March 2008
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Lake Michigan States Section Air & Waste Management Association Newsletter©

Mark your calendar and reserve the date! The **LM-A&WMA 2008 Waste Conference** will be held on:

April 15, 2008
at
Jenner & Block, LLP
330 North Wabash Avenue
Chicago, IL

The agenda is in the process of being finalized. Session topics tentatively include:

* Regulatory & Enforcement Update Panel
* The Latest on Redeveloping Impacted Property
* Waste Discharges to Lake Michigan
* Remediation Technology Update
* Sustainable Business and Corporate Environmental Responsibility

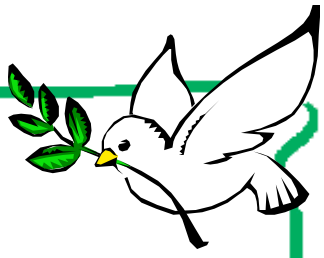
This will be a full day conference with a multitude of expert speakers, exhibitors and optimum networking opportunities.

If you are interested in being a potential speaker or your firm wishes to exhibit, please contact Deb Jacobson at (630) 472-5019, djacobso@wmrc.hazard.uiuc.edu.

Full conference brochure will be distributed shortly, watch your mail or check our website for updates: www.LMAWMA.org

Farewell Good Friend

Steve Rothblatt was a true gentlemen and true professional. I knew him off and on throughout his career and mine. Although we were always on the other side of the table, his dedication to protecting the environment while maintaining professional and collegial relationships was striking. When he had to cancel his last appearance at the annual section air conference, he called and asked if we would mind if he sent a substitute and then, as I understand it, spend considerable time on the telephone helping prepare the presentation. I cannot help but think that his professionalism, gentleness, and good humor represented the man behind the job. That is why we have chosen to publish the following personal tribute to Steve written by his sister and given at his funeral.



You know, I have always loved proudly telling people about my brother, Steve. How ironic that now, when I finally have this captive audience, I am so overcome by the circumstances – But as long as I've got you here…

Here's the truth, Steve was the most **ordinary** guy and the most **extraordinary** guy.

Steve made friends wherever he went – and I'm not just talking about the boat club and the office – I'm talking about the world. What are today's new buzz words — "green" and "global?" Let's just say Steve was a forerunner of many great movements. He worked with neighbors on committees to maintain and improve the natural beauty and quality of his local community. And he and his colleagues worked with Indian Chiefs in America and officials in Canada, Asia and Europe to improve the greater environment.

But I'd like to back up a little and recall some childhood memories — those ordinary ones that are the substance of life.

Maybe some of you will remember childhood trips with your family like I do – sharing that back seat for 13 hour car rides. No short plane trips with video games and IPODs for us. We were playing license plate bingo and other car games, fighting over sleeping space in the back seat – no seat belts – we were vying for space around the hump on the floor. And guess what, for us, a hotel in Florida wasn't at the end – it was Omaha, Nebraska and holidays with babi and zadi and sharing rooms with all our cousins. But it was an adventure. And the greatest adventure – when Dad couldn't come with – was when we took the Burlington Zephyr train all the way – eating in the dining car, opening and shutting enormous doors between cars – hoping there was a seat up in the dome.

Because of those childhood memories of trips together, Steve and I had an adult adventure, just the two of us, about a year ago when we already knew how precious time was. We enjoyed 5 days exploring southern Florida. Despite all the time I had spent in the area, Steve opened my eyes to the beauty of the waterways and marshlands, the vitality of the marine life – things that I was always too busy to stop and appreciate.

Continued on page 3.

Farewell Good Friend

Now not all of my childhood memories were so positive. To be honest with you – sometimes I was more than a bit scared by my older brother. Every Saturday night when our parents went out, he would go in the basement and try (usually successfully) to concoct bombs. But it was a different time when we grew up. Today he'd be arrested at 13 as a terrorist, in those days, he and his friends were just precocious experimenters. And guess what – none of them <u>became</u> terrorists – just highly regarded engineers, doctors, scientists, or lawyers.

Steve's route went from assembling winning science fair projects to earning a degree in chemical engineering and then a law degree. One career step at the Environmental Protection Agency of the City of Chicago, led to a position with the Federal EPA.

His coworkers can tell you more of his stories – but his family knows one of his proudest accomplishments was fairly recently, when he taught a seminar at Yale. Perhaps the family should have all worn the souvenir Yale T shirts he bought us as a tribute to him today.

Maybe we didn't look much alike and maybe our tastes and interests differed in various areas—a listing sailboat makes for a screaming sister – and don't even talk to me about hunting — but I truly treasured that we always found that bond that a shared history unites. We were blessed with wonderful, loving, and supportive
Parents, who encouraged us to be close and we followed their lead.

We've gone over this many times – I know it's not about me –

But these are the things I will so miss about him –

First, I will miss that he'd always let it be about me – like at all of our monthly lunch outings when he knew it would just be best if Deby eats where she wants.

I will miss sharing books on tape with him (although many of his choices were the masters and commander series)

I will, of course, miss sailing with Steve, although half the time I would be asking him how do we know when we're done – at least with golf it ends after 18 holes?

I will miss someone who will caller ID me and always take my call

And I hope he thought I was a good sister to him –

Continued on page 4.

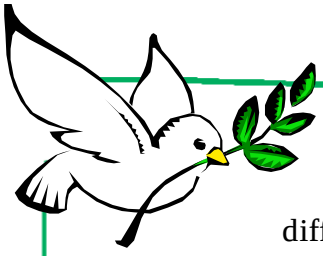
Farewell Good Friend

After all, I did always pretend that I really was interested in hour lectures on the newest sewer and water intake systems of each community.

I would like Steve's friends and his co-workers to know how much we thank them for their continued support and encouragement.

And I have so much respect and gratitude for Jeanne. Steve found a great wife, mother, companion, and friend in her as they sailed through life (oh just one sailing metaphor is okay). Of course, I especially respect her because she **also** let him know when some of his things just weren't her things – and she let him just go enjoy himself on his own. But not in his illness – in this battle that nobody wanted to be a part of – she became the commander. She was there with not only her emotional support, but her physical help.

I would like my nephew and niece, Dave and Joanna, to know how proud their Dad was of them. Both sensitive and thoughtful young adults, he just loved watching them grow and mature, the Rock Star and the Investor, he took pride in their accomplishments, but honestly just wanted them to be happy. And our greatest tribute to Steve would be to follow his lead and have a positive outlook on life – enjoy every day. Take in and give back. Let your interests become your passions — and live your dreams.



It has been my privilege to know Steve for 30 years. As an environmental consultant I had many meetings with him, most on difficult regulatory or permitting issues for my clients. As a fellow Board member of the Lake Michigan States Section of the Air & Waste Management Association, I worked closely with Steve for over five years during the 1980s and enjoyed his presentations and camaderie during the many years afterward at AWMA conferences. In her book, "Science and Health with Key to the Scriptures," Mary Baker Eddy, founder of Christian Science, states, "What we most need is the prayer of fervent desire for growth in grace, expressed in patience, meekness, love, and good deeds." As I recall the many hours spent with Steve, I am struck by his effortless expression of grace and how it was manifested in these four qualities — his patience in listening to all sides of a discussion before making a decision, the quiet dignity of his humility in exercising his leadership responsibilities, the genuine affection which he so naturally gave to those of us privileged to be his friends, for the countless good works he did in his professional and personal lives. He was indeed a man of great grace. He brought out the best in each of us.

Perry Fisher

2008 Seminar Schedule

Below is the current conference schedule for 2007. If you are interested in assisting with any of the events please contact the conference chair or Programs Chair, Ferdinand Alido at (312) 836-3922 or ferdinand.alido@nav-international.com.

In an effort to control costs, we are always interested in offers of meeting space at reduced or minimal costs. If you can provide meeting space for an event, please contact the conference chair.

Date	Title/Topic	Location	Event Chair/s
April 15, 2008	Waste Conference	Jenner & Block	D. Jacobson (630) 472-5019
May 2, 2008	Annual Luncheon	TBD	Ferdinand Alido (312) 836-3922
June ??, 2008	Homeland Security	TBD	D. Jacobson (630) 472-5019
TBD	Criminal Enforcement	TBD	Jim Harrington (312) 849-8252

Additional seminar subjects will be discussed at the Board of Directors meeting on February 27, 2008. If you have a suggestion or would like to assist with a seminar please contact Ferdinand Alido, Program Chair at (312) 836-3922 or ferdinand.alido@nav-international.com, or join us at the Board of Directors meeting. ***Board meetings are open to all members to attend. Your attendance and input are always welcome.***

New Members

Dean Apostolopoulos
Clean Air Engineering

Erin Augustine
Fishbeck, Thompson, Carr & Huber

Andrew Baner
Pfizer Inc.

Jill Baumgartner
University of Wisconsin-Madison

Suman Bir

Jerry Bovee
Bovee Environmental

Michael Brom
Potash Corp.

Larry Brown
BWF America, Inc.

Danielle Cella
Illinois Institute of Technology

John Connolly
Illinois Investment Trust

Amy Dean
Fishbeck, Thompson, Carr & Huber, Inc.

Jennifer Dunn
URS Corporation

Gregory Eirschele
RTP Environmental Associates, Inc.

Rebecca Flasck
Fishbeck, Thompson, Carr & Huber

David Gay
University of Illinois

Stephen Goetz
URS Corp.

Karl Karg
Latham & Watkins

Joi Kwiatkowski
URS Corporation

Illinois organizations receive awards for achievements in environmental protection

The Waste Management and Research Center (WMRC) joined Governor Rod R. Blagojevich in honoring 22 Illinois companies and organizations for their significant achievements in protecting the environment and boosting the economy. The Governor's Pollution Prevention Awards and the Illinois Sustainable Technology Awards were presented in Glen Ellyn during a luncheon. This is the 21st consecutive year the awards were presented by WMRC, a division of the Illinois Department of Natural Resources (IDNR).

"These organizations are leading the way in finding and using new ways to reduce waste and protect the environment. They have made an ongoing commitment to prevent pollution that, in the long run, will make their employees and our communities healthier," said Gov. Blagojevich.

"Gov. Blagojevich and I applaud the accomplishments of these award winners in reducing and recycling waste to help us conserve valuable natural resources while keeping our land, air and water clean," said IDNR Acting Director Sam Flood.

The Pollution Prevention (P2) projects recognized through the Governor's Pollution Prevention Awards program produced millions of dollars in savings in material and disposal costs. The award winners prevented hundreds of tons of waste materials from being released into the environment and saved millions of gallons of wastewater from being sent to treatment facilities. The Illinois Sustainable Technology Award recognizes a novel technology or process that leads to significant waste reduction, waste elimination, or environmental impact.

"These businesses and organizations have proven that pollution prevention makes good sense for the environmental and economic health of Illinois," said George Vander Velde, WMRC Director "They have achieved their pollution prevention goals and saved millions of dollars in pollution control, waste disposal, energy, and raw material costs."

The 2007 award winners are listed below. Information on the Governor's Pollution Prevention Awards program and technical assistance on pollution prevention and energy efficiency are available from the Waste Management and Research Center, One Hazelwood Drive, Champaign, IL 61820, phone 217/333-8940, **http://www.wmrc.uiuc.edu/**.

2007 Illinois Sustainable Technology Award winners

Colbert Packaging Corp in Lake Forest developed BlisterGuard and EnviroGuard, which replace the traditional plastic clamshell commonly used for retail display. Both products are pilfer resistant, use more environmentally friendly material, provide ample space for manufacturers' product branding and are easily recyclable by consumers. These products reduce or eliminate petroleum-based plastics and are printed using soy-based inks.

Crown Cork & Seal Beverage Division in Kankakee improved its spray machines to operate reliably at much lower pressures. A new system also monitors the spray to ensure proper application of the interior can coating. The system has allowed the plant to reduce interior coatings per can and save $250,000. Hazardous emissions have been reduced by 22.5 tons.

2007 Governor's Pollution Prevention Award winners

Abbott in North Chicago implemented projects to reduce fresh water usage, which saved more than 3 million gallons per year. Isopropyl alcohol is now segregated for reuse instead of going to a water treatment facility. Abbott also developed a process change that will reduce use of hazardous solvents up to 60%.

Akzo Nobel Non-Stick Coatings in Des Plaines has a goal to remove all hazardous air pollutants from its coatings. This year all of these solvents were removed from 20 coatings products, cutting emissions more than one ton. An additional reduction of 3/4 of a ton in hazardous emissions is expected in the upcoming year.

All-Brite Anodizing Co. in Northlake developed methods to extend the life of its Nickel Seal bath, converted to continuous pretreatment of its acid recycling, and developed a filter system to recycle the tank acid. This saves the small company over $12,000 per year.

Amerikal Products Corporation in Waukegan developed a biodegradable blanket and roller wash for offset printers. This product offers a viable alternative to petroleum based washes, which dramatically reduces or eliminates harmful chemicals while offsetting millions of gallons of petroleum each year. Additionally, Amerikal developed a single step fountain solution to run without alcohol.

Cadbury Adams in Rockford developed a non-contact system to provide cooling water to process equipment. Using this system in the three chiller cooling towers means discharge to the sanitary district has been reduced by more than 8 million gallons at a savings of $13 million dollars.

Caterpillar Inc. Hydraulics and Hydraulic Systems in Joliet implemented a flame sprayed coating for its truck suspension system, replacing a chroming process. As a result of this change, the plan will reduce hazardous waste by 700,000 pounds annually and save 14 million gallons of water. It also will save the company an estimated $280,000 per year. This project is the culmination of more than five years work to develop and implement an environmentally friendly alternative to hard chrome plating.

Caterpillar Inc. Cast Metals Organization (CMO) in Mapleton had a team that looked at the regulation requiring scrap to be free of Hazardous Air Pollutants. The team developed a program that informed the Foundry about the scrap suppliers' ability to provide acceptable product. Mapleton worked with the American Foundry Society to help produce a rule that would not only meet strict quality requirements, but would allow foundries to continue to recycle certain types of scrap and maintain a competitive cost structure.

Caterpillar Inc. Mossville Engine Center (MEC) in Mossville formed a team to look at used oil re-use and recycle processes that forced MEC to send large amounts of used oil off-site for recycling, instead of reclaiming it for re-use on-site. Based on the team's recommendations, the facility developed two system updates, installed a newer, more effective dehydrator and an underground pipeline. The resulting benefits included a total savings of $816,851 for the year and a reduction of about 208,000 gallons of oil.

Cintas Corporation in Rockford is an industrial laundry facility, which completed projects aimed at improving wastewater discharge compliance, reducing the amount of water used and discharged, and reducing the amount of energy used. Cintas installed a new clarifier and equalization tank for wastewater pretreatment, a wastewater heat re-claimer, a boiler stack economizer, and more efficient washers and dryers. The new process allowed Cintas to reduce freshwater usage by 25%, reduce the volume of wastewater discharged by 29%, and reduce natural gas consumption by over 28%.

Consolidated Printing in Chicago replaced its petroleum-based press and blanket washes with more environmentally responsible cleaners made from bean and seed esters. Consolidated reduced its volatile organic carbon emissions by 600 lbs, and increased the life of its press rollers, which saved $7,500 per year. Consolidated also converted to an electronic ordering and approval system to reduce the printing of hard paper proofs for their clients, and purchased a digital press for smaller orders, which has reduced paper and ink wastes.

Crest Industries of New Lenox manufactures industrial paints and coatings. Crest implemented several projects including installing separate lines of unpigmented and pigmented products. Previously, during a batch changeover, up to 100 gallons of solvent were used to clean the filling equipment. Now, with the dedicated line, only 20 to 30 gallons of solvent are required. Crest reduced its hazardous waste generation by over 13,000 gallons per year, reduced its annual cleaning solvent purchases by $43,000, and saved $6,000 in disposal costs.

Electronic Interconnect Inc. (EI) in Elk Grove Village is a Printed Circuit Board manufacturer. EI initiated several projects to decrease its chemical consumption and waste generation by a range of 10 to 45% for eight major chemicals. The liquid hazardous waste generated was reduced by 40% in a period of two years, which is almost 40,000 gallons per year. EI also substituted less hazardous chemicals in other processes and eliminated the in-house consumption of lead containing materials.

2007 Governor's Pollution Prevention Award winners (con't.)

Farmland Foods in Monmouth installed two hog coolers onsite, which were complemented with a large trim blender, and electrical switchgear. This resulted in reductions in water, CO2, and energy use in the meat cooling process. Water usage was cut by 34 million gallons per year, CO2 use was reduced by 2.7 million lbs, and energy use dropped by 5.2 million kWh. The projects collectively reduce greenhouse gas emissions by at least 9.7 million lbs annually, and saves the company over $8 million per year. Other significant benefits include a reduction in product shrinkage and improvements in labor savings.

GE Healthcare in Arlington Heights is a manufacturer of radiopharmaceuticals that are used in various imaging techniques. GE Healthcare implemented a waste reduction project to reduce the amount of Low Level Waste generated in manufacturing areas. By providing employees with the ability to segregate waste at the point of generation, an annual volume reduction of approximately 34% was realized. An estimated annual savings of $39,000 in disposal and labor costs was realized by this project.

HN Automotive Inc (HNAI) in Effingham initiated a Tooling Management Program, which saw a tooling costs decrease of over 30%, a savings of more than $300,000. It also installed a machine to compress metal chips from machining operations into cylindrical pucks that are sent back to the foundry to make new castings. HNAI upgraded the compressed air system, reducing annual energy usage by 350,000 kWh, a savings of over $20,000 per year. A membrane filtration system was installed to remove water from liquid wastes, which reduced water use over 100,000 gallons per year and saved more than $30,000.

Horigan Urban Forest Products, Inc. in Glenview is committed to recycling trees from the urban forest. Previously, most trees that were removed from the Chicago area were chipped for mulch or cut for firewood. Horigan now turns trees cut down on residential, commercial or public property into kiln-dried lumber for use by homeowners or artisans. By using trees from local sources, Horigan reduces the number of trees removed from the forest, reduces the amount of fuel consumption for transporting lumber, and reduces the amount of carbon released into the atmosphere by sequestering carbon as hardwood lumber.

International Truck and Engine in Melrose Park developed a new coating for the spray coating process for the new engines it manufactures. The prior engines needed to be completely spray-painted. The new coating is water-based, contributing to a reduction of hazardous emissions. Additionally, this coating covers an average of 23 engines per gallon; the old blue coat paint covered only four engines per gallon. The change resulted in annual reductions of paint use by 82%, hazardous emissions by 83%, and paint sludge waste by 12.5%. The facility's efforts have resulted in an annual savings of $115,000.

Koppers Inc. in Stickney implemented pollution prevention projects that reduced its hazardous waste generation by 70%, natural gas usage by 129,000 therms per year, and electricity consumption by 1.96 million kWhr per year. The projects saved $2.2 million per year. Koppers added exhausters to its process and a vapor ejector system. The exhausters separate phthalic anhydride from a byproducts stream and return it to the refining process, which increased product yield and reduced hazardous waste. Koppers also implemented a system that minimized the compressed air feed during low production. The reduced airflow has led to a decrease in energy consumption, a reduction in emissions, and an increase in product yield.

Nalco Company in Bedford Park is a specialty chemical company. The plant made improvements to recover more product from its manufacturing process and decrease the use of steam. These changes saved millions of pounds of products, reduced several tons of air emissions, and reduced the overall gas usage at the plant. The overall savings from these projects totaled over $600,000. Nalco also provides idled buildings to various governmental and local agencies for use in training drills, benefiting emergency response teams and hospitals.

New Holland Apartments in Danville is a five-story brick structure that was renovated in a way that combines historic restoration, affordable housing, and green design and technologies. The Holland was an abandoned building awaiting demolition until Crosspoint Human Services purchased it and restored it. A Geothermal unit was installed to provide energy efficient cooling and heating that is individual apartment controlled. Thermal windows and Energy Star rated appliances were installed to save energy. Period brick was reclaimed from nearby demolitions to replace architectural features long ago removed by former owners.

Less Paint Is More at International Truck and Engine Corporation

International Truck and Engine Corporation (http://www.internationalengines.com/index.aspx) participated in the Illinois Waste Management and Research Center's (WMRC's) Cutting Edge Partnership to reduce the amount of coating and volatile organic compounds (VOCs) used in their production process.

Background:
International Truck and Engine's Melrose Park facility manufactures inline six cylinder diesel engines that are used for Class 6 and 7 trucks and school buses. Since it's existence it has manufactured more than 1.5 millions engines over the years and was one of the first Diesel Engine Manufacturers in North America to be ISO14001 Certified.

As part of their commitment to the environment and ISO14001, they are continually seeking new opportunities for pollution prevention projects. The manufacturing of engines at the Melrose Park Plant requires engines to be painted to prevent rust.

Pollution Prevention Project:

The plant has recently implemented the manufacturing of their new I-326 2007 EPA compliant diesel engine. The engine includes parts such as the cylinder block, crankcase, and oil pan, which already come to the facility with a powder-coat. All engines manufactured prior to the January 2007 model at the plant were completely spray painted for protection. Even though the new engine came with some powder-coated components that did not require repainting (Figure 1).

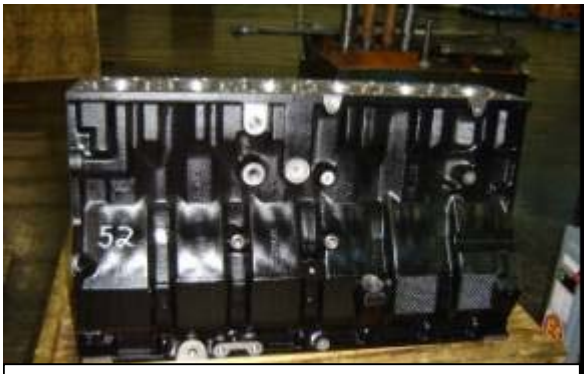


Figure 1: Cylinder Block with Powder Coat

This project was to find a more effective, efficient, and environmentally friendly alternative that still fully complied with EPA standards. Engine components that needed protection were identified and a new paint that satisfied requirements was developed. At the start of the project, the amount of paint used in the manufacturing process was identified. The paint booth meters measured the amount of paint used, which was then monitored and recorded in our environmental management system.


Figure 2: Blue Paint on Engine Prior to January 2007

The Production and Environmental departments of the plant worked together with the technical and sales personnel from Hentzen Coatings, Inc. (http://www.hentzen.com) to formulate a compliant product that met International Truck and Engine Corporation specifications and EPA Air Permit requirements. The new coating is water-based, which contributes to a reduction of VOC emissions. Shown in Figure 2 is an engine covered in the Blue Coat paint used on all engines of this model prior to January 2007. A gallon of Blue Coat paint covered only 4 engines (4 engines/gallon).

Now the Clear Coat (Figure 3) covers an average of 23 engines per gallon. This allows maximum protection of the engines with

Less Paint Is More (con't.)

minimum usage of paint. Manufacturing Engineers, Test & Paint Process Engineers, Quality Engineers, and the Environmental Team, along with the support of the plant management, implemented this project. The Clear Coat paint is used with a pre-programmed robot to coat only certain areas of the engine. This clear coat allows a bolder look at the engine, allowing all parts to be seen in their natural or machined finish (Figure 3).

Figure 3: Engine with Clear Coat

Benefits:
This project benefited their efforts in waste reduction and cost savings. With a reduction in paint usage, waste collection of paint sludge was considerably decreased. Using the paint usage of 23 engines per gallon, the annual paint savings and the reduction in waste disposal cost related to paint sludge disposal were calculated.

- Paint Reduction (from 2006 to 2007) = 82% (about 11,000 gallons/year)
- Paint Sludge Reduction (from 2006 to 2007) = 12.5%
- Annualized Savings (paint usage & waste disposal savings) = $ 115,000/year

For more information contact: Kristin Pelizza, Environmental Manager, International Truck and Engine Corporation, (708) 865-4359; or Malcolm Boyle, The Illinois Waste Management and Research Center (WMRC), (630) 472-5028

New City of Chicago Stormwater Ordinance

By Christopher P. Perzan

On January 1, 2008 a new ordinance governing storm water management at developments in the City of Chicago takes effect for all regulated developments seeking a sewer or water permit from the City after that date. The ordinance applies to developments in excess of 15,000 square feet in area, those that result in an impervious surface greater than 7,500 sq.ft., or those that result in discharges into waters or a separate sewer system. Exceptions to the ordinance include residential developments (defined as a regulated development which will result in single and two family homes), airports and industrial and municipal facilities with NPDES storm water discharge permits.

The ordinance requires a developer to prepare and submit a stormwater management plan for the City's approval. The plan requires a stormwater management system designed to control the peak rate of discharge, incorporating a maximum permissible release rate for regulated developments with larger amounts of impermeable surface. The plan also must incorporate best management practices (BMPs) to reduce the volume of discharged stormwater by capturing one-half of runoff from all impervious surfaces or reduce impervious surfaces by fifteen percent from existing conditions where there is no direct discharge to waters or a sewer system. Regulations adopted by the Department of Water Management spell out more specific requirements, including BMPs. Variances may be available on a showing of exceptional circumstances.

The ordinance incorporates permit application fees ranging from $1,000 to $3,000. The ordinance is enforceable by cease and desist orders and fines, including a civil penalty of between $5,000 and $10,000 for failure to have a plan.

Anyone with questions can contact Chris Perzan at (312) 609-0500 or by email at cperzan@brownfieldcounsel.com.

RECENT DEVELOPMENTS AFFECTING THE CHEMICAL INDUSTRY CHEMICAL RELEASES, THEFT OR DIVERSION, SABOTAGE OR CONTAMINATION

BY Carol L. Dorge

OVERVIEW OF NEW AUTHORITY

After 9/11, the Chemical and Transportation Industries were identified as among the critical infrastructure in this country. Presidential directives and industry initiatives initially addressed the vulnerabilities that were presented. But these voluntary initiatives were recognized as not enough. This article highlights the most recent regulations adopted to address risks presented by Chemical Facilities.

Significantly, the Department of Homeland Security or DHS published Appendix A, its list of Chemicals of Interest (COIs) and Screening Threshold Quantities (STQs) on November 20, 2007. 72 Fed. Reg. 65396-65435. This completes the chemical security regulation published as an "Interim Final Rule" –The chemical industry rule. 72 Fed. Reg. 17687-17745 (April 9, 2007).

A facility must complete calculations to determine whether it is a "Covered Facility" and a "Top Screen "analysis for Covered Facilities, through a secure DHS website, by January 22, 2008.

This rule identifies hundreds of COIs with multiple threat scenarios. This article provides highlights, and summarizes key aspects of the rule, but is not a complete analysis of the rule and all COIs that are covered. A facility should review Appendix A and the different calculation methods applicable to its own operations, in determining the rule's applicability.

COIs and STQs. The facilities that are covered by the rule are initially identified by the chemicals and quantities of chemicals they possess or plan to possess. Appendix A of the rule contains the Chemicals of Interest or COIs and Screening Threshold Quantities or STQs of these chemicals, which meet the Department's first level risk-related criteria.

The screening tool used in determining whether these affected facilities or "Chemical Facilities" are "Covered Facilities" presenting a high level of security risk is known as "Top-Screen", and is designed to be used through the CSAT system, a secure Department web site. Top-Screen solicits answers to a series of questions intended to assess the level of damage that could result from a terrorist incident at the facility.

The determination of risk is not cut and dried. This step involves consideration of site-specific factors beyond the nature and quantity of COIs that are present. It presents an opportunity for some Chemical Facilities to demonstrate they should not be found to be Covered Facilities, a determination ultimately made by DHS.

"Chemical Facilities" are facilities possessing these COIs in their STQs (subject to a few exemptions mentioned below). The transportation of these chemicals is subject to a separate rule, which is pending. Facilities most likely to be affected are manufacturing, commercial and distribution facilities, using and storing these COIs in their STQs.

Chemical Facilities determined to present a high level of security risk, in the Top-Screen analysis, are determined to be "Covered Facilities."

Applying Appendix A to the Chemicals at a Facility

The Appendix A COIs were determined to present a risk of:

Release including toxic, flammable and explosive materials,

Theft or Diversion including chemicals that may be used in weapons or explosives, chemical weapons and precursors, and weapons of mass effect, and/or

Homeland Security (con't.)

Sabotage or Contamination including chemicals that may present serious risks when mixed with other chemicals.

The method of calculating the STQs also differs, depending on the risk presented:

Release chemicals. There is a belief that a threat of release could involve multiple sources at a facility; therefore the total quantities are used. For the most part, it does not matter whether the chemical is being used or stored in any type of container. Examples of containers include: pipes, hoses, kettles, underground and above ground tanks, salt caverns, tank cars not in transit and other transportation containers not in transit, and many others.

Special rules apply to mixtures. Generally, for a mixture 1% or greater, the actual quantity of the chemical is counted, i.e., 5% x 100 lbs = 5 lbs. of the COI.

Chemicals in process intermediates and byproducts are also covered.

Threat and Diversion chemicals The STQs for explosive chemicals were established based upon consideration of commercial grade and packaging, and their potential use as explosives. The entire amount of the COI "at commercial grade or ACG" must be included in the calculation.

Chemical weapons and precursors having an STQ of CUM 100g require cumulative totals.

The STQs for chemicals of mass effect (WME) were established using DOT standards for chemicals that are poisonous be inhalation, as a reference point.

Propane, Chlorine and Ammonium Nitrate. The STQs for these chemical were established using a separate approach. The limits are higher than originally proposed. A facility should perform its calculation with reference to the table in Appendix A and the specific type of threat presented.

This is a general discussion of some major aspects of the rule. A facility should consult Appendix A for a complete list of COIs, STQs, and methods of calculation for a specific risk, to determine if it is regulated as a Chemical Facility, under this rule.

Top Screen

As already noted, the screening tool used in determining whether these affected facilities or "Chemical Facilities" are "Covered Facilities" presenting a high level of security risk is known as "Top-Screen", and is designed to be used through the CSAT system, a secure Department web site, by January 22. Access to CSAT is available to facilities through the DHS web site.

DHS is expected to make the risk evaluation and notify facilities that are determined to be "Covered Facilities."

Vulnerability Assessment

The April 9 rule describes the next step, which is the Vulnerability Assessment and is also submitted via CSAT. Covered Facilities will generally receive notification requiring them to submit Vulnerability Assessments within 90 days of that notification. The vulnerability assessment also involves site-specific factors and will be a second opportunity for a facility to show it should be placed in a lower tier, reflecting a relatively lower level of risk.

The Vulnerability Assessments has five fundamental steps, each with detailed instructions:

1. Identify the assets on the facility;
2. Identify threat scenarios for each asset;
3. Identify security vulnerabilities;
4. Apply the threat scenarios to each asset in light of the security measures in place and evaluate the likelihood and the degree to which the attack could succeed;
5. Countermeasures analysis.

Tiering. The Department will use the results of Vulnerability Assessments to assign Covered Facilities to 1 - 4 risk-based tiers. The tier will affect scheduling for submission of Site Security Plans and opportunities to utilize Alternative Security Programs.

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Site Security Plans

The rule also provides requirements for site security plans for "high risk" facilities, addressing the facility's Vulnerability Assessment and applicable risk-based performance standards. Each covered facility's Site Security Plan will be required to address each of the vulnerabilities identified in the Vulnerability Assessment.

Specified risks include:

(1) A VBIED (vehicle borne improvised explosive device); (2) a water-borne explosive device (if applicable); (3) an assault team; (4) individual(s) on the premises with explosives or a firearm, or (5) theft of certain chemicals; and (6) the possibility of insider or cyber sabotage.

Typically a facility's "layered" Site Security Plan will develop and explain measures to secure and monitor the perimeter and access to the facility; monitor the shipping and receiving of hazardous materials; deter cyber sabotage; train personnel for security purposes; address specific threats and vulnerabilities, and report incidents.

Alternative Security Programs. Depending upon a facility's tier, it may submit Alternative Security Programs. These may be programs established before these regulations were adopted.

Performance Standards. Performance will be "measured" against the measures a facility implements to protect against 19 or more enumerated items, e.g. secure the perimeter of the facility…deter cyber sabotage…train personnel and perform background checks. Performance standards will be risk based and may be better defined by future guidance and regulation.

EXEMPTIONS

Statutory exemptions. Statutory exemptions include public water supply systems and water treatment works, Department of Defense and Department of Energy facilities, facilities subject to regulation by the Nuclear Regulatory Commission and certain facilities subject to Coast Guard regulation under the Maritime Transportation Security Act of 2002.

Appendix A exemptions. The Appendix A regulations contain additional exemptions These include chemicals:

Structural— used as a structural components.

Janitorial—chemicals used for routine janitorial maintenance (meaning by an end user)

Food, drug, cosmetics—contained in food, drugs, cosmetics or other personal items used be employees at a facility,

Process water—contained in process water or non-contact cooling water drawn from the environment or municipal sources,

Air—as compressed air or a part of combustion,

Articles—as defined in 40 CFR 68.3

Solid waste. The rule exempts solid and hazardous waste regulated under RCRA. This exemption does not cover materials which are not RCRA solid wastes, such as discarded commercial chemical products, off-spec species, container residues or other materials subject to the recycling exemption in 40 CFR 261.33.

Condensate, crude oil, field gas, produced water—natural occurring hydrocarbon mixtures prior to entry of the mixture into a natural gas or petroleum refining process.

Laboratory chemicals have a partial exemption for a threat of release. They are regulated for their potential for theft or diversion, or sabotage. Universities are not exempt and chemicals used in research and development are not exempt.

Transportation. There have been a series of developments in the transportation area, also subject to DHS authority. DHS and DOT jointly

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issued a set of twenty-four "security action items" for the freight rail carriers of materials that are "toxic by inhalation" (TIH) (these materials are also referred to as "poisonous by inhalation" (PIH)). Measures to address four critical areas: (1) The establishment of secure storage areas for rail cars carrying TIH materials, (2) the expedited movement of trains transporting rail cars carrying TIH, (3) the positive and secure handoff of TIH rail cars at point of interchange and at points of origin and delivery, and (4) the minimization of unattended loaded tank cars carrying TIH materials. The rail carriers will submit plans to TSA for review.

Coast Guard. The Maritime Transportation Security Act of 2002 (MTSA) (Pub. L. 107-295, Nov. 25, 2002) enacted chapter 701 of Title 46, U.S. Code and required the Secretary of Homeland Security to issue regulations to strengthen the security of American ports and waterways and the ships that use them. Part 105 of title 33 of the Code of Federal Regulations imposed requirements on a range of maritime facilities, including hazardous material and petroleum facilities and facilities that receive barges carrying cargoes regulated by Subchapters D and O of Chapter I, Title 46, Code
of Federal Regulations or Certain Dangerous Cargoes. Under the Coast Guard's maritime security regulations, these facilities are required to perform security assessments, and then, based on these assessments, develop security plans, and implement security measures.

DHS ENFORCEMENT

The Department contemplates technical assistance and DHS involvement, hoping to minimize the need for enforcement. However, violations are subject to Orders for Compliance and civil penalties of not more than $25,000 per day for failure to comply with the Order. There are also procedures for ordering a facility to Cease Operations.

DHS REVIEW PROCESS AND APPEAL

Final agency action disapproving a vulnerability assessment or site security plan, along with Orders for Compliance and Orders to Cease Operations may be appealed by filing a Notice of Application for Review within 7 days of the adverse ruling. The Presiding Officer is a neutral adjudication officer who is a DHS employee. The Presiding Officer's decision may be appealed to the Secretary.

SENSITIVE INFORMATION

DHS provides for protection of "Chemical-terrorism vulnerability information" or CVI. "Covered persons" are persons with access to CVI. Each page of paper records is marked and other records (e.g. videotapes) are conspicuously marked. Federal employees are subject to civil penalties and other enforcement under subsection (j). DHS and covered persons destroy CVI when no longer needed pursuant to subsections (k)(1) and (k)(2)(A). State or local agencies are not required to destroy CVI that the agency is required to preserve under state or local law under subsection (k)(2)(B).

Ms. Dorge is an attorney with more than 20 years of expertise in the environmental area, including work with a wide range of industry. She has worked with the chemical, transportation and energy sectors, EPA, DOE, DOT and other authorities. She also has a masters in environmental engineering, and has served as a DOD contractor within the BRAC (base closure) program. Ms. Dorge has attended ABA conferences on Homeland Security in Washington D.C., as recently as January 17-18, 2008.

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Our client, an international multi-billion-dollar chemical organization, needs to hire a hands-on Environmental Engineer for three chemical plants in the Midwest region. This role will provide environmental expertise for three or four chemical plants in the Chicago area, northwest Indiana, and Cincinnati Ohio area; 35% travel. This position will be responsible for promoting environmental programs at the sites, including: program development and administration, EPA compliance, air issues, wastewater, solid waste, etc.

To be considered for this opportunity, the following criteria must be met:

- BS Chemical or Environmental Engineering, or related
- Strong environmental skills from chemical or related plants
- Multiple-site experience preferred
- EPA compliance, program development and improvements
- Air issues, wastewater, solid waste, training
- Must be a local south Chicago-area candidate; client will not provide a relocation package

If you possess the above criteria and have an interest in this opportunity, please forward an updated resume in Word format with salary history, to my attention. Once reviewed, I will contact you directly to discuss your background in more detail. Thank you.

Jane Dowling,
Technical Recruiting Assistant
ProfessionalOutlook, Inc.
jane@professionaloutlook.com

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SENIOR CLIENT SERVICE MANAGER

The Opportunity -RMT, Inc. is one of the leading environmental and engineering consulting firms in the country. We have been helping our clients solve their most difficult and diverse engineering and environmental challenges for over 30 years. With over 600 employees in eighteen offices in the United States and two international locations, we currently have an opportunity for a Senior Client Service Manager in our Chicago, IL office.

The Position -The Senior Client Service Manager will focus on client development and service to established clients. This position will lead sales, business development activities and direct and manage execution of consulting projects associated with RMT's business. Specific responsibilities include:

- Drive further sales development of clients through direct client contact, staff mentoring and coaching. The goal will be to capture follow-on work, expand RMT service offerings, and support RMT value propositions.

- Act as client advocate within RMT, providing client feedback to RMT on changing needs, trends, expectations and satisfaction and keeping clients informed of significant issues that might affect them.

- Project management, including financial management, contract negotiation, directing technical work, and client and regulatory liaison.

- Serve as technical resource for client and liaison with client and senior technical staff.

- Mentor project managers and technical staff.

Requirements -Qualified candidates will have a BS or BA degree in Engineering or other environmental related discipline with minimum 5 years in a client development capacity and a minimum of 15 years total environmental experience. **Specific experience in a similar role within an engineering consulting firm is required.** Ideal candidates will have existing relationships with clients in the Chicago ,Illinois metro area. A PE or PG registration in Illinois and an understanding of the application of regional environmental regulations is preferred. Candidates must have strong technical background and experience in conducting and directing environmental and related environmental engineering and compliance-based projects.

Successful candidate will have well developed interpersonal skills complemented by interaction with all levels of client organizations. Must be able to demonstrate excellent communication skills (verbal, written, proposal and presentation) and abilities. Candidate must be highly motivated person who can focus on RMT's strengths and relay and transfer that to client needs. Strong interpersonal and leadership skills must be demonstrated.

Physical Demands-Must be able to travel 25% of time. Must be able to use automobile and plane transportation. Will be required to view potential client work sites such as industrial plants, hazardous waste sites requiring walking and some climbing.

Benefits and Compensation-Compensation and benefits are highly competitive and include short-term incentive compensation, 401(k) plan, health and life insurance, disability, employee assistance program, time away from work, career development, employee referral program, etc. We value and support diversity and equal opportunities for employment.

To apply for this opening, please go to www.rmt.jobs
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AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS

Illinois – Indiana AIPG Section
Spring 2008 Section Meeting

Date: April 9, 2008

Time: 5:30 – 9:00 PM

Guest Speakers

Mr. Gregory W. Dunn, LPG
Program Manager
IEPA Voluntary Site Remediation

Speaker Topics

Regulatory Updates: 740/742, Vapor Intrusion, Community Right-To-Know, SRP Program Status and More...

Mr. James Adamson
Hydrogeologist
V3 Companies of Illinois

Mr. Stuart Dykstra
Director Natural Resources Division
V3 Companies of Illinois

Haiti: Finding Water Where There Was None

Meeting Location: The Morton Arboretum
4100 IL Rt. 53, Lisle, Illinois

You can visit www.mortonarb.org for directions. When arriving at the Arboretum proceed to the gate and tell the attendant you are there for the AIPG meeting and you will not be charged the entrance fee. Complementary hors d'oeuvers and a cash bar will be provided.

This event is free and open to the community practicing geological and geological engineering sciences in Illinois and Indiana.

Please R.S.V.P. to David Pyles at (630)325-1300 or DavidP@KPRGINC.COM

New Members (con't.)

Albert Lee
Shaw Environmental Inc.

David Lordi
Metro Water Reclamation Dist.

Eileen Openbrier
Abbott Laboratories

Donna Oswald
Civil & Environmental Consultants, Inc.

Christopher Perzan
Law Offices of Christopher P. Perzan, PC

Jenelle Reick
Brady Worldwide - Florist

Michael Saldarelli
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Thomas Skinner
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