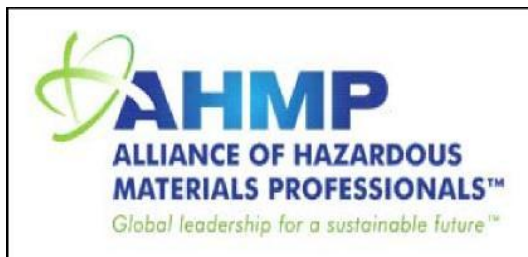


# The Hazardous Materials Manager

EASTERN WASHINGTON CHAPTER OF THE ACADEMY OF CERTIFIED HAZARDOUS MATERIALS MANAGERS NEWSLETTER



## Eastern Washington Chapter of the Academy of Certified

### Hazardous Materials Managers

1370 Jadwin, Suite 113

Richland, WA 99352

<http://www.ewcachmm.org>

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## PRESIDENT'S CORNER

From our President, Russ Johnson, CHMM

I have really been looking forward to warmer weather. Looks like I need to continue to wait. I am already tired of mowing my lawn that must mean that summer is here.

Our second general meeting in April was the best attended meeting I have seen in a long time. Over 40 people turned out to hear Wayne Johnson, PNNL, talk about the Japan crisis following the tsunami. Our chapter kicked in \$100 donation for the Japanese Red Cross for relief efforts there. The May general meeting, held on May 23<sup>rd</sup>, had decent attendance as well. Ron Skinnarland, Washington State Department of Ecology, gave a presentation on the status of the Hanford Dangerous Waste Permit. This was a great opportunity to ask Ron a wide variety of questions, which he graciously answered.

Our first tour of the year is tentatively scheduled for June 23<sup>rd</sup> at the Environmental Restoration Disposal Facility (ERDF). Contact Chuck Mulkey for more information at 373-4077 or 947-8889. Also, coming up soon is the Alliance of Hazardous Materials Professionals 2011 National Conference, August 28<sup>th</sup> to 31<sup>st</sup>, to be held in Austin, Texas. Registration for members (due by July 10<sup>th</sup>) is \$640. Late registration (prior to August 19<sup>th</sup>) is \$715, while registration at the conference is \$765. Online registration is available at the following web address:

<http://www.ahmpnet.org/sites/conf/austin2011/home.php>

Finally, we have a lot to do to get ready for the upcoming Essentials of Hazardous Materials Management Course, scheduled for September 2011. Contact Andrea Hopkins at 373-5395 or 539-5520 for more information. Check out the summary posted on our website at:

<http://ewcachmm.org/>



# The Hazardous Materials Manager

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## AHMP 2011 National Conference

Where All EHS&S Disciplines Connect

August 28–August 31, 2011

Hilton Austin • Austin, Texas



In Austin, Texas from August 28-31, AHMP will bring you together with other professionals from across wide-ranging disciplines – both domestic and international – to give you new perspectives and the confidence to help lead our industry into the future.

The AHMP National Conference is the EHS&S, hazardous materials and waste management industry's essential forum for national and international information exchange and networking – still going strong in its 24th year!



*From The Knowledge Center:*

Plan on attending a Pre-conference workshop at AHMP 2011 from Friday, August 26 – Sunday, August 28, 2011. AHMP 2011 National Conference registration is not required to attend any pre-conference workshops.

- 2011 DOT/IATA Highway and Air Refresher
- Medical Mass Casualty Incident Management Train-the-Trainer Workshop (2 day)
- 8-Hr Hazwoper Refresher
- 8-Hour Hazwoper Supervisor's Course
- Hot Topics in Safety and Industrial Hygiene
- Toxic Gas Hazards—Ammonia Risk Management Practices Across Industry Sectors
- Certified Safety Professional (CSP) Examination Preparation Workshop (3 day)
- Essentials of Hazardous Materials Management Course (3 day)

The AHMP National Conference is the EHS&S, hazardous materials and waste management industry's essential forum for national and international information exchange and networking – still going strong in its 24th year!

## **A Tour of the Environmental Restoration Disposal Facility (ERDF) is Scheduled for the Afternoon of June 23<sup>rd</sup>**

More information will be available soon. If you are interested in attending, contact **Chuck Mulkey** at 373-4077 or you can contact him at email [Charles\\_h\\_mulkey@rl.gov](mailto:Charles_h_mulkey@rl.gov)

Due to limitations on parking, we need to carpool. Please confirm your attendance by June 20<sup>th</sup>.

## CHMMs Tackle Earth Day 2011

### **Clean Creek Clean-up**

By Tom Ashley, P.E., CHMM



For Earth Day 2011, ARES Corporation organized a creek cleanup. The ARES office building located in Richland, WA, is adjacent to a small creek that drains into the Columbia River. As a small area of water in an otherwise paved area of the city, the creek has always attracted a variety of wildlife including ducks, geese, muskrats, raccoons, skunks, and even the occasional deer! On April 21, 2011 about a group of about a dozen ARES personnel and spouses stayed after work to collect trash and debris that had blown or been thrown into the creek and to remove dead trees and branches were obstructing the flow of water through the area. The effort took about four hours and

resulted in a much nicer looking area. The group discussed plans to make this a more regular event, to keep the area in good condition. The cleanup crew wishes to express special thanks to the Jerry D. Abrams Company for helping to collect and remove the trash, tree limbs and other debris removed from the creek.

### **Kids Take Part in PNNL Sustainability Fair**

By Harold Tilden, CHMM

PNNL celebrated Earth Day/Month on April 28, 2011 in conjunction with the annual *Take Our Sons and Daughters to Work Day*. The result was a “green-themed” day that included an all-staff Sustainability Fair. Staff and the 507 participating kids saw many new technologies, including PNNL’s new solar array and the electric-car charging station it powers. Kids collected and sorted (for recycling) all of their trash from the day’s events to see how much they actually produce - and learned what happens to it. They also got to see demonstrations on composting from WSU Master Gardeners, creating a planter with the Home Depot, caring for plants from Job’s Nursery, and made new paper from old paper with Gail Everett from the City of Richland. Home Depot collected compact fluorescent bulbs for recycling, and CI Shred provided shredding of personal documents. The day was capped off with a zero-waste ice cream social.

[https://labweb.pnl.gov/life/Photos/recycle\\_001.jpg](https://labweb.pnl.gov/life/Photos/recycle_001.jpg) (Kids sort recyclables under the watchful eye of Tiffany Papineau of PNNL)

[https://labweb.pnl.gov/life/Photos/IMG\\_1667.JPG](https://labweb.pnl.gov/life/Photos/IMG_1667.JPG) (Kids have finished their planters with the help of the Home Depot)

<https://labweb.pnl.gov/life/Photos/DSC00368.JPG> (Kids making new paper from recycled scraps – messy and fun!)

<https://labweb.pnl.gov/life/Photos/DSC00391.JPG> (Zero-waste ice cream tastes just as good!)

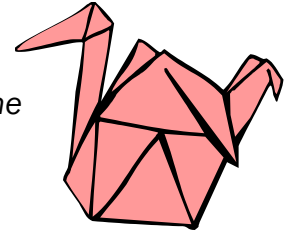
[https://labweb.pnl.gov/life/Photos/IMG\\_1617.JPG](https://labweb.pnl.gov/life/Photos/IMG_1617.JPG) (Ice cream can be made quickly with liquid nitrogen – but don’t try it at home!)

# The Hazardous Materials Manager

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## 1000+ Cranes - Wings of Hope for Japan

Naoko Kobayashi, an employee at the 222-S Laboratory at Hanford, spoke to the attendees that attended the EWC presentation given by Mr. Wayne Johnson from Pacific Northwest National Laboratory (entitled *Overview of the Challenges Facing the Fukushima Daiichi Nuclear Power Station*). Naoko is a native of Japan and the devastation of her homeland tugs especially strong at her heart strings.



Noako and her friends want to send 1,000 + cranes to Japan as a sign of hope and monetary funds are being raised for the relief effort. She said that 100% of the monies are to be donated to the Japan Red Cross. Mike Schmoldt, 2011 Treasurer of the EWC, provided Naoko with a donation of \$100 cash from EWC.

Noako told the group that there were various businesses in the Tri Cities that were also helping with the effort. She provided the times when to attend and she said she would teach others how to fold the origami cranes, as well.

The folding of cranes brings back a story passed down through the years in Japan about a little girl. Sadako Sasaki was two years old when the atomic bomb was dropped on August 6, 1945, near her home by Misasa Bridge in Hiroshima, Japan. Sadako is remembered through the story of attempting to fold a thousand origami cranes before her death, a wish which was memorialized in popular culture. Sadako was at home when the explosion occurred, about one mile from Ground Zero. In November 1954, Sadako developed swellings on her neck and behind her ears. In January 1955, purple spots had formed on her legs. Subsequently, she was diagnosed with leukemia (her mother referred to it as "an atom bomb disease"). She was hospitalized on February 21, 1955, and given, at the most, a year to live.

On August 3, 1955, Sadako's best friend Chizuko Hamamoto came to the hospital to visit and cut a golden piece of paper into a square to fold it into a paper crane, in reference to the ancient Japanese story that promises that anyone who folds a thousand origami cranes will be granted a wish by a crane. A popular version of the story is that Sadako fell short of her goal of folding 1,000 cranes, having folded only 644 before her death, and that her friends completed the 1,000 and buried them all with her. This comes from the book *Sadako and the Thousand Paper Cranes*. An exhibit which appeared in the Hiroshima Peace Memorial Museum stated that by the end of August, 1955, Sadako had achieved her goal and continued to fold more cranes.

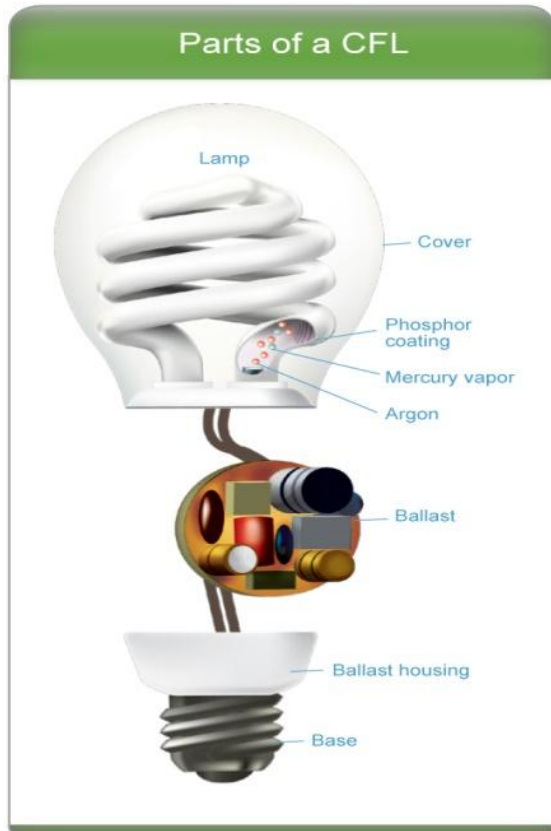
Though she had plenty of free time during her days in the hospital to fold the cranes, she lacked paper. She would use medicine wrappings and whatever else she could scrounge up. This included going to other patients' rooms to ask to use the paper from their get-well presents. Chizuko would bring paper from school for Sadako to use.

During her time in the hospital her condition progressively worsened. Around mid-October her left leg became swollen and turned purple. After her family urged her to eat something, Sadako requested tea on rice and remarked "It's good." Those were her last words. With her family around her, Sadako died on the morning of October 25, 1955 at the age of 12.

After her death, Sadako's friends and schoolmates published a collection of letters in order to raise funds to build a memorial to her and all of the children who had died from the effects of the atomic bomb. In 1958, a statue of Sadako holding a golden crane was unveiled in the Hiroshima Peace Memorial. There is also a statue of her in the Seattle Peace Park. Sadako has become a leading symbol of the impact of nuclear war. Sadako is also a heroine for many girls in Japan. Her story is told in some Japanese schools on the anniversary of the Hiroshima bombing. Dedicated to her, people all over Japan celebrate August 6 as the annual peace day.

## Compact Fluorescent Bulbs

From Scot Adams, CHMM



The United States is in the process of converting over to using Compact Fluorescent Light Bulbs (CFL) instead of incandescent bulbs. The CFLs offer the benefits of reduced electricity consumption and ten times the life. These bulbs involve a small amount of mercury. It is estimated that the use of the bulbs use less mercury than would have been emitted from coal powered electrical generation with the incandescent bulbs.

One down side of the CFL is that poor provisions for recycling to minimize mercury releases have been made available to consumers. For residential users, Home Depot will accept bulbs for recycling. However, there are still limited resources for commercial organizations to recycle.

Another down side is the possible exposures to mercury if bulbs break in your home. The State of Maine conducted research on methods to clean residential spills. It is recommended that bulbs be changed over a drop cloth. If a bulb breaks, then mechanical ventilation should be stopped for 1-3 hours and the building ventilated. Glass fragments should be containerized using gloves. The area should be wiped. The Maine study identified the difficulty of cleanup. If children or pregnant women are present, then removal of carpet should be considered. Under no circumstances should a vacuum be used.

CFL bulbs are not recommended for children's rooms where they could be broken. Some manufactures do produce less fragile covered bulbs that are safer, but more expensive. Special bulbs are needed for dimmer or 3 way applications. The bulbs are unsuitable for vibrating environments. The CFLs do emit small amounts of ultra violet light. The bulbs are fragile and extra care is needed in transport, storage, changing, and recycling. There are minor problems with some bulbs exploding, popping sizzling, smoking, leaking odors, and overheating. Most CFLs operate much cooler than incandescent bulbs. Most bulbs are imported.

Also in the attached

Maine Research Summary:

<http://www.maine.gov/dep/rwm/homeowner/cflreport.htm>

Maine Cleanup Guidance:

<http://www.maine.gov/dep/rwm/homeowner/cflreport/appendix.pdf>

General Electric consumer information:

[http://www.gelighting.com/na/home\\_lighting/ask\\_us/faq\\_compact.htm](http://www.gelighting.com/na/home_lighting/ask_us/faq_compact.htm)

Washington State Site:

[http://www.ecy.wa.gov/mercury/mercury\\_light\\_bulbs.html](http://www.ecy.wa.gov/mercury/mercury_light_bulbs.html)

US EPA:

<http://www.epa.gov/wastes/hazard/wastetypes/universal/lamps/>

## IHMM Approves Management System Manual Revisions

Rockville, Maryland (May 23, 2011)

The IHMM Board of Directors has approved revisions to its Management System Manual (MSM).

The purpose of the IHMM Management System Manual is to document the policies and procedures of IHMM and to align them with the accreditation requirements of ANSI/ ISO/IEC 17024. The Management System Manual is a formal description of how work performed by the Institute is accomplished and to assure consistency and accuracy among employees in the conduct of IHMM business. The MSM can be downloaded through its website at [www.ihmm.org](http://www.ihmm.org).

“The policies and procedures found in the MSM guide IHMM to ensure the credentials reflect the competencies of the Certified Hazardous Materials Manager, the Certified Hazardous Materials Practitioner and the Hazardous Materials Manager-in-Training,” said Vice Chair Allison King, “and continues to enable IHMM to maintain the highest levels of credibility for our certification programs and certificants. The MSM was revised to clarify procedures for reporting and reviewing code of ethics and unauthorized use violations, recertification audits, and other areas.”

## Happenings and Events

### Recap of Monthly EWC Hosted Presentations

#### *April 20<sup>th</sup> – Overview of the Challenges Facing the Fukushima Daiichi Nuclear Power Station*

Mr. Wayne Johnson, the Director of the Earth Systems Science Division within Pacific Northwest National Laboratory's (PNNL) Energy and Environment Directorate, made this presentation. Much information on the disaster, which was upgraded to the same level as Chernobyl – one of the most serious nuclear disasters in the world, was provided. PNNL is part of a multi-national team of experts working on an immediate and a long-term plan for recovery, supporting activities in Tokyo, Washington DC, and Richland. The following websites were provided for more information.

Japan Atomic Industrial Forum - <http://www.jaif.or.jp/english/>

- Nuclear and Industrial Safety Agency - <http://www.nisa.meti.go.jp/english/>
- Tokyo Electric Power Company - <http://www.tepco.co.jp/en/index-e.html>
- Japan Ministry of Economy, Trade and Industry - <http://www.meti.go.jp/english/speeches/20110417.html>
- Japan Ministry of Education, Culture, Sports, Science, and Technology - <http://www.mext.go.jp/english/>
- International Atomic Energy Agency - <http://www.iaea.org/newscenter/news/tsunamiupdate01.html>
- U.S. Nuclear Regulatory Commission - <http://www.nrc.gov/japan/japan-info.html>
- Nuclear Energy Institute - <http://www.nei.org/newsandevents/information-on-the-japanese-earthquake-and-reactors-in-that-region/>

#### *May 23<sup>rd</sup> – Hanford Facility Dangerous Waste Permit*

Mr. Ron Skinnarland, Waste Management Section Manager for the Department of Ecology's Nuclear Waste Program was the May speaker. Mr. Skinnarland discussed many of the considerations with Hanford's dangerous waste permit or site-wide permit. He discussed the assumptions that are being used and the Solid Waste EIS. This permit regulates the treatment, storage and disposal of dangerous waste within the entire 586-square mile Hanford facility.

He also briefly discussed other Tri City facilities with Dangerous Waste permits, such as Perma-Fix, Areva, Energy Northwest, and PNNL.



## Mistakes of the Past (And How Not to Repeat Them!) Issue 2

By Harold Tilden

[Author's Note: This article is intended to take a look at past activities in the light of how to learn from them. No accusations of impropriety on anyone's part are intended; usually the actions taken were "state of the art" at the time.]

In the late 1960s and early 1970s (before RCRA), a chemical manufacturer made components of Agent Orange, a powerful defoliant, for the U.S. military. It also made hexachlorophene, at the time a common skin cleanser. The manufacturer contracted with a waste oil hauler to remove byproducts of its manufacturing process. The byproduct was oily in consistency, but was not directly derived from petroleum. It was later discovered that the byproducts included dioxins and dibenzofurans, potent carcinogens.

For reasons not totally clear to this day, the waste oil hauler used the oily material for dust control at horse arenas and unpaved roads and driveways. Some of the material was placed in the hauler's waste oil tanks, so nearly all of his activities over several years helped to spread the contamination throughout eastern Missouri. In some cases, horses became sick and died after using the arenas and stables being sprayed. The soil was then removed from the arenas and used for fill elsewhere, further spreading contamination. By 1983, 33 different sites were identified as dioxin-contaminated. One site was the infamous city of Times Beach, Missouri, which had to be totally purchased by the Federal government and its citizens relocated in order to allow for cleanup. Since both the chemical manufacturer and the waste oil hauler were bankrupt and out of business, the federal Superfund had to bear the entire cost of the cleanup. Some of these cleanups continue to the current time, 40 years later.

### Lessons Learned:

- Waste Identification. Generators of wastes must now "characterize" (designate) their wastes to determine their hazards, and manage them appropriately under hazardous waste rules if they are hazardous.
- Know Your Service Provider. What is the company you are contracting with to dispose of your waste going to do with it? Waste liability is now "cradle to grave". Supplier audits may be in order.
- Use of Waste Oil. Use of waste oil for dust control is carefully controlled in order to avoid spread of contamination from unknown or unreported impurities in the waste oil.



## Regulatory News

### **NIOSH Issues Fact Sheet on Respirator Approval Labels**

May 19, 2011

The National Institute for Occupational Safety and Health (NIOSH) is releasing a fact sheet, “NIOSH approval labels—Key information to protect yourself,” on the approval process for respirators to receive NIOSH labels.

The regulations at 42 CFR Part 84 specify minimum approval requirements for respiratory protective devices. According to the fact sheet, NIOSH reviews respirator approval applications, which contain technical specifications, drawings, and other related information. In addition, NIOSH inspects, examines, and tests the equipment to be sure individual, completely assembled respirators meet the applicable requirements as per §84.30(a).

NIOSH issues certificates of approval for respiratory protective devices that meet the applicable requirements. The certificates include labels to be provided by the applicant with each approved respirator assembly. The fact sheet states that the use of the NIOSH label obligates the applicant to maintain the quality of manufactured respirators and assure that the device is manufactured to the drawings and specifications upon which the certificate of approval is based.

Approval labels can help users to understand the respirator, including its protections, cautions, and limitations, and approved configuration of components.

Further, the fact sheet describes what labels and markings are required by NIOSH and what information is included on the full NIOSH approval label.

To read the fact sheet, click on <http://www.cdc.gov/niosh/docs/2011-179/pdfs/2011-179.pdf>

### **Chemical Facility Operators Advised to Minimize Releases During Hurricane Season**

May 26, 2011

EPA is issuing a Hazardous Weather Release Prevention and Reporting alert to remind facility operators of certain regulations that require minimization of chemical releases during process shutdown operations, especially as the hurricane season approaches. This alert is designed to increase awareness among facility operators about their obligation to operate facilities safely and report chemical releases in a timely manner.

The alert specifies operational release minimization requirements and clarifies reporting requirements, including exemptions. Unlike some natural disasters, the onset of a hurricane is predictable and allows for early preparations to lessen its effect on a facility. Before hurricane force winds and associated storm surge flooding damage industrial processes, the alert recommends that operators take preventive action by safely shutting down processes, or otherwise operate safely under emergency procedures.

The alert and requirements are available at [http://www.epa.gov/region4/r4\\_hurricanereleases.html](http://www.epa.gov/region4/r4_hurricanereleases.html)



# The Hazardous Materials Manager

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## Jackson Testifies on Fuel Prices, Oil Drilling, and Hydraulic Fracturing

May 25, 2011

EPA Administrator Lisa Jackson offered testimony to the U.S. House Oversight and Government Reform Committee on May 24 regarding EPA's response to high oil prices and other fuel-related topics. Her remarks centered on the following:

- Gasoline and diesel prices. Jackson explained that gasoline and diesel cost more today than they did a year ago. Fuel prices are a function of crude oil prices, which are set by global supply and demand. Even though the U.S. will never control more than a tiny fraction of the world's oil supply, the Interior Department is taking steps to increase safe and responsible domestic oil production.
- Oil drilling in the Outer Continental Shelf. Congress has declared that a company cannot operate drilling equipment that emits large amounts of air pollution without first demonstrating, through EPA permitting, that the emissions will not harm Americans. "That requirement is not simply red tape," said Jackson. "A single exploratory drilling operation can emit as much air pollution on a daily basis as a large oil refinery." The administrator stated that the White House has formed a team of relevant bureaus at the Department of the Interior, the Department of Commerce, and EPA to coordinate oil drilling permits and prevent unnecessary delays.
- Hydraulic fracturing. Hydraulic fracturing, or fracking, involves injecting chemicals underground at high pressure to extract natural gas. Because other substances can emerge along with the natural gas, fracking has the potential to contaminate drinking water. Jackson pointed out that the agency is using input from technical experts, the public, and industry to study the relationship between fracking and contaminated water.

In addition, Jackson spoke about fuel efficiency standards imposed by EPA and the Department of Transportation on new cars and light trucks. Estimates show the new standards will save the average American driver \$3,000 over the life of the car and conserve 1.85 billion barrels of oil.

According to Jackson, additional standards that EPA will set this summer for heavy-duty trucks will save a tractor-trailer operator up to \$74,000 dollars over the life of the rig and conserve another half a billion barrels of oil. Also, EPA figures show that increased bio-fuel production mandates that EPA set last year will displace seven percent of America's expected gasoline and diesel consumption in 2022.

Jackson finished her remarks by saying, "I am proud of the role EPA is playing to shield Americans from the harmful economic impact of high gasoline and diesel prices. EPA's core mission, though, is protecting Americans from harmful pollution. That is what Congress has ordered EPA to do, and that is what the American people expect. Even when gas prices are high and the economy is still recovering, Americans do not like it when their families and livelihoods are harmed by industrial pollution that could have been avoided."

*If you tell the truth, you don't have to remember anything.*

*Mark Twain*