

zephyr®

Currents

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Managing Risk or “The Marriage between RMP and PSM”

Q: When are environmental and safety regulations united as ‘one’, such that the violation of a safety standard also constitutes the violation of an environmental rule, and vice versa?

A: When your processes are subject both to EPA’s Risk Management Program (RMP) rule and OSHA’s Process Safety Management (PSM) standard.

PSM and RMP, like a good marriage, share much in common and the marriage bond, if you will, is represented by management actively supporting and championing both simultaneously.

According to an EPA safety alert, “Recurring Causes of Recent Chemical Accidents”, operator error is *not* a main root cause of chemical accidents. Numerous barriers have to fail before operator error can cause an accident. Before relying on operator action to maintain safe operations, priority should be given to designing for minimum hazard, installing safety devices, using safety warnings, and having written procedures and administrative controls. Furthermore, the alert suggests that risk should not be accepted until at least all of the above, and operator training, have been addressed.

How can a facility manager ensure that these priorities are met? This is where effective programs for managing environmental risk and process safety issues come in. After a decade of the RMP rule and fourteen years of the PSM standard, we would expect that most facilities subject to these rules should now have robust programs in place including:

- ◆ Effective implementation plans,
- ◆ Dynamic management systems, and



- ◆ Continual improvement through compliance audits, process hazard analyses (PHAs), and management of change (MOC)

Chances are you have programs to address these requirements, and terms like PHA, MOC, and PSSR just roll off the tongues of operators, maintenance technicians, engineers, and safety managers. Not unlike viruses, RMP and PSM seem to find their way into practically every aspect of an industrial facility’s day-to-day business, whether the facility is a chemical manufacturer, semiconductor, or power plant, a wastewater treatment facility, an LPG operation, or simply a facility that has an ammonia refrigeration system or that uses natural gas for other than fuel purposes.

The Organisation for Economic Co-operation and Development (OECD) is an intergovernmental group representing thirty industrialized countries that has conducted research on chemical accident prevention. Its 2005 “Report of the OECD Workshop on Lessons Learned from Chemical Accidents and

managing risk >>> continued on page 3

FROM THE TRENCHES

AERMOD: There's a New Model on the Block

You're a dispersion modeler. For many years your world has been ISC, the Industrial Source Complex model. Sure, there have been other flings, other models to use in certain situations. But you've always come back to ISC, for you know what makes her tick, what she can and can't do. You've been through a lot together, and she's always been there for you.

Well, there's a new model in town, and she's about to make you forget all about ISC. Her name is AERMOD, AMS/EPA Regulatory Model, and if you think you can handle her just because you and ISC were tight, you've got another thing coming.

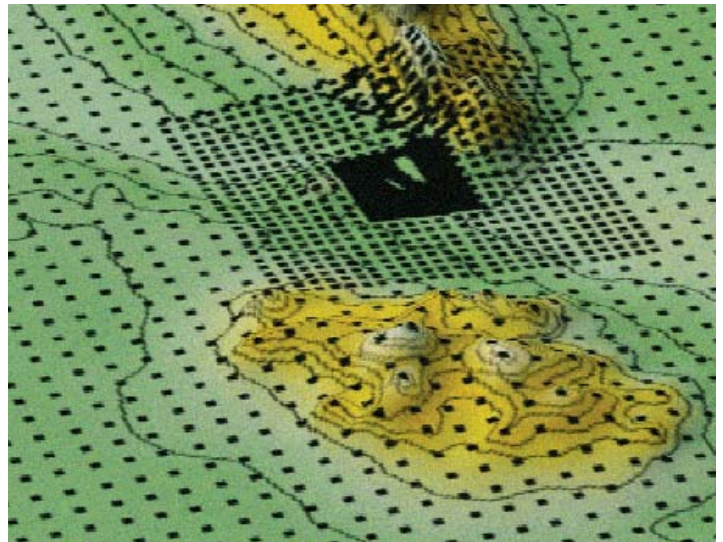
What the modeling community has been hearing rumors about for years is finally coming to pass. On December 9, 2006, AERMOD will replace ISC as the EPA's preferred dispersion model. After that date, you'll need special permission from your regulatory agency to use ISC in lieu of AERMOD.

By now you've probably heard how AERMOD is different from ISC — better boundary layer dispersion, more detailed meteorological data, and a pre-processor to more accurately handle the effects of terrain, just to name a few. The bottom line is that AERMOD has been under development for quite some time, and it is a significant improvement over ISC.

You may have also heard that AERMOD “looks” the same as ISC. The input and output files look basically the same, and vendors that sell the front-end software that helps run the models have crafted them such that, for the most part, you need only to click the “AERMOD button” instead of the “ISC button” to run the new model. Sounds simple enough, doesn't it?

What you may not have heard is that there are some significant new hurdles to clear before you get an AERMOD run going. For instance:

In the old days you ran PCRAMMET to create your met file for ISC. Now you must run AERMET, which is much more involved. In addition to surface and upper air meteorological files, you must also make decisions on variables such as surface roughness, surface albedo, and the Bowen ratio. Generally speaking, AERMOD isn't very sensitive to the last two variables, but what you assume for the surface roughness can have a significant impact on your results.



Gone are the days of just pulling receptor elevations off a topographical map; now you must run AERMAP to generate that and other information for each receptor to be used by AERMOD. The main input is Digital Elevation Model (DEM) data, which are easily obtained for the United States. But this becomes a bit more challenging if your modeling grid extends beyond the U.S.

In the old days, run time of dispersion models was such an issue that sometimes it was best to set up multiple runs going overnight, or all weekend long. The modeler was often the person with the PC that was fastest and had the most memory. Remember when modelers had the only PCs with a math co-processor? But, over time, PCs got faster, and run time concerns became a thing of the past. Unfortunately, AERMOD, with all of its improvements over ISC, has taken us backwards in that respect — run time is once again an issue for the modeling community. AERMOD can easily take more than a working day to churn through a run, and multiple-calendar-day runs are not unheard of. So, if it's been a while since your modeler has gotten a new machine, now might be a good time to upgrade.

The moral of this story is that you need to go ahead and find the best time to part ways with your old friend ISC and to tell her that, while it's been a good run, AERMOD can give you so much more than she ever could. Be prepared though, because like most new models capable of a lot more, she's also a lot more demanding. But if you play your cards right, this should be the start of a truly model friendship. ✨

Bill Jones
Project Manager

Incidents” concludes that “process accidents do not appear to be decreasing at the rate expected given present regulatory, professional and trade association initiatives.” According to the report, although new lessons are constantly being learned, *these lessons are not necessarily being implemented*. Further, they point to inadequately designed and/or executed process safety systems as the “root cause”.

Due to the high incidence of chemical accidents, the U.S. Chemical Safety and Hazard Investigation Board (CSB) was formed and charged with investigating industrial chemical accidents to identify root causes and issue recommendations. A review of CSB’s listing of chemical incidents reveals over fifty incidents at fixed facilities resulting in fires, explosions, shelter-in-place, evacuations, burns and other injuries, fatalities, and equipment damage during the first three weeks of June 2006. OSHA fines for such incidents can range from tens of thousands to millions of dollars, and EPA fines can be even higher — not to mention the costs due to injuries, deaths, litigation, environmental damage, equipment damage, and lost productivity. However, the long-term effects on those injured, the families of the survivors, the environment, and the facilities themselves, go far beyond the monetary costs.

According to the EPA safety alert, major chemical accidents share the following common factors:

- ◆ Inadequate hazard review or process hazards analysis
- ◆ Installation of pollution control equipment
- ◆ Use of inappropriate or poorly designed equipment
- ◆ Inadequate indications of process condition
- ◆ Warnings unheeded

Larger industrial facilities understand that a PSM and RMP program is not a one-shot deal or a one-time report that gets completed, only to be submitted and shelved. Smaller facilities, typically with fewer resources or knowledge, are less apt to have compliant PSM and RMP programs.

Requirements within the rules have different compliance timeframes: PHA revalidations and RMP submittal updates are due every five years, compliance audits every three years, and operating procedures must be certified annually. Having a system that actually *manages* your program can make a world of difference.

The required compliance audits are an excellent tool for managing continued improvement, assuming that post-audit actions are tracked and completed.

Like any regulation, such as IRS tax rules, the devil’s in the details. For example, the RMP rule requires consideration of potential offsite impacts where ‘offsite’ is not simply the area beyond the property line, because any areas of your facility to which the general public has access or where there is no controlled access, are considered offsite. With respect to PHAs, it’s not sufficient to just *complete* the PHA; you must also *track* and *address* the PHA recommendations . . . or suffer the consequences later.

The second edition of the OECD, *Guiding Principles for Chemical Accident Prevention, Preparedness and Response* includes ‘Golden Rules’ for preventing chemical accidents. Plain language interpretations of these management principles, with italics added for clarity, are provided below:

- ◆ Promote a “safety culture” that is known and accepted throughout the enterprise
- ◆ *Set the example from the top down*
- ◆ Establish [risk and] safety management systems and monitor/review their implementation
- ◆ *Provide the necessary resources and participate in the PSM/RMP program*
- ◆ Utilize “inherently safer technology” principles in designing and operating hazardous installations
- ◆ *Where feasible and available, design safer systems*
- ◆ Be especially diligent in managing change
- ◆ *Effectively use the MOC process*
- ◆ Prepare for any accidents that might occur
- ◆ *Accidents are called ‘accidents’ for a reason . . . they’re never planned or expected!*
- ◆ Seek continuous improvement
- ◆ *Never assume your RMP or PSM program is ‘complete’ . . .*

. . . sort of like never taking your marriage for granted! ✨

For more information, contact Joe Zupan at 512.879.6638 or jzupan@zephyrenv.com.

News Briefs

national news

EPA Reports Decreases in Greenhouse Gas Emissions

EPA released the latest U.S. greenhouse gas inventory report (1990 to 2004) prepared for the United Nations Framework on Climate Change, noting decreases in emissions in methane and nitrous oxide since 1990 of ten percent and two percent, respectively. The decreases were mainly due to landfill gas capture, improvements in natural gas treatment, storage and transfer systems, decreasing cattle populations, and mobile source controls. While methane and nitrous oxide are more potent greenhouse gases than carbon dioxide, EPA reported a 20-percent increase in carbon dioxide due to increased fuel combustion. It also reported a 57-percent increase in emissions of hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride due, primarily, to substitution of ozone depleting substances. For more information, contact Roger Brower at 410.312.7907 or rbrower@zephyrenv.com.

EPA to Reconsider Aspects of Clean Air Interstate Rule

EPA recently upheld the Clean Air Interstate Rule (CAIR), rejecting all administrative challenges from states and industry. CAIR uses emissions trading of nitrogen oxide (NO_x) and sulfur dioxide (SO₂) emissions from power plants in 28 states to reduce regional ozone and fine particulate matter (PM) pollution. The only revision to the rule was an extension of SO₂ emission restrictions to Delaware and New Jersey to meet fine PM limits under CAIR. In a related action, EPA denied a petition by North Carolina to require stricter emission reductions from power plants in thirteen other states that it claimed are preventing it from meeting the air quality standards for ozone and PM. For more information, contact Lou Corio at 410.312.7912 or lcorio@zephyrenv.com.

EPA Proposes Internal Combustion Engine Standards

As part of a consent decree with Environmental Defense, EPA has proposed rules intended to reduce emissions of air pollutants from stationary spark ignition internal combustion engines (ICEs), including a new Subpart JJJJ of the New Source Performance Standards (NSPS)

and an amended Subpart ZZZZ of the National Emission Standards for Hazardous Air Pollutants (NESHAPs). The new NSPS would limit emissions of nitrogen oxides, carbon monoxide, and non-methane hydrocarbons from ICEs constructed or modified after July 1, 2007. Applicability of the specific standards and compliance dates would depend on type and size of engine. The amended NESHAPs would limit emissions from existing, new and reconstructed ICEs located at area (minor) sources of HAP emissions or that have a site capacity rating less than or equal to 500 horsepower located at major sources of HAPs. The NESHAPs would either require engines to be certified by the manufacturer or to be tested to demonstrate compliance. The EPA must promulgate a final rule by December 20, 2007. For more information, contact Curtis Harder at 512.879.6643 or charder@zephyrenv.com.

EPA Reaffirms Clean Air Mercury Rule Decisions

The Clean Air Mercury Rule (CAMR), promulgated in March 2005, created a cap-and-trade program for utility mercury emissions. However, fourteen states and five environmental groups requested reconsideration of several specific aspects of the rule. On May 31, EPA took final action on those petitions and information submitted during the public comment period and is making minor changes to CAMR. For the most part, however, EPA reaffirmed the original rule. If you have any questions, please contact Jennifer Sharp Seinfeld, P.E. at 410.312.7915 or jseinfeld@zephyrenv.com.

EPA Revises RCRA Paperwork Requirements

In an attempt to reduce the paperwork burden on the regulated community and streamline its information collection requirements, EPA made changes to its Resource Conservation and Recovery Act (RCRA) rules on May 4. The primary changes relate to reduced records retention and submittal requirements, revised professional engineer certification requirements, and decreased inspection frequency for hazardous waste management units. EPA asserts that its goals of protecting human health and the environment will not be affected by these changes. For more information, contact Betty Moore at 512.879.6622 or bmoore@zephyrenv.com.

EPA Considers Reversing Aspects of Once-In-Always-In NESHAPS Policy

EPA is currently circulating for comments the draft of a change to its hazardous air pollutant (HAP) rules that would allow a major source to become an area source at any time by restricting its potential to emit HAPs. Emissions must be

less than 10 tons per year (tpy) of any single HAP or 25 tpy of any combination of HAPs to avoid most HAP-related emissions standards. Concerns raised by regulators include potential “backsliding” from Maximum Achievable Control Technology (MACT) controls, facilities that swing back and forth between major and area source status to avoid compliance dates, and Title V permitting of sources that switch to area source status. For more information, contact Michele Foss at 281.668.7342 or mfoss@zephyrenv.com.

EPA Finalizes Phase III Cooling Water Intake Rules

On June 1, EPA promulgated the third and final phase of requirements intended to protect aquatic life from cooling water intake structures. This “Phase III” rule establishes categorical requirements under the Clean Water Act for new offshore oil and gas extraction facilities that have a design intake flow of greater than 2 million gallons per day (MGD) and use at least 25 percent of the water exclusively for cooling purposes. Based on available scientific data and comments, EPA opted not to promulgate a national categorical rule for Phase III existing facilities. Discharges from existing facilities will be regulated through National Pollutant Discharge Elimination System (NPDES) permits on a case-by-case basis. For more information, contact Michele Foss at 281.668.7342 or mfoss@zephyrenv.com.

EPA Proposes Optical Gas Imaging to Detect Leaks

EPA is proposing optical gas imaging as a voluntary alternative work practice for finding leaking equipment, asserting that this new technology provides equal or better environmental protection than the current 25-year-old monitoring technology specified in Reference Method 21. This proposed new rule will affect, among others, chemical manufacturers, petroleum refineries, and manufacturers of coal products subject to New Source Performance Standards and National Emissions Standards for Hazardous Air Pollutants. For more information, contact Shahjabeen Hashim at 281.668.7359 or shashim@zephyrenv.com.

EPA Revises Oil and Gas Construction Storm Water Permitting Requirements

Reflecting the comprehensive energy policy enacted by Congress last year, EPA revised storm water regulations, effective June 12, to exclude construction-related storm water discharges at oil and gas facilities from NPDES permitting requirements, except in very limited instances. Construction activities that could result in discharges greater than a reportable quantity or could contribute to a violation of a water quality standard will still require permit coverage. However, individual states retain the right to regulate construction activities more stringently. For further information, contact either Brad Watson at 512.879.6624 (bwatson@zephyrenv.com) or Michele Foss at 281.668.7342 (mfoss@zephyrenv.com).

EPA Finalizes Startup, Shutdown and Malfunction Rules

On April 20, EPA amended portions of the Maximum Achievable Control Technology (MACT) rules and provided the following clarifications in the amendment’s preamble: 1) sources now have the flexibility to deviate from their start-up, shutdown, and malfunction (SSM) plans when necessary due to unanticipated types of malfunctions or emergencies and where safety considerations preclude following the plan, 2) the SSM plan is not part of the federal operating permits for sources, 3) sources, however, are required in their federal operating permits to minimize emissions during SSM events, 4) an SSM plan is neither a compliance plan nor a schedule of compliance as defined by the Clean Air Act, and 5) the public does not have unlimited access to a facility’s SSM plan unless EPA has previously obtained it under Section 114 authorization of the Clean Air Act. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

state news

TCEQ Proposes Changes to TPDES Multisector General Permit

The TCEQ is proposing renewal of TPDES Multi-Sector General Permit No. TXR050000, issued August 20, 2001, which authorizes the discharge of storm water associated with industrial activities. Several changes are proposed in the renewal and most industrial sectors will be affected. Existing facilities that require authorization under the renewed general permit must wait until it is issued before submitting either a new Notice of Intent or a conditional No Exposure Certification. For further information, contact Brad Watson at 512.879.6624 or bwatson@zephyrenv.com.

TCEQ Provides Electronic Option for Rule Comments

Beginning June 28, anyone may provide rulemaking comments to the TCEQ using the Agency’s online *eComments* resource. As with current public comment submissions, commenters must provide their names, addresses, and other pertinent information. In addition, comments may only be submitted for proposed rules during the active public comment period. The TCEQ will forward all comments to the appropriate technical staff for review and response and all comments will be electronically archived. For more information, contact Louisa Preston at 512.879.6646 or lpreston@zephyrenv.com.

TCEQ Pulls Back Proposed Permit-By-Rule Changes

Strong opposition from the regulated community has resulted in the TCEQ withdrawing the rule package that would have repealed the current PBRs 261 and 262 and replaced them with a new PBR 261. The revisions would also have created new PBRs

news briefs >>> continued on page 6

for temporary maintenance facilities, MSS emission releases and quantifiable anticipated (QUAN) emission releases. If the PBR revisions had been enacted as proposed, many facilities in the Air Pollutant Watch List areas would have been precluded from using the new PBR 261. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

TCEQ Proposes Standard Permit for Large Boilers

On April 14, the TCEQ proposed a new standard permit for larger boilers, providing an additional New Source Review authorization mechanism for units with heat inputs greater than 40 million British thermal units per hour. The proposed standard permit addresses expected maintenance, start-up and shutdown activities, including maximum emission limitations for nitrogen oxides, and would require renewal of the registration every ten years. For more information, contact Curtis Harder at 512.879.6643 or charder@zephyrenv.com.

TCEQ Proposes Changes to Emissions Credit Rule

The TCEQ is proposing changes to its Chapter 101 Emissions Credit Rules in response to EPA objections. The most substantial changes concern the elimination of discrete emission reduction credits (DERCs) generated after September 30, 2002 and the imposition of a September 2010 deadline for the use of any DERCs left in the DERC registry. In addition, under the proposed changes, only EPA will be able to approve interstate transactions or transactions between Texas nonattainment areas. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

TCEQ to Tighten RACT Rules in Houston Ozone Nonattainment Area

In June, the TCEQ initiated rulemaking projects to further reduce volatile organic compound (VOC) and nitrogen oxide (NO_x) emissions in the Houston-Galveston-Beaumont ozone nonattainment area. The TCEQ will be looking at VOC emissions controls for industrial wastewater, fugitives, storage, and transfer operations. Potential changes could involve making RACT emissions limits more stringent and lowering the emissions thresholds at which facilities become subject to the rules to draw in additional emissions sources. Current limits on emissions of highly reactive VOCs, now applicable only in Harris County, could be extended to the entire nonattainment area. The TCEQ is also looking at lowering the emission specifications for the NO_x Reasonably Available Control Technology (RACT) rule to achieve greater than the 80-percent reduction now in effect. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

TCEQ Repeals Property Line Standard

On June 11, the TCEQ's Chapter 111.155 rule, commonly referred to as the property line standard for particulate matter, ceased to exist. The standard previously required that the net concentration of particulate matter in the ambient air due to the emissions from a single site not exceed 400 micrograms per cubic meter (µg/m³) over a 1-hour period and 200 µg/m³ averaged over a 3-hour period. The decision was based partially on the existence of National Ambient Air Quality Standards for particulate matter and the TCEQ's Effects Screening Levels for species of particulate matter. For more information, contact Kevin Ellis at 512.879.6647 or kellis@zephyrenv.com. ✨

Calendar of Upcoming Events – Summer/Fall 2006

THE MEGA SYMPOSIUM EPA, DOE, EPRI, AWMA

August 28-31, 2006 • Baltimore, MD • <http://www.megasymposium.org/>

The sixth "Mega" Symposium on air pollutant controls for power plants, co-sponsored by the U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy (DOE), Electric Power Research Institute (EPRI) along with the Air & Waste Management Association (AWMA) will again cover SO₂, NO_x, particulate, mercury and air toxic emissions. This multi-pollutant conference will continue the Mega Symposium tradition of showcasing the latest development and operational experience with state-of-the-art methods for reducing air emissions from fossil-fueled boilers.

THE CHANGING FACE OF ENFORCEMENT FOR THE CEMENT INDUSTRY Zephyr Environmental Corporation

August 31, 2006 • Austin, TX • www.zephyrenv.com/workshop.html

This workshop is designed to help Plant Managers and Environmental Managers in the cement industry to prepare for EPA's recently announced enforcement initiatives directed toward the cement manufacturing industry. Speakers will include cement industry representatives, environmental attorneys experienced in the cement industry, and state and federal regulators.

calendar >>> continued on page 8

FROM THE PRESIDENT

FutureGen is in Our Future

Academia and the scientific community have been trying to come to grips with potential solutions to environmental problems such as air pollution and global climate change for years, and recently they have been joined by policy makers in industry and government (see *Currents*, April 2006, “The Rising Tide of Global Warming Regulations”). These issues, which continue to elicit passionate responses from both ends of the political spectrum, have even made it to the movie marquee as evidenced by “An Inconvenient Truth”, a film recently released to a broad U.S. audience.

A number of interesting projects are under development to revamp industrial processes, such as power generation, to minimize pollutants, while using traditional fossil fuels like coal. For example, CPS Energy (CPS) of San Antonio has recently permitted its new coal-fired J.K. Spruce Unit 2 amidst opposition from organized environmental groups. However, Joe Fulton, the CPS Director of Research and Environmental Management, reports that the new plant will be the best-controlled in the United States and goes on to explain that, with planned upgrades to controls at older plants, the net result will be no increased emissions. In fact, Fulton states that “with the new unit we’re going to reduce overall emissions of regulated pollutants by 60 percent.”

There is also genuine interest on the part of industry to minimize its “carbon footprint”, or the amounts of carbon dioxide (CO₂) and other greenhouse gases that are released into the atmosphere. In California, BP and Edison Mission Group plan to build a new \$1 billion, 500-MW hydrogen-fueled power plant, which plans to

sequester its carbon dioxide emissions as it generates “clean” electricity. Petroleum coke produced at California refineries would first be converted to hydrogen and CO₂, which will be captured and separated. The captured CO₂ would then be transported by pipeline to an oilfield and injected into reservoir rock formations thousands of feet underground. The net effect is expected to be both a stimulation of additional oil production and a long-term sequestration of the CO₂ away from the atmosphere.

Perhaps the most ambitious plan for reducing emissions from the generation of power from coal is the FutureGen project, sponsored by the U.S. Department of Energy, an industrial consortium of private energy industry and leading research partners. The \$1 billion prototype plant will establish the technical and economic feasibility of producing electricity and hydrogen from coal, while capturing and sequestering the CO₂ generated in the process. The FutureGen alliance released a final site RFP in March 2006, and site proposals were received from Ohio, Kentucky, West Virginia, Illinois, and Texas. Site selection is expected to be finalized within a year, and full-scale plant operations should be initiated in 2012.

More technology may not be the only answer to global climate change, but there is the potential for it to play a major role, particularly with global demand for goods and services increasing. It now appears that the U.S. government and industry are beginning to lead the way to more solutions. ✨

Joe Zupan
President



VAPOR INTRUSION: THE NEXT GREAT ENVIRONMENTAL CHALLENGE — AN UPDATE AWMA

September 13-15, 2006 ♦ Los Angeles, CA ♦ <http://www.awma.org/events/confs/vaporintrusion/default1.asp>

Defined by the U.S. Environmental Protection Agency as the “migration of volatile chemicals from the subsurface into overlying buildings,” vapor intrusion (VI) may represent a health risk to occupants of affected structures — even for sites in which remedial measures have already been implemented. This specialty conference will bring together nationally recognized scientists, engineers, regulators, communications experts, and attorneys with first-hand experience in the evaluation and remediation of VI. Based on real-life experiences and knowledge gained by the experts, attendees will have a newfound appreciation for the complex technical, legal, and risk communication issues that impact VI programs. As such, this conference will be especially beneficial to consulting engineers, representatives of responsible parties, environmental attorneys, and corporate and plant environmental managers facing a potential VI investigation.

VIRGINIA HAZARDOUS MATERIALS CONFERENCE AND EXPO VAHMRS, VDEM

September 25-29, 2006 ♦ Virginia Beach, VA ♦ <http://www.vdes.state.va.us/newsroom/events/hazmatconf2006.cfm>

The Virginia Association of Hazardous Materials Response Specialists (VAHMRS) in conjunction with the Virginia Department of Emergency Management (VDEM), are proud to announce the 23rd Annual Virginia Hazardous Materials Conference and Expo to be held September 25-29, 2006. This year’s conference, which will be held at the Sheraton and Hilton hotels on the Virginia Beach oceanfront, serves as the premier hazardous materials conference in the Mid-Atlantic region. The event features over 60 educational workshops and an exhibition area featuring the latest products and technology for the hazardous materials industry.

HOTZONE 2006 EPA, USDHS, et al

October 26-29, 2006 ♦ Houston, TX ♦ <http://www.hotzone.org/hotzone/default.htm>

The HOTZONE Committee is composed of representatives from the local, state, and federal levels of the HAZMAT response community serving Federal Region 6. It is the vision of the HOTZONE Committee to establish an annual training conference in order to continuously improve HAZMAT technical training and promote professional relationships within Region 6 as well as meet the unique needs of this region. ☀

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