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

Current Officers:
President: Chuck Mulkey
Vice President: Roni Swan
Treasurer: Harold Tilden
Past President: Russ Johnson

Committee Chairs:
Professional Development: Mike Schmoldt
Membership Development: Open
Public & Community Relations & Awards: Scot Adams
Government Liaison: Harold Tilden
Education: Andrea Hopkins
Web Master: Anne Dukelow
Newsletter: Roni Swan/Ginger Petaschnick
Past President's Advisory Council: Chuck Mulkey, Rampur Viswanath, Andrea Prignano

Past Presidents:
2011 – Russ Johnson
2010 – Mike Schmoldt
2009 – Robbie Tidwell
2008 – Mark Riess
2007 – Andrea Prignano
2006 – Robbie Tidwell
2005 – Michelle Y. Mandis
2004 – Chuck Mulkey
2003 – R. Terry Winward
2002 – Rampur Viswanath
2001 – Stan Jones
2000 – Roni Swan
1999 – Chris Brevick
1998 – Robert Newell
1997 – Delores Lutter
1996 – Terry Ostrander
1995 – Bill Holstein
1994 – Brian Dixon
1993 – Bruce Vesper

President's Corner

By Chuck Mulkey, President, CHMM

As I look back on this year there were many planned activities that the Chapter was not able to get done. I am looking forward to next year and expect good things with the Chapter under Roni Swan's leadership.

I wish to thank everyone that supported me this last year and I could not have accomplished much without the outstanding support of Roni, Harold Tilden and Scot Adams.

There was a good turn-out for the annual banquet and a number of awards were presented. The Chapter wants to acknowledge WRPS, CHPRC, and the U.S. DOE with their continuing support of the awards program.

As we look forward to next year, the planning includes organizing the CHMM Preparatory or Regulatory Overview Course. In addition, we need to increase our active membership so that we have the personnel that can organize the various activities. Volunteers will also be needed for the CHMM prepatory course. I know that Roni and Wade Winters (incoming Vice President) will welcome ideas for activities, talks, tours, or presentations.

Remember if you want to join or renew your membership, the cost is reduced to $15 until the end of the 2012. You can send your check to EWC-ACHMM, 1370 Jadwin, Ste 113, Richland WA 99352, or send it to someone on the Executive Committee.

In closing I wish everyone a safe and enjoyable Holiday Season!

EWC-Hosts Award Banquet

EWC held its annual award banquet on December 6, 2012, at the Courtyard by Marriott in Richland, to honor local achievements. Chuck Mulkey, 2012 EWC President, kicked-off the event. Rampur Viswanath, one of the original leaders of the awards program, also attended.

Joe Estey, Prolepsis Training, provided the Spotlight Presentation. Many of you know Joe. He has been a featured expert in leadership and organizational development and has conducted many ES&H trainings in Eastern Washington. His presentation, as always, supplied many thought-provoking ideas to reflect upon.

The following four awards were presented at the banquet:

Hanford's C Farm Waste Retrieval Team of Washington River Protection Solutions (WRPS) received the U. S. Department of Energy Office of River Protection Manager's Award For Exemplary Service.

This award was given for innovation, regulatory compliance, execution, management, and waste minimization while emptying three high level waste tanks. This award was sponsored by the U.S. Department of Energy Office of River Protection.

The Environmental Permit Transitions Team of PNNL (Pacific Northwest National Laboratory) & PNSO (Pacific Northwest Site Office) received an *Excellence in Hazardous Materials Management Award* for accomplishment of a complex activity involving environmental air and nuclear permitting at multiple sites, multiple Federal agencies, and the Washington Department of Health. This award was sponsored by CH2MHILL Plateau Remediation Company.

The Waste Encapsulation and Storage Facility (WESF) received an *Excellence in Hazardous Materials Management Award* for accomplishments related to improved risk reduction in the storage of cesium and strontium. This award was sponsored by Washington River Protection Solutions.

The CHPRC (CH2MHill Plateau Remediation Company) Comprehensive Environmental Management Involvement Team also received a *Special Achievement Award* for successes with their Environmental Management System (EMS).

Their EMS system received certification as an International Organization for Standardization (ISO) 14001 system in 2012. Also, the award included the success of a zero waste and sustainable staff picnic that made CHPRC History.

This award was sponsored by the EWC ACHMM.

Mistakes of the Past

(And How Not to Repeat Them!) - Part 8

"Co-Disposal Creates Toxic Brew"

Harold Tilden, CHMM

[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 1960s and 1970s, awareness grew that hazardous byproducts should not simply be discharged into the environment. Industrial companies began to utilize a number of various methods to manage the byproducts that they once simply discharged to land or water. One easy and convenient method was called co-disposal. Existing municipal waste landfills would accept industrial waste and place it either in a dedicated landfill area or co-dispose of it in the same area with municipal solid waste. In some areas of the country, co-disposal was encouraged as a means of destroying industrial waste through the same biodegradation processes operating in municipal waste facilities.

Unfortunately, many municipal landfills of that era were little more than natural depressions or man-made excavations with no liners or subsurface monitoring. Garbage is often wet, and rainwater is not excluded from these landfills. Placement of industrial wastes in these landfills often resulted in the industrial waste containers deteriorating at a rapid rate, releasing the industrial waste into the waste matrix. This waste, often consisting of halogenated organics, was then carried into the environment through and along with the leachate from the decaying municipal waste. This mixed leachate contaminated groundwater at many locations throughout the country, sometimes close enough to cities to foul their source(s) of drinking water.

As of 1998, approximately 250 landfills that co-disposed of municipal solid waste and/or municipal sewage sludge along with industrial wastes were listed on EPA's National Priorities List (NPL). These sites accounted for 23% of the NPL at that time. Many of these sites require long-term remedial action, since the contaminated groundwater plume is often sizable and contains many varied contaminants. Removal of the source may be impractical if the landfill is large and industrial waste was commingled; in such cases the landfill must be capped and the groundwater pumped and treated for years. Some municipalities are paying (and will be paying for many years yet) large sums to remediate and maintain these closed landfills.

Kent Highlands Landfill, Kent, Washington (NPL Site)
Industrial waste commingled with municipal solid waste
Capped and undergoing groundwater monitoring since 1986

Pasco Landfill, Pasco, Washington
Separate industrial waste cell(s) adjacent to municipal waste cells.
Some industrial waste removed, backfilled, and capped; remedial action and groundwater monitoring ongoing since 1996

Lessons Learned:

- Dilution (via mixing solid waste with hazardous waste) is not the solution to pollution.
- Since liability is cradle to grave, make certain that the disposal facilities you use for waste are constructed adequately to contain the waste you are sending them.
- Follow the land disposal restrictions (40 CFR 268 and WAC 173-303-145); waste that has been properly treated prior to land disposal of the residue is much less likely to leach contaminants in a volume or concentration that would threaten the environment.
- Little Known Fact: The Toxicity Characteristic Leaching Procedure (TCLP) test required by the Dangerous Waste Regulations was developed by EPA to simulate what it termed "worst case disposal" – commingling of hazardous waste with municipal solid waste and disposing of it in a municipal landfill.

Upcoming Presentation in 2013 - Mark your Calendars!

We are pleased to announce that Ms. Adriane P. Borgias, MSEM, CHMM, will be back in the Tri Cities on Thursday, February 28, 2013, to provide a presentation to EWC members and friends on ***Polychlorinated Biphenyls, A New Understanding: Spokane River and the Toxics Reduction Strategy***. This informative presentation will provide a new understanding of Polychlorinated Biphenyls (PCBs): the changes, challenges, and solutions needed for effective control of PCBs at the point of production.

Many environmental managers are familiar with the standard regulatory limits of "50 ppm" for the use and disposal of materials and items containing PCBs. Unfortunately these limits are woefully inadequate for achieving the federal, state, and tribal water quality standards. For example, EPA PCB water quality standard (based on a fish consumption standard) under the National Toxics Program is 170 parts per quadrillion. States and Tribes can set stricter standards. For example, the water quality standard for the Spokane River, as set by the Spokane Tribe of Indians, is 3.4 parts per quadrillion.

This is 15 billion orders of magnitude smaller than the EPA's regulatory maximum of 50 ppm for inadvertently produced PCBs! Achieving such strict water quality standards is a huge challenge. To do so, we must address not only the legacy commercial uses of PCBs (commonly known as Aroclors) but, significantly, the residual PCBs that are still being legally produced as "inadvertent contaminants" in industrial processes. A specific example is PCBs in pigments used in inks, dyes, and other products. Until PCBs are controlled at the source, the cost of removing them from wastewater is borne by industries and the public as expensive end-of-pipe treatments.

There is mounting evidence that even low levels of persistent chemicals such as PCBs have negative biological impacts of endocrine and neurological systems. The EPA National Listing of Fish Advisories lists more than 1200 water bodies in the United States where the PCB concentrations in fish render it unsafe to eat.

The challenge of reducing PCBs at the source is a national, even global issue. These persistent organic pollutants are globally transported, do not easily degrade, and bioaccumulate in the food chain. A new approach to addressing toxics in the environment is needed.

Come and hear what a regional group of industries, environmental groups, and government representatives are doing towards achieving clean water in the Spokane River!

Adriane has a BS in Chemistry from the University of California, Berkeley, and an MS in Environmental Management from the University of San Francisco. She has been a Certified Hazardous Materials Manager since 1986 and has held leadership positions in the Alliance of Hazardous Materials Professionals (AHMP), including past National President. In 2010-2011, Ms. Borgias spent 4 months in Bangalore, India as a Fulbright-Nehru Environmental Leadership Scholar. Married to Dr. Brandan Borgias, PhD for more than 32 years, she has two daughters and a delightful 2-year-old grandson.

The Value of a Good Laugh!

From the Porcelain Press __

Laughter activates the chemistry of the will to live and increases our capacity to fight disease. Laughing relaxes the body and reduces problems associated with high blood pressure, strokes, arthritis, and ulcers. Some research suggests that laughter may also reduce the risk of heart disease. Historically, research has shown that distressing emotions (depression, anger, anxiety, and stress) are all related to heart disease. A study done at the University of Maryland Medical Center suggests that a good sense of humor and the ability to laugh at stressful situations helps mitigate the damaging physical effects of distressing emotions.

Medicine from Henny Youngman:

- *"Doctor, I have a ringing in my ears." "Don't answer"*
- *The Doctors says, "You'll live to be 60." "I am 60!" "See, what did I tell you?"*

Looking for New EWC Members and Volunteers!

Do you have what it takes?

Membership in the Eastern Washington Chapter (EWC) is open to all individuals regardless of CHMM status. However, you are encouraged to become certified, if you are interested. To join the local chapter, mail your name and contact information (membership application is available from the website at http://www.ewcachmm.org). The dues are $25 annually (or just $15 if you mail your check by December 31st).

EWC also needs volunteers! Why volunteer? Studies have shown that when you focus on someone other than yourself, it interrupts the usual tension-producing patterns that can cause stress. Moods and emotions, like optimism, joy, and control over one's fate, strengthen the immune system and make you healthier. Volunteers have a sense of reward just by helping the community be successful with conducting worthwhile projects. If you have any time at all to volunteer, please send a note to either Roni Swan at rhonda_j_roni_swan@rl.gov, Harold Tilden at harold.tilden@pnnl.gov or Chuck Mulkey at Charles_H_Mulkey@rl.gov.