



# BEYOND COMPLIANCE

*Promoting Environmental Stewardship, Safety & Health at all University System of Georgia (USG) Institutions*

*“Creating a More Educated Georgia”*

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## EPD Offers Compliance Assistance Visit

We are pleased to announce that we are again partnering with the Environmental Protection Division (EPD) on a compliance assistance initiative. A similar initiative was conducted five years ago, with excellent participation and results.

Billy Hendricks, senior compliance officer in the Facilities Compliance Program of EPD's Hazardous Waste Management Branch, will join us at the June 22 GHENEHS meeting at North Georgia College & State University. He will give a brief presentation on what to expect during a compliance inspection, and will lead a campus walkthrough to look at and discuss “real-life” waste areas and practices. This is a great opportunity to ask questions in an informal, assistance-oriented, and non-enforcement setting.

Many of you already know Billy, but for those who don't here's a brief introduction:

*Billy was born, raised, and educated in Georgia. After graduation from the University of Georgia, he took a summer job with the EPD's Water Protection Branch. Thirty years after starting that summer job, he is the senior compliance officer in the Facilities Compliance Program. His responsibilities include all facets of hazardous waste regulation, permit writing, compliance auditing, and enforcement for over a hundred government-owned facilities.*

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## UPCOMING EVENTS:



- June 14—2005 Annual Agency Safety and Loss Prevention Coordinator Workshop, Atlanta, GA
- June 22—GHENEHS meeting, North Georgia College & State University, Dahlonega
- July 11—Georgia ACHMM regular meeting, Atlanta
- July 14—Environmental Compliance Assistance Workshop for Georgia Hospitals & Healthcare Facilities, Atlanta, GA
- July 16-21 — CSHEMA Annual Conference, Philadelphia, PA
- July 25-26—OSHA Safety & Health Management Systems Seminar, Macon
- August 14-17— Georgia Recycling Coalition Annual Conference, St. Simons Island, GA

## A Quick Look at What's Inside

- ***USDOT has created a new administration to oversee hazardous materials transportation safety (p. 2)***
- ***Using contact lenses in the laboratory (pp. 2-3)***
- ***An overview of the universal waste standard and common examples of universal wastes. (p. 4)***
- ***A comparison of some well-known and respected environmental and safety certifications. (pp. 4-5)***

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### Our Mission:

*To support the Board of Regents' mission of “Creating a More Educated Georgia” through teaching, discovery, outreach and public services by providing leadership and services to promote environmental stewardship, safety and health at all University System institutions.*

## USDOT Creates New Administration To Focus on HazMat Safety

On November 30, 2004 President Bush signed into law the Norman Y. Mineta Research and Special Programs Improvement Act (P.L. 108-426). This Act established a separate operating administration within the US Department of Transportation (USDOT) for pipeline safety and hazardous materials transportation safety operations.

As a result of this change, the Research & Special Projects Administration (RSPA) ceased operations on February 19, 2005.



The new safety administration, the Pipeline and Hazardous Materials Safety Administration (PHMSA), oversees the safety of the over 800,000 daily shipments of hazardous materials in the United States and the 64% of the nation's energy that is transported by pipelines.

Unlike RSPA, PHMSA is dedicated solely to safety. Their mission is to work toward the elimination of transportation-related deaths and injuries in hazardous materials and pipeline transportation, and to promote transportation solutions that enhance communities and protect the natural environment.

The research functions previously under RSPA have been moved to the new Research and Innovative Technology Administration (RITA). The establishment of RITA will enable DOT to more effectively coordinate and manage its research portfolio and expedite implementation of cross-cutting innovative technologies.

## Contact Lenses in the Laboratory: Do They Belong?

Does your institution's laboratory safety policy allow persons to wear contact lenses when working with chemicals or other eye hazards?

Contact lens use in the laboratory has been hotly debated over the past two decades. The result is confusing and inconsistent policies. Many institutional laboratory safety manuals recommend that contact lenses not be worn in areas with chemical splash or vapor exposure. Yet with approximately 33 million contact lens wearers in the US — ~10% of the population — campus safety professionals face increasing pressure to reconsider whether the risk of wearing contact lenses in the laboratory is greater than the benefit. Some vision problems can only be corrected by contact lenses, and wearing prescription glasses underneath protective eyewear can be uncomfortable and cause glare.

Most policies that restrict contact lens use in chemical laboratories are based on contentions that contact lenses can:

- fuse to the eyeball
- hold foreign material against the eyeball
- absorb and retain chemical vapors
- exacerbate potential damage from corrosive chemical splashes



These claims have not been substantiated by detailed studies on the use of contact lenses in a chemical environment. As a result, many professional safety organizations have reversed earlier statements against contact lens use in the chemical laboratory setting.

For example, prior to 1998 the American Chemical Society's Committee on Chemical Safety recommended in the book "Safety in Academic Chemistry Laboratories" that contact lenses not be worn in the chemical laboratory. In June 1998, however, ACS changed their position and stated:

*In many workplaces where hazardous chemicals are used or handled, the wearing of contact lenses is prohibited or discouraged. A good number of these prohibitions are traceable to earlier statements in this book that were based on rumors and perceived risks. A careful study of the literature by knowledgeable consultants has refuted these risks. Recent studies and experience have suggested that, in fact, contact lenses do not increase risks but can actually minimize or prevent injury in many situations.*

*"Because of the ever-increasing use of contact lenses and the benefits they provide, the American Chemical Society Committee on Chemical Safety, having studied and reviewed the issue, is of the consensus that contact lenses can be worn in most work environments provided the same approved eye protection is worn as required of other workers in the area."*

In 1998, the Occupational Safety and Health Administration (OSHA) revised the Respiratory Protection standard to remove a prohibition on the use of contact lenses with respirators. This decision was made based on comments received from the regulated com-

## Contact Lenses in the Laboratory (cont.)

munity, as well as a specific recommendation from the National Institute of Occupational Safety and Health (NIOSH) that OSHA allow respirator users to wear contact lenses. Additionally, OSHA's own review of the record identified no evidence that the use of contact lenses with respirators increased safety hazards. This is consistent with the 1992 ANSI standard for respiratory protection, which allows the use of corrective lenses, spectacles, and face protection devices, providing that these items do not interfere with the seal of the respirator. ANSI also allows the use of contact lenses where the wearer has successfully worn such lenses before and practices wearing them with the respirator.

### Know the Exceptions

Keep in mind that there are some chemicals that cannot be used with contact lenses safely, such as chemicals that have the potential to penetrate and bind with contact lens material. For example, the Occupational Safety and Health Administration has specific regulations that prohibit the wearing of contact lenses when working with:

- 1,2-dibromo-3-chloropropane (1910.1044)
- Acrylonitrile (1910.1045)
- Ethylene oxide (1910.1047)
- Methylene chloride (1910.1052—nonmandatory appendix)
- Methylenedianiline (1910.1050)

The Material Safety Data Sheet should also specify if wearing contact lenses while using a particular chemical is not safe, or if special first aid measures are required for persons wearing contact lenses during exposure.

### Ensuring Contact Lens Safety

If contact lenses are allowed in chemical laboratories on your campus, here are some safety recommendations from the American College of Occupational and Environmental Medicine to consider:

1. Establish a written policy that documents the general safety requirements for the wearing of contact lenses, including required eye and face protection and contact lens wear restrictions, if any.
2. Conduct an eye injury hazard evaluation in the workplace

to assess eye-hazardous environments and appropriate eye and face protection for contact lens wearers.

3. Provide training on contact lens use policies and first aid for contact lens wearers with chemical exposure. (see box below for sample first aid procedures)
4. Provide suitable eye and face protection for all workers exposed to eye injury hazards, regardless of contact lens wear.
5. Notify employees and visitors of any areas where contact lenses are restricted without appropriate eye and face protection.
6. Identify to supervisors and first aid responders all workers in eye-hazard environments who wear contact lenses.

#### First Aid For Chemical Exposures to the Eye for Contact Lens Wearers

- Copiously irrigate the eye with irrigation solution or water (do not use neutralizing solutions) while holding the lids apart.
- Remove the lens as soon as practical.
- Do not delay irrigation while waiting for contact lens removal.
- Do not worry about losing the contact lens.
- If the lens remains after the initial flushing, remove it or slide it onto the conjunctiva and reirrigate.
- Seek professional medical assistance. Let them know if the contact lenses are still in the eyes.



## The Basics of Universal Waste Management

The U.S. Environmental Protection Agency defines four widely-generated types of hazardous wastes as universal wastes: batteries, pesticides, thermostats, and lamps.

Generators of these wastes have the option to manage them either under the "traditional" hazardous waste regulations, or under the more flexible universal waste regulations.

The universal waste regulations were issued in 1995, and are intended to encourage recycling of these materials by allowing generators more flexibility in handling them. For example:

- Generators of universal wastes are divided into only two categories based on the amount of universal waste on-site: large-quantity handlers (>11,000 pounds of universal waste on-site) and small quantity handlers (<11,000 pounds of universal waste on-site).
- Universal waste can be accumulated for up to one year from the date of generation.
- Universal waste does not count towards determination of hazardous waste generator status

However, universal waste handlers are not required to recycle their wastes in order to take advantage of these less stringent requirements. EPA felt that limiting universal waste management options to recycling would complicate the regulations and discourage participation in the universal waste collection program.

Container labeling, spill response, and record-keeping are key components of proper universal waste management. For details, see 40 CFR Part 273, Standards for Universal Waste Management. The Georgia Environmental Protection Division has incorporated the federal rules into state rules by reference in Chapter 391-3-11, Hazardous Waste Management.

### Examples of Universal Wastes

**Batteries:** Ni-cad batteries, small sealed lead-acid batteries.

- Larger lead-acid batteries, such as car batteries, are managed separately under 40 CFR Part 266.

**Pesticides:** Unused agricultural pesticides and re-called pesticides.

**Thermostats:** Temperature-control devices, which may contain several grams of metallic mercury.

**Lamps:** Fluorescent, metal halide, high-pressure sodium, mercury vapor, neon, and high intensity discharge lamps.

- Some "environmentally friendly" fluorescent lamps may be safe for disposal in a solid waste landfill. However, these lamps do still contain some mercury, and it is a BOR policy to recycle all mercury-containing lamps.
- DOAS has negotiated a state contract for lamp recycling. This contract, S020704, is on the DOAS website at [http://ssl.doas.state.ga.us/PRsapp/statewide/S-020704\\_011305\\_151908.pdf](http://ssl.doas.state.ga.us/PRsapp/statewide/S-020704_011305_151908.pdf)

## Which Professional Certification is Right for You?

### Certified Hazardous Materials Manager (CHMM)

[Institute of Hazardous Materials Management](#)

#### Qualifications:

- Bachelors degree in a field related to hazardous materials management
- 3 years (Senior Level) or 7 years with program responsibility (Masters Level) experience in the field of hazardous materials management/engineering
- Passing score on a 3 hour, 160 question multiple choice exam

#### Fees:

- |                              |                 |
|------------------------------|-----------------|
| • Application/Exam fee       | \$90/\$150      |
| • Annual maintenance fee     | \$70            |
| • Annual membership in ACHMM | \$85 (optional) |

- Recertification fee \$75/5 years

#### Recertification Requirements:

- 17 Certification Maintenance (CM) points over a 5-year cycle

### Certified Associate Industrial Hygienist (CAIH)

[American Board of Industrial Hygiene](#)

#### Qualifications:

- Bachelors degree with a minimum of 30 semester hours of science and specific industrial hygiene coursework
- At least 4 years of professional-level industrial hygiene coursework
- Passing score on a comprehensive one-day examination

## Which Professional Certification is Right for You?

### Certified Associate Industrial Hygienist (CAIH) *cont*

#### Fees:

- Application/Exam fee \$100/\$150
- Annual renewal \$75

#### Recertification Requirements:

- 35 CM points over a 5-year cycle

### Certified Industrial Hygienist (CIH)

[American Board of Industrial Hygiene](#)

#### Qualifications:

- Bachelors degree in industrial hygiene, biology, chemistry, chemical, mechanical, or sanitary engineering, physics or safety. (Other bachelors degrees may be accepted)
- For exam year 2005, completion of 135 academic contact hours or 180 continuing education contact hours in industrial hygiene course work.
- 5 years of full-time employment in the professional practice of industrial hygiene subsequent to degree
- Passing score on ABIH core exam

#### Fees:

- Application/Exam fee \$100/\$150
- Annual renewal \$75

#### Recertification Requirements:

- 40 CM points over a 5-year cycle

### Certified Safety Professional (CSP)

[Board of Certified Safety Professionals](#)

#### Qualifications:

- An associate degree in safety and health or a bachelor's degree in any field from an accredited institution
- At least 4 years of acceptable safety practice (graduate degrees receive credit towards experience)
- Passing score on Safety Fundamentals and Comprehensive Practice Exams

#### Fees:

- Application/Exam fee \$125/\$275 each
- Annual renewal \$100

#### Recertification Requirements:

- 25 Continuance of Certification (COC) points over a 5-year cycle (1 CEU = 1 COC).

### Qualified Environmental Professional (QEP)

[Institute of Professional Environmental Practice](#)

#### Qualifications:

- Bachelors degree in physical, earth or natural sciences, engineering, or math.
- At least 5 years of subsequent professional environmental work experience, or
- 8 subsequent years of professional environmental work experience with a baccalaureate degree in a discipline other than those listed above.
- Passing score on a two-part, 6 hour multiple choice exam focusing on technical environmental science.

(NOTE: There is also an oral exam option)

#### Fees:

- Application/Exam fee: \$75/\$150
- Annual renewal: \$125

#### Recertification Requirements:

- 50 Professional Development Hours (PDH) over a 5-year period

### Registered Environmental Manager (REM)

[National Registry of Environmental Professionals](#)

#### Qualifications:

- Bachelors degree in an environmentally related discipline, which includes physical, biological and health sciences. 3 years of work experience may be substituted for each year of a degree program.
- 5 years of work directly related to environmental engineering, health, science or management.
- Passing score on a 4 hour multiple choice, open book exam.

#### Fees:

- Application & Exam fee: \$150
- Annual renewal: \$90

#### Recertification Requirements:

- 15 contact hours of continuing education or environmental service over a 1-year period.

