



January 22, 2026

The Honorable Brett Guthrie, Chair
The Honorable Frank Pallone, Ranking Member
House Energy and Commerce Committee
2125 Rayburn House Office Building
Washington, DC 20515

Re: Discussion Draft to Modernize the Toxic Substances Control Act (TSCA)

Dear Chair Guthrie and Ranking Member Pallone,

On behalf of the hazardous materials management community and the Institute of Hazardous Materials Management, we submit these comments in response to the Discussion Draft to Modernize the Toxic Substances Control Act (TSCA).

IHMM is an ANSI-accredited, ISO 17024-compliant credentialing body whose certificants, including Certified Hazardous Materials Managers (CHMM®) and Certified Hazardous Materials Practitioners (CHMP®), and Associate Hazardous Materials Managers® (AHMM®), are responsible for environmental compliance, hazardous materials management, emissions monitoring, incident response, and operational safety across a wide range of regulated industries.

Founded in 1984, the Institute of Hazardous Materials Management® (IHMM®) is a not-for-profit organization headquartered in Rockville, Maryland, operating in all 50 states and 85 countries. IHMM has been protecting the environment and the public's health, safety, and security through the creation of credentials recognizing professionals who have demonstrated a high level of knowledge, expertise, and excellence in the management of hazardous materials, dangerous goods transportation, environmental protection, health, and workplace safety.

It is primarily through two of IHMM's professional credentials that we provide comments in this submission: the Certified Hazardous Materials Manager® [CHMM®], the Certified Hazardous Materials Practitioner® [CHMP®], and the Associate Hazardous Materials Managers® (AHMM®)

IHMM certificants are responsible for the **identification, characterization, handling, storage, transport, disposal, and remediation** of hazardous materials across industrial, governmental, and community settings. As such, our certificants are directly affected by changes that are brought to the Toxic Substances Control Act, 15 U.S.C. Chapter 53.

The CHMM and CHMP credentials are accredited by the ANSI National Accreditation Board [ANAB], under the international ISO/IEC 17024-2012 standard, containing principles and requirements for a body certifying persons against specific requirements, and includes the development and maintenance of a certification scheme for persons.

ANSI/ANAB accreditation of IHMM's credentials is the strongest and highest level of accreditation for professional credentials, serving as an indicator of the rigorous ANSI annual surveillance process. ANSI accreditation is recognized both nationally and internationally and has become the hallmark of a quality certification program.

The IHMM CHMM and CHMP certification programs are also accredited by the Council of Engineering & Scientific Specialty Boards (CESB). CESB is an independent, voluntary membership body for organizations that recognize, through specialty certification, the expertise of individuals practicing in engineering and related fields. Accreditation is earned by demonstrating adherence to CESB Accreditation Guidelines, including a robust review program of compliance with those standards.

IHMM Comments on the Discussion Draft

I. Introduction and Professional Perspective

We submit these comments as credentialed professionals responsible for chemical management and worker-protection functions across manufacturing, processing, laboratories, transportation, waste management, and emergency response. Collectively, AHMMs, CHMMs, and CHMPs manage chemical safety programs at the facility level, ensure compliance with federal and state regulatory requirements, implement exposure controls, train employees, oversee emergency response readiness, and integrate hazard communication through the supply chain.

Accordingly, our comments focus on: (1) whether the draft improves **regulatory clarity and workability**, (2) whether it preserves or strengthens **worker and public health protections**, and (3) whether it supports **science-based decision-making** without creating avoidable implementation barriers.

II. Summary of Principal Recommendations

We generally support efforts to improve TSCA efficiency and scientific rigor, but urge the Committee to revise the discussion draft to:

1. **Retain a workable scope for “conditions of use”** while preventing speculative overreach;
2. Ensure the **“more likely than not”** standard does not unintentionally exclude foreseeable but under-documented exposures, particularly in occupational settings;
3. Maintain EPA’s ability to address **reasonably foreseeable downstream exposures** in new chemical reviews;
4. Clarify that EPA may consider **noncompliance as a risk factor** where supported by evidence, particularly when worker protection depends on enforceable real-world practices;
5. Preserve meaningful public accountability by ensuring judicial review provisions do not produce delay, uncertainty, or procedural bottlenecks;
6. Ensure fee reforms equitably address **reliant parties** while avoiding undue burdens on small and mid-sized enterprises; and
7. Provide clear transition guidance and implementation timelines to avoid program disruption.

III. Section-by-Section Comments

A. Definitions: “Conditions of Use”

Comment. We appreciate the Committee’s interest in limiting TSCA evaluations to real-world circumstances rather than theoretical possibilities. However, narrowing “conditions of use” to circumstances that are “more likely than not” could unintentionally exclude **foreseeable occupational and downstream exposures** simply because the data record is incomplete.

Recommended Revision.

- We recommend adopting a standard that preserves EPA discretion to include **reasonably foreseeable** exposures where a credible basis exists, while allowing EPA to screen out highly speculative pathways.
- Suggested approach: retain “reasonably foreseeable,” but require EPA to document the basis for inclusion/exclusion, including a transparent weight-of-evidence narrative.

AHMM/CHMM/CHMP operational concern: At the facility level, exposures often arise from routine tasks (maintenance, cleaning, repackaging, waste handling) that are foreseeable but not always well-captured in national datasets.

B. New Chemicals (TSCA §5): Scope and Determination Standards

1) Limiting new chemical assessments to submitter-identified conditions of use

Comment. This change risks creating an incentive to **under-describe downstream uses** in the notice, shifting risk downstream to workers and communities. Modern chemical management depends upon accurate identification of conditions of use across the supply chain.

Recommended Revision.

- Require EPA to evaluate conditions of use identified by the submitter **and** those EPA identifies as reasonably foreseeable based on:
 - known market analogs,
 - standard industrial practices,
 - disposal pathways, and
 - anticipated downstream applications.

This can be balanced with a record-based screening requirement to prevent speculative overreach.

2) “More likely than not” qualifier for unreasonable risk

Comment. We support clarifying evidentiary thresholds, but the “more likely than not” framing must not function as a requirement that EPA prove risk with near-litigation certainty before taking preventive action. Particularly in occupational settings, the consequence of under-regulation is that exposure becomes the proving ground.

Recommended Revision.

- Clarify in statutory text or report language that EPA may rely on **protective assumptions** where data gaps exist, consistent with TSCA’s preventive purpose, especially for worker exposures.

3) Administrator nondelegable statement for missed PMN deadlines

Comment. Accountability is appropriate, but we caution against a requirement that creates administrative bottlenecks. A nondelegable Administrator statement for every missed deadline risks diverting senior leadership time from substantive policy and enforcement priorities.

Recommended Revision.

- Consider allowing delegation to the Assistant Administrator while requiring a periodic (e.g., quarterly) Administrator certification regarding systemic performance and backlog.

4) Prioritization “best efforts” for Safer Choice, risk-reducing chemicals, and critical materials

Comment. We support incentivizing safer chemistry and strengthening domestic resilience. This is aligned with the practical work of CHMMs and AHMMs managing substitution and procurement decisions.

Recommendation.

- Clarify objective criteria for prioritization (e.g., hazard profile improvements, lifecycle risk reductions) and require transparency to avoid arbitrary determinations.

5) Limits on voluntary suspension

Comment. Predictable timelines benefit both industry and compliance professionals. We support reasonable limits but recommend flexibility where additional data development is underway.

6) Discretionary Section 5(e) orders

Comment. Converting mandatory risk-mitigation orders into discretionary action could reduce EPA’s ability to ensure enforceable workplace protections as a condition of market entry.

Recommended Revision.

- Retain a mandatory mechanism where EPA identifies risks that can only be controlled through enforceable conditions (PPE/work practice controls, engineering controls, disposal restrictions).

7) OECD reliance/exemption

Comment. Reliance on OECD member regulatory decisions may improve efficiency, but only if equivalency is robust. Variations in exposure patterns, PPE norms, enforcement, and workforce composition make direct reliance potentially inappropriate for occupational health.

Recommended Revision.

- Require EPA to confirm comparability of exposure scenarios and risk management assumptions before exemption/streamlining is granted.

C. Existing Chemical Risk Evaluations: Likelihood Standards & OSHA Compliance Assumptions**1) “More likely than not” exposure/hazard restriction**

Comment. As practitioners, we rely on TSCA’s ability to address chemicals where significant hazard exists but exposure information is incomplete. The draft could unintentionally exclude meaningful risks where the likelihood is not well quantified.

Recommended Revision.

- Allow EPA to consider exposures reasonably foreseeable in workplace and downstream contexts, including where uncertainty exists and data gaps persist.

2) Direction not to assume noncompliance, including OSHA noncompliance

Comment. We strongly caution against statutory language that could require EPA to treat **all OSHA standards as perfectly implemented**, absent evidence. In real-world settings, compliance varies across sectors, firm sizes, and subcontracting structures.

Recommended Revision.

- Preserve EPA discretion to consider evidence of noncompliance, enforcement history, and compliance variability—particularly where worker protection depends on robust implementation.

D. Risk Management: “Minimize reasonably feasible” and TSCA §9 “Inconsistency”

1) Minimize vs eliminate standard

Comment. We support feasibility and practicality, but worker protection must remain paramount. “Minimize reasonably feasible” must not become a loophole that tolerates preventable exposures.

Recommended Revision.

- Clarify that feasibility includes:
 - engineering controls,
 - administrative controls,
 - substitution analysis, and
 - reasonably available protective equipment,and that minimization must achieve a **protective exposure margin**.

2) Prohibiting TSCA rules inconsistent with other federal requirements

Comment. Coordination is appropriate; however, TSCA should remain capable of filling gaps where other regimes have limited scope. OSHA standards may not cover all chemicals, and many are outdated.

Recommended Revision.

- Clarify that “inconsistency” does not bar TSCA action where other federal rules are **silent, outdated, or do not address lifecycle exposures**, including disposal, byproducts, and downstream consumer exposures.

E. UVCB Inventory Nomenclature

Comment. We support clarity in nomenclature and equivalency determinations, particularly where inventory status drives compliance. However, equivalency rules must not enable regulated substances to evade review through strategic naming or composition variance.

Recommended Revision.

- Require transparent criteria for UVCB equivalency determinations, including impurity profiles and functional use similarities.

F. Citizen Petitions

Comment. We support focusing petitions upstream on prioritization; however, removing the ability to petition for risk management may reduce public confidence in TSCA's responsiveness when a risk evaluation has already identified unreasonable risk.

Recommended Revision.

- Consider retaining a limited petition pathway for risk management where:
 - a chemical has a final unreasonable risk finding,
 - EPA has delayed risk management beyond a defined period, and
 - the petition is supported by credible evidence.

G. Fees and Reliant Parties

Comment. We support equitable fee allocation so that parties benefiting from EPA's evaluation work contribute fairly. At the facility level, fees influence supply chain choices, substitutions, and compliance budgets.

Recommended Revision.

- Provide clear, workable mechanisms for identifying reliant parties and allocating costs, while protecting small entities and preventing duplicative burdens.

IV. Conclusion

We commend the Committee for seeking to improve TSCA's efficiency and scientific rigor. From the standpoint of front-line hazardous materials and chemical management professionals, we urge targeted revisions to ensure that narrowing provisions do not unintentionally weaken protection for workers and communities. With modifications—particularly in new chemical review scope, workplace exposure realism, and TSCA's ability to address foreseeable risks—this legislation could enhance TSCA's credibility and functionality without sacrificing health-protective outcomes.

IHMM Professional Credentials

The **Certified Hazardous Materials Manager® (CHMM®)** is a professional who has demonstrated, through education, experience, and examination, the ability to identify and assess the risks of hazardous materials, mitigate, or eliminate those risks, and manage

their impact on human health and the environment. A CHMM provides 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 U.S. regulatory requirements. We illustrate the hazardous materials compliance under 49 CFR and risk management knowledge, skills, and abilities of the CHMM by including the CHMM blueprint in **Attachment One**.

The CHMM is accredited by the Council on Engineering and Scientific Specialty Boards [CESB] and by the American National Standards Institute [ANSI]. The measure of the quality and strength of a certification program is to evaluate its accreditation status. Accreditation is a form of certification for the certifying organization, requiring conformance with strict standards of validity, reliability, and impartiality. A key feature of IHMM credentialing programs is that accreditation is essential because of the nature of work performed by IHMM certificants. The handling and management of hazardous materials and the transport of dangerous goods are governed by model regulations published by the US Environmental Protection Agency, US Department of Transportation, the U.S. Department of Labor, the Occupational Safety and Health Administration, as well as by the safety industry best practices regulations. Accredited credentials allow professionals not only to gain knowledge to use and implement these regulations but to be recognized for their competency to effectively manage and perform the functions of the profession.

The **Certified Hazardous Materials Practitioner® (CHMP®)** is a professional who has demonstrated, through education, experience, and examination, the ability to identify and assess the risks of hazardous materials, mitigate, or eliminate those risks, and manage their impact on human health and the environment. A CHMP provides 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 U.S. regulatory requirements. We illustrate the hazardous materials compliance under 49 CFR and the risk management knowledge, skills, and abilities of the CHMP by including the CHMP blueprint in **Attachment Two**.

The CHMP is accredited by the Council on Engineering and Scientific Specialty Boards [CESB] and by the American National Standards Institute [ANSI]. The measure of the quality and strength of a certification program is to evaluate its accreditation status. Accreditation is a form of certification for the certifying organization, requiring conformance with strict standards of validity, reliability, and impartiality. A key feature of

IHMM credentialing programs is that accreditation is essential because of the nature of work performed by IHMM certificants. The handling and management of hazardous materials and the transport of dangerous goods are governed by model regulations published by the US Environmental Protection Agency, US Department of Transportation, the U.S. Department of Labor, the Occupational Safety and Health Administration, as well as by the safety industry best practices regulations. Accredited credentials allow professionals not only to gain knowledge to use and implement these regulations but also to be recognized for their competency to effectively manage and perform the functions of the profession.

The **Associate Hazardous Materials Manager® (AHMM®)** is an early-career professional who has demonstrated, through education and examination, the ability to identify and assess the risks of hazardous materials. The AHMM is an early-career professional with some experience in handling hazardous materials across a wide variety of specialties, including safety, environmental protection, compliance, and 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. **The AHMM blueprint is attached as Addendum Three.**

Recertification of Credentials. After recognizing the strength of the content of the credential, and then its accreditation comes the requirements imposed by the certification body [IHMM] for the periodic recertification of the credential. IHMM requires that the CHMM, CHMP, and AHMM holders recertify their competency to continue to hold the credential every 5 years based on the contents of the certification blueprint. This ensures EPA and every public and private sector entity that relies on the professionals who hold these credentials, who are constantly upgrading their skills, knowledge, and abilities in their communities of practice.

Training. IHMM's commitment to the excellence of its professional credentials, and throughout our work with employers, is the emphasis on the necessity of receiving training, and IHMM applauds the dedication to training and education as we stand behind and support our credential holders. IHMM has a Foundation, the IHMM Foundation <https://hazmatsociety.org/>, whose reason to exist is principally a focus on the education and training of IHMM's certificants.

Here <https://hazmatociety.org/education-training/>, our certificants can easily find and take an extraordinary range of courses to upgrade and expand their knowledge, skills, and abilities.

IHMM appreciates the opportunity to comment on this discussion draft. IHMM and its certificants stand ready to support Congress in developing implementation guidance and training to promote safe, compliant, and environmentally responsible operations across the scope of this legislation.

Respectfully submitted,

Sincerely,



Eugene A. Guilford, Jr., CAE
Executive Director
gguilford@ihmm.org
301-244-4869

CC: Megan Jackson, Majority Staff Director, megan.jackson@mail.house.gov
Tiffany Guarascio, Minority Staff Director, tiffany.guarascio@mail.house.gov

About the Institute of Hazardous Materials Management - <https://ihmm.org/>

Founded in 1984, the Institute of Hazardous Materials Management (IHMM), is a not-for-profit organization. IHMM has been protecting the environment and the public's health, safety, and security through the creation of credentials recognizing professionals who have demonstrated a high level of knowledge, expertise, and excellence in the management of hazardous materials, dangerous goods transportation, environmental protection, health, and workplace safety.

Over 18,000 homeland security, environmental protection, engineering, health sciences, transportation, and public safety professionals have earned IHMM's accredited **Certified Hazardous Materials Manager® (CHMM®)** credential. IHMM also administers the **Certified Hazardous Materials Practitioner® (CHMP®)**, the **Certified Dangerous Goods Professional® (CDGP®)**, the **Associate Hazardous Materials Manager® [AHMM®]**, and the **Certified Dangerous Goods Trainer® (CDGT®)** credentials. IHMM also works with colleges and universities throughout the United States and, to that end, offers the **Student Certified Hazardous Materials Manager® (ST/CHMM®)** and **Student Associate Safety and Health Manager® [ST/ASHM®]** credentials. In 2019, IHMM acquired ISHM and now manages the **Certified Safety and Health Manager® [CSHM®]**, **Certified Safety Management Practitioner® [CSMP®]**, **Associate Safety and Health Manager® [ASHM®]**, **Certified School Safety Specialist® [CSSS®]**, and **Certified School Safety Manager® [CSSM®]** credentials.

Attachment One

Certified Hazardous Materials Manager



CERTIFIED HAZARDOUS MATERIALS MANAGER (CHMM®) EXAM SPECIFICATIONS (BLUEPRINT)

Effective 2021

A Certified Hazardous Materials Manager (CHMM) is a professional who has demonstrated, through education, experience and examination, the ability to identify and assess the risks of hazardous materials, mitigate, or eliminate those risks, and manage their impact on human health and the environment.

A CHMM provides 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 U.S. regulatory requirements.

The CHMM examination is a testing instrument designed to evaluate 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 managers 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 CHMM examination devoted to that domain. Tasks provide reference for activities conducted under each domain.

DOMAINS AND COMPETENCIES/TASKS	% of Exams
1 Planning for Materials with Hazards	9.35
1.1 Identify hazardous materials by name.	
1.2 Given four SDS, identify the hazardous material.	
1.3 Given a laboratory report (boiling point, classification, PH), identify the constituent that makes this mixture hazardous.	
1.4 Given a scenario about pollution prevention, identify the preferred strategy that should be used.	
1.5 Identify examples of effective recycling.	
1.6 Given a scenario involving pollution, identify the pollution impacts and the related regulations.	
1.7 Given a scenario about a Pollution Prevention Opportunity Assessment (PPOA), identify the elements and sequence of events.	
1.8 Given a scenario about hazardous materials and process, identify the impact to air.	
1.9 Given a scenario hazardous materials and process, identify the impact to water resources.	
1.10 Given a scenario hazardous materials and process, identify the impact to soil.	
1.11 Identify the characteristics of minor and major permits.	
1.12 Identify the characteristics of the permit application and permit review.	
1.13 Identify the characteristics of inspection, training, and waste requirements of permitting.	



1.14 Determine the threshold quantity of a regulated substance in a process required to comply with EPA's risk management program regulation.	
1.15 Identify the components of Standard Operating Procedures (SOP).	
2 Shipping and Transporting Hazardous Waste and Hazardous Materials	10.34
2.1 Given a scenario about hazmat transportation, identify requirements.	
2.2 Given a scenario about packaging, identify the appropriate container.	
2.3 Given a scenario about transporting hazardous waste or hazardous materials and the method of transportation, identify the required labeling.	
2.4 Given a scenario about shipping domestically or internationally, determine how hazardous materials should be marked.	
2.5 Given a scenario, identify what information needs to be included in the shipping documents, and the proper shipping description format, and order of information.	
2.6 Given a shipment scenario, identify the required placarding.	
2.7 Identify conditions under which shipments, or portions of shipments, can be accepted or rejected.	
3 Store Materials with Hazard	9.22
3.1 Identify storage location site requirements for property containing hazardous materials/waste.	
3.2 Given a scenario about controlling inventory, identify the regulations that apply to that inventory.	
3.3 Given a scenario about storage of hazardous waste/material, identify the facility signage requirements.	
3.4 Given a scenario about storing a hazardous waste/material, identify proper container labeling requirements.	
3.5 Given a scenario about controlling access to hazardous materials/waste, identify how to control access.	
3.6 Given a scenario, identify how storage meets requirements.	
4 Facility Operations Involving Materials with Hazards	9.12
4.1 Given a type of hazardous material/waste, identify the engineering control that should be used to treat the material/waste.	
4.2 Given a type of hazardous material/waste, identify the engineering control that should be used to store of the material/waste.	
4.3 Given a type of hazardous material/waste, identify the engineering control that should be used to dispose of the waste.	
4.4 Given a scenario about a process, identify regulatory training record requirements.	
4.5 Given an SDS, identify the hazardous communication requirements that are needed for that material.	
4.6 Given a hazardous material, identify the PPE that should be used when sampling, handling, i.e., sweeping, shoveling, etc., the material.	
4.7 Given a scenario, identify the testing procedures needed to determine the hazard associated with the material.	
4.8 Given a hazardous material, determine health, safety, and security requirements.	
5 Disposition of Materials with Hazards	8.46
5.1 Identify typical components of a waste profile.	
5.2 Given a scenario about a waste material, identify the disposition options.	
5.3 Identify what a generator uses to qualify/disqualify a disposal facility.	
5.4 Given a scenario about a material (soil, chemical product, construction waste, etc.), identify the disposition requirements for the material.	



5.5 Given a scenario about the final disposition of a hazardous waste under RCRA, identify how final disposition is confirmed and documented.	
5.6 Given a scenario where there is a release from a container, identify how the release should be managed.	
5.7 Given a waste disposition scenario, identify how emissions (air) should be managed.	
5.8 Given a waste disposition scenario, identify how discharges (water) should be managed.	
6 Record Keeping and Reporting	7.49
6.1 Given a scenario about a spill of a hazardous material, identify the reporting requirements (timeframe, threshold reporting quantities, who receives the reports.)	
6.2 Given a scenario, identify the record keeping requirements for the relevant regulatory program (RCRA, EPCRA, TSCA, UST, CWA, CAA, CERCLA, HMTA, and SARA).	
7 Training Personnel	8.07
7.1 Given a scenario, identify the training requirements for the relevant regulatory program (RCRA, EPCRA, TSCA, UST, CWA, CAA, CERCLA, HMTA, SARA, and OSHA.)	
7.2 Given an activity involving materials with hazard, identify the competencies that would be needed for that activity (could include identifying hazards, determine if respiratory protection is needed, determine PPE needed, decontamination sequences, site worker needs a physical).	
7.3 Given a scenario about a job, identify the types of training that are required.	
7.4 Given a scenario about training, identify the assessment that should be used.	
7.5 Given a scenario about a Hazmat event when conducting drills and exercises, identify which types of agencies should be involved.	
7.6 Given a regulatory requirement, determine the adequacy of the training content and duration.	
8 Response and Recovery	7.95
8.1 Given a scenario about a spill or release, identify the chemical and physical hazards of the material, the quantity of material, and the location of the spill /release.	
8.2 Given a scenario about a spill or release, identify the amount of material that has been spilled or released.	
8.3 Identify the conditions that require the incident to be reported to the National Response Center.	
8.4 Given a scenario about a spill or release, identify how to mitigate the impact to receptors.	
8.5 Identify the steps to develop a recovery or incident action plan.	
8.6 Given an accident situation, identify data needed to investigate the cause of the incident.	
9 Remediation	6.5
9.1 Given a scenario about a spill or release, determine how to identify the constituents of concern, the vertical and horizontal extent of the constituents of concern, and the characteristics of the receiving media.	
9.2 Given a release scenario, determine the appropriate remedial objectives.	
9.3 Given a scenario about physical characteristics of a contaminant and a situation involving the contaminant, identify the treatment option that should be used to remediate the contaminant.	
9.4 Given a scenario about a remedial technology that was selected, identify the tools that should be used to ensure remedial action objectives are achieved.	
9.5 Identify capital and recurring costs (O&M costs) associated with a selected remedial action.	
9.6 Given a scenario and remediation technology, identify redevelopment considerations and pitfalls.	
9.7 Given soil analytical results, determine if the clean-up standard has been achieved.	



10 Management Systems	6.58
10.1 Given a scenario, identify which regulations would apply to a multi-media program.	
10.2 Given a scenario, identify the requirements for the maintenance and retention of records.	
10.3 Given a scenario, identify how the investigator can determine if a regulation is current.	
10.4 Given a scenario, identify knowledge needed to participate in regulation development.	
10.5 Given a scenario, identify the required interested parties and the process for the interested parties to communicate.	
10.6 Given a scenario, what are the required public outreach mechanisms?	
10.7 Identify elements of a management system audit and difference(s) from a compliance audit.	
10.8 Identify variables in a financial analysis.	
10.9 Given a scenario, describe operations that require a program.	
11 Environmental Studies	6.35
11.1 Given a scenario about a property transfer (sales or purchase of property), describe the required environmental due diligence.	
11.2 Given a scenario where lead-based paint, asbestos, and other regulated materials are thought to be present, describe how a building survey should be conducted.	
11.3 Given a regulatory framework, describe the required process and output.	
11.4 Given a scenario of analytical data, identify contaminants of concern.	
11.5 Given a scenario of a source of contamination, describe likely exposure routes.	
12 Health and Safety	10.57
12.1 Given a concentration of a contaminant of concern, identify exposure routes and susceptible populations that may be affected.	
12.2 Given screening thresholds, identify potential hazardous material exposure routes.	
12.3 Given a scenario, identify tasks to complete a job, the hazards of those tasks, and the control of those hazards.	
12.4 Determine process safety management.	
12.5 Identify recommended basic elements of an OSHA-compliant site safety plan.	
12.6 Identify recommended elements of an emergency response plan.	
12.7 Given the presence of hazardous materials, identify the appropriate containment.	
12.8 Identify labeling requirements for products.	

This IHMM® CHMM® certification blueprint is the intellectual property of the Institute of Hazardous Materials Management, all rights reserved.

For more information about the Certified Hazardous Materials Manager certification program, including eligibility requirements and application procedures, see the IHMM [Candidate Handbook](http://www.ihmm.org) available at www.ihmm.org. If you have questions about the CHMM Blueprint, please contact M. Patricia Buley at pbuley@ihmm.org.

Attachment Two

Certified Hazardous Materials Practitioner



CERTIFIED HAZARDOUS MATERIALS PRACTITIONER (CHMP®)
EXAM SPECIFICATIONS (BLUEPRINT)

Effective Q4/2022

A Certified Hazardous Materials Practitioner (CHMP) is a professional experienced in handling hazardous materials in a wide variety of specialties, such as safety, environmental protection and compliance, and transportation. The CHMP professional focuses on technical knowledge and expertise in handling hazardous materials.

A CHMP provides 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 U.S. regulatory requirements.

The CHMP examination is a testing instrument designed to evaluate a candidate's minimal competency in the field of hazardous materials management. This Specification Blueprint offers guidance to candidates by outlining the Domains and Tasks covered in the examination. The Blueprint reflects the consensus of the profession validated via a survey of what hazardous materials managers do in practice. The Blueprint below describes the subject matter covered by the examination. All test items come from the Domain areas of the Specification Blueprint.

This Specification Blueprint lists each Domain and Competencies with Tasks given under each Domain. A percentage of the exam accompanies each Domain in this Specification Blueprint. This percentage represents the proportion of the actual CHMP examination devoted to that Domain. The Tasks provide a reference for activities conducted under each Domain.

DOMAINS AND COMPETENCIES/TASKS		% of Exams
1	Identification, Handling, and Transport of Hazardous Materials	35.58%
1.1	Declarative -- Identify management, transport, treatment, and disposal regulations for hazardous materials	
1.2	Declarative -- Identify mandated training (Example: HAZWOPER training.)	
1.3	Declarative -- Identify the difference(s) between DOT hazardous material, EPA/RCRA hazardous waste, and OSHA hazardous substance	
1.4	Declarative -- Identify generator, transporter, and TSDF standards	
1.5	Declarative -- State criteria for identifying the characteristics of hazardous waste and for listing hazardous waste	
1.6	Declarative -- Identify standards for VSQG, SQG, LQG, and generators of Universal Waste	
1.7	Declarative -- Identify shipping papers, labels, markings, placarding, packaging, and record keeping requirements	



1.8	Declarative -- Identify standards for managing specific hazardous waste, standards for owners and operators of TSDF, land disposal restrictions (LDR), and standards for universal waste management
1.9	Declarative -- Identify waste minimization activities
1.1	Declarative -- Identify waste record and reporting requirements
2	Management of Emergencies & Incidents (E&I) 18.46%
2.1	Procedural - Given a scenario, determine resources needed to provide an HSP and emergency planning and training; include an employee right to know (RTK) and access to safety data sheets (SDS)
2.2	Procedural -- Given a scenario about an incident, determine the size and role and responsibilities of the incident command system (ICS)
2.3	Procedural -- Given a scenario, determine if record keeping and reporting are necessary according to state and federal regulations and requirements
3	Sampling and Analysis of Hazardous Materials/Waste 15%
3.1	Declarative - Identify requirements of a Waste Analysis and Sampling Plan (WASP)
3.2	Declarative - Identify how and when to use different types of direct-reading instruments, such as Draeger Tubes, OVA = Organic Volatile Analyzer, CGM = Combustible Gas Meter, FLID = Flame Ionization Detector, PID = Photoionization Detector
3.3	Application - Given a scenario for a specific waste matrix, describe the sampling methods, sampling equipment, and sample preservation methods.
3.4	Declarative - Identify how specific analytical results correlate to waste characterization and specific treatment standards
3.5	Declarative - Identify standardized test methods used in waste characterization and/or determining DOT hazard class
3.6	Declarative - Identify proper sampling procedures and pertinent sampling media for the establishment of appropriate administrative and engineering controls
4	Site Investigation and Remediation 14.04%
4.1	Declarative - Identify potential physical or chemical hazards that may arise when a task is being performed and determine the engineering controls, administrative controls, and PPE requirements
4.2	Declarative - Identify procedures to conduct a site investigation/assessment
4.3	Declarative - Identify appropriate abatement methods based on investigation and risk assessment data
4.4	Declarative - Identify site hazard characteristics and select appropriate administrative and engineering controls including PPE
4.5	Declarative - Identify steps for long-term monitoring of hazardous waste
5	Program and Project Management 16.92%
5.1	Declarative - Identify hazardous waste programs scope including managing cradle-to-grave responsibility



5.2	Declarative - Identify requirements of the Hazard Communication Standard (HCS)
5.3	Declarative - Identify training requirements for hazardous materials for OSHA, RCRA, and DOT
5.4	Declarative - Identify OSHA training requirements for general requirements and respiratory protection

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For more information about the Certified Hazardous Materials Practitioner certification program, including eligibility requirements and application procedures, see the IHMM Candidate Handbook at www.ihmm.org. If you have questions about the CHMP Blueprint, please contact M. Patricia Buley at pbuley@ihmm.org.

Attachment Three

Associate Hazardous Materials Manager



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		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).	AND	No experience is required.	

Or

Option 2:

Education		Professional Experience	
High school graduate (or GED).	AND	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).	
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..	
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..	
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.	



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 or product.. (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.	

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