




# Introduction

This document will provide environmental, health, safety, transportation and security professionals with useful information about the Certified Hazardous Materials Manager (CHMM®) Program and the two organizations – the Institute of Hazardous Materials Management (IHMM) and the Academy of Certified Hazardous Materials Managers (ACHMM) – responsible for developing, maintaining and promoting the prestigious certification.



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## The CHMM® Program

The Certified Hazardous Materials Manager (CHMM®) credential is the standard of excellence within the hazardous materials management community.

The CHMM Program was launched in June 1984 by the Institute of Hazardous Materials Management (IHMM) in response to a need within the environmental, health, safety, transportation and security industries to identify professionals possessing a superior body of knowledge and expertise.

As of September 2005, more than 13,000 professionals have earned the CHMM® credential, with approximately 9,000 still active in a wide range of disciplines, including homeland security, environmental protection, engineering, health sciences, transportation and public safety.

The standards for credentialing eligibility and examination are rigorously maintained, and the integrity of the CHMM® credential is enhanced by recertification requirements that include annual professional development criteria.

The CHMM® program is based on four basic principles:

1. To provide a recognized credential for professionals engaged in the management, control and oversight of hazardous materials who have demonstrated the highest level of training, skills and competence;
2. To foster continued professional development for hazardous materials managers through continuing education opportunities, peer group interaction and technological development;
3. To facilitate the transfer of knowledge and experience regarding hazardous materials management among professionals and organizations; and
4. To provide government, industry and educational institutions with a mechanism for identifying hazardous materials management professionals who have met the exacting standards for certification.



## Credentialing Program Recognition and Accreditation

Industry, academia and government agencies look to the CHMM® credential to identify professionals who are uniquely qualified to manage, track and secure hazardous materials – in jobs involving the entire lifecycle of hazardous materials: writing regulations, requirements and specifications; material design, production, storage, recycling and ultimate disposal; environmental protection and remediation.

The CHMM® is the credential of choice for the environmental and hazardous materials professionals at many different entities in the private and public sectors. To learn more about the organizations partnering with ACHMM and IHMM, please visit page 11.

**The CHMM® program has been accredited by the Council of Engineering and Scientific Specialty Boards (CESB) since 1995. CESB is an independent, voluntary organization created to recognize, through specialty certification, the expertise of individuals in engineering and related fields.**

CESB guidelines for accreditation include:

- validity of the certification examination program;
- fairness of the procedures for determining applicant eligibility;
- adequacy of requirements for ensuring maintenance and enhancement of professional qualifications or recertification;
- professionalism and independence of the certifying body; and
- openness of the program to public scrutiny.



## Certification Requirements

All candidates for CHMM® certification must have a baccalaureate degree (or higher) from an accredited college or university and pass a professional multiple-choice examination developed and administered by IHMM.

Eligibility to sit for the exam, and the level of certification, are determined by the candidate's education and experience.

Candidates for certification must have achieved a significant level of education and experience and then demonstrate that knowledge and skill by passing a rigorous examination which tests for:

- An understanding of the basic principles involved in the science and technologies pertaining to hazardous materials management, including: chemistry, physics, biology, geology/hydrology, toxicology, and engineering;
- Knowledge of the Federal regulatory framework relating to hazardous materials management;
- Competence and maturity of judgment in managing environmental programs and resources.

Once candidates have successfully completed these requirements, they must pledge to maintain the highest standards of integrity through the CHMM Code of Ethics and must demonstrate continued competence by undergoing recertification every five years.

## Levels of Certification

**Master Level:** Attainment of a degree (as described above) in a field related to hazardous materials management/engineering plus seven years of experience in hazardous materials management or a related field, including responsibility for developing, implementing, directing and/or evaluating one or more related program activities.

**Senior Level:** Attainment of a degree (as described above) plus three years of appropriate experience in hazardous materials management or a related field.

Graduate studies at an accredited college or university in a related field may be substituted for experience on a year-for-year basis (30 credits per year) up to a maximum of two years.

Candidates with degrees from institutions outside the United States must submit a statement verifying the equivalence of the degree from a recognized evaluating agency.

## Examination

The CHMM exam is available at locations throughout the United States. A schedule of dates and locations is posted on the IHMM web site at [www.ihmm.org/dspExamSchedule.cfm](http://www.ihmm.org/dspExamSchedule.cfm). Candidates must apply to IHMM at least six weeks in advance and be found eligible to sit for the exam. Application forms are also available on the IHMM web site.

The CHMM examination encompasses knowledge of science and technology, regulations, and maturity of judgment regarding management of programs and resources. It is a closed-book test, consisting of 160 multiple-choice questions to be answered in a three-hour period.

The exam is based on the following topics:

### 1) Laws and Regulations

**Statutory Law (Major Acts, including predecessors and amendments):** Clean Air Act (CAA), Clean Water Act (CWA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Emergency Planning and Community Right-to-Know Act (EPCRA), Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Hazardous Materials Transportation Act (HMTA), Occupational Safety and Health Act (OSHA), Oil Pollution Act (OPA), Pollution Prevention Act (PPA), Resource Conservation and Recovery Act (RCRA), Safe Drinking Water Act (SDWA), Superfund Amendments and Reauthorization Act (SARA), Toxic Substances Control Act (TSCA)

### Regulatory Law

### Federal Primacy and Delegation



## **Major Regulatory Agencies and Programs**

- Department of Transportation (DOT) Title 49 CFR
- Environmental Protection Agency (EPA) Title 40 CFR
- Nuclear Regulatory Commission (NRC) Title 10 CFR
- Occupational Safety and Health Administration (OSHA) Title 29 CFR
- Other Regulatory Agencies and Programs: Centers for Disease Control (CDC), Department of Homeland Security (DHS), Federal Emergency Management Administration (FEMA), National Institutes of Occupational Safety and Health (NIOSH), Joint Agency Actions

## **2) Science and Technology**

### **Science**

Chemistry, Physics (including radiation), Geology/Hydrology, Biology/Ecology, Physiology/Health & Safety, Toxicology, Math & Statistics

### **Basic Technology**

Statistical Methods, Basic Laboratory Analysis, Equipment and Instruments

### **Applied Science & Advanced Technology**

Health and Safety, Engineering Technology & Treatment Methods, Data Collection and Analysis

## **3) Management Principles and Practical Applications**

### **Program Management**

General Management, Policy-making, Authority/Responsibility, Principles of Decision-making, Information Resource Management, Public/Community Relations, Risk Communication, Regulatory Burden, Program Controls, Process Safety Management, Risk Management Plans, Permitting, Audits, Best Management Practices, ISO Standards, International Issues

### **Hazardous Materials On-site (non-waste)**

Controlling Chemical Exposures, Shipping and Receiving, Emergency Planning and Response, Reporting, Storage and Handling, Pollution Prevention, Fire Safety/Fire Codes, Security Plans

## **Waste Stream Management**

Air, Water, Hazardous Waste, Universal Wastes, Toxic Release Inventory (TRI) Reporting, Resource Recovery/Recycling

## **Assessment and Remediation of Contaminated Sites**

Site Assessment, Risk Assessment, Brownfields, Economic Issues, Property Transfer Issues, Corrective Actions, Common Sense Solutions

Candidates with less than three years of experience may qualify for the Hazardous Materials Manager-in-Training (HMMT) exam (see page 7).

## **Recertification**

After passing the CHMM® exam, professionals must demonstrate continued competence by undergoing recertification every five years. Meeting these requirements is mandatory to maintain the CHMM credential.

The IHMM Recertification Program ensures that CHMMs maintain the highest professional standards and expand their industry competence. The program requires that CHMMs participate in professional development activities and submit proof of these activities on a regular basis.

Certification Maintenance Points (CMPs) are used to measure the professional activity of CHMMs. Points are granted for activities such as: active professional practice, membership and leadership in professional associations and societies, participation in continuing education and professional development activities, and other activities listed in the Recertification Manual (also available at [www.ihmm.org/dspRecertRequirements.cfm](http://www.ihmm.org/dspRecertRequirements.cfm)).

## Hazardous Materials Manager-in-Training (HMMT) Program

The Hazardous Materials Manager-in-Training (HMMT) is a designation designed to introduce young professionals into the CHMM® program. The IHMM Board of Directors created this new program in 2004 to enable young professionals to:

- Sit for the HMMT examination at any time between the final semester of their senior year of undergraduate study and up the point of having achieved three years of experience; and
- Take just the science and basic technology portions of the CHMM® examination while those topics are fresh, and then be exempted from taking those parts of the exam when they qualify to take the CHMM® examination.

IHMM also awards up to \$20,000 per year in grants for university research in the field of hazardous materials management.



## ACHMM Membership

The Academy of Certified Hazardous Materials Managers (ACHMM®) was founded to serve the ongoing needs of CHMMs. As the national membership organization for CHMMs, it remains devoted to the recognition and professional development of CHMMs, and provides opportunities for them to share knowledge, exchange ideas and promote the industry and the credential. ACHMM comprises more than 60 chapters representing 37 states and the District of Columbia.

ACHMM membership allows for individual members to network and increase their effectiveness as professional hazardous materials managers. This nationwide capability expands the horizons of technical information and assistance to members, and helps them explore new and better career opportunities. ACHMM membership is a worthwhile proposition for hazardous materials managers. Currently, there are three different levels of membership: member, affiliate member and corporate member. To find out more about becoming a member contact the Academy at (800) 437-0137 or e-mail [academy@achmm.org](mailto:academy@achmm.org).



ACHMM creates growth opportunities for CHMMs by:

- Providing membership benefits and services;
- Offering quality educational programs and activities;
- Making available technical information resources, including assistance with industry standards and regulatory requirements;
- Encouraging public and private sector support of the CHMM® credential program;
- Providing technical and leadership training;
- Supplying resources, such as web sites, publications, newsletters and other tools;
- Collaborating with other technical organizations; and
- Providing networking opportunities and career planning.

### **ACHMM Vision**

The Academy of Certified Hazardous Materials Managers vision is to be the recognized leader and resource for those practicing environmental, health and safety management.

### **ACHMM Mission**

The Academy of Certified Hazardous Materials Managers mission is to promote the environmental, health and safety profession, offer professional development and networking opportunities, and to provide value to our membership.

### **ACHMM Strategy**

The Academy of Certified Hazardous Materials Managers mission will be achieved by working with ACHMM Chapters, the Institute of Hazardous Materials Management, and other professional organizations to link industry, government and academia, and achieve the ACHMM vision for the future.

## Professional Development

The hazardous materials management industry requires high levels of training and skills development, and CHMMs must be competent in a wide array of technical, personnel, financial and administrative areas. For CHMMs, professional development involves further developing skills and remaining current on the latest technologies, regulations and advances. ACHMM not only provides these opportunities, but also creates numerous networking opportunities and forums to enhance knowledge on specific areas of hazardous materials management. ACHMM helps cultivate highly qualified professionals who contribute to the workforce while protecting nature and maintaining the work environment in the interest of public health, safety and welfare. The organization strives to help its members and affiliates by:

- Maintaining and increasing training opportunities to achieve the highest quality of professionals;
- Evaluating and implementing professional specification requirements to assure proper recognition for qualified professionals;
- Recognizing career tracks for retaining and promoting professionals; and
- Recruiting and maintaining highly qualified and professional staff.

There are more CHMMs employed in the workforce than ever in the credential's 20-year history. From industry and services to government and education, CHMMs have become a significant part of the workforce. The CHMM® program is being incorporated into career development and professional growth tracks within the public and private sectors to develop and maintain a qualified and well-trained professional staff. Major corporations such as 3E Company, Clayton Group, General Motors and Teris have programs in place seeking CHMMs for job opportunities and encouraging current employees to earn the CHMM® credential.

In addition, ACHMM provides several annual forums for professional growth and development:

**National Conference** – ACHMM members and other industry professionals meet each year to learn about the latest developments in hazardous materials management. The conference provides numerous opportunities for professional development and networking, and features key industry speakers, an awards gala and an exhibit hall with the latest products, services and resources. One of the conference's many highlights is an emergency response drill coordinated by ACHMM members and ACHMM chapters in conjunction with local, state and regional agencies and organizations.

**Leadership Training** – ACHMM offers training courses for current and future leaders. Each spring, chapter and committee leaders are provided with workshops to provide personal career development in addition to supplying ACHMM leaders with skills to further develop the organization's chapters. The ACHMM National Conference also provides numerous leadership training activities.

## Strategic Partnerships and Alliances

The Academy of Certified Hazardous Materials Managers (ACHMM) and the Institute of Hazardous Materials Management (IHMM) work together to develop, maintain and promote the CHMM® credential – a standard of excellence within the hazardous materials management industry.

ACHMM and IHMM are indebted to many companies and organizations that support the CHMM® and the hazardous materials management industry.

ACHMM has developed strategic partnerships and alliances with complementary professional organizations to provide mutually beneficial services and member benefits, with the following:

- **American Society of Safety Engineers**
- **Auditing Roundtable**
- **International Association of Emergency Managers**
- **National Environmental Performance Track**
- **National Environmental, Safety & Health Training Association**
- **RAB**

IHMM offers reduced fees and simplified paperwork to companies and organizations that endorse the CHMM® credential for their environmental, health, safety, transportation and security personnel. Organizations currently participating in this partnership with IHMM include:

- **General Motors Corporation**
- **Delphi Corporation**
- **DaimlerChrysler Corporation**
- **ENSR International**

ACHMM and IHMM are looking to form strategic alliances with industry, academia, and government agencies to further promote the CHMM® program and the hazardous materials management profession. To learn more about opportunities to form strategic partnerships and alliances with ACHMM and IHMM, please contact ACHMM at (800) 437-0137 or IHMM at (301) 984-8969.

## Resources

There are several resources available to prospective CHMMs to learn more about the CHMM® program. Information is also available on the IHMM web site at [www.ihmm.org](http://www.ihmm.org) or the ACHMM web site at [www.achmm.org](http://www.achmm.org).

### National Overview Course

ACHMM's key educational program, the National Overview Course (NOC), is designed to be a broad introduction for those new to the industry and a refresher for environmental professionals preparing for the CHMM® certification exam. It also serves as a refresher for existing CHMMs and counts toward annual CMPs.

In 2000, the Department of Energy's National Environmental Training Office endorsed the NOC. It is an advanced application-based course for environmental, health and safety professionals to test their knowledge and ability to apply the different environmental regulations. DOE approved the course as satisfying the "Environmental Manager" training need.

The NOC provides instruction about laws and regulations, technologies and practices in an overview manner, highlighting and emphasizing what hazardous materials managers need to know to better accomplish their jobs.

Taught by CHMMs who are registered trainers, the NOC is hosted by ACHMM chapters and available as a corporate training program.



## Managing Hazardous Materials

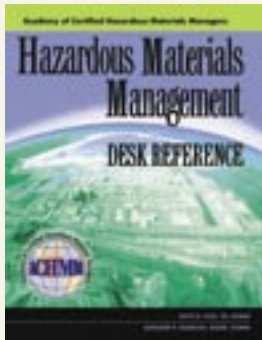


**Managing Hazardous Materials** is a comprehensive text covering the breadth and unity of the hazmat field. It was developed to reflect the core knowledge that is required for practice in this field.

Published by IHMM, the book is an ideal study guide when combined with knowledge of current regulations and practical experience. The text, written by CHMMs and other experts, is an inclusive professional reference. Look to **Managing Hazardous Materials** to define the profession and shape the discipline for the future.

For more information or to place an order, contact IHMM at (301) 984-8969 or via e-mail at [ihmminfo@ihmm.org](mailto:ihmminfo@ihmm.org).

## Hazardous Materials Management Desk Reference, Second Edition



The Second Edition of the **Hazardous Materials Management Desk Reference** is an essential educational resource for CHMMs, industry professionals, educators and students.

This edition is divided into nine major topic areas, ranging from regulatory and management issues to safety principles and hazardous materials management to air and water quality. It also features a complete index, glossary and conversion table.

The reference book is an excellent example of the technical materials that ACHMM members are capable of generating for those in the hazardous materials management industry. It is the culmination of thousands of hours of volunteer service by dedicated ACHMM members.

For more information or to place an order, contact ACHMM at (800) 437-0137, via e-mail at [academy@achmm.org](mailto:academy@achmm.org) or online at [www.achmm.org](http://www.achmm.org).

