge/comprehension of electrical safety (e.g., bonding, grounding, circuit interrupter, etc.).	1
ASF11	Ability to assess the hazards and controls of safe material handling and storage.	2
ASF12	Ability to assess the hazards and controls of hoisting and conveying equipment (e.g., ropes, chains, slings, cranes, conveyors, etc.).	2
ASF13	Ability to assess the hazards and controls of powered mobile equipment and vehicles (e.g., forklifts, scissorlifts, bucket trucks, pickup trucks, vans, etc.).	2
ASF14	Ability to assess the hazards and controls of hand and portable tools.	2
ASF15	Ability to assess the hazards and controls of shop machinery (e.g., lathes, table saws, drill presses, etc.).	2
ASF16	Ability to assess hazards and controls associated with hot work (e.g., welding, cutting, brazing, etc.).	2
ASF17	Ability to assess hazards and the control of hazardous energy and harmful substances (e.g. lockout/tagout of hydraulic, pneumatic, steam, mechanical, electrical hazards, etc.).	2
ASF18	Basic knowledge/comprehension of hazards and controls associated with automated systems, equipment and processes (e.g., robotics, remote starts, computer controlled systems, nanotechnology, etc.).	1
ASF19	Basic knowledge/comprehension of process safety (e.g., chemical, manufacturing, etc.).	1
ASF20	Ability to assess the hazards and controls related to confined space entry.	2
ASF21	Ability to assess the hazards and controls related to elevated work (e.g., ladders, fall protection, platforms, scaffolds, etc.).	2
ASF22	Basic knowledge/comprehension of laboratory safety.	1

ASF23	Ability to assess the hazards and controls associated with working alone and remotely.	2
Auditing (AUD)		
AUD1	Basic knowledge/comprehension of auditing principles and techniques.	1
AUD2	Basic knowledge/comprehension of inspections, compliance audits and management system audits.	1
AUD3	Ability to conduct basic inspection, compliance, and management system audits.	2
Ergonomics (ERG)		
ERG1	Basic knowledge/comprehension of ergonomics (e.g., anatomical, physiological, biomechanical, etc.).	1
ERG2	Basic knowledge/comprehension of the signs and symptoms of musculoskeletal injuries.	1
ERG3	Basic knowledge/comprehension of regulatory requirements related to ergonomics (e.g., regulations, guidelines, standards, etc.).	1
ERG4	Basic knowledge/comprehension of the components of an ergonomics program (e.g., CSA Z412, etc.).	1
ERG5	Basic knowledge/comprehension of the role of ergonomics in design and procurement (e.g., workspace layout, tools, equipment, materials, etc.).	1
ERG6	Basic knowledge/comprehension of the role of an ergonomist.	1
Fire Prevention and Protection (FPP)		
FPP1	Basic knowledge/comprehension of the roles and functions of standard-setting bodies (e.g., National Fire Prevention Association, Underwriters Laboratory, Factory Mutual, Canadian Standards Association, European Union, etc.).	1
FPP2	Basic knowledge/comprehension of codes and standards as applied to fire safety (e.g., National Building Code, National Fire Code, etc.).	1
FPP3	Basic knowledge/comprehension of life safety (e.g., building design, construction, location, materials, etc.).	1
FPP4	Basic knowledge/comprehension of fire chemistry and behaviour.	1
FPP5	Ability to implement basic fire safety programs.	2
FPP6	Ability to implement basic fire prevention procedures.	2
FPP7	Basic knowledge/comprehension of fire detection systems and devices (e.g., design, application, maintenance, inspection, etc.).	1
FPP8	Basic knowledge/comprehension of fire control systems and devices (e.g., design, application, maintenance, inspection, etc.).	1
Health and Wellness (HW)		
HW1	Basic knowledge/comprehension of workplace health promotion.	1
HW2	Basic knowledge/comprehension of injury, illness, and disease prevention programs (e.g., immunizations, personal protective equipment, hand hygiene, medical screening, etc.).	1
HW3	Basic knowledge/comprehension of employee and family assistance programs.	1
HW4	Basic knowledge/comprehension of wellness programs (e.g., stress management, physical fitness, weight management, etc.).	1
HW5	Basic knowledge/comprehension of disability management programs (e.g., modified work, rehabilitation, return to work, etc.).	1
HW6	Basic knowledge/comprehension of addiction control programs (e.g., tobacco, alcohol, drugs, gambling, etc.).	1
HW7	Basic knowledge/comprehension of the effects of fatigue on worker health and performance (e.g., shift work, fitness for work, overtime, etc.).	1
HW8	Basic knowledge/comprehension of the influence of the psychosocial work environment on worker health and wellness (e.g., leadership, expectations, civility, respect, etc.).	1
HW9	Basic knowledge/comprehension of the influence of work/life balance on worker health and wellness.	1
Law and Ethics (LE)		
LE1	Basic knowledge/comprehension of occupational health and safety law in Canada (e.g., Internal Response System (IRS), due diligence, criminal liability, general duty clause, etc.).	1
LE2	Basic knowledge/comprehension of environmental legislation (e.g., Canadian Environmental Protection Act, Hazardous Products Act, Transportation of Dangerous Goods Act, WHMIS/GHS, etc.).	1
LE3	Basic knowledge/comprehension of the duties of workplace parties (e.g., supervisors, workers, joint health and safety committees/representatives, etc.).	1
LE4	Ability to apply the principles of worker rights (i.e., right to know, right to participate and right to refuse).	2

LE5	Basic knowledge/comprehension of the duties and powers of enforcement agencies (e.g., orders to comply, prosecutions, ticketing, administrative penalties, the appeal process, etc.).	1
LE6	Ability to meet the obligations of a certified OHS Technician (e.g., with respect to employers, co-workers, public, fellow professionals, contractors, etc.).	2
LE7	Ability to critically evaluate the certified OHS Technician obligations with respect to *The Rules of Professional Conduct* (Code of Ethics).	3
LE8	Basic knowledge/comprehension of consequences of professional errors and omissions.	1
LE9	Ability to critically evaluate the role of the certified OHS Technician and limits of professional practice (e.g., interaction with government agencies, scope of practice, boundaries of competence, etc.).	3
Management Systems (MS)		
MS1	Basic knowledge/comprehension of the integration of health and safety into organizational structure, function, culture and design.	1
MS2	Basic knowledge/comprehension of training needs analyses (e.g., development, delivery and evaluation, etc.).	1
MS3	Basic knowledge/comprehension of adult learning principles.	1
MS4	Ability to deliver routine training programs.	2
Occupational Hygiene (OH)		
OH1	Basic knowledge/comprehension of routes of entry (i.e., inhalation, absorption, ingestion, injection).	1
OH2	Basic knowledge/comprehension of the characteristics, hazards and controls associated with gases, vapours, solvents, fumes, mists, nanomaterials and dusts.	1
OH3	Basic knowledge/comprehension of physical hazards and controls (e.g., noise, ionizing and non-ionizing radiation, thermal stress, vibration, etc.).	1
OH4	Basic knowledge/comprehension of biological hazards and controls (e.g., mold, mycotoxins, influenza, viruses, etc.).	1
OH5	Basic knowledge/comprehension of indoor air quality.	1
OH6	Basic knowledge/comprehension of occupational hygiene measurement and sampling (e.g., air, noise, radiation, chemical, etc.).	1
OH7	Basic knowledge/comprehension of ventilation (e.g., local, general, supply, exhaust, etc.).	1
OH8	Ability to implement occupational hygiene prevention and protection programs (e.g., respiratory, hearing, thermal stress, medical surveillance, etc.).	2
OH9	Basic knowledge/comprehension of occupational exposure limits (e.g., Threshold Limit Values (TLVs), Biological Exposure Indices (BEIs), action levels, etc.) .	1
OH10	Basic knowledge/comprehension of hazards and controls associated with lasers.	1
OH11	Basic knowledge/comprehension of occupational illness and disease (e.g., asthma, chemical and environmental sensitivity, dermatitis, cancer, etc.).	1
OH12	Basic knowledge/comprehension of the role of an occupational hygienist.	1
Risk Management (RM)		
RM1	Basic knowledge/comprehension of risk management principles.	1
RM2	Ability to conduct basic risk assessments (e.g., inventory, risk matrix, prioritization, etc.).	2
RM3	Ability to apply risk control processes (e.g., weight of evidence, precautionary principle, ALARA, etc.).	2
RM4	Basic knowledge/comprehension of emergency preparedness and response planning (e.g., CSA Z731, NFPA 1600, etc.).	1
RM5	Basic knowledge/comprehension of workplace violence and harassment prevention programs.	1
RM6	Ability to apply the hierarchy of controls.	2
RM7	Ability to implement hazard communication (e.g., symbols, safety data sheets, labeling, database research resources, hazard awareness training, etc.).	2

Appendix C: Process for The Development Of Items for the Certification Examination

This document outlines the process used by the Board of Canadian Registered Safety Professionals (BCRSP) in the development of examination questions (items). Multiple-choice questions are developed to assess a sample of the knowledge, skills, abilities, attitudes and judgments (*competencies*) expected of an entry-level registered safety professional. There are two types of multiple-choice questions on the examination – case-based and independent.

Case-Based Multiple-Choice Items

A case is a set of two or more multiple-choice items associated with a brief scenario. The scenario (case text) is written prior to formulating the associated items. The following guidelines are used by item writers in developing cases:

- Describe an OHS situation.
- Write the case in simple, concise and precise language.
- Provide all necessary information but do not include extraneous information.

Independent Multiple-Choice Items

There are four steps followed when multiple-choice items are developed: (1) the competency is examined, (2) the stem is created, (3) the correct response is written and (4) the distracters are formulated.

Step 1: Examine the Competency

The competency must be read and thoroughly understood.

If the meaning of a competency is not understood, one of the other item writers or the item writing facilitator must be consulted.

The item is written to reflect the competency.

Step 2: Create the Stem

The stem must be presented as a complete sentence.

As much of the wording as possible is written in the stem, rather than in the options.

The stem must be clear and concise providing all the necessary information to enable the candidate to select an option.

The stem must be stated in a positive form.

Step 3: Write the Correct Response

Current reference texts/articles must be cited to identify the correct response. If it is difficult to locate a reference that relates directly to the content of a particular item, the reference chosen must support the

general principle addressed in the question. References should be well-known and accessible to the candidate.

A response must be provided that experts are likely to agree on as the _best_ of the options provided.

Step 4: Formulate the Distracters

An important feature of the correct response is omitted or an incorrect or irrelevant feature is introduced.

- The types of errors less proficient candidates are likely to make should be anticipated.
- All of the distracters must be plausible and homogeneous (e.g., if the stem asks for an action, each option must be presented as an action).

Develop Rationales

By providing a rationale for why the correct response is correct, the likelihood of creating an inaccurate or ambiguous question will be minimized. The following guidelines are used:

- The rationale must indicate why an option is correct. The explanation does not need to be exhaustive.
- The rationale may be written in point form.

Group Review of Items

Each item is presented to the item writing group for comments and suggestions. When the group has agreed that an item meets the guidelines for examination questions, the item is approved. This activity verifies the quality and accuracy of the items that are developed.

Review of Items By Examination Committee

The Examination Committee reviews and approves items prior to their adoption and use on the examination.

Essential Steps to Create Quality Examination Items

- Ensure that the item measures the targeted competency.
- Direct the difficulty level of the question toward the entry-level registered safety professional.
- Avoid textbook language and technical jargon. Use simple language.
- Avoid sex bias and racial or cultural stereotypes.
- Phrase items in the third person (e.g., What should **the registered safety professional** or **registered safety technician** recommend?) because the use of the second person (e.g., What would **you** recommend?) introduces an element of subjectivity into the question.
- Ensure consistency in spelling. If a word does not appear in the dictionary, an accepted current publication may be used as a reference for spelling.
- Express units of measurement according to the International System of Units (SI).
- Avoid the use of abbreviations, except for common, standard ones. When using acronyms, write the term in full, followed by the acronym in parentheses. Subsequent citations of the term within a question need only include the acronym.
- Make the options comparable in length.

- Make the options grammatically consistent with the stem.
- Avoid the repetition of key words or phrases in each option.
- Do not use "All of the above," "None of the above," or combined responses (e.g., A and B) as options.
- When developing case-based items, do not put any information in the stem that will guide the candidate in correctly answering other questions within the case.

Appendix D: BCRSP Examination Accommodation Form

GUIDING PRINCIPLES

For candidates unable to take a BCRSP's examination using the standard testing process, the BCRSP will make all reasonable efforts to accommodate candidate needs up to the point of undue hardship. In this regard, BCRSP has adopted the following guiding principles for responding to requests from candidates for exam accommodation.

1. Accommodation requests will be considered on an individualized basis.

2. The accommodation procedures will respect the dignity and privacy of the candidate.

3. Requirements and procedures for test accommodations will ensure fairness for all candidates, both those seeking accommodations and those testing under standard conditions.

4. Accommodations will be appropriate and reasonable for the documented disability and must be consistent with the mandate of the BCRSP to ensure persons holding a BCRSP certification meet the competencies required of a registered safety professional or registered safety technician.

5. Accommodations must not result in undue hardship, or fundamentally alter that which the test is designed to measure.

6. Accommodation requests must be made in sufficient detail, and be accompanied by appropriate and verifiable documentation, to ensure that the BCRSP has all the information it requires to determine the most appropriate accommodation.

In making their decision, the BCRSP will consider factors such as undue disruption of the BCRSP's operations, added costs to the Board, human resource availability, maintenance of examination security, and the effect of a particular accommodation on the ability to best ensure that granting the accommodation request will not compromise the validity and integrity of the certification exam.

BCRSP's decision will, if at all possible, be communicated to the candidate at least thirty (30) days prior to the exam. If an accommodation is granted, the BCRSP reserves the right to assign the date, time and location of the examination, taking into account any accommodation needs that may impact the scheduling of the examination.

Prior to writing the exam the candidate will sign an acknowledgement that all agreed to accommodation(s) have been provided.

Post exam writing the candidate will sign a further acknowledgement that all agreed to accommodation(s) have been provided to their satisfaction. If a candidate was not provided with the accommodations as requested and any concerns could not be satisfactorily resolved at the test centre, a candidate may submit an appeal within fifteen (15) days of writing the examination.

Accommodation arrangements approved by the BCRSP are not transferable from one examination to another. A new accommodation request must be submitted each time the candidate applies to sit a BCRSP examination and will be evaluated independently.

A request for accommodation must be submitted in writing to the BCRSP Executive Director at least 90 days before the examination date for both, first write and any re-writes of the examination. Late requests may be considered in extenuating circumstances but BCRSP cannot guarantee that such requests will be accommodated. All requests will be handled on a confidential and individualized basis.

A written request for disability accommodation must include:

- A completed, signed, request for accommodation form explaining the nature and extent of the candidate's restrictions or limitations in sufficient detail to ensure that the form, along with any supporting documentation, provides BCRSP with all the information it needs to determine the most appropriate accommodation.

- Original letter(s), on office letterhead, from the candidate's fully-licensed practicing physician, clinical psychologist, other appropriate licensed health care provider, or other appropriate professional or practitioner (the practitioner cannot be a relative or spouse of the candidate) identifying and confirming the existence of the functional limitation(s), the nature of the accommodation requested, and a detailed explanation of why the accommodation is required.

- If applicable and available, documentation demonstrating that similar accommodations were provided to the candidate during any previous education program or other certification examination.

All medical and other supporting documentation submitted will be kept confidential by the BCRSP, and will be used for the purpose of implementing the accommodations necessary for the candidate, if any.

All disability-related documentation must be current within *six (6) months* of the date of application to write the exam. If the medical documentation, i.e. report or letter is not current within six (6) months of the date of the candidate's application, the applicant must include a letter from a fully-licensed practitioner or other professional with appropriate credentials. The letter shall indicate that they have reviewed the supporting medical documentation and concur that the accommodations set out within it remain valid for the candidate for the purposes of the BCRSP certification exam on the date of the proposed sitting of the exam.

If additional information is required to evaluate the accommodation request, the BCRSP will consult with the candidate.

The final decision regarding an accommodation request lies with the BCRSP Certification and Examination Committee Chair and Vice Chair in collaboration with the BCRSP Executive Director.

A written appeal of the decision may be made within 60 days and will be reviewed by the Governing Board at their next regularly scheduled Board meeting. In cases of appeal, the decision of the Governing Board will be final.

BCRSP Examination Accommodation Request Form

Please submit the completed form to the BCRSP to the attention of the Executive Director. Please include in your submission the completed form along with the necessary supporting documentation. The completed form may also be faxed to the Board office (905-567-7191) or sent via courier to BCRSP, 6700 Century Ave Suite 100, Mississauga, ON L5N 6A4. ATTN: Executive Director or emailed to nwright@bcrsp.ca.

Do not pre-schedule an examination writing – the accommodation must be approved before you can schedule an examination with the accommodation applied.

CANDIDATE APPLICATION FOR TESTING ACCOMMODATIONS

Examination	☐ CRSP Examination	☐ CRST Examination
Name		
Address (including postal code)		
Telephone		
Email		
Candidate ID (if known)		
Did you receive accommodation on a previous BCRSP Examination? ☐ Yes ☐ No		
Grounds for request (please describe):		
Please describe why the grounds that you have listed above prevent you from writing the examination in the usual method and/or environment:		

Please indicate the type of accommodation you are requesting (please mark all that apply)

- ❐ Accessible testing site (e.g. Ramp for wheelchairs)
- ❐ Amanuensis (recorder of answers)
- ❐ Extended writing time – identify amount of extra time requested
- ❐ Extra time for breaks – specify frequency and duration
- ❐ Reader (person to read examination items aloud)
- ❐ Separate testing room
- ❐ Sign language interpreter
- ❐ Special chair (specify type)
- ❐ Special input device, such as a trackball mouse (specify type)
- ❐ Special output device, such as a larger monitor (specify type)
- ❐ Other (please describe)

❐ I have enclosed original documentation, on office letterhead, from my fully-licensed practicing physician, clinical psychologist, other appropriate licensed health care provider, or other appropriate professional or practitioner (the practitioner cannot be a relative or spouse of the candidate) identifying and confirming the existence of the functional limitation(s), the nature of the accommodation requested, and a detailed explanation of why the accommodation is required.

Signature:	
Date:	

BCRSP Examination Candidate:

Please provide the following information to your fully-licensed practicing physician, clinical psychologist, other appropriate licensed health care provider, or other appropriate professional or practitioner (the practitioner cannot be a relative or spouse of the candidate).

ATTN: Fully-licensed practicing physician, clinical psychologist, other appropriate licensed health care provider, or other appropriate professional or practitioner (the practitioner cannot be a relative or spouse of the candidate).

You are being requested by the BCRSP examination candidate to supply, **an original letter(s), on office letterhead**, identifying and confirming the following:

- Approximate date of when the disability was first diagnosed and/or identified,
- A brief history and description of the functional limitation(s) of the BCRSP examination candidate,
- A detailed explanation of why the accommodation is required, (i.e. explain the aspect of the disability which requires testing accommodation, the effect it has on the candidate's daily living and the effect of the disability on the candidate's ability to perform under normal testing conditions
- The nature of the accommodation requested, (please refer to the listing below for the most common types of accommodation requested),
- Your contact information, capacity in which you are acting (i.e. physician, psychologist, etc), your signature and date.

Types of Accommodation

- Accessible testing site (e.g. Ramp for wheelchairs)
- Amanuensis (recorder of answers)
- Extended writing time – identify amount of extra time requested
- Extra time for breaks – specify frequency and duration
- Reader (person to read examination items aloud)
- Separate testing room
- Sign language interpreter
- Special chair (specify type)
- Special input device, such as a trackball mouse (specify type)
- Special output device, such as a larger monitor (specify type)
- Other

BCRSP EXAMINATION POTENTIAL ACCESSIBILITY BARRIERS

The BCRSP's examination presents the following potential accessibility barriers.

Manual

Candidates must use a mouse to point-and-click and navigate from one question to the next. All questions on BCRSP examinations are multiple choice. For further information on a BCRSP Examination, please review the applicable *Examination Blueprint* available on the BCRSP website.

Optical

Reading text – examination questions are written at a reading level appropriate to the content. The computer-based examination (CBT) questions must be read on a monitor. The font can be as small as 10 point.

Physical Stamina

The examination is 3 ½ hours.

Please contact the BCRSP office if more information is required to determine what accommodation may be necessary (905-567-7198. 888-279-2777, info@bcrsp.ca).