EXAMINATION BLUEPRINT
STSC6

Domain 1
Safety Program Implementation • 21.9%

Knowledge of:

1. Established environmental, safety, and health programs for implementation in the field (e.g., program compliance)
2. Appropriate respiratory protection relevant to the job task and associated hazards
3. Incident investigative processes and documentation (e.g., secure site, gather facts, take photographs)
4. How to conduct a job/task hazard analysis
5. Hazards that need to be escalated and who to contact for determination of appropriate controls
6. Sanitation requirements (e.g., hand-washing facilities, toilets, single-use cups, potable drinking water, trash receptacles)
7. Illumination requirements for job tasks
8. Hot work hazards and associated control methods (e.g., fire watch, permit)

Skill to:

1. Evaluate if workers have required qualifications, training, or certifications for job tasks (e.g., power industrial trucks, aerial work platforms, confined space, lockout/tagout, respiratory protection)
2. Identify and evaluate if a worker is fit for duty (e.g., sick, under influence of controlled substances, fatigued)
3. Identify safe and at-risk workplace behaviors
4. Conduct a safety inspection or audit
5. Correct hazards or risks found in a safety inspection or audit
6. Implement corrective actions based on the outcome of an incident investigation
7. Implement appropriate controls for job site hazards

Domain 2
Hazard Identification and Control • 40.2%

Knowledge of:

1. Electrical hazards and controls
2. Excavation hazards and controls
3. Confined space requirements, hazards, and controls
4. Hazardous energy and control methods (e.g., lockout/tagout, blocking and bleeding of lines)
5. Work zone hazards and controls (e.g., traffic control, limited access zones)
6. Hazards and controls associated with material handling (e.g., site layout for materials, proper stacking and storage, lateral and horizontal movements)
7. Struck by/caught between hazards and controls
8. Rotating moving equipment pinch points hazards and controls
9. How to respond to environmental impacts (e.g., spills, pollutants)
10. Appropriate use, care, maintenance, and limitations of personal protective equipment (PPE)
11. Hazards associated with working at heights (e.g., scaffolding, lifts, ladders, stair towers, leading edge)
12. Fall protection systems, components, and installations
13. Hazards associated with walking/working surfaces
14. Hazards associated with poor housekeeping (e.g., rolling stock, slip hazards, blocked exits, fire exposures, material waste)
15. Hazards associated with hand and power tools (e.g., guarding; powder actuated; use, care, and maintenance of tools)
16. Hazards associated with heavy equipment (e.g., crawlers, bucket loader, back hoe)
17. Hazards associated with cranes (e.g., swing radius, ground conditions, overhead power lines)
18. Hoisting, rigging, and signaling
19. Hierarchy of controls

Skill to:

1. Identify if there are risks or hazards associated with the site layout
2. Identify if personal protective equipment (PPE) is adequate for the job task and hazards

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Domain 3

Health Hazards and Basic Industrial Hygiene • 12.6%

Knowledge of:

1. Hazards and controls related to musculoskeletal disorders (e.g., proper lifting techniques, buddy system, elevating material to proper work height)
2. Work conditions that could create thermal stress (e.g., humidity, temperature, PPE, duration of exposure, wind) and control methods (e.g., drinking water, warm up area)
3. Chemical hazards and controls (e.g., Globally Harmonized System)

Skill to:

1. Recognize ergonomic hazards on the worksite (e.g., vibration, repetitive motion)
2. Recognize symptoms associated with thermal stress (e.g., heat stroke, hypothermia)
3. Identify hazards associated with inhalation, absorption, ingestion, and injection on a job task (e.g., silica, asbestos, chemicals, lead, welding fumes, sharps)
4. Identify potential exposure to noisy environments
5. Identify if controls are being implemented correctly (e.g., if hearing protection is being worn correctly)

Domain 4

Emergency Preparedness and Management • 11.5%

Knowledge of:

1. Use, access, and inspections of fire prevention and protection methods (e.g., PASS-pull the pin, aim at base of fire, squeeze handle, and sweep side to side)
2. Potential fire hazards (e.g., sources of ignition)
3. Emergency response plans and drills (e.g., natural disasters, weather, crisis, fire, alarms, evacuation, rescue procedures)
4. Required emergency response equipment for worksite hazards (e.g., eye wash facilities, backboard, rescue skiff, first aid kit)
5. How to respond to medical emergencies (e.g., bloodborne pathogens, first aid, emergency contacts)

Skill to:

1. Identify if correct fire extinguishing methods are in place for worksite hazards

Domain 5

Leadership, Communication, and Training • 13.8%

Knowledge of:

1. Coaching techniques
2. How to influence others to achieve desired outcome
3. Effective communication techniques (e.g., repeat back)
4. Negative and positive reinforcement and motivation techniques (e.g., progressive discipline, recognition for correct behaviors)
5. How language and cultural barriers impact the safety of employees
6. How to limit exposure to hazards from multiple trades working in proximity (e.g., scheduling, communication of safety-related matters)
7. What should be documented (e.g., training attendance, inspections, daily safety briefings)
8. All written documentation being discoverable in a legal case
9. Confidentiality considerations (e.g., trade secrets, personal medical information)
10. BCSP Code of Ethics

Skill to:

1. Recognize when to seek appropriate subject matter expertise for additional guidance

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BLUEPRINT REFERENCES
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The questions that appear on the STSC examination are written by subject matter experts, and every question is supported by a published reference. The following is a list of references that were frequently used during development of the STSC examination. This is not intended as a comprehensive list of all materials available to STSC candidates and should not be intended as a guaranteed means of passing the exam. Candidates are also strongly advised to become familiar with industry regulations, standards, and practices in preparing for the STSC certification examination.

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Safety Professional's Reference & Study Guide; 3rd Edition Yates, W. D. (2020). Boca Raton, FL: Taylor & Francis Group, LLC.
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