



Associate Hazardous Materials Manager (AHMM) Exam Specifications (Blueprint)

Effective May 29, 2023

An Associate Hazardous Materials Manager (AHMM) is an early career professional with experience in handling hazardous materials in a wide variety of specialties, such as safety, environmental protection, compliance, or basic dangerous goods transportation. The AHMM professional focuses on technical knowledge and expertise in handling hazardous materials gained from some experience in the United States military from time in a military occupation specialty code [MOS] or Air Force Specialty Codes [AFSC], or formal education in undergraduate or graduate degree studies in applied science, environmental science, environmental engineering, chemistry, biology, physics, or geology.

For military applicants, IHMM is providing a comprehensive list of MOS and AFSC codes most closely associated with the domains of this AHMM blueprint. Military applicants may view this material at <https://ihmm.org/wp-content/uploads/2023/05/U.S.-Branches-of-the-Armed-Forces-Job-Codes-Alignment-with-the-AHMM-Blueprint-Domains-Final-6.14.2022.pdf>

An AHMM works with those who provide proper controls for material handling, transportation, and security throughout the life cycle of hazardous materials, from design and production through storage, recycling, and ultimate disposal. They apply scientific knowledge, engineering technologies, and best management practices in compliance with appropriate regulatory requirements.

The AHMM examination is a testing instrument designed to evaluate a candidate's minimal competency in the field of hazardous materials management. This Specification Blueprint is intended to offer guidance to candidates by outlining the domains and tasks that will be covered on the examination. The blueprint reflects the consensus of the profession validated via a survey of what hazardous materials specialists do in practice. The Blueprint below describes the subject matter covered by the examination. All test items will be drawn from among the domain areas of the Specification Blueprint.

This Specification Blueprint lists below each domain and competencies with tasks given under each domain. A percentage label accompanies each domain in this Specification Blueprint. This percentage represents the proportion of the actual AHMM examination devoted to that domain. Tasks provide a reference for activities conducted under each domain. Applicants must not be



convicted of a felony within five years of application for the AHMM examination.

AHMM Eligibility Requirements:

Option 1:

Education	AND	Professional Experience
Associate degree (or higher) from an accredited college or university (i.e., in applied science, environmental science, environmental engineering, chemistry, biology, physics, or geology).		No experience is required.

Or

Option 2:

Education	AND	Professional Experience
High school graduate (or GED).		180 days or more of continuous active military service OR 6 months of experience in handling hazardous materials in a wide variety of specialties, such as safety, environmental protection, compliance, or basic dangerous goods transportation. <i>Specialized experience may include but is not limited to: Safety Managers, Directors, Fire, Rescue/EMS, Hazardous Materials Response Team Members (Fire Rescue, State, Federal, Commercial, Industrial), Lab Workers, Transportation Specialists, Police Assigned to Specialty Teams (ESU, SERT, CERT, SWAT, ERT, Bomb Squad), Wastewater Treatment Operators, State and Federal Environmental Compliance Officers Abatement Workers, Sanitation (Solid Waste Worker)</i>

Or

Option 3:

Education	Professional Experience
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Student CHMM upon completion of their degree (i.e., environmental studies, environmental engineering, chemistry, biology, or geology).	AND	No experience is required.
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IHMM AHMM 2023 Blueprint		
ID	DOMAINS AND COMPETENCIES/TASKS	% of Exam
1.0	Hazardous Material Identification/Classification	26%
1.1	Declarative: Identify basic chemicals (acids, bases, oxidizers, organics, metals, halogens, etc.).	
1.2	Declarative: Identify the Periodic Table of Elements.	
1.3	Application: Given a Scenario, differentiate between chemical elements, such as organics and inorganics, acids, and bases.	
1.4	Declarative: Understanding of Chemical compatibilities (acids/bases, oxidizers/organics, etc.).	
1.5	Declarative: Understands the differences, changes, and results between states of matter and the mechanisms driving them.	
1.6	Declarative: Know how and where to obtain chemical information (Safety Data Sheets, CHEMTREC, United Nations Globally Harmonized System of Classification and Labeling of Chemicals (UN GHS; NIOSH).	
1.7	Declarative: Identify the difference between hazardous materials and hazardous waste.	
2.0	Safety and Personal Protection	23%
2.1	Declarative: Identify the four exposure pathways of hazardous materials; inhalation (respiratory), ingestion, contact (eyes, skin), and injection (needlestick, etc.).	
2.2	Application: Given a scenario, identify exposure and be able to identify the potential pathway. A clear understanding of hazardous chemicals and how they might create exposure.	
2.3	Application: Given a scenario, identify symptoms and be able to determine the likely exposure pathway, and understands the basic relationship between exposure and symptoms. For example, understands the signs of respiratory exposure which could include wheezing, wet cough, heavy breathing, shallow breathing, etc.	



2.4	Declarative: Know the definition of each level for elimination, substitution, engineering controls, administrative controls, and PPE.	
2.5	Declarative: Identify the levels of PPE and a basic understanding of when they are needed based on the situation.	
2.6	Application: Given a scenario, identify and choose the proper PPE given an industrial/construction situation.	
3.0	Facility Operations Involving Materials with Hazards	19%
3.1	Application: Given a scenario, evaluate and recommend chemical compatibility and materials segregation principles for safe storage.	
3.2	Application: Given a scenario, recognize and communicate signage (National Fire Protection Association [NFPA], Hazardous Materials Identification System [HMIS], Globally Harmonized System of Classification and Labeling of Chemicals [GHS], Department of Transportation [DOT]) for Facility Operations.	
3.3	Declarative: Recognize basic fire safety principles and elements included in the Life Safety Code.	
3.4	Declarative: Identify fire suppression systems and communicate alarm notifications.	
3.5	Declarative: Recommend facility and materials security.	
3.6	Application: Given a scenario, review and use facility, product, or mechanical drawings and diagrams.	
3.7	Application: Given a scenario, evaluate mobile equipment and recognize the use and limitations of Powered Industrial Trucks (PIT).	
3.8	Declarative: Recognize or evaluate wastewater treatment and wastewater management principles.	
3.9	Declarative: Recognize and evaluate stormwater management practices.	
3.10	Declarative: Recommend or evaluate preventative maintenance and mechanical integrity practices.	
3.11	Declarative: Recognize and recommend waste management, recycling, and reuse practices.	
4.0	Emergencies, Response, and Recovery	18%
4.1	Declarative: Know appropriate response requirements and notifications if a chemical release involves a TPQ being exceeded.	



4.2	Declarative: Know the key elements such as incident command, basic command structure, emergency action plan, and contingency plan. Know how to coordinate with local agencies and emergency responders.	
4.3	Declarative: Know the key elements of a debriefing and lessons learned document. Know how to set up a decon line for different levels of isolation based on hazards like hot zone, warm zone, and cold zone.	
5.0	Standards, Rules, and Regulations	14%
5.1	Application: Given a scenario, develop a safety plan and identify the appropriate regulations. What is the overarching regulation (OSHA, CERCLA, and DOT)?	
5.2	Application: Given a scenario, use statutes and regulations to make a hazard determination on a substance, product, etc. (e.g., RCRA).	
5.3	Declarative: Able to review and communicate international agreements (e.g., United Nations Conference on Environment and Development Agenda 21, Basel Convention).	
5.4	Declarative: Recognize international environmental standards, rules, and regulations (e.g., Globally Harmonized System of Classification and Labeling of Chemicals, ISO 14001 Environmental Management Systems, etc.).	

If you have questions about the AHMM Blueprint, please contact M. Patricia Buley at pbuley@ihmm.org.

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