BCSP is committed to impartiality and objectivity in every aspect of our operation. We have intentionally structured ourselves to segregate responsibilities in our organization to facilitate this impartiality and objectivity. BCSP also evaluates each application individually without regards to age, gender, race, religion, national origin, marital status, disability, or sexual orientation.

This publication is not intended to guarantee that the user will pass an exam, become certified, or in general may not cover every aspect of the certification process. Additionally, this publication is not considered training or preparatory in any manner. BCSP makes no promises or warranties of any kind, expressed or implied, of the actions of third party organizations.

This publication is subject to change without notice at anytime.

DISCLAIMER:

An individual’s status with BCSP is an indicator that an individual has completed a combination of defined education, experience, and examination requirements. However, certification is not a guarantee or assurance of the competence or ability of any particular individual. Further, given the rapid changes in the field, BCSP cannot warrant that any examination and other certification materials will at all times reflect the most current state of the art.

BCSP disclaims liability for any personal injury, property or other damages of any nature whatsoever, whether special, indirect, consequential or compensatory, directly or indirectly resulting from the certification program or the acts or omissions of any person who has been certified by BCSP.

In conducting the certification program, including issuing certifications, BCSP is not undertaking to render professional or other services for or on behalf of any person or entity, nor is BCSP undertaking to perform any duty owed by any person or entity to someone else. Anyone using the services of a person who has been certified should rely on their own independent judgment as appropriate in determining the exercise of reasonable care in any given circumstances.
The Occupational Hygiene and Safety Technician® (OHST®) Certification

BCSP awards the Occupational Hygiene and Safety Technician (OHST) to individuals who demonstrate competency and work part-time or full-time in occupational health and safety activities devoted to the prevention of harm to individuals in the workplace environment. Whether your career goals include seeking a new position, moving up in your current organization, or moving to private practice, you can accelerate your opportunities by achieving the Occupational Hygiene and Safety Technician (OHST) certification. You can improve your chances for success, being selected for leadership and senior positions, and increased salary through the OHST credential. BCSP offers you the opportunity to rise above the competition by adding the OHST certification to your portfolio.

Purpose of This Guide

The purpose of this guide is to walk you through the process of applying for and taking the examination leading to the OHST certification. This guide is the first step to help you achieve the credential.

How to Use This Guide

This guide provides you with in-depth information regarding the application process, examination process, and the rules and procedures essential in retaining the OHST certification after you achieve it. Reading and following the suggestions and rules in this guide will help you navigate your path to the OHST certification.

Visit bcsp.org and click on “My Profile” to create an account and apply for your desired certification(s). If you need further assistance you may contact the Certification Services Department at +1 317-593-4800 or by email at bcsp@bcsp.org.

Important Information

For the most current version of this publication, please visit bcsp.org/OHST.

As a candidate or certificant you are solely responsible to keep BCSP informed of your current mailing and email address. If either address changes you must notify BCSP. You could lose your credential or eligibility status if you miss important notifications related to your credential.
**ABOUT BCSP**
Headquartered in Indianapolis, Indiana, BCSP is a not-for-profit corporation recognized as a leader in high-quality, accredited credentialing for safety, health, and environmental (SH&E) practitioners. BCSP establishes standards and certifies competency criteria in professional safety practice. Since 1969, over 68,000 BCSP's certifications have been achieved.

**CAREER INFORMATION**
For details on careers in SH&E, download from the BCSP website:
- Career Paths in Safety Brochure
- For a comprehensive list of accredited U.S. independent, third-party organizations (listed below) that evaluate certification requirements on a regular basis:
  - American National Standards Institute (ANSI), ansi.org (ISO/IEC 17024, General Requirements for Bodies Operating Certification Systems of Persons)
  - National Commission for Certifying Agencies (NCCA), credentialingexcellence.org
  - Council of Engineering and Scientific Specialty Boards (CESB), cesb.org

**ACCREDITATION AND RECOGNITION**
BCSP's certifications are accredited by independent, third-party organizations (listed above) that evaluate certification requirements on a regular basis:
- American National Standards Institute (ANSI), ansi.org (ISO/IEC 17024, General Requirements for Bodies Operating Certification Systems of Persons)
- National Commission for Certifying Agencies (NCCA), credentialingexcellence.org
- Council of Engineering and Scientific Specialty Boards (CESB), cesb.org

BCSP has been granted special consultative status with the United Nations Economic and Social Council (ECOSOC) since 2014.

**CERTIFICATIONS**
Certified Safety Professional® (CSP®)
- has been in operation for more than 40 years with over 40,000 CSPs certified
- is the premier certification in the safety profession
- covers a wide range of safety, health and environmental (SH&E) practice disciplines

Safety Management Specialist (SMS)
- demonstrates management skills required for an organization’s safe operation, including defining and utilizing safety management systems

Associate Safety Professional® (ASP®)
- demonstrates a broad scope of knowledge of SH&E practice
- serves as one of several approved credentials meeting requirements for the CSP

Occupational Hygiene and Safety Technician® (OHST®)
- provides practitioners with partial responsibility in SH&E with a high quality certification

Construction Health and Safety Technician® (CHST®)
- offers a certification for individuals who work in a construction craft or are construction safety specialists

Safety Trained Supervisor® (STS®)
- provides a quality certification for work group leaders in various industries who are responsible for the safety and health of their workers
- is a leading indicator of safety performance
- has led to reductions in injuries and workers’ compensation claims and has created productivity gains in participating companies

Safety Trained Supervisor Construction® (STSC®)
- holds the same requirements and benefits as the Safety Trained Supervisor certification but provides a quality certification for work group leaders working specifically in construction

Certified Environmental, Safety and Health Trainer® (CET®)
- certifies those who have experience and expertise in developing, designing, and delivering SH&E training

**CHAPTER 2 | CERTIFICATION SUMMARY**
3. **Purchase Your Exam**
Anytime during the one-year eligibility period, candidates may pay for their examination through “My Profile” at bcsp.org or by calling Certification Services at +1 317-593-4800. The examination authorization period begins the day a candidate purchases an exam (within their one-year eligibility period) and ends once he/she has sat for the examination or on the day their eligibility ends, whichever comes first.

Active or retired military may qualify for a reimbursement of the examination fee through the VA. The VA Brochure is located on the BCSP website for more information.

4. **Schedule Your Exam**
Once BCSP has processed your examination fee, you will then be able to schedule your examination with Pearson VUE. Pearson VUE is the official computer-based testing provider for all BCSP examinations. More information about the scheduling your examination can be found in Chapter 5, “Examination Overview.”

5. **Sit For Your Exam**
Candidates eligible for the OHST examination must pass the examination within their one-year of eligibility.

BCSP allows candidates to extend their eligibility time limit once during their term and the extension is valid for one year. Extensions are available for purchase within the last 60 days of a candidate’s eligibility period. Exam authorizations can be forfeited by contacting BCSP directly prior to the candidate’s examination authorization end date. Extensions can be purchased through “My Profile” at bcsp.org, as long as the candidate is eligible.

**Chapter Abstract**
This chapter provides general information about the Occupational Hygiene and Safety Technician (OHST) credential. You may download this chapter as well as other chapters of the Complete Guide to the OHST from the Board of Certified Safety Professionals (BCSP) website at bcsp.org.

An overview of the OHST certification is presented along with qualifications, requirements, and time limits.

Visit bcsp.org for the most current version of this guide.

**Overview of the OHST Certification**
The OHST is a certification awarded by BCSP to individuals who meet all of the Board-established requirements.

**The OHST Process**
One of the most common questions by potential candidates is “What do I have to do to become an OHST?” The process has several stages, each one building on the other.

1. **Are You Eligible?**

   **Experience Requirement:**
   To qualify for the examination, OHST candidates must have three (3) years of experience with at least 35% of primary job duties involving safety, health and environmental practice.

2. **Submit Your Application**
BCSP reviews all application materials to determine eligibility for the OHST examination. Candidates must meet all requirements in order to be made eligible to sit for the OHST examination. More information about the application process can be found in Chapter 3, “Application Instructions.”
BCSP's examination provider, Pearson VUE (pearsonvue.com/BCSP), has test centers located around the world and operates every business day. All Pearson VUE testing sites are subject to change based on criteria provided by Pearson VUE. Please be sure to check regularly for available locations when scheduling an exam. Examinations are delivered via computer at the test center. Candidates will be given their examination results at the center immediately after submitting their exam. Candidates that fail may purchase a new examination authorization as long as they remain eligible.

Note: If you need special examination facilities or accommodation arrangements for documented disabilities (consistent with the Americans with Disabilities Act and the American Disabilities Amendment Act), you must request the accommodation with BCSP at the time you purchase your exam. Accommodation requests should be emailed to accommodations@bcsp.org. Failure to request at the time of exam purchase may impact your ability to have the accommodation provided at the testing center.

For a list of current fees, visit bscp.org/Certifications/Safety-Certifications-at-a-Glance.

6. Maintain Certification

Annual Renewal Fees:

After completing all of the requirements, BCSP awards candidates who pass the OHST exam the OHST credential. Certificants will need to pay annual renewal fees in order to maintain certification. A prorated renewal fee will be applied for the remainder of the year in which the candidate passes the exam.

Recertification:

OHSTs must remain up-to-date with changes in professional practice by earning 20 recertification points every five years. Additional information regarding recertification can be found in the Recertification Guide, located at bscp.org/Certifications/Recertification.

Chapter Abstract

This chapter provides detailed instructions and information about how to apply to become an OHST. You may download this chapter as well as other chapters of the Complete Guide to the OHST from the Board of Certified Safety Professionals (BCSP) website at bscp.org.

Visit bscp.org for the most current version of this guide.

Application Instructions

Individuals who wish to pursue the OHST must create a profile through “My Profile” at bscp.org. Once you have created your profile, you may select the certification application you are interested in and follow the online instructions. Candidates for certification apply only once, provided they follow all policies and stay within their eligibility time limit.

A complete application requires candidates to provide:

1. Contact Information
2. Experience Information
3. Application Agreement and Validation
   (acknowledging truthful information has been provided, informing BCSP of any criminal convictions or unethical behavior, and agreeing to adhere to BCSP Code of Ethics, and not disclose any information.)
4. Payment of Application
   - If you are unable to submit online and require a paper application, there will be a processing fee. Please call our office for more details.
   - Do not send resumes, professional papers, continuing education course certificates, or any other items that are not specifically requested.

After you submit your application, BCSP Certification Services will contact you with any questions or once your application review has been completed.

The application fee is nonrefundable and nontransferable. For a list of current fees, visit bscp.org/Certifications/Safety-Certifications-at-a-Glance. You will be prompted to include payment along with your application. Your application will not be complete until payment for the application fee and any additional requested materials have been received. If all application requirements have not been met within one year of the application submission date, the application will expire.

Validation

BCSP requires applicants to disclose criminal convictions, disciplinary actions, and denial or revoked certifications, licenses and professional registrations taken against the applicant by the issuing certification board or agency. BCSP uses its policy relating to criminal convictions to determine whether the application can proceed or whether it will be terminated. In some cases, a BCSP attorney may contact the applicant to clarify information about the conviction. A copy of the BCSP criminal conviction policy appears at bscp.org/OHST under the Resources tab “Policies and Forms.”

Applicants are required to provide disclosure of:

- All felony convictions
- All misdemeanor convictions within the past five (5) years (Minor traffic violations and petty offenses DO NOT have to be reported)
- Any record of unethical behavior
- Information related to having a professional license or certification denied, suspended or revoked for reasons other than not meeting qualifications, failure of examination, or failure to pay renewal fees
Chapter Abstract

This chapter provides information about BCSP examinations and suggestions for preparation. You may download this chapter as well as other chapters of the Complete Guide to the OHST from the Board of Certified Safety Professionals (BCSP) website at bcsp.org.

Visit bcsp.org for the most current version of this guide.

Preparing for the Examination

You may use various approaches to prepare for the examination:

• Complete the Self-Assessment
• Perform individual study
• Participate in informal study groups
• Attend formal review courses

Some keys to success include:

• Knowing your strengths and weaknesses
• Having an examination preparation plan
• Developing a test-taking strategy
• Understanding how to use your calculator

Having an Examination Study Plan

The examination blueprint shows how the items on an examination are distributed across domains and tasks/topics. The percentage of items per domain is noted on the examination blueprint.

Converting your subject strengths and weaknesses into a study plan is likely to increase your overall examination score. Scoring well in one subject area can compensate for a weaker score in another subject area. However, there may not be enough items in your strong areas to achieve a passing score.

Note that knowledge and understanding are essential in passing the examination. Relying only on simulated examination items is not the best way to increase knowledge and understanding. Use simulated items to provide insight into the areas in which you should engage in additional study.

Developing a Test-Taking Strategy

Knowing how to take the examination will help improve your score. The examination uses multiple-choice items with only one correct answer and three incorrect answers. Remember, the goal is to get as many items correct as possible. There is no penalty for selecting an incorrect answer. However, only correct answers count toward reaching the passing score.

• Read the items carefully
• Consider the context
• Use examination time wisely
• Go back to troublesome items
• Complete all items

Using Your Authorized Calculator(s)

The candidate is allowed to bring one or two calculators into the secure testing room as long as they both are among the brands and models listed:

• Casio models FX-115, -250, -260 or -300
• Hewlett Packard models HP 9, 10, 12 or 30
• Texas Instruments models TI-30, -34, -35, or -36

Different versions of the above models will be permitted. For example, the HP-30S and TI-30X calculators will be permitted, as they are versions of these models.

If the candidate does not have one of the approved calculators, he or she should use the online calculator that is part of the exam. Test centers do not provide calculators or allow candidates to bring in non-approved models.
Make sure you know how to use your calculator(s) so you do not waste valuable time trying to understand how to use it once the examination clock starts. It is a good idea to practice working solutions and to be able to recall the correct calculator procedures.

Remember, solutions to computational items usually are rounded. You should select the answer closest to the computed value.

Obtaining Information on the Body of Knowledge

Draw on your professional experience and study references in your own library, a company library, or a public library. BCSP maintains a list of examination references for each certification at bcsp.org/Resources/Review-and-Study-Sources. Examination items are not necessarily taken directly from these sources. However, BCSP believes these references represent the breadth and depth of coverage of safety, health, and environmental practice.

BCSP-Published Self-Assessment

It is essential for you to compare your knowledge against what is contained in the examination blueprint. One way to do this is by using a self-evaluation method. A self-evaluation helps determine how well you know various subjects.

BCSP publishes a Self-Assessment for all certifications. The Self-Assessment can help diagnose how well you know the body of knowledge, as well as to help refresh your test-taking skills.

The Self-Assessment is based on the blueprint described in this guide and is half the length of a full examination. The Self-Assessment includes a scoring sheet and correct answers, along with references for each item.

Note: The Self-Assessment is designed to assist the candidate in evaluating their strengths and weaknesses, strategize test-taking pace, and plan future studying accordingly. The Self-Assessment is not considered training or preparation in any manner.

To order a Self-Assessment, please log on to “My Profile” at bcsp.org to make the purchase.

Other Review and Study Sources

A number of professional membership organizations, trade organizations, colleges, universities, and private companies offer study courses, software, and materials to assist candidates when preparing for BCSP examinations. Because candidates for BCSP examinations often ask where to locate review courses and materials, BCSP maintains an online list strictly as a courtesy at bcsp.org/Resources/Review-and-Study-Sources.

Beyond the written materials BCSP publishes, BCSP has no involvement in the development, content, or distribution of any courses or materials associated with preparing for BCSP examinations or evaluating readiness. BCSP neither endorses the providers shown on the online list nor evaluates the providers or the providers’ materials for consistency with BCSP examination blueprints or with any aspect of any BCSP examination.

Candidates must contact the sources directly about materials, course schedules, fees, or matters related to satisfaction with their products or services.

Examination Integrity

A key to a successful and respected credentialing program is examination security. Without it, a peer-operated credentialing program has little value. BCSP relies on the ethical behavior of candidates and certificants to maintain the security of BCSP examinations.

When those who hold credentials or those who are pursuing credentials reveal information about the content of BCSP examinations, they violate the agreement all candidates accept when they apply for certification and when they take an examination. Applicants, examination candidates, or certificants who reveal confidential information about the content of BCSP examinations through any means also violate the BCSP Disciplinary Action Policy and the BCSP Code of Ethics located at bcsp.org/About.

BCSP pursues legal actions against organizations, individuals not seeking certification, and individuals who fraudulently claim or misrepresent their intent to seek certification, who reveal information about the content of BCSP examinations. Penalties include permanently barring individuals from pursuing the credential and revoking the certifications and interim designations of those who have status with BCSP, in addition to other legal remedies.
Chapter Abstract
This chapter provides detailed information about the OHST examination leading to the OHST credential. You may download this chapter as well as other chapters of the Complete Guide to the OHST from the Board of Certified Safety Professionals (BCSP) website at bcsp.org.

An overview of the OHST examination is presented along with its respective examination blueprint. Sample item types typical of the examination can be found in Chapter 6 with answers.

Visit bcsp.org for the most current version of this guide.

Computer-Based Testing
The OHST examination uses computer-based testing, with one item appearing on the screen at a time. You will simply use a mouse to point to the desired answer and click on it to select it. Answers can be changed the same way. You can mark items to return to later or simply skip them and move to the next item. At the end of the examination, there is a table of items and answers selected. The table also shows skipped and marked items. You can return to any item by simply clicking on the item number.

Prior to beginning the actual examination, there is a tutorial. Your examination clocks begin when you officially commence with the examination itself. After completing the examination, you will select to end the exam to formally submit your examination for scoring.

You will have FOUR (4) hours to complete the OHST examination. Examinations are closed book, and accessing external reference materials during your examination is not permitted. For use during the examination, the testing center will provide you with materials for working out calculations by hand.

Refer to the Pearson VUE Computer-Based Testing Brochure located at bcsp.org for more details and requirements.

Scheduling Your Exam
Once you have purchased your examination, BCSP will send you information on scheduling your examination with a Pearson VUE testing center. It is important that when you schedule, you do so on Pearson VUE’s website or by calling their national number. Local testing centers do not schedule examinations. All Pearson VUE testing sites are subject to change based on criteria provided by Pearson VUE. Please be sure to check regularly for available locations when scheduling an exam.

For a complete list of testing center rules and procedures, visit PearsonVUE.com/BCSP.

General Description of the OHST Examination
All candidates for the OHST must pass the OHST examination to earn the credential.

The OHST examination contains 200 multiple-choice items with four possible answers and only one correct answer. Data necessary to answer items are included in the item. Each item is independent and does not rely on the correct answer to any other item. Formulas will be embedded into each item that requires one.

OHST Examination Blueprint
BCSP examination blueprints are based on surveys of what safety professionals do in practice. The OHST examination is required for candidates to demonstrate knowledge of professional safety practice at the OHST level.

The top levels, called domains, represent the major functions performed by safety professionals at the OHST level. Within each domain are lists of knowledge areas and skills necessary for carrying out the task in that domain. Each domain heading is accompanied by a percentage label which represents the proportion of the actual OHST examination devoted to that domain. The following pages describe the subject matter covered by the OHST examination.

Examination Content Development and Revision
BCSP updates examinations regularly. Items come from safety professionals in practice. Before items are accepted into item banks, they go through rigorous technical, psychometric, and grammatical editing. Also, 10–15% of the items on BCSP examinations are experimental, and do not contribute to a candidate’s pass/fail decision. BCSP analyzes the performance of these experimental items before including them as scored items.

How BCSP Establishes the Minimum Passing Score
BCSP uses a criterion-referenced procedure (the Modified Angoff Method) to establish minimum passing scores for examinations. This procedure ensures that the passing score is independent of scores for other candidates sitting for the examination and involves having a panel of experts rate each examination item with respect to the minimally qualified candidate. As examinations are modified on a regular basis, the minimum passing score is adjusted for the difficulty of items on the examination. Item performance is also evaluated regularly to ensure that BCSP examinations maintain the highest testing standards.
# Domain 1: Fundamental Math and Science and Business Calculations/Analysis • 9.7%

**Knowledge of:**
1. Fundamental mathematics (e.g., algebra, ratios, geometry, trigonometry)
2. Fundamental statistics (e.g., mean, median, confidence intervals, distributions, probabilities, sample sizes)
3. Fundamental biology concepts (e.g., anatomy, physiology, basic medical terms, cells, genetic mutations, DNA)
4. Fundamental physics concepts (e.g., force calculations, gravity, energy conversions, acceleration, load distribution, leverage, pulley, friction)
5. Fundamental chemistry concepts (e.g., pH and balancing equations, organic and inorganic, reactivity, corrosive properties, compatibility, periodic table)
6. Basic business financial terminology (e.g., interest rates, loss rates, return on investment, depreciation, opportunity costs, budget, present and future value)
7. Basic concepts related to economic effects of losses (e.g., cost per person, incident, mile, or unit; direct and indirect costs)
8. Benchmarking procedures and standards (e.g., key performance indicators, standard deviation, industry comparisons)
9. Qualitative data collection and analysis (e.g., perception surveys, focus groups)
10. Quantitative measures to track and report performance (e.g., number of audits planned versus completed; training planned versus completed)

**Skill to:**
1. Calculate performance metrics (e.g., incidence rates, injury rates, key performance indicators)

# Domain 2: Safety, Health, and Environmental Programs & Risk Management • 18.3%

**Knowledge of:**
1. Incident investigation practices or processes
2. Job hazard analysis (e.g., PHA)
3. Differences between leading and lagging indicators and appropriate use of each
4. Audit processes and practices (e.g., follow checklist or flow chart, interview, document findings, verification follow up)
5. Interview techniques for conducting investigations or process improvement
6. When to consult with equipment manufacturers, suppliers, or subject matter experts
7. Relevant international safety, health, environmental and security standards, guidelines, and best practices (e.g., ISO standards)
8. Processes for continuous improvement (e.g., six sigma, lean management systems, streamlining work, product substitution, sustainability, reducing waste)
9. Basic concepts of process safety management
10. Basic concepts of hazardous waste management
11. Globally Harmonized System of Classification and Labeling of Chemicals (GHS) (e.g., labels, safety data sheets, pictograms, signal words)
12. Behavior-based safety principles
13. Fundamental elements of risk analysis techniques (e.g., root cause analysis; requirements of matrix/gap analysis methods)
14. Fundamental risk management concepts (e.g., risk transfer, insure, loss control)

**Skill to:**
1. Assess external and internal risks to facilities (e.g., property, systems, processes, equipment, and employees)
OHST5 Examination Blueprint | V.2016.12.01

**Domain 3**

**Hazard Identification and Control • 31.4%**

**Knowledge of:**

1. Hazardous materials management requirements (e.g., storage, labeling, compatibility, disposal, spill response)
2. Hazards and controls associated with hazardous energy sources
3. Hazards and controls associated with working in hot or cold environments (e.g., heat, cold stress)
4. Hazard of controls (e.g., elimination, substitution, engineering, administrative, personal protective equipment [PPE])
5. Safety systems/internals (e.g., electrical systems, critical support systems, robotics)
6. Hazards and controls associated with working around pressurized systems (e.g., steam systems, hydraulic systems)
7. Unique workplace hazards (e.g., combustible dust, spray booths, dip tanks)
8. Confined space requirements (e.g., identification, permits, entry, rescue)
9. Hazards and controls associated with working at heights or on elevated work platforms (e.g., fall prevention and protection methods; aerial lift, scaffolding, ladders)
10. Hazards and controls associated with working around water/working surfaces (e.g., slips, trips, and falls; stairways)
11. The requirements for operating and inspecting material handling equipment/trucks, including forklifts (e.g., checklists, certifications, competencies, pedestrian safety, battery charging stations)
12. Hazards and controls associated with hand and power tools (e.g., hammers, grinders)
13. Hazards and controls associated with working around moving parts and pinch points (e.g., machine guarding, pulleys)
14. Hazards and controls associated with housekeeping (e.g., materials storage, clutter, staging, fire hazards)
15. Hazards and controls associated with hot work (e.g., welding, burning, cutting, grinding)
16. Safety operations associated with cranes and lifting devices (e.g., pre-operation inspection, checking manufacturer use standards, chain fall, load ratings)
17. Safety procedures associated with hoisting and rigging (e.g., inspection of rigging equipment, load limitations of rigging, use of tag lines)
18. Personal protective equipment (PPE), including types, selection, proper use, storage, maintenance, and inspection
19. Electrical safe work practices (e.g., arc flash protection, temporary power cord safety, ground fault circuit interrupter [GFCI])
20. Hazards and controls associated with excavations (e.g., depth, distance, barricades, spoil pile location, basic soil classifications, access and egress)
21. Safety practices associated with motor vehicle operation (e.g., seat belts, loading docks, check of wheels, defensive driving)
22. Safety practices associated with heavy equipment operation (e.g., front-end loaders, backhoes, excavators)
23. Hazards and controls associated with compressed gas storage and use (e.g., fuel gas, oxygen storage, ammonia tanks, liquefied petroleum gas cylinders)
24. Hazards and controls associated with radiation (e.g., types of radiation, half-life calculations, time-distance and shielding, inverse square law, waste disposal)
25. Hazards and controls associated with using technology while working (e.g., distraction caused by use of personal electronic devices, proximity alarm systems, alarm fatigue)
26. Basic components of technical drawings (e.g., units of measurement)
27. Basic components of process flow diagrams (e.g., legend icons)
28. Fundamental building design and construction (e.g., blueprints, ventilation, lighting, layout, flooring, noise, floor load ratings, occupancy ratings)

**Domain 4**

**Health Hazards and Basic Industrial Hygiene • 14.3%**

**Knowledge of:**

1. Basic concepts in ergonomics (e.g., proper lifting techniques, cumulative trauma disorders, neutral posture, workspace design)
2. Lighting requirements for job tasks (e.g., lighting measurements and conversions)
3. Occupational illnesses (e.g., bloodborne pathogens, tuberculosis, dermatitis, dermal burns, asbestosis, silicosis, flu)
4. Hazards and controls associated with noise (e.g., sound level calculations, hearing protection devices, engineering controls)
5. Respiratory hazards and controls (e.g., types of particulates and gases, cartridges and filters, types of respirators, pre-use requirements)
6. Common occupational injuries (e.g., carpal tunnel, amputation, electrocution/shock, repetitive injuries, sprains or strains, lacerations)
7. Acute and chronic occupational exposures and control methods (e.g., latency periods)
8. Hazards and controls associated with biological safety and containment (e.g., levels of lab containment, disposal, biosafety cabinets, ventilation, sharps management)
9. Stress-related conditions and responses (e.g., workplace violence, loss of consciousness)
10. Basic concepts of industrial hygiene sample and indicator media (e.g., colorimetric tubes, PH strips, cyclones)
11. Sampling equipment, applications, and limitations (e.g., light meters, sound level meters, gas meters, sample pumps, dosimeters)
12. Differences between passive and active sampling equipment
13. Principles of medical surveillance and their relevance to health hazards

**Domain 5**

**Emergency Preparedness, Fire Prevention, and Security • 7.4%**

**Knowledge of:**

1. Techniques for conducting and evaluating the effectiveness of exercises and drills
2. Emergency equipment use, inspection, and required performance tests
3. Organizational and community response plans and integration (e.g., mutual aid agreements, business continuity and community plans, community right-to-know)
4. Disaster/emergency response/evacuation planning
5. Emergency systems operations and limitations (e.g., critical equipment operation, types of sprinkler systems)
6. Appropriate selection and use of available emergency response equipment (e.g., fire extinguishers, respirators, decontamination)
7. Emergency response procedures or action plans (e.g., fire aid, eye washes, safety showers, cardiopulmonary resuscitation [CPR], automated external defibrillator [AED], bloodborne pathogens, fire extinguishers, emergency exit and re-entry procedures)
8. Incident command system (e.g., roles, structure, importance of)
9. Agents that could be used in terrorist events, including chemical, biological, radiological, nuclear, and explosive agents

**Skill to:**

1. Participate in emergency response drills and exercises

**Domain 6**

**Organizational Communication and Training/Education • 13.7%**

**Knowledge of:**

1. Basic management principles of authority, responsibility, and accountability (e.g., chain of command, informal leadership)
2. Channels or methods to most appropriately communicate various types of information
3. Types of records that must be retained
4. Basic conflict resolution techniques
5. Basic concepts of adult learning theory
6. Training delivery mediums and technologies (e.g., presentation media, online, classroom, hands-on)
7. Appropriate training for content and audience (e.g., on-the-job training, lecture, demonstration)
8. Methods to evaluate student retention of the learning objectives (e.g., quizzes, tests, skills demonstration)
9. Techniques for evaluating the quality of the training (e.g., surveys, observation)

**Skill to:**

1. Influence behavior related to safety (e.g., group dynamics, motivation strategies, coaching strategies)
2. Participate in organizational teams
3. Effectively communicate (verbally and in writing) with internal and external stakeholders
4. Develop and deliver effective presentations or trainings

**Domain 7**

**Ethics and Professional Conduct • 5.2%**

**Knowledge of:**

1. Obligation to ensure safety information is understood (e.g., provide interpreter or translated materials)
2. BCSP Code of Ethics
3. Protecting confidential information (e.g., privacy of medical and personally identifiable information, trade secrets)

**Skill to:**

1. Apply concepts of BCSP Code of Ethics (e.g., obligation to report hazards, environmental, or safety issues; chain of custody of samples and specimens; ethics related to conducting audits)
An air-purifying respirator is equipped with a cartridge displaying a white color code. For what class of airborne contaminant does this cartridge provide respiratory protection?

A. Carbon monoxide  
B. Ammonia  
C. Organic vapors  
D. Acidic gases

Which records should be maintained as a part of a workplace safety program?

A. Private medical records  
B. Records identifying employees who file complaints with regulatory authorities  
C. Minutes/notes of safety committee meetings  
D. Employee personnel files

An eight-inch (diameter) grinding wheel spins at 2,000 revolutions per minute. You must calculate the grinding wheel’s surface speed to ensure that this tool is being used in accordance with the manufacturer’s recommendations. The surface speed is:

A. 1,300 feet per minute.  
B. 4,200 feet per minute.  
C. 16,000 feet per minute.  
D. 50,200 feet per minute.

The primary source of error in colormetric sampling devices is:

A. Interference from other contaminants.  
B. Gel coagulation.  
C. Temperature miscalibration.  
D. Pump air flow inaccuracy.

A manufacturing engineer is seeking to design a robotics station on a production line. The engineer is concerned about safety and also seeks to avoid production downtime. Which is the BEST solution for this situation?

A. Awareness barriers  
B. Perimeter signage and entry authorization procedures  
C. Perimeter signage and barrier guards  
D. Barrier guards with effective interlocks

An Occupational Hygiene and Safety Technician in full-time employment is offered an opportunity to perform safety-related consulting outside of full-time employment. Before accepting this work, the OHST must consider whether this consulting work will cause the OHST to:

A. Require time away from work to perform the consulting services.  
B. Have a conflict of interest with his or her full-time employer.  
C. Ask for a leave of absence from his or her full-time employer.  
D. Demonstrate compliance with additional recertification requirements.

A manufacturing engineer is specifying a pressure sensitive mat to instantly shutdown a robotic palletizing operation in case someone steps into the “danger zone”. The danger zone is a rectangular area 11 feet (3.35 meters) by 12 feet (3.66 meters) and an area defined by a right triangle with one leg of the right angle being 9 feet (2.74 meters) and the other at 12 feet (3.66 meters). What is the total area needed for the pressure sensitive mat?

A. 132 square feet (40.23 square meters)  
B. 186 square feet (56.69 square meters)  
C. 190 square feet (57.91 square meters)  
D. 240 square feet (73.15 square meters)

Methanol has a flash point of 52 °F and a boiling point of 148 °F. According to the National Fire Protection Association, this liquid is defined as Class:

A. IA.  
B. IB.  
C. IC.  
D. II.

Which statement BEST describes a common risk to employee safety?

A. Management overestimates risks and hazards in the workplace.  
B. Employees are more persuaded by group statistics in safety meetings than personal stories.  
C. Supervisors become more concerned by risk as their familiarity with the risk increases.  
D. Employees become convinced the cause of occupational injuries are understood and controllable and lower their perception of risk when they are provided with the goal of ‘zero injuries’.

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Chapter Abstract
This chapter provides detailed information needed after earning your credential. You may download this chapter as well as other chapters of the Complete Guide to the OHST from the Board of Certified Safety Professionals (BCSP) website at bcsp.org.

An overview of the rules and procedures essential in retaining the OHST credential is presented as well as proper use of the title. It also defines discipline procedures, contains guidelines for helping promote the value of the OHST credential, and provides information on ordering seals, stamps, jewelry, certificate frames, and other logo products.

Visit bcsp.org for the most current version of this guide.

Features and Benefits of Obtaining BCSP Credentials
Wall Certificate. When you achieve the OHST credential, BCSP issues a wall certificate suitable for framing. Should you lose or damage your wall certificate, BCSP will replace it for a nominal fee. Visit “My Profile” on the BCSP website to order.

Access to BCSP’s Career Center. Many employers post open job positions seeking qualified safety professionals. With a BCSP credential, you may post your resume online and employers have access to view your resume and contact you if you wish.

BCSP eNewsletter Subscription. As a BCSP certificant, you will receive the quarterly BCSP eNewsletter. The BCSP eNewsletter contains information about important changes which may affect BCSP certifications and designations, information about certificate holders, and professional safety practice information. Current issues and back issues are located on the BCSP website.

BCSP Annual Report. The BCSP Annual Report is another important publication you will receive electronically. It contains summarized data about OHSTs and the annual audited financial report and can be found on the BCSP website at bcsp.org/About.

BCSP Directories. BCSP publishes directories of individuals who currently hold BCSP certifications and designations. An abbreviated format, containing names, cities, and states, appears on the BCSP website and allows viewers to confirm if a person currently holds a BCSP certification or designation.

eSafetySource Registration. BCSP offers the opportunity for BCSP certification and designation holders to register on the electronic safety source registry, indicating their areas of specialization.

Mail Lists. Organizations and companies providing valuable services to safety professionals may purchase a list of BCSP certificate names and addresses. Use of the list is restricted and all list sales are approved by BCSP. Restriction limit the sale to uses which are of value in professional safety practice (i.e. notices of upcoming conferences or professional publications). Sales are not approved for promotion of general merchandise services, for resale or distribution to third-party organizations. OHSTs may specify at any time that their names not be included on mail lists by managing “Communication Preferences” in “My Profile” at bcsp.org.

Membership Level. Individuals may use the OHST credential to qualify for the highest level of membership in professional safety societies. After achieving the OHST credential, check with the safety and health organizations in which you hold memberships to see if you qualify for a status change. For example, the OHST credential qualifies members of the American Society of Safety Engineers (ASSE) for “Professional Member” status.

Title Protection and Laws Involving the BCSP Credentials. Some states have enacted title protection laws which restrict anyone from claiming to hold BCSP certifications without having duly obtained them from BCSP. Additionally, several states have enacted laws or regulations which specify that OHSTs may provide loss control services for insurance companies. Check your state government website for more details.

Use of the OHST Title
It is important to know how to use your OHST title correctly. The “Occupational Hygiene and Safety Technician” title and the letters “OHST” are registered certification marks issued to BCSP by the U.S. Patent and Trademark Office. They can only be used when authorized for a period specifically designated by BCSP. There are guidelines for displaying your OHST credential properly.

Examples of correct use:
- Robert A. Smith, OHST
- Robert A. Smith, Occupational Hygiene and Safety Technician

The OHST credential is awarded to individuals, not companies, and should only be used with individuals’ names.

The OHST credential may be used only for the period for which use is authorized. Use expires if you have not paid the annual renewal fee or have not met recertification requirements for the OHST. Use of these titles beyond the authorized period (without complying with renewal or recertification requirements) constitutes unauthorized use of the credential.

You may use this credential on your business cards, resume, correspondence, or with your signature. You may use your OHST credential virtually anywhere you use your name.

Example of proper company use:
ABC Safety Company provides the latest safety services. Employees holding the Occupational Hygiene and Safety Technician (OHST®) certification include Robert A. Smith, OHST and Mary A. Jones, OHST.

Example of improper company use:
ABC Safety Company, providing safety services by Occupational Hygiene and Safety Technicians.

Maintaining Your Certification
In order to retain your certification, you must:
- Inform BCSP when your mail or email address changes
- Pay your annual fee
- Complete recertification requirements

Changing Your Name. If you change your name through marriage or other court proceedings, you may request a name change by contacting bcsp@bcsp.org. Additionally, you must provide a copy of the court record or marriage certificate in order for BCSP to register the change.

Paying Your Annual Renewal Fee. The authority to use the OHST title is valid for one year. It must be renewed annually. You will receive a prorated fee for the remainder of the year in which you pass the examination. Each following year, BCSP will send you a notice when your annual renewal fee is due. BCSP gives you several options for paying the fee online via a credit card or by phone. After receiving your payment, BCSP will have a receipt and wallet card available to print. For a list of current fees, visit bcsp.org/Certifications/Safety-Certifications-at-a-Glance.

Meeting Recertification Requirements. The recertification program helps OHSTs keep up with changes affecting professional safety practice. The program complies with requirements of BCSP’s national accrediting organizations.

Every five years (one cycle) you must achieve 20 points. There are ten categories of activities, each providing points toward meeting that goal. Keep in mind, there is no limit to the number of points in some categories, while other categories have annual and/or total point limits.
At the end of the five-year period, you must submit the points you earned during that cycle. Only points earned during a recertification cycle count toward that cycle. BCSP randomly selects 5% of those who submit their points for an audit. While documentation to prove points is not required with the initial submission, the audit procedure requires you have proof of the points claimed. It is important that you keep records to verify your recertification activities.

Additional details of the recertification program appear in the Recertification Guide. You may download the Recertification Guide on the BCSP website to help you through the process. You will want to refer to the website regularly for the most up-to-date information.

Reinstatement
If you fail to pay your annual renewal fee on time or fail to achieve the required recertification points every five years, BCSP will send you a notice that your credential has been invalidated and you no longer hold the OHST. You may seek reinstatement online through ‘My Profile’ at bcsp.org. Reinstatement must be by 12/31 of the same year you are invalidated. Reinstatement includes paying a reinstatement fee and complying with the current recertification requirements. Otherwise, you will be required to apply as a new candidate and meet all of the requirements in place at the time of your application.

Career Interruptions
While holding the OHST credential, you may face situations which affect your ability to maintain your certification. You may experience an interruption in your safety career, such as moving to a job which is not in the safety profession, taking time out to be a parent, student, soldier, having an extended health problem, or being unemployed. BCSP has established some options to help deal with these types of situations.

Leave of Absence and Extensions.
You may seek a leave of absence or an extension if you meet recertification requirements. Please refer to the Recertification Guide for detailed information.

Annual Renewal Fee Waiver While Unemployed.
If you become unemployed and are unable to pay your annual renewal fee, you may request in writing a one-time waiver of the annual renewal fee.

Retired OHSTs
Certificants who are retiring can hold their certifications in retired status should they meet the following requirements:

- They have held certification a minimum of ten (10) years.
- They have completed two (2) recertification cycles.

To maintain a certification in retired status:

- Safety practice is not required.
- No more than 200 hours of safety practice annually is allowed.
- A Retired Annual Renewal Fee is required each year.

A certificants holding a certification in retired status must indicate their status as in the following examples:

- Robert A. Smith, OHST Retired
- Robert A. Smith, OHST (Retired)
- Robert A. Smith, OHST Ret.
- Robert A. Smith, Occupational Hygiene and Safety Technician (Retired)

Protecting the OHST Credential and Logo
Because BCSP has registered its logos and titles, it has a solid position for challenging BCSP title and/or logo infringement. There are several legal theories and considerations involved. Registration itself does not provide absolute protection from others using similar acronyms or titles. BCSP does not have exclusive use of the acronym. BCSP continually challenges those uses which can be confusing to the public or for which there are legal grounds to make such challenges.

Individuals Using the OHST Credential Without Authority
BCSP has established procedures for challenging individuals known to use the Occupational Hygiene and Safety Technician credential without having obtained it, or after they lost it for failure to pay annual renewal fees, or meet recertification requirements.

In order to establish someone is using the credential without authority, BCSP must have the original document (or a copy) showing where the individual is using the title. Most often the unauthorized use occurs online, on a business card, resume, business letterhead, brochure or similar publication, or with a signature. To initiate action against the individual using the credential without authority, BCSP also needs the individual’s current mailing address.

BCSP relies on those finding potential unauthorized uses to report them and provide the documentation showing the use of the title. BCSP will not disclose the name of the person or organization reporting potential unauthorized uses.

After receiving documentation of a potential unauthorized use case, BCSP takes steps to challenge that individual and seeks to correct any record-keeping error on the part of BCSP. Legal counsel for BCSP may participate in the procedures.

Those who have used BCSP titles without authority may be barred from pursuing the OHST certification for five years. Their names are also published on the BCSP website. Other penalties may be applied. BCSP reserves the right to use the courts in protecting use of the OHST credential.

Criminal Convictions
BCSP’s criminal conviction policy appears on the BCSP website. It applies to BCSP certification holders. The policy also covers convictions by other certifications and licensing bodies for unauthorized use of designations.

It requires OHSTs to report new convictions which can result in BCSP disciplinary proceedings.

Discipline Procedures
BCSP authorizes individuals to use the OHST credential when they meet requirements for achieving and retaining the credential. BCSP also has a responsibility to withdraw that authorization if individuals fail to pay annual renewal fees, fail to meet recertification requirements, or violate BCSP Disciplinary Action Policy, or the BCSP Code of Ethics. The BCSP Disciplinary Action Policy contains rules on disciplinary procedures and grounds for action. The complete BCSP Disciplinary Action Policy is located at bcsp.org/About.

Appeals
You may appeal decisions related to earning and maintaining BCSP credentials. Requests for appeal must be submitted to the Chief Executive Officer in writing and in accordance to the current appeals policy located online at bcsp.org/About.

Promoting the OHST
BCSP uses several methods to promote the OHST credential and to encourage safety professionals to pursue it. You may volunteer to assist in these activities. Please contact BCSP or visit the BCSP website to determine available materials.

Request a Returnable Banner Display.
Use of BCSP banner displays helps promote BCSP and the OHST certification. They are ideal for meetings, local and regional conferences, or educational programs of local professional groups and companies. BCSP pays for shipping to and from events. Some instances may earn Recertification credit for promoting the OHST. To request a display, fill out the Display and Literature Request Form located at bcsp.org/Resources/Articles-Presentations, or contact BCSP.

Promotional Materials.
There is a variety of complimentary literature about all of the BCSP credentials, qualifications and procedures, and examinations. Most BCSP publications are available on the BCSP website as downloadable
This code sets forth the code of ethics and professional standards to be observed by holders of documents of certification conferred by the Board of Certified Safety Professionals. Certificants shall, in their professional activities, sustain and advance the integrity, honor, and prestige of the profession by adherence to these standards.

Standards:

1. HOLD paramount the safety and health of people, the protection of the environment and protection of property in the performance of professional duties and exercise their obligation to advise employers, clients, employees, the public, and appropriate authorities of danger and unacceptable risks to people, the environment, or property.

2. BE honest, fair, and impartial; act with responsibility and integrity. Adhere to high standards of ethical conduct with balanced care for the interests of the public, employers, clients, employees, colleagues and the profession. Avoid all conduct or practice that is likely to discredit the profession or deceive the public.

3. ISSUE public statements only in an objective and truthful manner and only when founded upon knowledge of the facts and competence in the subject matter.

4. UNDERTAKE assignments only when qualified by education or experience in the specific technical fields involved. Accept responsibility for their continued professional development by acquiring and maintaining competence through continuing education, experience, professional training and keeping current on relevant legal issues.

5. AVOID deceptive acts that falsify or misrepresent their academic or professional qualifications. Not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. Presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, or past accomplishments with the intent and purpose of enhancing their qualifications and their work.

6. CONDUCT their professional relations by the highest standards of integrity and avoid compromise of their professional judgment by conflicts of interest. When becoming aware of professional misconduct by a BCSP certificant, take steps to bring that misconduct to the attention of the Board of Certified Safety Professionals.

7. ACT in a manner free of bias with regard to religion, ethnicity, gender, age, national origin, sexual orientation, or disability.

8. SEEK opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health and well-being of their community and their profession by sharing their knowledge and skills.
MISSION
BCSP sets and certifies technical competency criteria for safety, health, and environmental practitioners worldwide; enhancing careers, advancing the profession, protecting the public.

VISION
Creating a safer world through safety, health, and environmental certification.