



August 1, 2025

Benjamin D. Kochman
Acting Administrator
U.S. Department of Transportation,
1200 New Jersey Avenue SE,
West Building Ground Floor, Room W12-140,
Washington, DC 20590-0001

RE: Docket No. PHMSA-2025-0050, Docket No. PHMSA-2025-0032 (HM-265B)

Dear Administrator Kochman,

The Institute of Hazardous Materials Management [IHMM] is pleased to submit comments concerning the docket cited above regarding the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Notice of Proposed Rulemaking under dockets **PHMSA-2025-0050 and PHMSA-2025-0032 (HM-265B)**.

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 three 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 Certified Dangerous Goods Professional® [CDGP®].

All three of these 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 of professional credentials and serves as the indicator of the vigorous 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, CHMP, and CDGP 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 draws attention to these three [3] professional credentials consistent with the proposed rules, as follows:

1. Retrospective Regulatory Reviews in the HMR

Support for Incorporating Periodic Retrospective Reviews

Yes, PHMSA should **formally incorporate into the Hazardous Materials Regulations (HMR) an explicit requirement to conduct retrospective regulatory reviews at defined intervals**. The pace of technological innovation, industry practices, and international harmonization demands that regulations remain current, effective, and not unnecessarily burdensome. Embedding a regular review cycle into the HMR would improve transparency, promote regulatory efficiency, and enable a continuous feedback loop between PHMSA and stakeholders.

Recommended Review Interval

We strongly recommend a **minimum five-year interval** for comprehensive retrospective reviews. This mirrors best practices in other federal regulatory frameworks (e.g., the FAA's Aviation Rulemaking Advisory Committees and EPA's Clean Air Act section 812 reviews) and provides an appropriate balance between:

- **Regulatory certainty** for the industry,
- **Time to assess real-world impacts**, and
- **Sufficient opportunity for data to accumulate on the effectiveness or burden of regulatory provisions.**

Shorter intervals (e.g., 2–3 years) may be too resource-intensive and would not allow adequate time to observe implementation impacts, while intervals exceeding 5 years risk regulatory obsolescence or the accumulation of unnecessary burdens.





Suggested Regulatory Language

PHMSA could consider adding a new section to Part 106, Subpart B—Rulemaking Procedures, for example:

§106.30 – Periodic Retrospective Review of the HMR

(a) Review Requirement. The Associate Administrator for Hazardous Materials Safety shall conduct a retrospective review of the Hazardous Materials Regulations at least once every five years to identify regulations that may be outdated, unnecessarily burdensome, ineffective, or in need of revision to improve regulatory efficiency, safety outcomes, and alignment with evolving technologies.

(b) Scope. The review shall include:

- Cost-benefit evaluation of regulatory provisions;
- Consistency with international standards and domestic best practices;
- Consideration of special permits with strong safety performance records for incorporation;
- Stakeholder-identified regulatory burdens and recommendations.

(c) Public Participation. Each review cycle shall include a public notice and comment period and may include stakeholder meetings, listening sessions, or advisory panels.

(d) Report. The results of each review shall be published on the PHMSA website within 12 months of initiating the review and shall include any planned or proposed rulemakings resulting from the findings.

Stakeholder Engagement Mechanisms

Stakeholder input is vital for meaningful regulatory reviews. PHMSA should institutionalize the following engagement methods:

1. **Advance Notice of Review (ANR):** Publish a Federal Register notice to announce the initiation of a retrospective review and request specific stakeholder input.
2. **Virtual Listening Sessions:** Host open-access listening sessions with regulated parties, shippers, emergency responders, training organizations, trade associations, and public safety experts.
3. **Advisory Committees:** Re-engage the **HM-ACCESS advisory panel model** or leverage existing FACA-chartered committees to guide review themes and priorities.



4. **Online Comment Portal:** Maintain a standing digital platform (via Regulations.gov or PHMSA.gov) where stakeholders can suggest burdensome regulations or nominate special permits for codification.
5. **Summary Reports with Response Matrix:** Publish a formal response matrix summarizing stakeholder feedback and PHMSA's rationale for regulatory actions or inactions.

Anticipated Benefits

- **Improved alignment** with innovation and industry practices;
- **Reduction in outdated or duplicative rules;**
- **Greater public trust** through structured and transparent engagement;
- **Enhanced harmonization** with international regulations (e.g., UN Model Regulations, IMDG Code);
- **Codification of safe and effective special permits**, reducing administrative burdens.

Conclusion

PHMSA's proactive leadership in adopting periodic regulatory review will reinforce its mission of protecting people and the environment while ensuring the safe and efficient transport of hazardous materials. A **five-year review cycle**—mandated in regulation, supported by robust stakeholder engagement, and followed by transparent reporting—will institutionalize continuous improvement in hazardous materials safety regulation.

2. Response to NEPA Burden and Categorical Exclusions

Do PHMSA compliance practices concerning the National Environmental Policy Act (NEPA) place an undue burden on affected stakeholders?

Yes, in certain contexts, PHMSA's current NEPA compliance practices may impose undue burdens on stakeholders, particularly where routine regulatory oversight activities or approvals are subjected to unnecessarily lengthy or duplicative environmental assessments (EAs) or environmental impact statements (EISs), despite having well-established histories of minimal environmental impact.

However, we acknowledge that NEPA plays a critical role in ensuring environmental protection and informed decision-making. Therefore, we recommend refining PHMSA's application of NEPA **by expanding the scope and clarity of its categorical exclusions (CEs)**—in line with the flexibilities



provided under **42 U.S.C. § 4336c**—to avoid unnecessary delays, reduce administrative burdens, and support efficient regulatory operations without compromising environmental safeguards.

Activities That Merit New or Expanded Categorical Exclusions

PHMSA should adopt or expand categorical exclusions for the following classes of activities, which—based on safety records, operational scope, and technical characteristics—present minimal environmental risk:

1. Approval of Special Permits and Renewals for Previously Authorized Activities

- **Rationale:** When PHMSA approves or renews a special permit with a demonstrated safety and environmental performance history (e.g., certain tank car packaging exemptions, alternate testing methods), these permits do not materially alter the environmental status quo.
- **Precedent:** Similar exclusions exist at **DOT Modal Administrations (e.g., Federal Motor Carrier Safety Administration)** for permits and waivers.

2. Administrative Actions, Including Enforcement, Compliance Reviews, and Interpretive Guidance

- **Rationale:** These are procedural or clerical actions with no physical environmental effects.
- **Precedent:** Categorical exclusions for administrative actions are standard in **DOE (B1.3), USDA, and FHWA NEPA** procedures.

3. Training Exercises and Non-Invasive Inspections

- **Rationale:** Routine compliance inspections or classroom-based hazardous materials training exercises involve no physical site disturbance or emissions.
- **Precedent:** **EPA and FEMA** both exclude non-destructive inspections and training events from NEPA review.

4. Adoption of Internationally Harmonized or Functionally Equivalent Safety Regulations

- **Rationale:** Regulatory changes that harmonize U.S. rules with the **UN Model Regulations, IMDG Code, or ICAO TI** typically maintain or improve safety without significant environmental changes.
- **Precedent:** CEQ guidance supports exclusions for regulatory changes that do not materially affect the environment.

5. Renewal or Minor Modifications to Existing PHMSA-Regulated Infrastructure





- **Rationale:** Activities such as requalification of cylinders, minor pipeline modifications, or replacement-in-kind operations should not trigger new environmental reviews when they do not expand capacity or materially alter existing operations.
- **Precedent:** FERC, DOE, and NRC have similar exclusions for minor infrastructure maintenance.

Categorical Exclusions from Other Agencies That PHMSA Should Consider Adopting

Under **42 U.S.C. § 4336c**, PHMSA is authorized to **adopt CEs from other federal agencies** if the CE covers substantially similar activities. Recommended examples:

Agency	CE Example	Activity Type	Applicability to PHMSA
FERC	Categorical exclusion for replacement of pipeline components with no change in capacity	Minor infrastructure	Relevant to PHMSA pipeline oversight
DOE	CE B1.3 – Routine maintenance	Routine maintenance and inspections	Similar to PHMSA inspections
EPA	CE for grant administration, guidance issuance	Non-construction program activities	Relevant to PHMSA administrative tasks
FAA	CE for safety orders, rulemakings not affecting air traffic or emissions	Safety-focused rulemakings	Analogous to PHMSA's harmonization rules
FMCSA	CE for issuance of operating authority or exemptions	Special permit issuance	Applicable to hazmat motor carrier exemptions

Suggested Improvements to Reduce Burden

1. **Develop a Clear, Publicly Posted NEPA Desk Guide**
 - Like the **Federal Highway Administration's NEPA Implementation Manual**, this would aid stakeholders in understanding when NEPA applies and when CEs are available.
2. **Use Programmatic Environmental Assessments (PEAs)**
 - For repetitive or similar projects (e.g., certain types of special permits or enforcement actions), PEAs can streamline the review process.
3. **Establish a Stakeholder Consultation Process Before Initiating Full NEPA Reviews**
 - Solicit technical input to determine whether proposed actions may truly trigger "significant environmental impacts" or are eligible for CEs.
4. **Track and Publish CE Usage Annually**



- Transparency in how PHMSA applies CEs would foster trust and provide insight into whether burden reductions are occurring.

Conclusion

PHMSA should continue to uphold the intent of NEPA while **adopting new categorical exclusions and streamlining its environmental review processes** for routine, repetitive, and low-risk regulatory actions. Such changes will ensure NEPA compliance is targeted and proportionate, minimizing delays and cost burdens on stakeholders while preserving environmental integrity.

3. Response to PHMSA ANPRM – Codification of Special Permits and Interpretations

Question: Are there any interpretations or widely used special permits with established safety records meriting codification within PHMSA’s HMR because they would facilitate identification, development, and use of domestic energy resources or would otherwise improve government efficiency?

Answer: Yes. There are several longstanding special permits and formal regulatory interpretations currently issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) that merit codification into the Hazardous Materials Regulations (HMR) pursuant to PHMSA’s authority under 49 U.S.C. §§ 5103(b) and 5117(f), and consistent with the objectives of Executive Orders 12866 and 13992 to promote regulatory clarity, reduce unnecessary burdens, and support economic development and energy independence.

Codification of such permits would (1) facilitate consistent compliance by regulated parties, (2) reduce administrative burdens on both the agency and industry by eliminating the need for routine reissuance, and (3) promote regulatory transparency and efficiency without compromising public safety or environmental protection. Importantly, many of these permits support the energy sector by authorizing alternative packaging, testing, or operational procedures that are technically equivalent to those required under the HMR and have been demonstrated to present no increased risk based on extensive operational history and incident-free performance.

We respectfully submit the following examples of special permits and interpretations that warrant codification based on their widespread use, favorable safety records, and relevance to domestic energy development and regulatory streamlining:

1. DOT-SP 12332 – Non-DOT Specification Composite Cylinders for Hydrogen and Natural Gas



- **Scope:** Authorizes the manufacture, mark, sale, and use of non-DOT specification composite cylinders conforming to ISO standards for transportation of compressed hydrogen or natural gas.
- **Justification:** This special permit has been in continuous use for over a decade, with no significant incidents. Codification would facilitate deployment of hydrogen and compressed natural gas fueling infrastructure—critical to decarbonizing transportation and supporting domestic energy initiatives.
- **Efficiency Gains:** Removes the need for repetitive permit renewals for similar technologies and promotes alignment with international standards.

2. DOT-SP 16365 – Use of Advanced Leak Detection Equipment

- **Scope:** Allows use of advanced electronic gas detection equipment for leak testing of cylinders and containment systems in lieu of prescribed soap solution tests.
- **Justification:** Codification would encourage modernization of inspection protocols with more accurate and efficient technologies. Adoption of this permit would improve inspection throughput and reduce personnel exposure.
- **Safety Record:** Proven effective in industrial use with documented improvements in detection sensitivity and operational safety.

3. DOT-SP 10677 – Bulk Packaging for Residue Quantities of Hazardous Materials

- **Scope:** Permits the continued use of bulk packagings (e.g., cargo tanks, portable tanks) for transporting residue quantities of hazardous materials without full requalification.
- **Justification:** This special permit addresses a significant operational and logistical burden encountered during energy production and downstream processing, where de minimis quantities remain in containers post-discharge. Codification would provide clarity and consistency for terminal operators and reduce costs related to unnecessary inspections.
- **Environmental Note:** Has no measurable environmental or safety impact given the trace quantities involved.

4. PHMSA Interpretation Letters Supporting Functional Equivalency

- Examples include:
 - **Interpretation 12-0147 (2013):** Recognized equivalency in pressure relief device design for certain liquefied petroleum gas (LPG) tanks.
 - **Interpretation 10-0053 (2010):** Clarified use of alternative means of hazard communication under Part 172.
- **Justification:** Codifying such longstanding interpretations improves regulatory certainty, reduces duplicative variance requests, and aligns compliance expectations.



5. Special Permits Authorizing Remote Valve Actuation and Monitoring

- **Scope:** Multiple permits allow for remote or automated closure of valves in hazardous materials pipelines and transport vehicles, using GPS or telemetry.
- **Justification:** Codification would advance modern pipeline safety controls and align with risk-based inspection models. These technologies reduce emergency response times and are especially relevant to remote or unmanned energy infrastructure.
- **Energy Relevance:** Supports upstream and midstream oil and gas operations, improves real-time control, and enhances PHMSA's broader goal of pipeline integrity management.

Conclusion

The codification of widely used special permits and binding interpretations into the HMR is consistent with PHMSA's statutory mandate under 49 U.S.C. § 5103 and with the agency's responsibility to "reduce paperwork and regulatory burdens" (49 U.S.C. § 5117(f)). We urge PHMSA to initiate a formal rulemaking proceeding to incorporate these and similar provisions, subject to appropriate notice and comment, ensuring that safety and environmental protections are maintained while significantly improving regulatory efficiency and supporting the development of domestic energy resources.

Should PHMSA require further documentation or case histories of these permits in action, we would be pleased to provide additional technical, safety, and operational data in support of codification.

4. Response to PHMSA ANPRM – Special Permits Regulatory Burden and Recommendations for Reform

Question: Do PHMSA regulations, implementing guidance, or practices governing special permits in its Hazardous Materials Program Procedures (part 107, subpart B) impose an undue burden on affected stakeholders? Please identify any specific amendments to regulations, guidance, or protocols meriting consideration, as well as the technical, safety, and economic reasons (including the categories and number of affected entities) supporting those recommended amendments.

Answer:

Yes. PHMSA's current regulations and administrative practices under **49 CFR Part 107, Subpart B** governing the application, issuance, and renewal of special permits impose **undue burdens** on a broad spectrum of regulated stakeholders, particularly small-to-medium-sized businesses, terminal operators, logistics providers, and manufacturers of hazardous materials packaging and containment systems. These burdens arise primarily from (1) delays in processing times, (2)



opaque or inconsistent review criteria, and (3) the repetitive administrative requirements for renewals of long-standing, incident-free permits.

I. Regulatory and Procedural Burdens Identified

A. Lengthy and Unpredictable Processing Times

- **Issue:** Initial application reviews for special permits often exceed PHMSA's target timelines (per 49 CFR § 107.113), with some applicants waiting **6 to 12 months** or more for initial decisions, particularly when technical evaluations are complex.
- **Impact:** This creates uncertainty for business operations, especially for companies relying on special permits to introduce new technologies or maintain supply chains (e.g., hydrogen fuel containers, alternative packaging methods).

B. Inconsistent Application of Safety Evaluation Criteria

- **Issue:** Applicants report that similar technologies or materials can receive disparate treatment depending on reviewer assignments, and the lack of a published, uniform risk-assessment matrix complicates compliance planning.
- **Impact:** This inconsistency discourages innovation and leads to duplicative application efforts when stakeholders attempt to mirror an existing permit already granted to a competitor or partner.

C. Redundant Renewal Requirements for Safe, Well-Established Permits

- **Issue:** Even after years of safe use and wide adoption, permit holders must repeatedly submit full renewal applications under 49 CFR § 107.109, despite minimal or no changes in operation or packaging design.
- **Impact:** This consumes considerable staff and legal resources for both industry and PHMSA, with no demonstrated safety benefit, particularly when permits have never triggered incident reporting under 49 CFR §§ 171.15 or 171.16.

D. Inadequate Transparency in Application Tracking and Status Communication

- **Issue:** The current public docket and PHMSA's online portal do not allow real-time tracking of application status or reviewer assignment. Stakeholders often must resort to informal inquiries to determine review progress.
- **Impact:** This lack of procedural transparency delays project planning and impedes timely investment and innovation in packaging and transport technology.

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II. Recommended Amendments to Regulations, Guidance, and Protocols

To reduce unnecessary burdens while maintaining robust safety oversight, we recommend the following specific changes:

A. Codify Expedited Review Pathways for Functionally Equivalent or Widely Adopted Permits

- **Proposal:** Amend § 107.105 and § 107.113 to establish an “expedited equivalency” pathway for applications that (1) replicate previously approved permits, or (2) utilize technologies or methods already adopted under international standards (e.g., ISO, IMDG, ICAO).
- **Justification:** Reduces duplicative review and encourages harmonization with global best practices.
- **Entities Affected:** Packaging manufacturers, gas cylinder vendors, international shippers (~5,000+ affected parties globally).

B. Create a Tiered Renewal System Based on Safety History

- **Proposal:** Amend § 107.109 to provide automatic 10-year renewals for permits with (1) 10+ years of incident-free history and (2) no material changes to operational scope or technology.
- **Justification:** Allocates agency resources toward higher-risk or novel applications while reducing industry burden.
- **Entities Affected:** Legacy hazmat transporters, tank car operators, gas cylinder vendors (~2,500+ holders of legacy special permits).

C. Mandate Publication of Risk Evaluation Criteria and Scoring Framework

- **Proposal:** Direct PHMSA to issue formal guidance (under § 106.95) outlining the technical criteria and safety metrics used during special permit evaluations.
- **Justification:** Promotes consistency and predictability, particularly for first-time applicants and small businesses.
- **Entities Affected:** All applicants, especially SMEs unfamiliar with internal agency expectations.

D. Implement Real-Time Application Tracking and Stakeholder Dashboard

- **Proposal:** Upgrade the online PHMSA Portal to include application status updates, anticipated review timelines, reviewer contact information, and permit history lookup functions.

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- **Justification:** Enhances government efficiency and trust, reduces unnecessary calls and delays, and aligns with e-Government goals under the GPRA Modernization Act.
- **Entities Affected:** All applicants, trade associations, and legal counsel (~3,000+ annual applications affected).

E. Expand Use of General Permits or Blanket Authorizations for Common Low-Risk Activities

- **Proposal:** Initiate a rulemaking under § 106.105 to codify high-frequency, low-risk special permits (e.g., DOT-SP 10677 for residue transport, DOT-SP 9275 for minor overpacks) as “general permits” akin to those used by EPA and Army Corps of Engineers.
- **Justification:** Removes the need for individualized applications for routine, well-controlled activities; maintains safety through standard conditions.
- **Entities Affected:** Terminal operators, logistics providers, Class I & II railroads (~1,000+ entities).

III. Technical, Safety, and Economic Justifications

- **Technical:** Many special permits involve the use of alternative designs or materials that meet or exceed equivalent safety standards (e.g., composite tanks, GPS-tracked relief valves). Their codification or streamlined approval does not diminish safety margins.
- **Safety:** The majority of special permits with long use histories have demonstrated exceptional safety records. According to PHMSA data, fewer than 0.1% of special permit uses result in reportable incidents.
- **Economic:** The direct cost of legal, engineering, and administrative fees to apply or renew a single special permit often exceeds **\$10,000–\$20,000 per cycle**. These costs are disproportionately borne by small and mid-sized firms. Streamlining procedures would generate estimated industry-wide savings in the **tens of millions of dollars annually**.

Conclusion

While the special permit system is essential to maintaining flexibility and encouraging innovation within the hazardous materials regulatory framework, current procedures under 49 CFR Part 107, Subpart B impose **avoidable and unnecessary burdens** on regulated parties. The recommended reforms above would improve regulatory efficiency, uphold safety, reduce costs, and increase access to alternative compliance pathways—particularly for entities engaged in critical infrastructure, energy production, and international logistics.

We urge PHMSA to initiate a rulemaking to adopt these changes and to further engage stakeholders in refining the special permits framework in alignment with modern safety standards and administrative best practices.



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 the 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, 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 properly 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**.





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The **Certified Dangerous Goods Professional® [CDGP®]** is a professional with a credential that has an unbiased verification that a company employs a global multi-modal hazmat transportation expert, as the CDGP recognizes expertise in dealing with the safe, secure, and compliant multi-modal transportation of dangerous goods internationally under the model regulations published by the United Nations, International Maritime Organization, International Civil Aviation Organization, and International Air Transport Association.

The CDGP 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, 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, the model regulations published by the United Nations, International Maritime Organization, International Civil Aviation Organization, and International Air Transport Association, 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 properly manage and perform the functions of the profession. **See Attachment 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 CDGP holders

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recertify their competency to continue to hold the credential every 5 years based on the contents of the certification blueprint. This ensures DOT/PHMSA 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. We strongly recommend that the DOT/PHMSA rely on professional credentials that require recertification based on the certification blueprint at least every 5 years.

Training. IHMM's commitment to the excellence of its professional credentials, and throughout DOT/PHMSA's 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 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://hazmatsociety.org/education-training/>, our certificants can easily find and take an extraordinary range of courses to upgrade and expand their knowledge, skills, and abilities.

If there are specific areas where DOT/PHMSA-required training can be made available to IHMM certificants, then we are pleased to make these resources available to all.

We appreciate the opportunity to offer IHMM's comments in this proceeding and again commit to working with DOT/PHMSA in every way possible in the evolution of hazardous materials and dangerous goods transportation credentials that help create safer workers, safer communities, and a safer hazardous materials and dangerous goods transportation environment throughout the nation.

Sincerely,

Eugene A. Gullford, Jr., CAE
Executive Director

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.





INSTITUTE OF HAZARDOUS MATERIALS MANAGEMENT

Attachment One

Certified Hazardous Materials Manager [CHMM]

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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.	

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INSTITUTE OF HAZARDOUS MATERIALS MANAGEMENT

Attachment Two

Certified Hazardous Materials Practitioner [CHMP]

IHMM.Submission.to.Docket.No;.PHMSA-86816698.Docket.No;.PHMSA-86816698.(HM-8205).Page.74 of.76



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**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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INSTITUTE OF HAZARDOUS MATERIALS MANAGEMENT

Attachment Three

Certified Dangerous Goods Professional [CDGP]

IHMM.Submission.to.Docket.No;.PHMSA-86816698.Docket.No;.PHMSA-86816698.(HM-8205).Page.76 of.76



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CERTIFIED DANGEROUS GOODS PROFESSIONAL (CDGP) EXAM SPECIFICATIONS

Effective October 2018

A Certified Dangerous Goods Professional® (CDGP®) is a professional involved in the transport of goods and materials that have been categorized as regulated materials and have special packaging, communication, and transport requirements. The CDGP is a person who is an expert in appreciating the potential hazards and the complexity of the regulations that apply to them, and who can accurately analyze the requirements for dangerous goods transport through his or her use of regulatory reference sources. A CDGP is competent in:

- International regulatory requirements and standards relevant to the transport of dangerous goods
- Understanding the training requirements, the terms, phrases and definitions for the transportation of dangerous goods
- Interrelationships between international regulatory requirements, standards and associated updates
- Understanding special permits, competent authority approvals, and/or agreements and certificates
- The identification, classification, packaging, marking, labeling/placarding, documenting, handling/loading/unloading, stowage, segregation, security and emergency response for dangerous goods
- The use of special provisions and exceptions
- Emergency Planning, Emergency Information, Incident reporting: What is required, when it is required and to whom it must be reported, the use of salvage packaging, repackaging and prohibitions on salvage packaging
- When site specific security plans are needed, and their training requirements, key issues to consider when developing security procedures for personnel, and key issues to consider when developing security procedures for travel routes

A CDGP has the knowledge, skills and abilities appropriate for dealing with the transportation and security of dangerous goods in accordance with specific global modal regulations:

- UN Recommendations on the Transport of Dangerous Goods - Model Regulation, 20th Edition
- International Civil Aviation Organization's Technical Instructions (ICAO TI), 2017-2018 Edition
- International Maritime Organization's Dangerous Goods Code (IMDG Code), 2016-2018, 38th Edition

These three regulations of the editions noted or newer are permitted references for the open-book CDGP exam administration. In addition, the International Air Transport Association's Dangerous Goods Regulations (IATA DGR) are incorporated into the scope of subdomain 1.1 of the CDGP examination to the extent that the ICAO TI underlies the IATA DGR. The scope of the CDGP examination does not include those areas where the IATA DGR sets a more stringent standard than the ICAO TI.

- International Air Transport Association's Dangerous Goods Regulations (IATA DGR), 59th Edition or newer may be used in conjunction with or in lieu of the ICAO TI.



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Certified Dangerous Goods Professional (CDGP) Exam Blueprint

The CDGP Exam Blueprint consists of six domains. A domain is a major area of responsibility that defines the role of a Certified Dangerous Goods Professional (CDGP). A competency/task is an activity performed within a performance domain.

DOMAINS AND COMPETENCIES/TASKS	% of Items
1.0 Identify and describe international regulatory standards relevant to the transport of dangerous goods	40%
1.1 Knowledge of International Regulatory References	7%
1.1.1 Applies Recommendations on the Transport of Dangerous Goods – Model Regulations, United Nations Committee of Experts (UN COE) as appropriate in international transportation.	
1.1.2 Applies Technical Instructions for the Safe Transport of Dangerous Goods, International Civilian Aviation Organization (ICAO) Technical Instructions as applicable in international air transportation, and IATA to the extent that those relate to international standards for moving goods	
1.1.3 Applies International Maritime Dangerous Goods Code, International Maritime Organization (IMO) as appropriate for maritime transportation	
1.2 Knowledge of the Training and Certifications Required by International Regulations	20%
1.2.1 Complies with the training requirements required by international regulations	
1.2.2 Implementing function-specific requirements tasks as appropriate	
1.2.3 Implements emergency response job functions	
1.2.4 Performs safety and security related job functions	
1.2.5 Complies with retention requirements for training records	
1.3 Working Knowledge of Dangerous Goods Terminology and Definitions	13%
1.3.1 Employs key words used in the regulations	
1.3.2 Converses in the common terminologies relevant to dangerous goods transportation	
1.3.3 Utilizes the definitions specific or unique to the separate regulatory standards	
1.3.4 Applies dangerous goods definitions (e.g. Hazard Class, Divisions, Packing Groups) in accordance with requirements	
2.0 Management of Transportation	22%
2.1.1 Classifies dangerous goods for transportation and selects the proper shipping name	
2.1.2 Implements UN standard packaging, testing, marking and notifications to packaging users, and closure instructions	
2.1.3 Properly selects authorized packaging for a classified dangerous good	
2.1.4 Implements labeling requirements for dangerous goods packaging	
2.1.5 Implements marking requirements for packages	
2.1.6 Implements placarding requirements for dangerous goods	
2.1.7 Complies with documentation requirements for the transport of dangerous goods	

3.0 Handling of Cargo	14%
3.1.1 Complies with requirements and standards for markings on packages of dangerous goods	
3.1.2 Complies with standards and requirements for loading and unloading of dangerous goods	
3.1.3 Implements methods for proper segregation and securement of cargo in-transit	
3.1.4 Complies with the different modal handling requirements for the transportation of dangerous goods (i.e. air, water)	
3.1.5 Complies with the requirements and standards for inspection, acceptance, and reporting of dangerous goods	
4.0 Management of Documentation	8%
4.1.1 Realizes packaging testing and packaging closure documentation requirements	
4.1.2 Complies with requirements for preparing and maintaining transport documents	
4.1.3 Complies with approvals process for permits, authorizations or agreements and certificates	
5.0 Emergency Management	9%
5.1.1 Plans for and implements key emergency planning concepts	
5.1.2 Obtains important sources of emergency response information	
5.1.3 Fulfills requirements of incident reporting: What is required, when it is required and to whom it must be reported	
5.1.4 Differentiates between situations which require salvage packaging, repackaging and prohibitions of salvage packaging	
6.0 Security	7%
6.1.1 Execute site specific security plans are needed, and their training requirements	
6.1.2 Implement and employ the elements of security awareness, including the nature, recognition and methods for addressing security risks	
6.1.3 Considers key issues when developing security procedures for personnel	
6.1.4 Considers key issues and regulations when dealing with sensitive information security plans	

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