AIR & WASTE MANAGEMENT ASSOCIATION
SINCE 1907

# Indiana NEWs

**January 2006**

News from the Indiana Chapter of the Air & Waste Management Association

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## *EPA Replaces Air Dispersion Model*

*By: Keith Baugues, Keramida Environmental, Inc.*

After more than 25 years of use, the U.S. Environmental Protection Agency has replaced the Industrial Source Complex (ISC3) model. On November 9, 2005, EPA published a notice in the Federal Register stating that AERMOD would replace ISC. Thirty days after publication (December 9, 2005) the notice became effective. Starting at that time there is a one-year phase-in period for AERMOD.

AERMOD will present a challenge for modelers. The model guidance is not complete (EPA ran out of funding). Many issues regarding the use of the model will need to be debated with state agencies, Regional EPA offices, and EPA headquarters to establish policies regarding the use of AERMOD. The main issues revolve around the processing of meteorological data: how to fill in missing data, how to deal with error/warning messages, development of data using gridded meteorology, and the use of land-use parameters in the processing of data. AERMOD runs five times slower than ISC. Although results will vary, AERMOD often predicts higher concentrations than ISC (10 to 15 percent higher). This conclusion is based upon a test case made by Keramida and is supported by EPA model comparison studies.

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## *Indiana Environmental Leaders Brave the Snow to Speak at December 2005 Winter Technical Meeting*

*By: Jaime K. Saylor, Hatchett & Hauck LLP*

Despite the significant snowfall which began during the opening minutes of the 4th Annual Winter Technical Meeting of the Indiana Chapter of the Air & Waste Management Association, the Indiana Chamber V.P. for Energy & Environmental affairs, IDEM program leaders, and the IDEM Commissioner all braved the storm to speak about current environmental issues in Indiana. About 60 members also ventured out to attend the meeting.

Vince Griffin of the Indiana Chamber of Commerce opened the meeting with a presentation about Indiana environment and energy issues for 2005-2006. He summarized key points for both the 2005 and 2006 legislative sessions. He also discussed important regulatory issues including the Annex 2001/Great Lakes Water Use Plan, the need for a drought plan, ozone attainment/nonattainment designations, the future for energy sources and use, and waste tires. In closing, Vince stressed that state legislators want to hear from people like A&WMA members, who have relevant and much-needed technical knowledge on many of these very important topics. Vince's powerpoint presentation, posted on the Indiana A&WMA website at http://www.inawma.org/files/2005-12-08_Vince_Griffin.ppt, includes slides explaining ways to contact your state legislators.

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## 2006-2007 Indiana Chapter Executive Board

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# *From the Chair*

*By: Board Chair, Kristen Gobbi-Belcredi, Keramida Environmental*

This is my first message in the Chapter newsletter as Chair for the Indiana A&WMA and I first want to thank Steve Dixon for his fine leadership during his term as Chair. I look forward to helping continue the valuable work the Chapter has been doing for so many years. Our December meeting was well attended and is becoming an annual tradition for the Chapter. Please read the summary of the meeting in the newsletter if you were not able to attend. Congratulations to our Officers and Directors elected during the Business Meeting portion of the program.

As you know, the main focus of the Chapter has always been on providing timely technical and regulatory environmental information to our members through technical meetings such as these we held in 2005, and our newsletters. These days, there are many more technological options at our disposal for transferring this information. We are exploring options for webinars and satellite meetings to expand our Technical Meeting outreach even further.

You might also notice that the article on RISC Default Closure Levels for TCE, beginning on page 3, addresses that topic for the second newsletter in a row. In response to the article in our November newsletter, we received a letter from IDEM Commissioner Thomas W. Easterly, P.E., DEE, QEP (past Chair of the Iron and Steel Committee of the International A&WMA) responding to assertions in the November article and providing the supporting documents for IDEM's position. Reflecting the A&WMA as a neutral forum for information exchange, we are pleased to bring this responsive article to Chapter members, along with links to the more detailed documents on IDEM's website. We invite Chapter members and others to contact us in the future if an article or technical session suggests an alternative position or additional information that should be brought to these pages.

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Our *thanks* to

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***for sponsoring the Indianapolis Chapter website, www.inawma.org***

## *IDEM Releases New RISC Numbers for TCE*

On January 4, 2006, the Indiana Department of Environmental Management ("IDEM") released new draft Risk Integrated System of Closure ("RISC") Default Closure Levels for Trichloroethylene ("TCE"). The IDEM announcement below briefly explains the process the Office of Land Quality used to derive new draft TCE cancer potency estimates, or slope factors, which are in turn used to calculate the RISC Default Closure Level values. This announcement is also available at http://www.in.gov/idem/land/risc/tce_announcement.html.

Table A compares the pre-2004 RISC TCE Default Closure Level values, the current ones adopted in July 2004, and the new 2006 draft values.

**Table A. Previous and Current (2004) TCE Default Closure Levels**

| | Soil | | | GW | Indoor Air |
|---|---|---|---|---|---|
| | Soil Direct mg/kg | Migration to GW mg/kg | Default Closure Level mg/kg | Default Closure Level mg/l | Chronic ug/m$^3$ |
| **Residential** | | | | | |
| **2003** | 45 | 0.057 | 0.057 | 0.005 | 11 |
| **2004** | 0.71 | 0.057 | 0.057 | 0.005 | 0.17 |
| **2006 Draft** | 4.9 | 0.057 | 0.057 | 0.005 | 1.2 |
| **Industrial** | | | | | |
| **2003** | 72 | 3.0 | 3.0 | 0.26 | 24 |
| **2004** | 1.1 | 0.082 | 0.082 | 0.0072 | 0.36 |
| **2006 Draft** | 24 | 0.35* | 0.35 | 0.031* | 7.9 |

*these numbers reflect the non-carcinogenic end point, which results in a moderately lower closure level than the carcinogenic end point.

If you are interested in submitting comments on the technical document that was used to derive the slope factors, IDEM has recently announced that **the public comment deadline has been extended to March 3, 2006**. For more information on public comment submission, please see the bottom of page 4.

### Implementation of Revised Slope Factors

***By: Office of Land Quality, Indiana Department of Environmental Management***

The Office of Land Quality (OLQ) has derived draft slope factors for Trichloroethylene (TCE, CAS 79-01-6) and is releasing the technical document supporting that derivation for comment. The TCE technical document, "**A Regulatory Approach for Deriving Trichloroethylene Cancer Potency Estimates for use in the Development of Health Based Remediation Closure Levels" (Review Draft)**, can be found at http://www.in.gov/idem/land/risc/announcements.html . OLQ is proposing to replace the slope factors in the 2004 Default Closure Level Tables. After evaluation of the comments, OLQ will issue revised slope factors. OLQ plans to use the revised slope factors until USEPA releases further guidance on TCE. The draft slope factors can be used immediately in any non-default application. The draft slope factors generally increase the default closure levels, especially the industrial values. The revised default closure levels are given in Table A, above.

**Development History**

Slope factors are cancer potency estimates and are used, along with other inputs, to derive closure levels at remediation sites. OLQ has derived the draft slope factors from a group of slope factors listed in a USEPA draft document issued by the National Center for Exposure Assessment (NCEA). USEPA NCEA presented a group of slope factors with values ranging from 0.02 to 0.4 $(mg/kg\text{-}day)^{-1}$ and OLQ has selected values derived from studies within that range.

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The release of the NCEA document and its use has created significant controversy across USEPA and the United States. NCEA not only released new science information with their document, but also presented states with new choices on how to use slope factors. The way in which OLQ has decided to interpret the NCEA document is important in understanding how and why OLQ derived the draft slope factors.

OLQ uses a hierarchy of sources to derive slope factors. OLQ established this hierarchy in the late 90s through a series of meetings with the regulated community during development of the Risk Integrated System of Closure (RISC). Two principal sources within the hierarchy are USEPA Regions 3 and 9. These two Regions publish tables of screening level values, very similar in purpose to the RISC default closure level tables.

The Region 3 and 9 tables have a lot of information, including slope factors. It has been common practice, based on the hierarchy, for OLQ to use the slope factors listed in these documents to develop closure levels. Slope factors, as with other types of toxicity information, continually change, as new science information becomes known. The Regions adopt this new information on a regular basis and OLQ, in turn, adopts the same information.

Shortly after the release of the NCEA document, Regions 3 and 9 interpreted this document and adopted the high end, or most conservative portion, of the slope factor range for use in their tables. In 2004, OLQ updated its tables and adopted the new slope factors presented by Regions 3 and 9. As a result, the default closure levels in Indiana changed significantly, becoming much lower. The regulated community responded to these new lower closure levels and commented that they were derived from a NCEA "draft" document. Since it is common practice for the Regions to reference NCEA as a source for toxicity information when the primary source, the USEPA Integrated Risk Information System, was silent, OLQ was not alarmed. OLQ recognized that the document was draft but failed to find a situation in which the new closure levels had a practical impact on clean up and also recognized that under RISC, a responsible party has the opportunity to explore different options.

However, as OLQ continued to investigate this issue, it became apparent that one of the significant problems with the NCEA document was unclear guidance regarding how to use the range for site-specific applications. As OLQ was using the high end or most conservative portion of the range, it seemed unreasonable not to have clear guidance on when to deviate from the high end. The USEPA Science Advisory Board, while supporting the use of a range of slope factors, reached a conclusion similar to OLQ and requested that USEPA provide clearer guidance on how to use and interpret the range of values. Shortly after, the National Academy of Science (NAS) also became involved. When the NAS became involved, it became clear that new USEPA guidance would not be forthcoming in a timely manner and OLQ decided to try to resolve the issue internally.

At first, OLQ attempted to develop guidance on how to use the range, finally realizing this was not possible without further input from USEPA. OLQ also evaluated returning to the old, pre-2004, slope factors, but decided that it was not in the best interest of the public or the regulated community to do so. It seemed unreasonable to ignore the significant body of new science regarding TCE's carcinogenic potency, and the hierarchy sources, Regions 3 & 9, clearly had used this document to derive their slope factors.

Finally, OLQ decided to derive a single slope factor value using the range of slope factor values and the studies used to derive them. OLQ believes the studies used by the NCEA to develop a range are representative of the body of studies available from which to derive a slope factor. It is also apparent that USEPA, and science bodies in general, advocate the use of a range of slope factor values from which states should select values for individual application. Therefore, OLQ has concluded that the range of slope factors presented in the NCEA document best present overall toxicity and is suitable for slope factor derivation. OLQ has developed a list of evaluation criteria and, using the evaluation criteria, selected the best study (studies) from within the NCEA range to use in deriving a single slope factor for developing default closure levels. This is similar to what has historically been done to derive slope factors.

**Comment Period**

OLQ is releasing this "Draft" document for comment and discussion. It is available at http://www.in.gov/idem/land/risc/announcements.html. OLQ is very appreciative of the input from the regulated community that resulted in the decision to release this document and invites further comment. Comments may be submitted by electronic mail to Sandie Meanor at smeanor@idem.in.gov. OLQ asks that all comments be forwarded by March 3, 2006.

## *U.S. EPA Delegates Authority for 42 NESHAPs to IDEM*

*By: Jaime K. Saylor, Hatchett & Hauck LLP*

On November 30, 2005, the U.S. EPA Region 5 delegated implementation and enforcement authority to Indiana for an additional 42 National Emission Standards for Hazardous Air Pollutants ("NESHAPs"). NESHAPs impose strict emission limitations, compliance monitoring, and work practices on an industry-by-industry basis. Indiana incorporated these 42 federal NESHAPs into IDEM rules without change, meaning that the Indiana rules mirror the federal requirements and contain no additional requirements.

USEPA also delegated certain general responsibilities referred to as "Category I" authorities for both the newly delegated NESHAPs and those previously delegated.

*How does this delegation affect a source?*

Practically speaking, the delegation of authority for the new NESHAPs means that IDEM becomes primarily responsible for implementing and enforcing NESHAPs. The January 13, 2006 Federal Register Notice announcing the delegation states that "[a]ll notifications, reports and other correspondence required under section 112 standards should be sent to the State of Indiana rather than to the EPA, Region 5, in Chicago." Reports due under both the newly delegated NESHAPs and those previously delegated are required to be submitted to IDEM instead of the U.S. EPA. However, if a permit currently states that the report must go to U.S. EPA, the permit may need to be revised before implementing any changes. **Note that the Federal Register listed IDEM's address incorrectly. Reports sent to IDEM should be addressed to: Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana 46204.**

The "Category I" authorities, found at 40 C.F.R. § 63.91(g), have been delegated to IDEM for all delegated NESHAPs (both new and old). The specific authorities are as follows:

- Applicability Determinations (40 C.F.R. § 63.1)
- Operation and Maintenance Requirements – Responsibility for Determining Compliance (40 C.F.R. § 63.6(e))
- Compliance with Non-Opacity Standards – Responsibility for Determining Compliance (40 C.F.R. § 63.6(f))
- Compliance with Opacity and Visible Emission Standards – Responsibility for Determining Compliance (40 C.F.R. § 63.6(h))
- Approval of Site-Specific Test Plans (40 C.F.R. § 63.7(c)(2)(i) and (d))
- Approval of Minor Alternatives to Test Methods (40 C.F.R. § 63.7(e)(2)(i))
- Approval of Intermediate Alternatives to Test Methods (40 C.F.R. § 63.7(e)(2)(ii) and (f))
- Approval of Shorter Sampling Times and Volumes When Necessitated by Process Variables or Other Factors (40 C.F.R. § 63.7(e)(iii))
- Waiver of Performance Testing (40 C.F.R. § 63.7(e)(2)(iv), (h)(2), and (h)(3))
- Approval of Site-Specific Performance Evaluation (Monitoring) Test Plans (40 C.F.R. § 63.8(c)(1) and (e)(1))
- Approval of Minor Alternatives to Monitoring (40 C.F.R. § 63.8(f))
- Approval of Intermediate Alternatives to Monitoring (40 C.F.R. § 63.8(f))
- Approval of Adjustments to Time Periods for Submitting Reports (40 C.F.R. § 63.9 and 63.10)
- Approval of Minor Alternatives to Recordkeeping and Reporting (40 C.F.R. § 63.10(f))

*What authorities are NOT delegated to IDEM?*

According to 40 C.F.R. § 63.91(g)(2)(i), a state may not ask the U.S. EPA to delegate any of the authorities referred to as "Category II" authorities. Thus, the following authorities (listed at 40 C.F.R. §63.91(g)(2)(ii)) remain with the U.S. EPA:

- Approval of Alternative Non-Opacity Emission Standards (40 C.F.R. §63.6(g))
- Approval of Alternative Opacity Standards (40 C.F.R. §63.6(h)(9))
- Approval of Major Alternatives to Test Methods (40 C.F.R. §63.7(e)(2)(ii) and (f))
- Approval of Major Alternatives to Monitoring (40 C.F.R. §63.8(f))
- Approval of Major Alternatives to Recordkeeping and Reporting (40 C.F.R. §63.10(f))

*Delegated NESHAPs*

Table 1 is a list of the 42 recently delegated NESHAPs and their location in the Indiana Administrative Code; Table 2 provides a list of NESHAPs which were previously delegated to IDEM, and the delegation date:

**Table 1**

| Standard | 40 C.F.R. Part 63 MACT Standard Subpart (NESHAP) | 326 Indiana Administrative Code |
|---|---|---|
| Chemical Recovery Combustion Sources at Kraft, Soda Sulfite, and Stand-alone Semichemical Pulp Mills | MM | 20-49 |
| Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units | UUU | 20-50 |
| Manufacturing of Nutritional Yeast | CCCC | 20-51 |
| Wet-Formed Fiberglass Mat Production | HHHH | 20-52 |
| Leather Finishing Operations | TTTT | 20-53 |
| Cellulose Products Manufacturing | UUUU | 20-54 |
| Rubber Tire Manufacturing | XXXX | 20-55 |
| Pharmaceuticals Production | GGG | 20-57 |
| Amino and Phenolic Resins | OOO | 20-58 |
| Polyether Polyols Production | PPP | 20-59 |
| Solvent Extraction for Vegetable Oil Production | GGGG | 20-60 |
| Semiconductor Manufacturing | BBBBB | 20-61 |
| Refractory Products Manufacturing | SSSSS | 20-62 |
| Surface Coating of Large Appliances | NNNN | 20-63 |
| Surface Coating of Metal Coil | SSSS | 20-64 |
| Paper and Other Web Coating | JJJJ | 20-65 |
| Flexible Polyurethane Foam Fabrication Operations | MMMMM | 20-66 |
| Municipal Solid Waste Landfills | AAAA | 20-67 |
| Friction Material Manufacturing Facilities | QQQQQ | 20-68 |
| Polyvinyl Chloride and Copolymers Production | J | 20-69 |
| Secondary Aluminum | RRR | 20-70 |
| Asphalt Processing and Asphalt Roofing | LLLLL | 20-71 |
| Brick and Structural Clay Products | JJJJJ | 20-72 |
| Clay Ceramics Manufacturing | KKKKK | 20-73 |
| Coke Ovens: Pushing, Quenching, and Battery Stacks | CCCCC | 20-74 |
| Engine Test Cells/Stands | PPPPP | 20-75 |
| Hydrochloric Acid Production | NNNNN | 20-76 |
| Printing, Coating and Dyeing Fabrics and other Textiles | OOOO | 20-77 |
| Surface Coating of Metal Furniture | RRRR | 20-78 |
| Surface Coating of Wood Building Products | QQQQ | 20-79 |
| Reciprocating Internal Combustion Engines | ZZZZ | 20-82 |
| Organic Liquid Distribution (Non-Gasoline) | EEEE | 20-83 |
| Miscellaneous Organic Chemical Manufacturing | FFFF | 20-84 |
| Surface Coating of Automobiles | IIII | 20-85 |
| Surface Coating of Metal Cans | KKKK | 20-86 |
| Sit Remediation | GGGGG | 20-87 |
| Miscellaneous Coating Manufacturing | HHHHH | 20-88 |
| Stationary Combustion Turbines | YYYY | 20-90 |
| Lime Manufacturing Plants | AAAAA | 20-91 |
| Iron and Steel Foundries | EEEEE | 20-92 |
| Integrated Iron and Steel Manufacturing | FFFFF | 20-93 |
| Mercury Cell Chlor-Alkali Plants | IIIII | 20-94 |

(*Continued from Page 6*)

**Table 2**

| Standard | 40 C.F.R. Part 63 MACT Standard Subpart (NESHAP) | Date of Delegation |
|---|---|---|
| General Provisions | A | August 7, 1997 |
| Coke Oven Batteries (Phase I) | L | August 7, 1997 |
| Chromium Electroplating | N | August 7, 1997 |
| Commercial Sterilization | O | August 7, 1997 |
| Magnetic Tape Manufacturing | EE | August 7, 1997 |
| Wood Furniture Manufacturing | JJ | August 7, 1997 |
| Aerospace Manufacturing and Rework | GG | August 7, 1997 |
| Petroleum Refineries | CC | August 7, 1997 |
| Marine Tank Vessel Loading | Y | August 7, 1997 |
| Printing and Publishing Facilities | KK | August 7, 1997 |
| Group I Polymers and Resins | U | August 7, 1997 |
| Epoxy Resins and Non-nylon Polyamids | W | August 7, 1997 |
| Perchloroethylene Dry Cleaning Facilities | M | August 7, 1997 |
| Group IV Polymers and Resins | JJJ | August 7, 1997 |
| Industrial Process Cooling Towers | Q | August 7, 1997 |
| Halogenated Solvent Cleaning | T | August 7, 1997 |
| Gasoline Distribution, | R | January 6, 2000 |
| Hazardous Organic National Emission Standard for Hazardous Air Pollutants | F, G, H, I | January 6, 2000 |
| Off-site Waste Recovery Operations | DD | January 6, 2000 |
| Primary Aluminum Reduction | LL | January 6, 2000 |
| Polyurethane Foam | III | December 29, 2003 |
| Portland Cement | LLL | December 29, 2003 |
| Hazardous Waste Combustion | EEE | December 29, 2003 |
| Oil and Natural Gas Production | HH | December 29, 2003 |
| Natural Gas Treatment | HHH | December 29, 2003 |
| Publicly Owned Treatment Works | VVV | December 29, 2003 |
| Pulp and Paper, non-combustion | S | December 29, 2003 |
| Phosphoric Acid Manufacturing | AA | December 29, 2003 |
| Phosphate Fertilizer Production | BB | December 29, 2003 |
| Tanks, Level I | OO | December 29, 2003 |
| Containers | PP | December 29, 2003 |
| Surface Impoundments | QQ | December 29, 2003 |
| Individual Drain Systems | RR | December 29, 2003 |
| Closed Vent Systems | SS | December 29, 2003 |
| Equipment Leaks, Level I | TT | December 29, 2003 |
| Equipment Leaks, Level II | UU | December 29, 2003 |
| Oil-Water Separators | VV | December 29, 2003 |
| Storage Vessels, Level 2 | WW | December 29, 2003 |
| Generic Vessels, Level 2 | YY | December 29, 2003 |
| Pesticide Active Ingredient Production | MMM | December 29, 2003 |
| Mineral Wool Production | DDD | December 29, 2003 |
| Wool Fiberglass Manufacturing | NNN | December 29, 2003 |

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# *EPA Proposes Changes to SPCC Regulation and Releases "SPCC Guidance for Regional Inspectors"*

*By: Terry Hogan, Keramida Environmental, Inc.*

*Proposed SPCC Rulemaking Changes*

On December 12, 2005, the EPA proposed two separate amendments to the Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR § 112) in the *Federal Register*. The first streamlines the regulatory requirements for qualified facilities and equipment regulated by 40 CFR § 112 and can be found at ***http://www.epa.gov/fedrgstr/EPA-WATER/2005/December/Day-12/w23917.pdf***. The second proposal, available at ***http://www.epa.gov/fedrgstr/EPA-WATER/2005/December/Day-12/w23916.pdf,*** extends the SPCC compliance dates for all affected facilities until October 31, 2007. In proposing these changes, the EPA states that it is streamlining the SPCC regulatory requirements, while maintaining protection of human health and the environment.

The proposed deadline extension would extend the compliance dates in 40 C.F.R. § 112.3 for both the SPCC Plan Amendments and SPCC Plan amendment implementation to October 31, 2007. These extensions are being proposed by the EPA to allow those facilities that may be affected by a final rule to take advantage of any streamlined provisions that may be promulgated.

The proposed changes under the SPCC regulation for qualifying facilities/equipment provide:

- An option that allows owners/operators of facilities that store less than 10,000 gallons of oil and meet other qualifying criteria to self-certify their SPCC Plan rather than having a review and certification by a Professional Engineer;
- An alternative to the secondary containment requirement, without requiring a determination of impracticability, for facilities that have certain types of oil-filled equipment;
- A definition and an exemption for "motive power containers" (read as vehicles with over 55 gallon fuel tanks for their own fuel needs); and
- An exemption for airport mobile refuelers from the specifically sized secondary containment requirements for bulk storage containers.

It is important to note that a "qualifying facility" is described by the regulation to have the following characteristics:

- The aggregate aboveground storage capacity of the facility is 10,000 gallons or less; ***and***
- The facility either has been in operation for at least ten years immediately prior to the date of self-certification and in the ten-year period immediately prior to self-certification had no discharges as described in 40 CFR § 112.1(b) of the regulation ***or***
- Is beginning operations or has been in operation for fewer than ten years without any discharges of oil as described in 40 CFR § 112.1(b).

The proposed rulemaking would also

- Remove and reserve certain SPCC requirements for animal fats and vegetable oils; and
- Provide a separate extension of the compliance dates for farms.

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*SPCC Guidance for Regional Inspectors*

On December 2, 2005, the EPA released the long awaited *SPCC Guidance for Regional Inspectors* via the Internet. The guidance document's stated purpose is to assist regional inspectors in reviewing a facility's implementation of the SPCC rule (40 CFR § 112). According to the EPA announcement, the EPA is trying to establish a consistent understanding among regional EPA inspectors on how particular provisions of the rule may be applied. The guidance is available at ***http://www.epa.gov/oilspill/guidance.htm#Content.***

The guidance document is about 200 pages long, broken down into 7 chapters discussing such illuminating subjects as applicability; environmental equivalence; secondary containment and impracticability determinations; oil/water separators; facility diagrams; and inspection, evaluation, and testing. This is followed by several hundred additional pages of appendix documents for quick reference. Reference material includes the Clean Water Act language found at Section 311(j)(1)(c); the current version of 40 CFR § 112, a summary of the revised rule regulations (the previous revisions, not those proposed in December 2005), two example SPCC Plans, a sample Contingency Plan, the ever-important SPCC Inspection Checklist, and "Other Policy Documents".

Of course, this guidance document should also be helpful to those owner/operators of facilities that are subject to the SPCC requirements. These facilities should examine the guidance document. The guidance document appears to answer some questions while, of course, creating new ones. If all is not perfectly clear after reading the guidance, the hotline phone number is 1-800-424-9346.

*Public Comment Period on Proposed Rule Changes and SPCC Guidance*

- The EPA accepted comments on the proposed compliance date extension until only January 10, 2006
- The EPA is accepting comments on the proposed rule until February 9, 2006.
- Details on how to submit comments on the proposed rulemaking can be found on the Internet at ***http://www.epa.gov/oilspill/nprm.htm***.
- The EPA is also accepting comments on the *SPCC Guidance for Regional Inspectors* until February 9, 2006, although it will not responds to all comments. As it is a "living document", the EPA states that it will accept comments on the guidance after February 9, as well. These comments will be reviewed and will be used to inform ongoing revisions to the guidance document. Comments on the guidance document can be submitted by email to SPCC.OilSpill@epa.gov.

For More Information:

December 12, 2005 Federal Register for both proposed regulations (see links in first paragraph)
**http://www.epa.gov/oilspill/guidance.htm#Content** for copy of the SPCC Guidance for Regional Inspectors

EPA Oil Information Hotline (1-800-424-9346)
Ms. Vanessa Rodriquez at rodriquex.vanessa@epa.gov or 202-564-7913
Mr. Mark Howard at howard.markw@epa.gov or 202-564-1964

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AIR & WASTE MANAGEMENT
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INDIANA CHAPTER

# A&WMA
# Clean Air Scramble Golf Outing

**Florida Scramble**
**May 18, 2006**

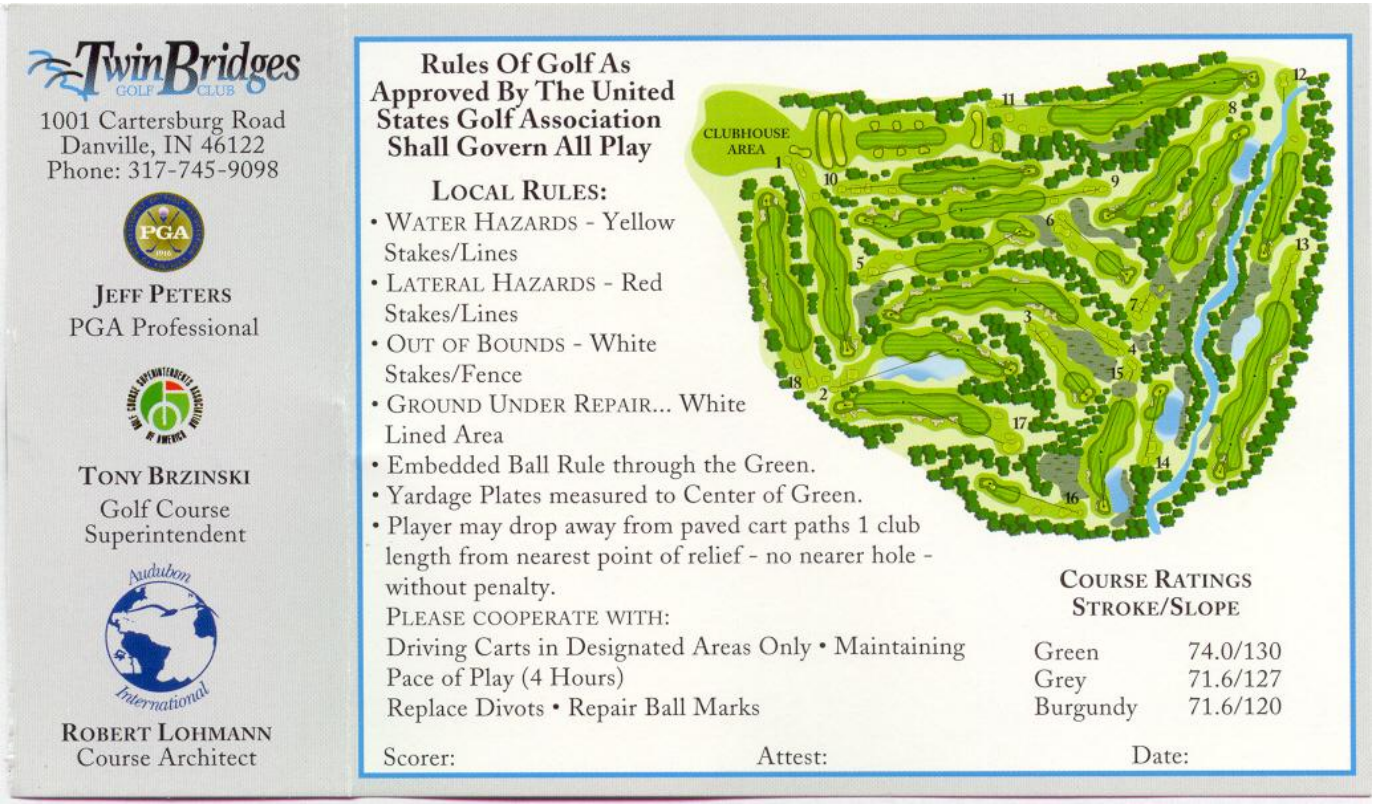
**Twin Bridges Golf Club**
**1001 Cartersburg Road**
**Danville, Indiana 46122**
**317-745-9098**

The INDIANA CHAPTER of the Air & Waste Management Association is very pleased and excited to announce our annual golf outing. The outing will be held at **Twin Bridges Golf Club located in Danville, Indiana**. Twin Bridges was the first Indiana course to achieve Audubon International's Signature Status. In addition, the Course is located on Waste Management's Twin Bridges Recycling and Disposal Facility buffer zone. The landfill is a state of the art facility with landfill gas-to-electricity power plants located on the property.

The cost is $75.00 per person, which includes greens fees, ½ golf cart, lunch and prizes. Hole Sponsorships are available for $125.00 each. Funds collected from sponsors and players will be applied toward scholarships, environmental seminars and assistance to A&WMA Student Chapters. **In addition, any contributions of prizes or gifts from your business would be greatly appreciated.** These items could either be utilized by the entire outing or for individual use.

We are looking forward to your participation.

| | | |
|---|---|---|
| **Schedule:** | 10:30 a.m. | Registration and Practice Range |
| | 11:00 a.m. | Lunch and Practice Range |
| | 12:00 p.m. | Tee Off |
| | 5:00 p.m. | Quick Awards Presentation |
| **Awards**: | First Place: | $75.00 each – gift certificate |
| | Second Place: | $50.00 each – gift certificate |
| | Closest to the pin: | 4 Gift Certificates - $25.00 each |
| | Longest Drive: | 2 Gift Certificates - $25.00 each |
| **Lunch:** | Catered | |

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## PLEASE REGISTER BY THURSDAY, MAY 4, 2006

Please make checks payable to Indiana Chapter A&WMA and send with Registration Form to Mr. Harry Williams, 5502 West 15th Street, Speedway, Indiana 46224

$300.00 per foursome or $75.00 each for green fee, ½ a golf cart, lunch and prizes _____

$125.00 per hole sponsorship _____

TOTAL ENCLOSED: _____

Name: _____

Affiliation: _____

Address: _____

Phone: _____

Fax: _____

E-mail: _____

Additional Members of Foursome: _____

**Information**: Harry Williams (317) 241-2277

Richard Nelson (317) 745-2878 xt15
rnelson3@wm.com

Doug Watson (317) 697-7574

# *Geophysics as a Risk Management Tool for Environmental Due Diligence*

*Jesse Japitana, Geophysicist, ENSR Corporation jjapitana@ensr.com*
*Robert Cataldo, Vice President, ENSR Corporation rcataldo@ensr.com*

**Introduction**

Geophysical assessment is a relatively fast, straightforward and inexpensive method to provide non-invasive information on a property. By implementing one or more of the geophysical methodologies commonly available, a clearer picture of what lies underground is possible and an understanding of potential problems are available before a shovel of dirt is removed from the site. These early non-invasive exploratory methods can greatly reduce the risk of missing critical subsurface problems by providing a more site-specific strategy for follow-up subsurface investigations.

**Managing Risk and Uncertainty**

One of the primary reasons for conducting a due diligence assessment on a property that will either be purchased or sold is to understand the potential liabilities associated with the past and present activities conducted on-site. In summary, the purpose is to "manage risk".

Although there is an abundance of resources available regarding past site usage, prior permits or Sanborn mapping, there exists the uncertainty of what was existed at the site long before permits were required or maps were available. In addition, there is always the possibility that documents are no longer available; having been lost in a fire or flood, or stored away in an unknown repository. Regardless of the reason, a clear understanding of what went on at the site and what the subsurface holds comes into question.

Another problem are the cases where invasive investigations are not permitted by the current site owner or, due to facility operations and the unknown location of buried utilities, invasive methods are neither safe nor possible. Therefore, how can a potential buyer or financing institution gather useful information regarding the risks associated with the site? In many instances, a geophysical investigation can be the solution to the problem.

**Benefits of Geophysical Assessment**

The benefits of utilizing geophysics as a first approach are many, a few of which are listed below:

- Cost-effective
- Quick mobilization
- Fast on-site set-up and breakdown
- Non-invasive collection of data
- Elimination of risk during subsurface work
- Permits generally not required
- Wider area of coverage
- No generation of impacted media

As with all investigatory tools, there are some limitations with geophysical methods, such as heavy use of rebar in concrete or buildings that can't be entered. However, one of the major advantages with geophysics is that multiple options are available to assess different parameters over the same area of concern; thereby allowing for multiple views of the same information.

**Types of Geophysical Methodologies**

There are many types of geophysical methods available; the six main types utilized for environmental work are: Ground Penetrating Radar, Electromagnetics, Magnetometry, Gravity Surveying, Radio and Audio Frequency Location and Seismic Surveying. A brief explanation of each is presented below.

**Ground Penetrating Radar** – This method is useful in a variety of settings to identify underground storage tanks, define aerial and vertical extent of buried debris, aid pipe and cable location, and delineate strong changes in lithology. Depth of usage is typically ranges from surface grade to 100 feet.

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**Electromagnetics and Magnetometry –** This method, which has a variable depth range, is excellent for identifying larger subsurface anomalies with magnetic properties (iron, steel, etc.). It can also be used to characterize changes in underlying bedrock horizons.

**Gravity Surveying –** This method detects changes in relative gravity of a buried object relative to the local gravity signature of the earth. It is commonly used to delineate broader changes in trends (gravity fields) such as bedrock type or overburden deposits. Depth of usage is typically from the surface to 100 feet.

**Radio and Audio Frequency Location –** This method can be used to actively or passively induce a signal into the subsurface utilities via a transmitter. Using a handheld receiver, this signal can then be used to trace these buried storm sewers, electric lines, piping, etc.. This is the method commonly utilized to pre-dig prior to subsurface drilling and excavation activities. Maximum effectiveness locating depth is 20 feet below surface grade if directly connected to the utility.

**Seismic Surveying –** This "tried and true" geophysical method uses multiple receivers (geophones) and an induced energy source (strike plate, vibrator, and compression device). This method has a greater depth penetration than most other geophysical devices, but with generally lower resolution. Seismic surveying takes up where the other devices leave off, and is commonly used to characterize bedrock topography and other underground geomorphic structures.

**Examples Of Geophysical Benefits – Case Studies**

In order to illustrate the how geophysical investigation can help optimize site investigation, three case studies are presented here:

**Case Study 1**: **Due diligence situation where an environmental site investigation was required for property transfer in Connecticut.**

Historic Sanborn maps indicated a former automotive service station and associated underground storage tanks (USTs) once existed at the site. Ground penetrating radar (GPR) and electromagnetic (EM) survey techniques were employed to investigate a paved parking area suspected to be the site of the former service station. Findings of the geophysical investigation identified two areas of concern (AOC) which were interpreted to be the location of USTs with associated piping and an area of buried debris. The geophysical data results were used to direct test pit activities within the AOC which subsequently uncovered two steel USTs and associated piping runs and some buried metallic debris (i.e. car parts, bicycle wheel, concrete backfill).

**Case Study 2: Former manufacturing facility in New York which was to be rehabilitated to accommodate new tenants.**

In order to develop a greater understanding of subsurface conditions at the site and aid in future invasive subsurface work, geophysical site investigation was performed. Radio frequency subsurface utility locator (RFSUL), ground penetrating radar (GPR), and electromagnetic (EM) terrain conductivity geophysical techniques were used to assess four AOCs for suspected buried USTs and/or septic tank structures, and perform subsurface pipe location. As a result of geophysical survey, four subsurface utilities including a cast iron drain pipe, gas, water, and sewer lines were traced, septic tank structures were identified, and an area suspected to have USTs was found to be clear.

**Case Study 3: A 40-acre fruit tree orchard behind a former manufacturing facility in Ontario, Canada suspected to be once used as an illegal waste disposal area.**

Electromagnetic (EM) survey techniques were employed to determine if disposal debris was present within the orchard that could account for groundwater contamination observed in off-site monitoring wells. Six AOCs were identified across the orchard, which were subsequently found to be discrete pockets of buried metallic debris and manufacturing waste during test trenching activities.

**Summary**

The use of geophysics as the initial phase of a larger environmental investigation has been proven to reduce overall costs and identifying potential risks associated with the property that normally might not have been uncovered. Geophysical assessment continues to be a cost-effect, safe and efficient tool in the assessment of potential past and future risks; especially on older, heavily utilized facilities.

## *Environmental Education Resource Guides Available*

Free EERGs are available for a short period of time. In return for the Indiana Chapter's financial contribution to assist the A&WMA's environmental education program, we are entitled to 100 free copies of this new product. The EERG CD-ROMs replace the bulky 3-ring binder versions that have been in use since the early 1990s.

Toyota Motor Manufacturing of Indiana also contributed to the modernization effort. Margaret Weinzapfel from Toyota, who chairs the A&WMA's Public Education Division of the Education Council, has arranged a jointly sponsored booth at the upcoming Hoosier Association of Science Teachers, Inc. (HASTI) Conference. Scheduled for February 8-10 at the Indiana Convention Center, the HASTI Conference will be the primary means of disseminating the EERGs to Indiana educators. We anticipate distributing the entire Chapter's, and Toyota's supply of CDs.

If you would like to receive a free copy while they are still available, please contact Dave Hoffman, Chapter Education Committee Chair, immediately at DrHoffmanD@aol.com.

## *The Indiana Department of Environmental Management Offers Confidential Compliance Assistance*

*By: Cheri Storms, Compliance and Technical Assistant Program, IDEM Office of Pollution Prevention and Technical Assistance*

You've got questions: IDEM's Compliance and Technical Assistance Program (CTAP) has answers that are complimentary and confidential. CTAP is a non-regulatory program within IDEM, which was created to provide free, confidential assistance to the regulated community. CTAP offers this service either in person, by phone, or via workshops conducted throughout the state.

All of CTAP's services are non-regulatory and impose no obligations on its customers. CTAP is bound by IND. CODE § 13-28-3-4* to maintain confidentiality. Business-specific information is held confidential, except in cases of clear and immediate danger to human health and the environment. In its 10 years of providing service to the regulated community, CTAP has responded to over 33,000 inquiries, and has found no instances of clear and immediate danger.

Because many small businesses don't have a full-time environmental professional on staff, they may have difficulty staying current with ever-changing environmental regulations. By working with CTAP, businesses can get answers to the following questions and many more:

- Which environmental laws apply to our business?
- Do we need a permit for our new or modified process, or do we need to amend our existing permit?
- Were new rules implemented this year that we need to know about?

For more information on the CTAP program, visit www.IN.gov/idem/ctap, or call (317) 232-8172 or toll-free at (800) 988-7901.

* IND. CODE § 13-28-3-4 provides:
*"Inquiries made to the program and activities and documents of the program that identify or describe an individual facility or operation are confidential, unless a clear and immediate danger to the public health or environment exists. Information concerning inquiries, activities, and documents of the program that identify or describe an individual facility or operation may not be made available for use by other divisions of the department without the consent of the person who made the inquiry, participated in the activity, or provided the document."*

## *Indiana Environmental Leaders Brave the Snow to Speak at December 2005 Winter Technical Meeting*

(*Continued from Front Page)*

Daniel Murray, Assistant Commissioner of the Office of Pollution Prevention & Technical Assistance ("OPPTA"), discussed the structure of OPPTA, including a focus on the Compliance and Technical Assistance Program ("CTAP") (see Cheri Storms's article about CTAP in this issue), the CTAP confidentiality mandate, types of assistance available to Indiana businesses, current and future CTAP initiatives, and the CTAP Quality Assurance Guarantee, as well as the roles of the Pollution Prevention, Source Reduction and Recycling, and Community Environmental Health and Education branches of OPPTA. Daniel's powerpoint presentation can be found at http://www.inawma.org/files/2005-12-08_OPPTA_Init_1205.ppt.

Paul Dubenetzky, Assistant Commissioner of the Office of Air Quality, spoke about metrics used by the agency to gauge the quality of Indiana's environment, and his office's role in meeting environmental targets for air quality. He also talked about reducing the amount of time between applying for a permit and permit issuance by use of more efficient internal mechanisms to develop permits, working to help applicants submit more complete applications, and issuing the remaining Title V permits. The remaining Title V permits have been held up recently by changes IDEM has made to the language in several "commonly appealed" permit provisions. Paul discussed how those changes will be made both for the yet-to-be issued Title V permits and already-issued permits. He explained that if your permit is in the renewal phase, you have a significant permit modification at IDEM, or the initial permit has not yet been issued, you do not need to do anything - the changes will automatically be made to your permit. He briefly covered what some of the changes were. Paul also talked about reducing dollars spent on using outside contractors to write permits and the resulting in-house changes that are occurring in an attempt to attain that goal.

Matthew Klein, Assistant Commissioner of Compliance and Enforcement, spoke about Tom Easterly's policies of "compliance first, enforcement second" and "no 'gotcha' enforcement." He also spoke about the four stages of compliance and enforcement, which are pre-compliance, compliance, enforcement, and post-enforcement. In discussing pre-compliance, he explained that this stage is the responsibility of the facility, but he also pointed out sources of pre-compliance help at IDEM such as the CTAP program and the Wastewater On-site Technical Assistance Program. He also explained IDEM's environmental audit & self-disclosure policy, which is available at http://www.state.in.us/idem/oe/nrp/self.html. Matt's presentation also set out specific compliance initiatives which include industrial stormwater issues, LUST issues (specifically wellhead protection areas, KARST terrain, and lack of commitment to remediation), delinquent fee payments, and wastewater treatment plant compliance issues (specifically collection systems monitoring, solids handling, and operator competency). In the enforcement stage, the Office of Compliance and Enforcement is making an effort to eliminate older cases and to get new cases resolved within one year. Matt also set out specific enforcement initiatives which include auto salvage enforcement, delinquent penalty payments, old cases, getting sources to audit and self disclose, as well as supplemental environmental projects ("SEP") policy enhancements. Finally, Matt discussed post-enforcement issues such as the use of SEPs. Matt's presentation is also posted on the Indiana A&WMA website at http://www.inawma.org/files/2005-12-08_Compliance_and_Enforcement.ppt.

IDEM Commissioner Tom Easterly's presentation was titled "Summary of IDEM Task Team Report of the Government Efficiency Commission," to follow up his presentation at the 2004 Winter Technical Meeting. His presentation explained how recommended efficiency improvements within IDEM are intended to reduce staff-time for necessary tasks, reduce state dollars used to perform necessary tasks, and reduce the calendar time to make particular decisions, all while maintaining the effectiveness of the current IDEM program. The Commissioner explained that, while the efficiency recommendations, if implemented correctly, could result in a savings of five to twenty million dollars five to ten years down the road, these savings may be needed to fund new agency obligations, one of which could be cleanups of illegal methamphetamine labs.

(*Continued to Page 16*)

## *Indiana Environmental Leaders Brave the Snow to Speak at December 2005 Winter Technical Meeting*

(*Continued from Page 15*)

Commissioner Easterly proceeded to discuss the efficiency recommendations and the progress being made towards each one. He specifically discussed the following recommendations:

- Improving IDEM process for setting strategic priorities and for accounting for progress and quality results
- Establishing a merit deputy assistant commissioner position with technical and manager qualifications
- More rigorous and uniform use of management techniques to align individual tasks with organizational objectives
- Improving manager-employee communication about job performance and skill development
- Improving the recruitment, selection, and orientation of career merit employees
- Technical and professional staff development
- Improving manager capabilities
- Establishing and reinforcing among all staff a clear, single, appropriate direction for IDEM
- Improving the IDEM processes for engagement in policymaking
- Electronic compliance reporting and permitting
- Improved inspection policies
- Use of field citations

Tom followed up each of these recommendations with specific and often innovative ideas to meet them. For example, IDEM is piloting a tablet-based "Digital Inspector" in the Office of Land Quality to gain efficiency through the use of electronic compliance reporting. Another idea is to have staff issue "tickets" in the field while conducting inspections, with a ticket possibly consisting of a formal warning or a fine of less than $250 per violation found at a facility. To see a list of ideas the Commissioner wants to implement to improve efficiency at the agency, you can find his entire presentation at http://www.inawma.org/files/2006-12-08_AWMA_GEC.ppt.

*Jaime Saylor practices environmental law with Hatchett & Hauck LLP in Indianapolis. She may be reached at (317) 464-2620 or jaime.saylor@h2lawyers.com.*

## *EPA Replaces Air Dispersion Model*

(*Continued from Front Page*)

Modeling is required for a source becoming a new major source subject to PSD (Prevention of Significant Deterioration) or a major source for PSD that makes a change resulting in a significant emission increase. For projects in which there is any increase in toxic emissions, IDEM may, under its modeling guidance, request that applicants address toxic modeling. However, if the applicant does not, IDEM may conduct modeling of the toxic pollutants.

If you have a modeling project to do, it would be best to use ISC and get it in soon. IDEM is already warning that projects should be considering the use of AERMOD. If your project will be submitted within several months, use of AERMOD will probably be necessary. IDEM wants to make sure that all modeling analyses approved after December 9, 2006 use AERMOD.

If you have questions on this topic, please contact Keith Baugues at (317) 685-6600 or at kbaugues@keramida.com.

*Keith Baugues is a Senior Project Manager with Keramida Environmental, Inc.*

## *From e-Gadgets to e.Scrap – What To Do with Those Old Electronics*

As Hoosiers receive new electronic devices, such as televisions, computers, hand-held games, and cell phones during this holiday season, they may not know what to do with their unwanted and outdated electronic devices. At the same time, businesses begin a new budget year and are purchasing new computers, printers and more, and will also have items to get rid of.

On January 11, 2006, the Indiana Recycling Coalition (IRC) announced the kick off of a statewide campaign to let Hoosiers know that electronic devices contain hazardous materials, such as lead and mercury, and should not be thrown into the trash. Instead, the IRC provides many resources for reusing and recycling electronics when they are no longer needed through a new e.Scrap education campaign and informational website, www.eScrapIndiana.org.

"The campaign is designed to grab attention and drive people to the Indiana Recycling Coalition's new website dedicated solely to the issue of electronic scrap, also called e.Scrap," said IRC's Executive Director, Michelle Cohen. Cohen continued, "Once at the website, a business person, homeowner, or anyone can find more information about the hazards that electronic devices contain, how to properly manage these materials, what laws apply, and even how to buy 'greener' devices in the future."

The website is a one-stop-shop for all information about proper management of electronics.

Hoosiers will begin hearing radio ads and seeing television, billboard and print ads in the coming months. A general brochure and posters have also been developed for those interested in distributing materials to local community and business groups.

*This IRC project is funded in part by the Indiana Chapter of the A&WMA.*

## *From the Chair*

(*Continued from Page 2*)

By expanding our efforts on providing information we hope to grow the Chapter membership as well. So spread the word and let your "non-member" colleagues know why A&WMA is valuable to you.

I want to confirm that the International A&WMA's board of directors unanimously voted to hold the Annual Conference and Exhibition in New Orleans as scheduled June 20-23, 2006. Only a few months after Hurricane Katrina devastated New Orleans the city is returning to normalcy and has taken major steps to recovery. There will likely be papers and tours related to the Hurricane recovery at the conference. I have colleagues that have been to the city for business and to help with the recovery. They tell me that the French Quarter, the Central Business District, and the Warehouse and Arts District are all "back to business." So, please plan on attending the conference.

Remember, there are always opportunities to join one of our Indiana Chapter committees and help with the work done by the Chapter. Please feel free to contact me or any of your Chapter Board members to let us know how you would like to become more involved.

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### *A&WMA Anniversaries*

**5 Years**
Timothy Zahn
Brent Yeagy
Robin Ridgway
Brian Griesemer

**10 Years**
Valerie Krulic

**15 Years**
John Young
Scott Darling
Jayne Browning

**20 Years**
Paul Reynolds

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# Indiana NEWs

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