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P Reporter

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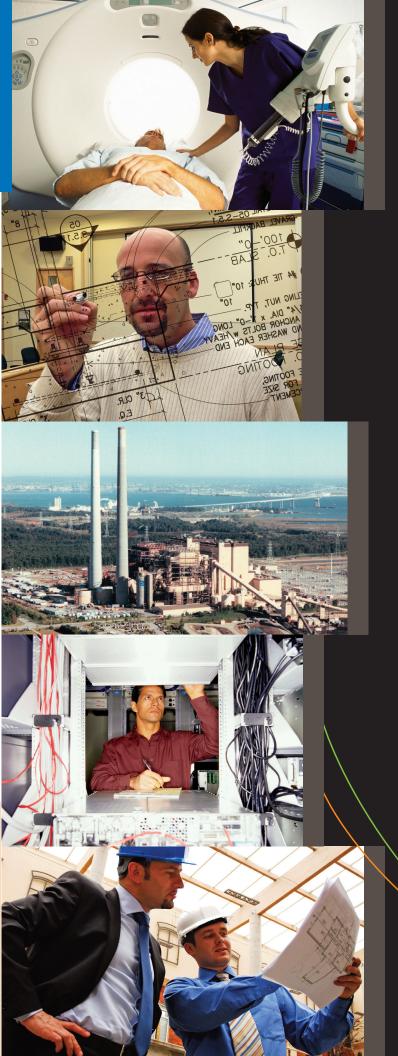
Volume XXVI Number 2 Spring 2009

COVER STORY: PSPE Awards Outstanding Engineers

Engineer of the Year, Harvey D. Hnatiuk, PE, F.NSPE is shown here with his family.

Also inside:

Are Cyber-Signatures and Cyber-Seals in Our Future? 5
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Bog Turtles - What Developers and Landowners
Need to Know 11



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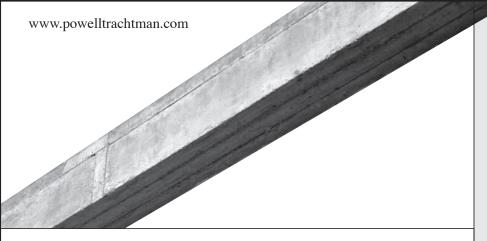
To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of man and the highest standards of professional conduct;

To place service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations. In humility and with need for Divine Guidance, I make this pledge.

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Typical Proclamation for Celebrating 75 Years of Engineering Excellence:

WHEREAS, engineers have used their scientific and technical knowledge and skills in creative and innovative ways to fulfill society's needs; and

WHEREAS, engineers face the major technological challenges of our time; and

WHEREAS, engineers are celebrating 75 years of licensure in Pennsylvania, recognizing the need for standards in pursuit of the protection of public health, safety, and welfare; and

WHEREAS, engineers are encouraging our young math and science students to realize the practical power of their knowledge; and

WHEREAS, more than ever, we will look to engineers and their expertise and abilities to meet the challenges of the future;

NOW, THEREFORE BE IT RESOLVED,

that the national, state and local authorities proclaimed February 15 - 19, 2009 National Engineers Week and celebrate "Engineers Make it Work."

Reflection and Outlook

John F. Bradshaw, PE, PLS, F.NSPE

It seems like yesterday that we held a memorable state conference in Gettysburg. My year as president passed quickly. Reflecting on this past year, I note that much has been accomplished, but more challenges lay ahead.

We started the year with a well organized Leadership Meeting at Penn State's Main Campus in State College via video conferencing with Penn State's Lehigh Valley Campus in Bethlehem and the Airside Office of Michael Baker Jr., Inc. in Moon Township near Pittsburgh. Each location was well attended and the interaction was good. It is a good venue for future leadership meetings. It minimized travel time for our chapter leaders and helped reduce mileage and lodging costs. At this meeting, we revisited the strategic plan and re-set priorities. Our strategies remained the same as to increase stature of the professional license as viewed by the general public, owners, business operators, educators and non-license engineers, and to protect the professional license by proactively working to eliminate infringements through legislation. Our priorities were re-set to,

- Focus on the value of membership, retention of current members, and recruitment of new members.
- 2. Develop a continuing education program for our membership and non-member engineers.
- 3. Become more visible as an organization through our state and local chapters.
- 4. Build-up committees, establish goals, develop action plans to accomplish the goals.

The most challenging priority is the retention and recruitment of members. The Membership Committee under the direction of Tim Ormiston, PE, continued working

diligently this year to develop programs to attract new members. The six month free membership and enterprise are still programs available to help encourage new members at a cost savings.

Executive Director, John Wanner, CAE, has done another superb job this year interacting with the legislatures in the interest of PSPE. Continuing Education has been his forte among the legislators and we should soon have an approve bill that will make the required continuing education much more accessible to our engineers. Thanks to John's involvement, we will have a Continuing Education program much closer to the national model rules and make reciprocity with other states much less difficult.

As stated in an earlier PE Reporter article, "Chapters are the Backbone of Our Society". Again, they have demonstrated their versatility in organizing and holding great programs for our membership and the community. This year I had the privilege of attending a number of state activities and chapter programs and found them very well planned. Some of the more intricate programs are listed as follows:

1. Pennsylvania MATHCOUNTS continues to be one of the strongest programs in the United States. It was thrilling to know that 389 schools and 2,651 students competed in the 23 local competitions held throughout the state. Many companies and friends provided financial support including the \$75,000 "Science and Math Programs" grant from the Governor's Budget to help run the MATHCOUNTS. The PSPE Chapter Coordinators, the MATHCOUNTS Committee, the Pennsylvania Federation of Business and Professional Women's Organization, all volunteered their time,

"Message" continued p. 20



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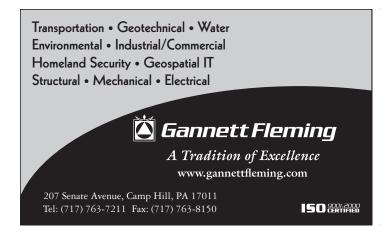
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Are Cyber-Signatures and Cyber-Seals in Our Future?

Rebecca A. Bowman, PE, Esq.

If you are really paying attention, you might recognize some of this article from a decade ago. Yes, I'm recycling, but only because the issue keeps coming up. I have updated for new legislation, new cases, and new technologies. So, let's go back to the title question: Are cyber-signatures and cyber-seals in our future?

The answer to the question is "Yes, cybersignatures and cyberseals ARE in our future." However, they will probably be in your future more than five years from now rather than next year.

Technological change has already affected both the way we engineers do our business and our clients' expectations. For thirty years now, I have been using computers to perform and verify calculations. For the past twenty or so years, I have been preparing drawings electronically. For the past decade, I have been delivering drawings to clients electronically, confirmed with a sealed, hard copy that was the binding document. These transmissions have the typical issues, such as pen tables for plotters and versions of software. The clients know that the sealed, hard copy is the binding document and have not attempted to assert any separate responsibility/liability for the electronic drawing file. I was unable to locate any cases resolving this specific issue, but there are plenty of cases honoring sealed drawings over unsealed drafts.

We are already required by many

public entities and some private ones to submit bids electronically. Section 502 of the Electronic Transactions Act, Act of December 16, 1999, P.L. 971, as amended, (73 P.S. § 2260.502) gives each Commonwealth agency the authority to decide whether and how it will send and accept electronic records and electronic signatures. 13 Pa.C.S. §1108 (2008) Relation to Electronic Signatures in Global and National Commerce Act supersedes the Electronic Signatures in Global and National Commerce Act (Public Law 106-229, 15 U.S.C. § 7001 et seq.) Multiple Pennsylvania and federal jurisdictions require that case filings be made electronically, with NO special provisions for authentication of signatures. In Bankruptcy Court, you actually have to petition the court for special permission to submit hard copy filings.

[Chances are that your medical records are already electronically stored and your pharmacy is receiving prescription orders electronically for non-controlled medications. To the best of my knowledge, the only authentication for non-controlled prescriptions is verification of the source address. (Prescriptions for controlled substances must still be transmitted by hard copy.)]

The next step in the evolutionary process will be the electronic transmission of cyber-signed, cyber-sealed work product without hard copy confirmation. The technology is extant to accomplish such transmissions and there is growing legislation addressing the use of each of these technologies. We won't be able to move into these technologies without answering some important questions.

Already, notaries in Pennsylvania are no longer required to use their seals. They disappear on copies and FAXs and scans. With so many Recorders' offices using

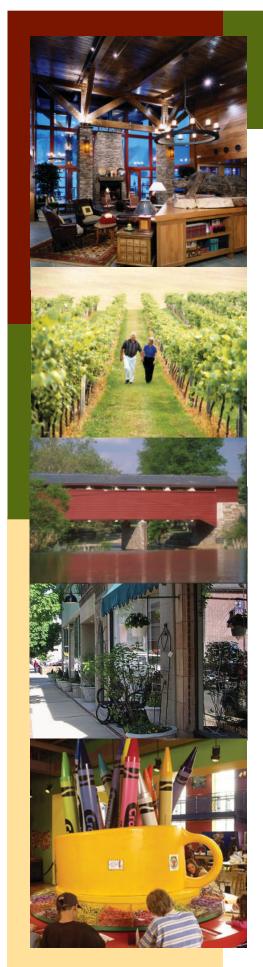
scanning for filing of subdivision and deeds, the issue demanded resolution. Although more engineers use stamped seals than embossed seals, the issue still needs to be addressed.

Cyber-signatures can also solve an existing problem. We have always had the issue of validation for revisions: Sure, the engineer sealed the original drawing, but the initials of some unidentified draftsperson on revision do not give the comfort of engineer review and validation. With cyber seals and signatures, each revision can be easily validated by the reviewing engineer and the history captured electronically.

How can we safely cyber-sign/seal a drawing? The applicable technology really isn't a seal or signature; it's a set of two encrypting "keys." One key is available to clients from the entity providing the encryption technology. The other key is kept private by the source - the engineer. It is computationally impossible to derive the private key from the public key. Using the private key, the document is encrypted with a digital signature. The recipient used the public key to decode the document. Only the private key could generate a document which could be decoded by the public key, so the recipient has in the public key a means of verification that the sender is actually the sender and that the document has not been altered. The entity providing the encryption technology also provides a digital certificate tying the source identity to the source's public key. Although the private key is a software tool, confidentiality can be protected through passwords and more conventional technologies.

How will we protect ourselves against data manipulation? We have long been able to write-protect files. What if the client needs manipulation capability? Control

"Cyber Sign & Seal" continued p. 23



PSPE Annual Conference & NSPE Northeast Region Fall Conference October 15 - 17, 2009

In 2009, the National Society of Professional Engineers will celebrate its 75th Anniversary. The Pennsylvania Society of Professional Engineers is honored to be part of the celebration as we host the 2009 NSPE Northeast Region Meeting in conjunction with this year's annual state conference.

The conference is going to be held October 15-17, 2009 at the Bear Creek Mountain Resort in scenic Macungie, PA which is located about 10 miles southwest of the Lehigh Valley exit off I-476. There are a variety of regional attractions including winery and covered bridge tours, the kid-friendly Crayola Factory, and more. Check out the many options at www.lehighvalleypa.org and www.readingberkspa.org.

The conference will begin on Thursday evening with some ice breaker events, including a Young Engineers Happy Hour. Friday will be packed with programs, including educational sessions, the NSPE Northeast Region Meeting, an Order of the Engineer Ceremony and a dinner reception with a guest speaker, David Matthews, Director of the New Reactor Licensing for the U.S. Nuclear Regulatory Commission. The conference will culminate on Saturday with various PSPE governance meetings.

One of the most important aspects of the conference is the educational sessions. Beginning in September 2009, Pennsylvania will start requiring mandatory continuing education credits in order to renew a Professional Engineer license in 2011. The change in the registration law will require professional engineers in Pennsylvania to obtain 24 professional development hours (PDH) over a two year period. This conference will be one of the first opportunities for Pennsylvania Professional Engineers to obtain some of those credits for the next renewal cycle. We plan to offer educational sessions in four different time slots, allowing individuals to earn at least 4 PDHs. We are looking forward to an exciting conference and hope that you will be part of it! See you in October!

Bear Creek Mountain Resort & Conference Center features 330 wooded acres of hiking, biking, fishing and boating summertime activities. Guests can relax at the spa, catch up with friends at the bar and restaurant, or enjoy the indoor pool and indoor/outdoor hot tubs.

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Pennsylvania Taking Action Science & Engineering Education

Mark Rutkowski, P.E.

Pennsylvania is taking steps to improve interest in and the quality of STEM (Science, Technology, Engineering, and Math) education in the Commonwealth. PA recently applied to the National Governors' Association for a grant to improve STEM education in the state. PA was one of six successful applicants. The purpose of the grant is to identify best practices and other assets that we have for STEM education. Once identified those assets would be disseminated as widely as possible through the establishments of partnerships and other networks. This information is correlated with the results of a gap analysis study that identifies the needs of the state's employers. This assures that the maximum effort is placed where the need is most.

This effort is spearheaded by the Team Pennsylvania Foundation with support from numerous State agencies including PA Department of Education, Department of Labor and Industry, and Department of Community and Economic Development. Financial and other support has come from a number of sources including the Bill & Melinda Gates Foundation, Intel Foundation, WIRED Wall Street West Initiative, National Girls Collaborative Project, and others.

The stated long term goals of the programi are:

- 1. Increase the number and diversity of Pennsylvania's students, residents, and workers with high quality post-secondary STEM education and training.
- 2. Ensure that all graduates from Pennsylvania's high schools meet or exceed proficiency in STEM content areas.
- 3. Diversify and increase the number of Pennsylvania teachers who are well prepared and highly-effective in providing STEM education.
- 4. Increase awareness of and commitment to STEM education as a priority for Pennsylvania.

In order to bring the results down to the local level, the state is divided into five regions. Each region is tasked with identifying local assets and local needs. Perhaps more importantly, each region brings together many individuals from both higher education and K-12 education along with business, industry, economic development agencies, and even community groups such as girl and boy scouts. The goal is to increase interest in and ultimately the quality of PA's STEM education.

In order to accomplish this, we need to educate the stakeholders about the importance of STEM education in the long term competitiveness of PA and the United States in our global economy. These stakeholders obviously include our students and teachers. Students and teachers cannot tackle this problem alone. We need to enlist the whole-hearted support of parents to reinforce the importance of what is taught in our schools. This can be a challenge since many parents have worked in well paid union positions in manufacturing. Many of these jobs did not require education beyond high school. It is important that these parents understand how the PA economy has shifted to a knowledge based economy that now requires post secondary education. It is unfortunate that many are learning this lesson the hard way. With manufacturing facilities closing down, many incumbent and displaced workers are finding the need to return to school for the training they need in today's job market.

Most people reading this, in addition to being a professional, are also parents. I am sure just about all parents have experienced an instance when their child has related a new bit of knowledge that they learned from someone outside the home. The child treated this knowledge as a revelation, as if they heard it for the first time. At the same time you, as a parent, are thinking to yourself about the many times you

spoke to your child about the very same issue. Sometimes it takes an outsider to get a child to truly listen and learn. This mentality is not restricted to children. Consider the last time you heard an expert speak about some issue. Often that expert traveled a considerable distance to deliver their presentation. Very likely there was a local person with the same or better knowledge. A tongue in cheek definition of an expert is "some guy from out of town". This often rings true. Teachers experience this same dynamic. There is much value in occasionally having an outside speaker to come into the classroom to corroborate what is being taught. Better still if the "outsider" can affirm that the skills taught in the classroom are actually used on the job. After all, the teacher could not possibly know (student perspective) what is needed in the workplace that the student would like to work in.

This is how you can help. As an educated professional in the engineering community, you have the credentials to affirm the importance of what is being taught in the STEM classroom. Doing that in person, in the classroom can have a meaningful impact on the students. You may ask how you go about doing this. I suggest you get to know the teachers in your area. Attend high school parent conferences or college open houses. Let them know your willingness to help. They may ask you about placing a student in your company for an internship or job shadowing experience. They may be looking for a coach for their MATHCOUNTS team or their bridge building team. Perhaps they would like a guest speaker in the classroom. We think about these issues every February as Engineering Week approaches. We need to think about this every week. Just as parents are parents every week of every year, professionals are professionals every week

STEM Initiative continued to p. 20

2009 PSPE PAC Sponsor Recognition

Many thanks to the following individuals who contribute to the PSPE Political Action Committee fund. The PAC fund allows PSPE lobbyists to influence bills on behalf of PSPE members. PSPE is very active at the Pennsylvania state capitol. Each session we monitor legislation that could impact PSPE members in their profession. Your contributions are critical as PSPE affects bills such as those found in the article "On Capitol Hill."

Pennsylvania Circle

PSPE guests at the Installation and Awards Banquet on Friday, June 5, 2009 raised over \$1,400 for the PSPE Political Action Committee. Thank you!

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Pennsylvania's Budget Saga

John D. Wanner, CAE

Budget Stalemate Continues

Even though the Pennsylvania constitution requires that the state budget be enacted by June 30th, the Commonwealth has missed that deadline for the 7th consecutive year. This year's impasse is much more serious than previous years, however, as the country's economic downturn has left this and nearly every state with far less revenue than anticipated. How to balance the 2009-2010 budget is now at the heart of the stalemate. While Governor Rendell calls for an increase in the Personal Income Tax (PIT), Republicans are advocating more spending cuts to balance the books. Even if the Democratic House followed the Governor's lead, a budget cannot get done without the Republican Senate buying into the plan. In short, no budget deal is expected in the next couple of weeks. In fact, most Capitol insiders believe that the deadlock will drag into August.

Business Privilege Tax Bill Awaiting Action in Senate

A bill that would prevent contractors from having to pay the local business privilege tax in any municipality where they have a project is on the move in the Senate. Senate Bill 601 has been rereferred to the Senate Appropriations Committee after previously passing out of the Senate Finance committee. This bill is in reaction to a 2007 State Court ruling that expanded a municipality's ability to tax anyone conducting business within city limits. The State Supreme Court ruling in V.L. Rendina v. Harrisburg found that a contractor can be required to pay the local business privilege tax even if the contractor does not have a permanent office within city limits. As contractors often have construction trailers

at job sites, the ruling could cost contractors a great deal of money.

Mechanics Lien Law Revisited

The Senate is considering modifications to the PA Mechanic's Lien law which was overhauled in 2006. The currently pending legislation, Senate Bill 563, simply redefines what constitutes "residential" projects. Under the current law, contractors can still waive their lien rights on residential construction contracts worth less than \$1 million. Contractors are not permitted to waive their rights on non-residential projects under the law enacted in 2006. Senate Bill 563 redefines "residential" by eliminating the million dollar threshold and replacing it with a new definition that describes a residential project as being any town house or single family dwelling of 3 stories or less not including the basement.

The bill is intended to prevent problems that have occurred at housing developments where the general contractor has gone bankrupt and the subs file liens against the home owners. The bill is expected to be voted on by the full Senate before the Legislature's summer break. While there is no organized opposition to the bill in its current form, several organizations are interested in amending the law to undue some of the changes made in 2006. As a result, the legislation bears close watching.

Legislative Activity

HB 416 RE: Falsely Pretending to Hold a License (by Rep. Brian Barbin, et al)

Amends Title 18 (Crimes and Offenses) by defining "licensing board" and "professional or occupational license";

and adding a section defining the offense of impersonating the holder of a professional or occupational license. The bill defines the offense as falsely pretending to hold the office of notary public within this Commonwealth or to hold a professional or occupational license issued by a licensing board and performing any action in furtherance of this false pretense. The bill provides for grading of the offense.

Reported as amended from Senate Consumer Protection & Prof. Licensure Committee, and read first time, 6/23/2009

HB 687 RE: Guaranteed Energy Savings Contracts (by Rep. Frank Dermody, et al)

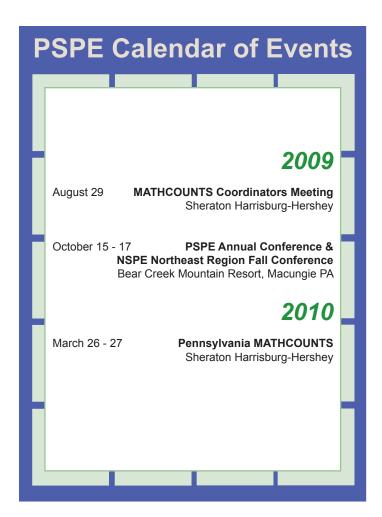
Amends Title 62 (Procurement), in guaranteed energy savings contracts, amending the definition of "energy conservation measure" to include technology upgrades designed to reduce water and wastewater consumption or operating costs, and inserting water and wastewater-related provisions into language relating to contract procedures and provisions.

Reported as committed from House Appropriations Committee, 6/2/2009 Laid on the table and removed from the table, 6/25/2009

HB 786 RE: State Energy Office Act (By Rep. Camille George, et al)

Establishes the State Energy Office in the Department of Environmental Protection to promote the goals of energy development and energy conservation. The legislation provides for the powers and duties of the office, including to promote the development of PA's indigenous and renewable energy, to assist the Department

"Capitol" continued to p. 21









Bog Turtles What Developers and Landowners Need to Know

Anthony Haubert, Public Relations Specialist, RETTEW
Tim Falkenstein, Senior Biologist, RETTEW



As with any project that involves construction, obtaining environmental clearances is an essential component to successfully completing the job. One such environmental regulation that could potentially cause delays in project schedules and/or impact the feasibility and costs of your project involves protecting the bog turtle.

Found throughout 15 counties in southcentral and eastern Pennsylvania, as well as in other states, bog turtles (Glyptemys muhlenbergii) are known to inhabit wetlands in Adams, Berks, Bucks, Chester, Cumberland, Delaware, Franklin, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York counties. More important, they are listed on the Pennsylvania Fish and Boat Commission's (PAFBC) list of endangered species and the U.S. Fish and Wildlife Service's (USFWS) list of threatened species.

Why Is It Important to Know About Bog Turtles?

Since state and federal law strictly regulates land development activities from disturbing or impacting bog turtle habitats, anyone planning land development activity on parcels containing wetlands in these

counties must comply with USFWS and PAFBC seasonal search protocols. The most stringent of these regulations requires that projects impacting wetlands must have a Phase I bog turtle habitat assessment completed. If the Phase I habitat assessment identifies potential bog turtle habitat, then a Phase II presence/absence survey must be completed within a two-month window between April 15 and June 15. Missing this two-month search window will cause project delays of at least one year.

Phase I and II Surveys

The first step in identifying bog turtles involves conducting a Phase I survey, in which a USFWS-qualified bog turtle surveyor conducts a field view to determine the presence or absence of potential bog turtle habitat, which is typified by open, emergent wetland vegetation and soils with a soft, mucky substrate. If the Phase I survey detects potential bog turtle habitat, the qualified surveyor must then complete a Phase II survey to confirm the presence or absence of any bog turtles on the property. The Phase II survey, however, can be conducted only between April 15 and June 15, when the turtles are above ground and active. Otherwise, the project will be

halted until the Phase II survey work can be completed during the next April-June timeframe the following year.

Besides the tight timeframe, Phase II surveys require several trained scientists' spending a number of days conducting an on-foot search for the small creatures which, because of their size, can be difficult to find. (The smallest turtle in Pennsylvania, bog turtles typically reach a maximum shell length of around four inches at adulthood.) If the Phase II survey does uncover bog turtles, the surveyor then serves as a liaison between the municipal authority and federal/state agencies to achieve environmental compliance and obtain permits.

Prior to the design of a project, developers and landowners need to consider if there are any wetlands that could be potentially impacted by their project. Given the unforeseen challenges that developers may face with their construction project, it's important to realize that the bog turtle could be one of those challenges, if the appropriate measures aren't taken to preserve this endangered species.

To learn more about the rules and regulations surrounding bog turtles visit http://ecos.fws.gov/docs/federal_register/fr3175.pdf

Bright orange water coming from the piping clearly shows high levels of iron.



Water runoff with visible signs of high iron levels, next to Centennial road.



Construction of the aeration pond.

Iron Reduction Treatment Alternatives

Glanraffan Creek

Evan R. Andrews, P.E., and Corey Fenwick Pennoni Associates Inc.

Traditional water treatment facilities are generally large, warehouse-type buildings filled with pools, pipes and pumps. These facilities certainly do not look like a part of nature, but have always been considered necessary to keep water clean and free of pollutants and contaminants. Through advances in modern engineering, new and creative ways to overcome water treatment challenges have emerged. Lower Merion Township recently discovered they were able to improve waterway quality in a natural and economical way.

During a routine water quality inspection in 2002, the Department of Environmental Protection found an imbalance in the Township's Glanraffan Creek. An investigation determined that an increased level of iron in the water was stemming from a former Township landfill facility, which had closed over 25 years earlier.

In the early 1920's, the landfill in Lower Merion Township was opened and operated over existing groundwater seeps that discharged into Glanraffan Creek. In 1937, an incinerator was built on the site. In 1969, the original incinerator was replaced with a new one and it operated until the landfill closed in 1977. Over the years, loads upon loads of ash and trash had been placed in the landfill, while the existing seeps remained.

Glanraffan Creek's Total Maximum Daily Load (TMDL), an estimate of the maximum of a pollutant that a waterbody can receive and still safely meet water quality standards, was established by USEPA in the winter of 2003. The TMDL required a reduction of the iron discharge from the site and to meet the iron limit, treatment of the water emanating from the seep was required.

Taking action, the Township enlisted the services of Philadelphiabased consulting engineers Pennoni Associates to develop treatment alternatives to reduce the amount of iron discharged into the creek. With the creek being a part of a small watershed that flows through a small floodplain wetland area before it reaches the Schuylkill River, it was important for not only the township, but also to the region, to improve the quality of the waterway.

Treatment Plans

Pennoni presented Lower Merion with treatment alternatives to reduce the amount of iron discharged into the creek. Options included both active and passive treatment systems. Active systems considered included chemical addition, mixing, mechanical aeration, and settling. Such active treatment would require considerable capital expense and ongoing operations expense for chemical purchase and power consumption. Connection to the nearby sanitary sewer was considered, but it would have caused fouling of the sewer and downstream pump station from the iron precipitate and potentially incur additional treatment costs from the City of Philadelphia.

The Township selected passive treatment of the groundwater seep. Aeration would occur using a cascade (stair steps) followed by a holding pond where the iron would oxidize and settle on the pond floor. Pond discharge would be polished in a constructed wetland. Lower Merion decided on this plan due to the use of natural treatment processes, the wooded nature of the watershed, and the low operation costs associated with the alternative.

Passive Treatment Design

This treatment system is based on the fact that iron within the seep flow will precipitate out when the water is aerated. Passive systems are designed based on iron loading and expected removal rates

Water from the seep collects in a blanket drain. The blanket drain is located in an excavated trench where the seep appeared on the slope of the former landfill. At the toe of the blanket drain, a perforated pipe is wrapped in the blanket in a crushed stone annulus to collect the seep water. The pipe becomes a solid wall pipe (not perforated) as it exits the blanket and is routed under a road to the pond.

At the pond, the pipe discharges into a concrete cascade aerator. Seep water fills the inlet to the aerator until it overflows onto the steps of the cascade. The inlet of the aerator keeps the PVC pipe and the lower portion of the seep blanket full to minimize the oxidation of iron in the seep water. The fall of the seep water down the cascade initiates aeration of the seep water and starts the iron oxidation process in the pond.

The pond discharge system resembles a piped discharge from a stormwater management basin. The primary pond outlet is composed of a precast concrete inlet. Water must pass over the crest of the riser and then flow through a pipe through the pond embankment. At the downstream toe of the embankment the pipe discharges to the wetland area. The pond is lined to prevent the seep water from infiltrating into the ground creating new seeps.

Results

The project was completed and the iron load in the creek has since been meeting the TMDL limits. The decision to go with a passive treatment was both economically and environmentally practical. By providing this treatment prior to discharge into one of southeastern Pennsylvania's major rivers, the Township is not only helping to improve the environment in their neighborhood, but helping to improve water quality in the region.

At the ACEC/PA 2009 Diamond Awards Banquet, Lower Merion Township and Pennoni were presented with the Environmental Honor Award for the accomplishment of the Glanraffan Creek Project. ■

Evan Andrews is a Senior Engineer and Water-Wastewater Division Manager for Pennoni Associates Inc. He can be contacted at eandrews@ pennoni.com. Corey Fenwick is a Communications Specialist with Pennoni. He can be contacted at cfenwick@pennoni.com.



Water coming from the pipe after being treated is much clearer.



The completed pond.



An example of the cleaner flowing creek in the heavily wooded area.

Celebration of Engineers

June 5 – 6, 2009 Holiday Inn Harrisburg-Hershey Grantville, Pennsylvania



Tim Ormiston, PE, accepted the award on behalf of the Beaver County Chapter for their Outstanding Program.

The recipe for this successful celebration included live music, public recognition of outstanding engineers, generous sponsors, and of course a great guest list. Not much more needs to be said than, "A great time was had by all."

If you missed it, mark your calendar and save the dates of October 15 - 17, 2009 for the next PSPE conference. We'll see you at Bear Creek Mountain Resort in Macungie!



Paul Dugan, PE, accepted the award on behalf of the Valley Forge Chapter for the Chapter Communication Award.

PRESENTATION OF AWARDS David K. Williams, PE, Awards Chair

Engineer of the Year
Harvey D. Hnatiuk, P.E., F.NSPE
Maida Engineering Inc.

Young Engineer of the Year Robert L. Scheib, P.E. Wilbur Smith Associates

Chapter Special Achievement Award Delaware County Chapter

Chapter Communication Award Valley Forge Chapter

Chapter Outstanding Program Award Beaver County Chapter

President's Dedicated Service Award Delaware County Chapter PSPE

Order of the Engineer Link 230 Inductees

Benjamin T. Burson, III PE John Hilditch PE Ronald N. Morris PE, CM Christine Volkay-Hilditch PE



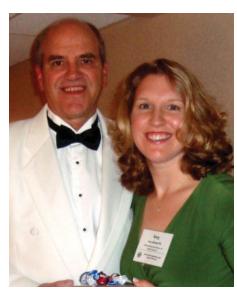
Howard Bink and the Tunesters provided music appreciated by guests of all ages. Thank you again, Howard! The featured dancer is Milana Dauite, daughter of Amy Daiute, PE, and granddaughter of Walter Poplawski, PE.

RECOGNITION OF NSPE FELLOWS PENNSYLVANIA CLASS OF 2009

John F. Bradshaw, PE, PLS, F.NSPE

Walter J. Poplawski, PE, F.NSPE

Donald D. Smith, PE, F.NSPE



Walter Poplawski PE, F.NSPE, (PSPE President) and his daughter, Amy Daiute, PE (2009 Conference Chair.)



Walter Poplawski, PE, F.NSPE, PSPE President 2009-2010 surrounded by the "first family."

PSPE EXECUTIVE COMMITTEE 2009-2010

President
Walter J. Poplawski, PE, F.NSPE
The A & E Group Inc.

President-Elect

David L. McCullough, PE

The PBS & J Corporation

Secretary
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Vice President, Southwest Region Michel J. Sadaka, PE Sadaka Corporation

Vice President, Central Region Susan K. Sprague, PE Johnson, Mirmiran & Thompson, Inc.

Vice President, Northeast Region Eric W. Tappert, PE Tappert Engineering

Vice President, Northwest Region Timothy S. Ormiston, PE PPG Industries

Pennsylvania Representative to NSPE House of Delegates Harvey D. Hnatiuk, PE, F.NSPE Maida Engineering Inc.



The Delaware County Chapter was recognized for an outstanding year of work, taking home the President's Dedicated Service Award and Chapter Special Achievement Award. L-r: Eileen Nelson, Christine Volkay-Hilditch, John Pickett, and Lisa Catania.



PSPE Engineer of the Year, Harvey D. Hnatiuk, PE, F.NSPE proudly supported by his family.



Susan Sprague, PE, leads PSPE members as they participate in the Order of the Engineer ceremony.

Thank you!

Baker

Gold Sponsor
Michael Baker Jr.



Bronze Sponsor

The PBS&J Corporation

Special thanks to Paul Dugan, PE, for sharing his photographic talent.



Frank Stanton (right) accepts his raffle prize - a basket of Hershey's chocolate - from John Nawn (left). (Zeyn Uzman won the putter.)

State Competition Results

Pennsylvania Top Teams



Valley Forge Middle School Wayne, PA

Jeffrey Han (8) Ary Swaminathan (8) Ruth Wang (8) Crystal Wang (7) Allison Long (coach)



Sewickley Academy Sewickley, PA

Justin Ferri (8) Ray Li (8) Daniel McCormick (7) Jason Schuchardt (7) Thomas Perdziola (coach)



Radnor Middle School Wayne, PA

Christopher Blazey (8) Bryan Cai (8) Phoebe Cai (7) Kimberly Zhang (8) Deana Storey (coach)

Pennsylvania Countdown Round Winners

*Bryan Cai (8) Radnor Middle School Coach: Deana Storey **Delaware County**

*Ray Li (8) Sewickley Academy Coach: Tom Perdziola Pittsburgh

3 *Shashwat Kishore (6) Charles F. Patton Middle School Coach: Mary Jo Knauer **Chester County**

*Ted Meador (8) Lower Dauphin Middle School Coach: Debbie Gleim Harrisburg

Crystal Wang (7) Valley Forge Middle School Coach: Allison Long Chester County

Danny Balter (7) Winchester-Thurston Middle School Coach: Heather Crowley Pittsburgh

> Ary Swaminathan (8) Valley Forge Middle School Coach: Allison Long **Chester County**

Matt Weidner (7) Brandywine Heights Middle School Coach: Ken Weidner Reading

> George Kunkel (8) Chestnut Hill Academy Coach: Andrew Wolf Philadelphia

Corey Smithmyer (8) Mechanicsburg Middle School Coach: Kathy Semanko / Lee Kennedy-Shaffer Harrisburg

National Results

*Bryan, Ray, Shashwat, and Ted represented Pennsylvania at the 2009 Raytheon MATHCOUNTS National Competition held at Walt Disney World's Swan and Dolphin Resort in Orlando, Florida. As coach of the first place state team, Alison Long gained the honor of advancing as coach for the PA team to the national competition.

Out of the 228 final Mathletes® from 57 U.S. states and territories, Ray Li was a quarter-finalist and the team finished 11 in the nation. Outstanding performance!



Pictured l-r (front) Ted Meador, Shashwat Kishore, Ray Li, Bryan Cai, Alison Long. (Back) Beverly Withiam, P.E., David Stone, P.E., John Bradshaw, P.E. F.NSPE.

Photography services provided by Tim Leary, who I am sorry to say, passed away a few months after the state MATHCOUNTS competition.

The People Who Made it Happen

Sponsors







Shell Buchart-Horn, Inc. Hanover Engineering Associates PPG Foundation

Individuals

William R. Gorman Jr., P.E. Arthur P. Luthy P.E.

Scholarships

Business and Professional Women of Pennsylvania **Drexel University Gannon University** Pennsylvania Engineering Foundation Pennsylvania State University Temple University University of Pittsburgh University of Pittsburgh at Johnstown

Regional Coordinators

Anthracite Chapter Rebecca Mairose P.E. Alfred Benesch & Co

Anthracite Chapter **Greg Stewart** Alfred Benesch & Co

Beaver County Chapter David McCullough P.E. PBS & J

Blair Chapter Christopher Oliver Penn State University

Bucks County Chapter Anton Kuhner P.E. McMahon Associates Inc

Central Chapter Christopher Oliver Penn State University

Chester County Chapter William Gorman, Jr. P.E. Diamond Power International

Delaware County Chapter Kevin Matson P.E. Kelly & Close Consulting Engineers & Surveyors

> Erie Chapter Gerald Kraus PhD Gannon University

Fayette Chapter R. Kevin Maxwell Penn State University

Harrisburg Chapter Yves Pollart PE Rettew Assocs Inc

Johnstown Chapter Amy Miller University of Pittsburgh at Johnstown

Johnstown Chapter Linda Tully University of Pittsburgh at Johnstown

> Lehigh Valley Chapter Lori DeLong Barry Isett and Associates

Lincoln Chapter Susan Sprague P.E. Johnson Mirmiran and Thompson

Luzerne County Chapter Rich Kresge P.E. Quad Three Group Inc

> Midwestern Chapter Art Hall P.E. Wheatland Tube Co

Northeast Chapter Mary Bogart P.E. Bogart Engineering

Pittsburgh Chapter Virginia Dailey P.E. D& D Engineering

Reading Chapter James McCarthy, P.E. McCarthy Engineering Assoc PC

> Susquehanna Chapter David Stone P.E.

Valley Forge Chapter Karen O'Connell McMahon Associates Inc

Washington County Chapter Jean Byers

Westmoreland Chapter Virginia Dailey P.E. D & D Engineering

State Committee

State Coordinator David B. Stone Jr., P.E.

Assistant Coordinator Beverly W. Withiam, P.E. University of Pittsburgh at Johnstown

> Director of Testing Michael A. Barron, P.E. Lehigh County Authority

Facilities Director Timothy S. Ormiston P.E. PPG Industries

Director of Scoring Mark Stabolepszy P.E. Spotts Stevens & McCoy Inc

> Director of Grading Madeline J. Bauer

Director of Technology Keith Roberts, PLS Spotts Stevens & McCoy Inc

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Countdown Round Director David H. Fleisher P.E. Fleisher Forensics

Assistant Countdown Round Director Brookes A. Britcher Jr., P.E. Sara Lee Bakery Group

Countdown Round Moderator Harvey D. Hnatiuk, P.E., F.NSPE Maida Engineering

Officials Ann Bacon, PhD **Iames Bacon** John F. Bradshaw, P.E, F.NSPE Robert Freer Joan Freer Arthur P. Luthy, P.E. Mary Luthy Albert Mauthe, PhD

PSPE Deputy Executive Director Jennifer Summers

Logical Connections

Pennsylvania MATHCOUNTS would like to express sincere appreciation to Dr. Jerry Shoup and his team from the Penn State Harrisburg engineering department. Over 100 students participated in hands on activities with professors from Penn State overseeing. The Pennsylvania Society of Professional Engineers believes that there is a logical connection between students who enjoy the problem solving opportunities presented in the MATHCOUNTS program and engineering as a career choice. The activity received great reviews from all parties. If this is something your college or university might be interested in hosting in 2010, please contact Jennifer Summers at 717.441.6051.



"Genes in a Bottle" - Students created their personal DNA necklace during a hands-on biotechnology activity.



Teams of four students engaged in robot construction & operation with professors from Penn State facilitating.



Students observed some fundamental theories of electrical and optical science phenomena before breaking into hands on projects.

NSPE gives you information to help you lead a non-profit, volunteer organization. Take advantage of the resources in

Following are samples of information available to you as an NSPE leader and member.

You will need the e-mail NSPE has on file and your password to access the toolbox.

Contact Jennifer Summers (jennifer@wannerassoc.com) if you do not remember which e-mail NSPE has in your record.

A Guide to Enhancing Professional Development: From College Student to Company Principal

Engineers' Creed

EWeek Programs

Leader Orientation Guide

Legal Responsibilities: A Guide for NSPE and State Society Officers and Directors

NSPE Board Meeting Minutes

NSPE Executive Meeting Minutes

NSPE House of Delegates Minutes and Agendas NSPE Policy Manual (includes bylaws)

Reports from the Regional Vice Presidents State and Chapter Activities Task Force

Society Leadership Orientation Program

Speaker Database

State and Chapter Leader Idea Exchange

Strategies For Member Retention and Attraction Successful NSPE press placements on licensure, ethics, and the merits of PEs

Volunteer Task Catalog

Chapter Leader Handbook

Chapter Activity Suggestions

Chapter Governance Summary of Best Practices

A Year in the Life of a Chapter President

State Leader Handbook

NSPE State Model Bylaws and Operating **Procedures**

NSPE Chapter Model Bylaws and Operating

Procedures

Leadership Qualities

Officer Installation Ceremony

Roberts Rules of Order Overview

Meeting Planning

Identify Great Grassroots Activities

Ten Tips for a Successful Leadership Year

Templates for State and Chapter Functions

State Society Executive Resources

Economic Renewal

Economic Impact on Associations 2009 Benchmark Study

Enterprise Prospects

Exit Survey Results 2009

Generations and the Future of Association

Participation

Give Back Get Back Renewal

Insurance-Memo Regarding Commercial General

Liability & Not-for-Profit Liability Insurance-2008

Insurance-Certificate of Insurance Request Form-2009

Member Counts (By State 2000-08)

Membership Counts (1935 - Current)

Providing Pro Bono Services as a Firm or as an Individual

Sample Recruitment Letters

State Web Site Template

Student Chapter Report Form

Sample Policies

Antitrust Compliance Statement

Conflict-of-Interest Statement

Document Retention

Joint Venture

Non-Harassment

Objective Compensation

Privacy Policy-E-mail, Web, Member Data

Whistleblowing

PSPE Member Update

Share PSPE

PSPE is valuable to you for specific personal reasons...

- friendship
- job leads
- problem solving network
- leadership opportunities
- resume builder ...any number of possibilities.

Share these gifts with a colleague or mentee. NSPE and PSPE are offering a 6 month trial membership at no fee.

Download the 6 month trial application from the members only section of www.pspe.org and give it to a colleague. (Send an e-mail to jennifer@ wannerassoc.com if you need your username and password.)

Following are members who joined PSPE in 2009. Chapter officers can access member data in realtime with a login and password from NSPE. If your chapter does not yet have a membership chair or officer who has this access, please contact Jennifer Summers, jennifer@wannerassoc.com or 717.441.6051.

Beaver County

Matthew Balmer

Chester County

Jesse Condon

Delaware County

Margaret Finch Carragher J Earl Coffman Susan M Lynch PE

Harrisburg

Glenn P Groff EIT Ankit T Shah

Johnstown

Kevin H. Fruck PE

Lehigh Valley

L. Brian Akelaitis Scott D Gold PE James Charles Krutchen PE

Lincoln

Alvis O Elrod Talvas Lucas Sean T Preller PE

Luzerne County

Susan Fenske Prahlad N Murthy PE

Philadelphia

Stacey W Culbreath CET Christopher J. Holliday Michael W Tantala PE Peter John Tantala Tyson S Thomas Ning Xu

Pittsburgh

Kristin M Smith Robert Wayne Venturini PE Richard William Zollinger

Reading

Nicole L Greenway PE Jack G Tropp PE Nathan D Zipay EIT

Valley Forge

Craig Michael Billman PE

"Message" continued from p. 3 did excellent work in organizing this year's program under the direction of David Stone, PE, MATHCOUNTS Coordinator.

- 2. The Order of the Engineer is a prestigious ceremony and several were held during the year. Organized by President Elect Walter Poplawski, PE, F. NSPE, the Lucerne County Chapter held a ceremony at Wilkes University in Wilkes Berra. Over 50 men and women were part of the ceremony, dedicating their service to engineering. A number of them were instructors at Wilkes. This truly was a good example of how to organize a successful ceremony. In fact, a few of the candidates joined PSPE.
- 3. Legislative Day was a success this year thanks to our own John Nawn, PE, and John Wanner, who organized the affair in association with ACEC/PA, ASCE, ASHE, Engineer's Club of Philadelphia and ITE, Mid-Atlantic Section. The program consisted of a day of training on the Friday before the event, breakfast and prep talks on issues, Capitol Hill visits, and an evening Legislative Reception sponsored by ACEC.
- 4. National Engineers Week is another event celebrated by our chapters in association with other engineering and technical organizations. Many fine programs and banquets took place in February 2009 to honor this event. Many awards were given at this time to outstanding engineers for their service. This year, I had the privilege

of attending the Delaware County Chapter's 75th Year Celebration of Engineering Excellence. Over 500 people were in attendance. The program honored engineers and engineering companies of which were two or three generations. Proclamations, such as the one at the start of this article, were provided by Delaware County, the city of Chester, and many boroughs and townships within the county. Eileen Nelson, PE, Chapter President, and Nick Cirilli, PE, including the Committee members planned a memorable and festive event. I am honored to select the Delaware County Chapter as the recipient of the prestigious President's Award for 2009.

As your President, I have enjoyed working with everyone on the Executive Committee and the Board. All have been very supportive and helpful in doing their part to make PSPE an outstanding organization. I must emphasize that we could not perform our duties and responsibilities very well without the excellent support of Jennifer Summers, our dedicated Deputy Executive Director. She not only provides the necessary support, but is skillful in directing and providing good advice.

There are two things that gave me concern this year but could not be avoided. First, I could not be with you in the Celebration of Engineers at our Installation of Officers and Awards Ceremony on June 5th. The program was well organized under the direction of Amy Daiute, PE (Walter Poplawski's daughter), of the Luzerne County Chapter. As many know, I attended my grandson's high school graduation in Texas on the same day. I congratulate Harvey Hnatiuk, PE, F. NSPE, and Robert Scheib, PE, for winning the Engineer of the Year and Young Engineer of the Year Awards, respectively. Also, I congratulate the chapter award winners. Each of the award winners are well deserving of the recognition.

Second, I wanted to continue with the glossy editions of the PE Reporter for our members. I think it is an outstanding publication and sells our organization. However, due to the lack of funds from advertising support and the high expense of printing, PSPE could no longer continue the publication. Instead, we will maintain an electronic edition through the PSPE website and provide one full publication each year following our annual conferences. You will be notified when the electronic edition is posted on the website. Our members are encouraged to supply PSPE with updated email addresses.

As my term draws to an end, the gavel is ready for Walter J. Poplawski, PE, F.NSPE, to take the helm. Walter has a strong desire to build the engineering profession and our society. He has good leadership skills, is very conscientious, and works well with others. I look forward to a good year under Walter's direction. ■

STEM Initiative continued from p. 7

of every year. Mentoring the young people that will someday take your place is part of the responsibility of being a member of a professional community. This mentoring is vital to keep the United States competitive in the global marketplace.

There may be some that view PA's STEM Initiative as too little too late. Be assured that these efforts are just the first step in a long process. As we know, every journey begins with a first step. PA has taken that first step. If you still think it is not enough, then I ask you, what are you doing to help? ■

Mark Rutkowski, PE

Mr Rutkowski is Professor of Engineering Technology at Luzerne County Community College and chairs the Northeastern region of the

For more information about the PA STEM Initiative and to find out how you can become involved visit www.pasteminitiative.org. i From www.pasteminitiative.org

"Capitol" continued from p. 9 of General Services in promoting the efficient use of energy by the State government, and to be the point of contact for private and government energy matters and the lead Commonwealth agency for energy policy development.

Reported as amended from House Appropriations Committee, 6/15/2009

Read second time, 6/17/2009

Read third time, and passed House 6/23/2009 (111-83)

Received in the Senate and referred to Senate Environmental Resources and Energy Committee, 6/26/2009

HB 975 RE: Engineer CE and Continuing Competence (by Rep. Bill Adolph, et al)

Amends the Engineer, Land Surveyor and Geologist Registration Law deleting language providing for mandatory continuing education and adding new language for continuing professional competency requirements for the practice of professional engineering, professional land surveying and professional geology. Each licensee shall be required to obtain twentyfour PDH units during the biennial renewal

Reported as amended from House Professional Licensure Committee, read first time, and Rereferred to House Rules Committee, 6/9/2009

HB 1089 RE: Mini-COBRA Small Employer Group Health Plan and Premium Assistance Act (by Rep. Rob Matzie, et al)

Provides Commonwealth citizens the opportunity to take full advantage of the Federal premium assistance program so the cost of health insurance coverage for the unemployed can be minimized when possible, and which will survive beyond the temporary relief provided in the Federal act. Persons, and the eligible dependents of the persons, who are employed by an employer that normally employed between two and nineteen employees on a typical business day during the preceding year and are not receiving social security benefits are eligible. Passed House, 4/22/2009 (191-1)

Reported as committed from Senate Appropriations Committee, 6/1/2009 Read third time, and passed Senate, 6/3/2009

Approved by the Governor 6/10/2009. Act No. 2 of 2009

HB 1390 RE: Integrated Water Resources Restoration, Protection and Management Act (By Rep. Bob Freeman, et al)

Updates and expands the storm water planning requirements to be undertaken by counties; authorizes counties to regulate storm water within a watershed-based planning area; authorizes the formation of water resources management authorities; enables counties, municipalities and water resources management authorities to develop integrated water resources management plans; imposes duties and conferring powers on the Department of Environmental Protection, the Environmental Quality Board, counties, municipalities and water resources management authorities; provides for financing and for waiver of use for certain grant or loan funds; and makes related repeals.

Informational meeting held House Local Government Committee, 6/3/2009

HR 78 RE: Minority-owned businesses (by Rep. Jake Wheatley, et al)

Resolution providing for the establishment of a select committee to investigate the degree to which minorityowned business enterprises, women-owned business enterprises and disadvantagedowned business enterprises have been utilized in contracts awarded by the Commonwealth of Pennsylvania. Adopted, 3/25/2009 (192-0) Select Committee established: Wheatley, Chair, Buxton, Thomas, Josephs, Beyer, Mustio and

Sonney, 4/27/2009

Public hearing held in House Select Committee

Public hearing held in House Select Committee 6/1, 6/15, and 6/29/2009

SB 45 RE: CE Requirements (by Rep. Stewart Greenleaf, et al)

Amends the Landscape Architects' Registration Law further providing for application for license and qualifications and experience requirements of applicants by removing language allowing the board to register and license without written examination an applicant who has ten years of active experience as a landscape architect and is a graduate of an approved institution, or who has fifteen years of active experience even though not a graduate of an approved institution, if in the opinion of the board the experience is of such grade and character as to fit the person to assume responsible charge. Additionally, the bill provides for continuing education by requiring 24 hours of continuing education during each two year license period (increased from ten hours). License periods, which are currently designated by regulation, would be designated by the board.

Read second time, 6/1/2009 Read Third time and passed Senate, 6/2/2009 (49-0)

Received in the House and referred to House Professional Licensure Committee, 6/3/2009

SB 142 RE: BPOA Enforcement Powers (by Sen. Tommy Tomlinson, et al)

Amends the act entitled, "An act empowering the General Counsel or his designee to issue subpoenas for certain licensing board activities; providing for hearing examiners in the Bureau of Professional and Occupational Affairs; providing additional powers to the Commissioner of Professional and Occupational Affairs; and further providing for civil penalties and license suspension" by authorizing boards and commissions to impose discipline including, but not limited to a civil penalty of up to \$10,000 per violation on any licensee, registrant, certificate holder, permit holder, or unlicensed person who commits certain offenses. The bill also establishes a section relating to confidentiality of records of licensure boards, requiring all documents

"Capitol" continued to p. 22

"Capitol" continued from p. 21 and materials utilized for an investigation by the bureau shall be confidential and privileged. The bill provides for certain disclosures permitted, and for affidavits. Passed Senate, 5/6/2009 (49-1) Reported as committed from House Professional Licensure Committee, read first time, and laid on the table, 6/23/2009 Removed from the table and rereferred to House Appropriations Committee, 6/24/2009

SB 195 RE: Industrialized/Commercial Modular Buildings (by Sen. Mike Waugh, et al)

Amends the Industrialized Housing Act adding definitions for "industrialized/ commercial modular building" and "industrialized/commercial building module" and authorizing the Department of Community and Economic Development to enter into a multistate agreement for the purpose of regulating the construction of industrialized/commercial modular buildings. The department shall adopt regulations to administer the program. Reported as amended from House Labor Relations Committee, read first time, and laid on the table, 6/9/2009

Removed from the table and Rereferred to House Appropriations Committee, 6/10/2009 Reported as committed from House Appropriations, and read second time, 6/25/2009 Read third time, and passed House, 6/29/2009 (200-0)

Received in Senate as amended and rereferred Senate Rules and Executive Nominations Committee, 6/30/2009

SB 235 RE: Flood Control (by Sen. John Wozniak, et al)

Amends the Flood Control Law, modifying and adding several definitions, and providing for the duties of DEP related to Surveys and Plans, and outlining its powers and responsibilities with respect to Federal Flood Control Works and Improvements, Contracts and Acquisition of Property, eminent domain, and federal regulations.

Reported as committed from Senate Environmental Resources and Energy Committee, and read first time, 6/16/2009

Rereferred to Senate Appropriations Committee, 6/30/2009

SB 563 RE: Mechanics' Lien Law (By Sen. Pat Browne, et al)

Amends the Mechanics' Lien Law further providing the definition of "residential property" (changed from "residential building"), by stating it means property on which there is or will be constructed a residential building not more than three stories in height, not including any basement level, regardless of whether any portion of that basement is at grade level, or which is zoned or otherwise approved for residential development on which there is or will be constructed a residential building not more than three stories in height, not including any basement level, regardless of whether any portion of that basement is at grade level, planned residential development or agricultural use, or for which a residential subdivision or land development plan or planned residential development plan has received preliminary, tentative or final approval on which there is or will be constructed a residential building not more than three stories in height, not including any basement level, regardless of whether any portion of that basement is at grade level. Additionally, the bill provides for waiver of lien by claimant by stating a contractor or subcontractor may waive his right to file a claim against residential property by a written instrument signed by him or by any conduct which operates equitably to estop such contractor from filing a claim.

Reported as amended from Senate Labor and Industry Committee, and read first time, 6/23/2009

Read second time, 6/29/2009 Read third time, and passed Senate, 6/30/2009 (49-0)

SB 693 RE: Transportation Infrastructure (by Sen. John Rafferty, et al)

Amends Title 74 (Transportation) adding a part entitled Transportation

Infrastructure. The bill establishes that a proprietary public entity has full authority to enter into a transportation development agreement with an authorized development entity or entities governing the development or operation of all or any portion of a transportation facility, with exceptions. The bill authorizes certain project activities, and stipulates that the Transportation Commission shall serve as the primary repository for all materials relating to the review and approval of transportation development agreements that involve transportation facilities that receive funding from the Commonwealth or result in the proprietary public entity disposing of or relinquishing its control over the transportation facilities. The bill outlines rules governing solicited and unsolicited proposals, negotiations, federal credit assistance, adverse interests, and confidentiality of records.

Reported as committed from Senate Transportation Committee, and read first time, 6/16/2009

Rereferred to Senate Appropriations Committee, 6/30/2009

SB 850 RE: The General Appropriations Act of 2009 (By Sen. Jake Corman)

The Senate Republicans 2009-10 budget. Provides from the General Fund for the expenses of the Executive, Legislative and Judicial Departments of the Commonwealth, the public debt and the public schools for the fiscal year July 1, 2009, to June 30, 2010, for certain institutions and organizations, and for the payment of bills incurred and remaining unpaid at the close of the fiscal year ending June 30, 2009; to provide appropriations from the State Lottery Fund, the Energy Conservation and Assistance Fund, the Hazardous Material Response Fund, The State Stores Fund, the Milk Marketing Fund, the Home Investment Trust Fund, the Emergency Medical Services Operating Fund, the Tuition Payment Fund, the Banking Department Fund, the Firearm Records Check Fund,

"Capitol" continued to p. 23

"Cyber Sign & Seal" continued from p. 5

could be provided by sending an unprotected file which was also an unsigned and unsealed file for manipulation purposes with a separate transmission of a write-protected, cyber-signed/sealed file. As discussed above, the cyber-signature/seal would include verification that the document had not been altered; this protection would act for both parties.

Will a cyber-signed/sealed document be honored the way a signed, sealed paper document is? Only the courts will ultimately provide the answer, but only when we are using cyber-signatures/seals. In the meantime, what can we do to make sure that the courts "find" the answers we need them to? Include in your contracts language which authorizes cyber-signed/sealed documents, including the procedure to be utilized. The courts go out of their way to validate clear, well-documented agreements between parties.

Signatures (of any form) become an issue primarily when work doesn't meet the client's needs. And the security of our seals and corresponding protection from abuse and/or fraudulent use is always within our control, whether that seal is a physical rubber seal or the private key for a cyber-seal.

As an interesting side note, as cyber-signed and sealed documents become the norm, I expect to see a raised customer expectation: Even inhouse customers are going to come to expect cyber seals as validation of interim reviews. To get those cyber seals, I anticipate increased intracorporate interest in and willingness to sponsor licensing. Work it, folks. This could be a great opportunity for our profession.

Remember, if you don't keep up with the technology of your branch of engineering OR with the technology of the profession in general, you are running a Risky Business.

The "Risky Business" column offers articles covering liability from both the legal and engineering perspective. Mrs. Bowman's articles share general information and should not be relied upon as professional legal advice of either a general or specific nature. Rebecca Bowman is a civil engineer-attorney in solo private practice in McMurray, Pennsylvania for more than 25 years. Her practice is a certified woman-owned business. Her B.S. in Civil Engineering is from the University of North Dakota.

Author's Note: If you are interested in looking at more information in this area, I have provided a list of sites.

Albert Gidari & John P. Morgan, Survey of Electronic and Digital Signature Legislative Initiatives in the United States at http://www.ilpf.org/groups/digrep.pdf. Although this is from 1997, it's still a useful starting point.

Algorithmic Research, the Digital Signature Company http://www.arx.com/digital-signatures-faq.php

American Bar Assoc., Digital Signature Guidelines at http://www.abanet.org/scitech/ec/ isc/dsgfree.html

Center for Democracy & Technology, Digital Signatures - Comments of the Center for Democracy and Technology to NIST at http://www.cdt.org/digsig/nistcom.html (Comments to the Commerce Department's public forum)

Digital Signature Resource Center at http://www.ilpf.org/groups/

VeriSign, Inc., VeriSign Digital ID Center at http://www.verisign.com/authentication/ government-authentication/index.html World Wide Web Technology and Society domain Digital Signature Initiative at http://www.w3.org/DSig/DSigResources.html

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the Ben Franklin Technology Development Authority Fund and the Tobacco Settlement Fund to the Executive Department; to provide appropriations from the Judicial Computer System Augmentation Account to the Judicial Department for the fiscal year July 1, 2009, to June 30, 2010; to provide appropriations from the Motor License Fund for the fiscal year July 1, 2009, to June 30, 2010, for the proper operation of the several departments of the Commonwealth and the Pennsylvania State Police authorized to spend Motor License Fund moneys; to provide for the appropriation of Federal funds to the Executive Department of the Commonwealth and for the payment of bills remaining unpaid at the close of the fiscal year ending June 30, 2009; to provide for the additional appropriation of Federal and State funds from the General Fund, from the State Lottery Fund and from the Tobacco Settlement Fund for the Executive Department of the Commonwealth for the fiscal year July 1, 2008 to June 30, 2009, and for the payment of bills incurred and remaining unpaid at the

close of the fiscal year ending June 30, 2008; and making interfund transfers for the fiscal year July 1, 2008, to June 30, 2009.

Passed Senate, 5/6/2009 (30-20)

Defeated in House Appropriations Committee, 6/8/2009

Remaining Spring 2009 Session Schedules

SENATE SESSION SCHEDULE FOR JULY 2009

July 1, 2, 3

HOUSE SESSION SCHEDULE FOR JULY 2009

July 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

More days may be added as needed to pass the FY 2009-2010 state budget.

Copies of all bills of interest can be accessed via the Internet at: $http://www.legis.state.pa.us/WU01/LI/BI/billroom.htm \,\blacksquare$