The purpose of the Pennsylvania Association of Environmental Professionals is to promote environmental education, research, planning, assessment, review, and management through the formation and operation of a nonpolitical multidisciplinary professional society.

PAEP

PENNSYLVANIA ASSOCIATION OF ENVIRONMENTAL PROFESSIONALS

Summer 2009

PAEP Newsletter

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If you have any items for the next Newsletter, or if you would like to help with the Newsletter please contact Mike Kenawell at mkenawell@jmt.com.

Thoughts from the President...

Happy Summer! I hope all of you are having fun and staying safe while enjoying the warm weather!

Our annual conference held in May in State College was a success thanks to the Conference Committee (led by Mike Parrent and Tim Tuttle), PAEP attendees, corporate sponsors, engaging presenters, and our PAEP professional staff. Congratulations again to the 2009 recipients of the Karl Mason Awards - Devra Davis and the Montour Run Watershed Association!

Planning for next year's conference is underway by the Central Section, lead by Conference Co-Chairs Camille Otto and Deborah Henson. More information about the 2010 annual conference date and location is to come, so stay tuned!

I'd like to thank both Jason Minnich and Amy Altimare for their time and effort towards serving as Co-Chairs of the PAEP Central Section over the last few years. Both recently stepped down from their positions, and Kevin Starner has volunteered to serve as the new Central Section Chair. Monthly section events are in the works beginning in September, so watch for event announcements via email.

The Board has focused much of its attention over the last couple of months on identifying areas of PAEP that could be revitalized and/or refocused to best serve our membership, as well as developing an approach and schedule to make our goals realities. There is an article providing an overview of these Board efforts in this newsletter issue. The Board is excited about what lies ahead for PAEP in the coming months and years!

Virginia Bailey
PAEP President

Section Updates

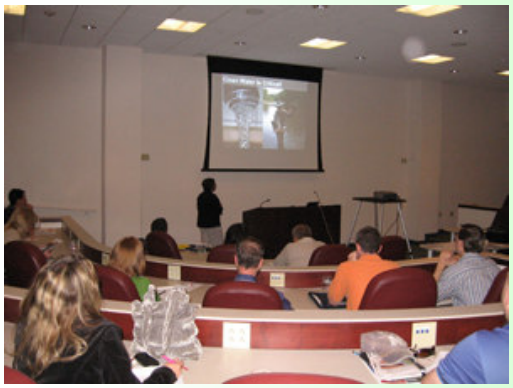
Central Section

Welcome, Kevin Starner, New Central Section Chair

Effective July 14, 2009, **Kevin Starner** of Skelly & Loy has accepted the position of PAEP Central Section Chair. Kevin is excited about the position and planning upcoming events. Look for monthly Central Section events beginning in September!

Thanks to Jason Minnich and Amy Altimare for their valuable service to PAEP over the last few years as the former Section Co-Chairs!

I SPY….



PAEP's 2009 Annual Conference

MEMBER HIGHLIGHT

Abhinav Charan joined PAEP in the Spring this year as a student member. Mr. Charan graduated with a Master of Science in Civil and Environmental Engineering from Carnegie Mellon University, Pittsburgh. He joined Calgon Carbon Corporation, Pittsburgh (NYSE: CCC) as a Project Manager with the Engineering Systems Department.
We are committed to 'making water and air safer and cleaner'.

Abhinav Charan

Join the Pennsylvania Association of Environmental Professionals (PAEP) Group on Facebook to keep up with events and network with colleagues!

facebook

Get Educated…Training Courses available…

New National Highway Institute (NHI) Advanced NEPA Course Available -
Advanced Seminar on Transportation Project Development: Navigating the NEPA Maze (FHWA-NHI-142055)

Course Description: Building upon demonstrated knowledge and understanding of the NEPA project development process, this advanced training provides practical tools and approaches to successfully resolve complex environmental issues and challenges. Designed in seminar format, this training is highly interactive and guides participants through the NEPA decision making process, pointing out potential pitfalls and providing the skills and knowledge to apply critical thinking to reach defensible decisions.

Upon completion of the course, participants will be able to:

- Manage and deliver projects and programs more effectively
- Apply tools and techniques to their jobs
- Apply principles of environmental stewardship and streamlining to complex projects
- Employ integrated coordination of related laws and regulations, as well as coordination among all stakeholders
- Identify strategies to manage controversial projects
- Formulate solutions to complex environmental challenges
- Apply lessons learned from relevant case law
- Build a defensible administrative record
- Identify solutions to emerging issues

Target Audience**:** Experienced environmental practitioners and project development managers (i.e. planning, design, legal, and technical specialists) involved in the NEPA and transportation decisionmaking process. NHI encourages a mix of experienced staff from FHWA, State DOTs, resource and permitting agencies, and local governments, as well as consultants.

Prerequisite: Completion of the 3-day Instructor-led training, *NEPA and Transportation Decisionmaking (NHI 142005)*, or completion of the 4-hour, Web-based training, *Introduction to NEPA and Transportation Decisionmaking (NHI 142052)*.

To check out this and other available course offerings or to host a course, visit NHI online at http://www.nhi.fhwa.dot.gov . Courses are scheduled upon request; any agency or consulting firm may host an offering contingent on meeting minimum paid participant requirements as outlined on the website.

Introduction to Wetlands - Online training course

This online class can be taken at any time from anywhere. It is three contact hours (3 PDH credits). It presents an overview of the current issues and regulatory aspects of wetlands. We discuss the history of wetlands regulation, what a wetland from a technical aspect is, what laws pertain to wetlands and how wetlands are mitigated or can be an economic benefit to a project. This class is for anyone who is just looking to get their feet wet and needs an understanding of what a wetland is and what laws and permits are required to do work in and around wetlands. Cost $150. Please go to www.eduwhere.com for more information.
Email - info@eduwhere.com

LEGAL/REGULATORY INFORMATION

Welcome to the latest addition to our Newsletter. The goal of this column is to provide periodic legal insight on existing and developing regulations and regulatory policy, as well as contract and liability issues affecting PAEP members. New regulations and policies, both final and draft, will often be discussed; but it is not our goal to be a regulatory update checklist source per se. Future columns will also include any questions or comments sent to mburack1@verizon.net.

EPA'S NEW PROPOSED RENEWABLE FUEL STANDARDS (RFS2) WILL HAVE MAJOR IMPACT –ESPECIALLY FOR ETHANOL

Renewable Fuel Regulatory Context:

On May 29, 2009, EPA published its proposed regulation (RFS2) setting forth requirements for renewable transportation fuel production that will gradually increase the use of renewables in lieu of petroleum and thereby reduce emissions of greenhouse gases (GHG). See 74 Fed. Reg. 24904 (May 29, 2009). **On July 2, EPA extended the comment period from July 27 to September 25.**

In accordance with the Energy Independence and Security Act of 2007 (EISA), RFS2 expands and clarifies the existing RFS1 program, (previously promulgated at 72 Fed. Reg. 23900, May 1, 2007, codified at 40 CFR § 80). The massive RFS2 package comes on the heels of a proposed rule requiring GHG emission reporting for various categories of sources, including ethanol plants exceeding 25,000 metric tons of CO2 equivalent. 74 Fed.Reg. 16448 (April 10, 2009).

RFS2 establishes new minimum production and use volumes for renewable fuels, and articulates specific fuels and production methods that qualify for compliance with program requirements. Each gallon of qualifying fuel produced is assigned a unique 32 digit "RIN" code, for compliance tracking purposes.

Qualifying fuels must meet specific standards for reduction of GHG emission, compared to petroleum, based on a "life-cycle" analysis. This analysis considers the land use and other impacts of growing, harvesting and transporting feedstock material, and the production of the fuel, as well as the actual impact of using the fuel.

RFS2 sets forth four categories of renewable fuels, having different GHG reduction requirements and volume production requirements.

Ethanol Industry Overview:

One of the significant changes that will occur from the RFS2 program, is a change in the balance between cellulosic and non-cellulosic biofuels. At this point in time, starch-derived ethanol (primarily corn) predominates the industry. EPA documentation suggests that there are currently 158 ethanol plants operating in the U.S, producing 9.1 billion gpy of ethanol. 149 of these facilities, representing approximately 89% of the production volume, use corn feedstock, and approximately 140 of these plants use dry-milling technology. There are 10 facilities producing approximately 1.7 billion gpy, utilizing wet-milling technology. Five of these ten facilities are owned by ADM. In light of the above, the economic viability of the ethanol industry has been tied to the price of corn as well as the price of oil. It is claimed by many (and continually debated) that using corn for ethanol should be minimized because it causes environmentally detrimental land use impacts and increased food prices world wide. Whether or not these claims have merit, EPA and the Department of Energy are vigorously committed to increasing the viability and availability of cellulosic ethanol, through regulations such as RFS2, and several hundred million dollars in DOE and USDA federal grant support for cellulosic research and pilot plant start up.

There are now reportedly at least 70 companies in various stages of attempting to construct demonstration or commercial scale cellulosic ethanol production facilities. Feedstock for these operations includes both cellulosic crops (switchgrass, wood) crop residues (corn stover, sugar cane residual) and various other waste materials. Cellulosic fuel production of 100 million gallons is required by 2010, ramping up to the eventual requirement of 16 billion gallons by 2022.

Opportunities and Issues for Environmental Professionals:

Environmental professionals may become involved in RFS2 issues in one or more of the following ways:

1) **Immediate submittals to EPA to insure listing of an ethanol production process**

The proposed rule only lists 15 types of qualifying renewable fuel "pathways" based on the limited lifecycle analyses that EPA has been able to carry out. EPA has indicated that it intends to expand the list for the final rule, as well as to encourage post-rule petitions for new technologies and productions methods. Therefore, prospective producers whose generic process is not listed, will need to submit detailed lifecycle information to EPA before the end of the comment period (Originally July 27, 2009 **and now extended to September 25, 2009**), in order to qualify for inclusion in the final rule. Producers that enter the scene after that time, will not be on the approved list and will only be able to achieve listing via petition to EPA and formal amendment of the rule. This may prove to be a time consuming process, during which the prospective producer cannot assure partners and investors that the process will be RFS2 compliant. It is therefore critical, if at all possible, to get on the list that is included in the final rulemaking. One deleted feedstock category that will undoubtedly get significant attention before final rulemaking, is municipal solid waste.

2) **Preparation of Environmental Impact Statements**

Any renewable energy project receiving federal grant money will trigger NEPA review requirements. If the impact is deemed sufficiently substantial to require an Environmental Assessment, the prospective producer will need to devote significant resources and several months of time in order to participate in this process. If a full Environmental Impact Statement is deemed necessary, the investment of time and resources grows substantially. In light of recent precedent, one should anticipate the possibility that DOE will require Lifecycle GHG information, in addition to site-specific environmental information for an NEPA analysis.

Many projects will also be covered by individual state NEPA requirements.

Opportunities and Issues for Environmental Professionals:

Environmental professionals may become involved in RFS2 issues in one or more of the following ways:

3) **Submittal of permit applications**

Most facilities will require state air and water permitting. The extent of permitting will vary, as there are a number of different biochemical and thermal processing techniques contemplated for utilization at ethanol facilities, and a variety of potential feedstocks.

Biochemical processes:

Biochemical processes use bacteria, enzymes or acids to break down cellulose in fermentable sugar. The enzymatic and bacterial approaches are often limited to a specific feedstock. Acidic processes are more likely to accommodate a variety of feedstocks, including, municipal solid waste.

Thermochemical processes:

In thermochemical processes, feedstocks are partially burned with oxygen at a very high temperature and converted into a synthesis gas made up of carbon monoxide and hydrogen. A significant advantage of such a process is that virtually any hydrocarbon mater can potentially be processed as feedstock, so long as varying relative concentrations of carbon monoxide and hydrogen can be tolerated for the synthesis gas. The synthesis gas is subsequently converted to either ethanol or diesel by one of several different processes.

Another EPA approved thermochemical approach is known as Fisher –Tropsch (F-T), which produces cellulosic diesel fuel (or in some cases, napthta), via a Biomass to Liquid (BTL) process.

4) **Brownfield site remedial agreements with state agencies and/or EPA**

A number of companies will be considering construction of facilities at brownfield sites. Many such sites are strategically located proximate to rail and water transportation, have existing buildings and infrastructure that can be modified in lieu of new construction, and are selling at prices substantially less than vacant suburban land. Redevelopment of Brownfield sites typically requires site characterization, risk management evaluation, a remedial action plan to address historic soil and groundwater contamination, agreements with responsible parties and government agencies, articulating remedial expectations and liabilities, if any, and cost allocation for required remediation and monitoring.

5) **Renewable Fuel Facility Siting Approvals**

Convincing township planning commission members and township supervisors and their constituents, of the environmental merits of a renewable fuel facility is a critical milestone and is often the most challenging. Everyone wants to reduce dependence on oil but not everyone is willing to welcome additional industrial activity. Everyone wants to see Brownfield sites redeveloped but many local residents will try to hold out for residential or commercial use before supporting industrial reuse. In light of the above, it is critical for environmental professionals to be involved in the siting process from day one, and to be able to clearly communicate with and gain the trust of local residents and government officials

6) Retail fuel dispensing infrastructure

It is expected that consumption of the increased ethanol production required by RFS2 will require increasing ethanol content in blended fuels up to 15% (E-15). Use of such fuel will have to be approved by EPA under the Clean Air Act, and many service stations will need to modify fuel dispensing systems to accommodate emission and safety criteria applicable to E15 blends. EPA has already received and is considering a petition to approve E15 fuel. Public support for such approval is far from unanimous, due to the ever-growing political and economic complexity of the issues surrounding renewable fuels, and particularly ethanol.

Recent DEP Guidance

Draft Nutrient Reduction Trading Guidance—(#392-0900-001-May 30, 2009)

This draft guidance amends the previously issued policy and guidelines on Trading of Nutrient and Sediment Reduction Credits (Dec. 30, 2006). The primary change relates to elimination of credits based on conversion of land use. However, for those members who are not familiar with the nutrient reduction credit program, this is an opportune time to review the guidelines and consider potential professional opportunities. The basic premise is similar to the emission reduction credit (ERC) process utilized by the Air program. Point source dischargers having effluent limits for Phosphorus or Nitrogen can implement treatment beyond that which is required, quantify the additional nutrient reduction achieved, and sell the credits to other dischargers. Non-point source dischargers can obtain credits by implementing BMPs which reduce nutrient discharge. Purchase and sale of nutrient credits will be of increasing importance in the next few years, as EPA and DEP continue on their current campaign to issue extremely stringent TMDLs for Pennsylvania streams. POTWs and other significant phosphorus sources are among those who should be most interested in this type of service.

Civil Penalty Guidance (#362-4180-001, 002 and 006-June 20, 2009)

DEP issued 3 guidance documents simultaneously, addressing penalty calculations for effluent limit violations, discharges of oil or other spills, and an informal penalty assessment procedure for such penalties. All 3 guidance documents are “draft”; but one can expect DEP to invoke the substantive structure of the penalty policies nonetheless.

What's in the News....

Portal To The Mining Industry

On all mine sites in Pennsylvania, operators are required to post bonds in order to guarantee that the reclamation obligations stipulated in the approved mining permit will be met. The bonding program is administered by the Pennsylvania Department of Environmental Protection's (PA DEP's) Bureau of Mining and Reclamation. The methods for calculating bond amounts for coal versus non-coal (i.e., industrial minerals) are different, although the objectives of the bonds are the same. The differences in the methods of bonding for coal and industrial minerals as well as the evolution of the current bonding systems are described in this issue of Portal To The Mining Industry.

To read this issue in its entirety, please click the link below.
http://www.skellyloy.com/Pressroom/MiningPortal/mp/Volume VII, Issue 2 Portal.pdf

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Making a Difference

Summit Environmental Consulting
Promotes Environmental Education and Research

Summit Environmental Consulting in Barto, PA has taken a unique approach to promoting environmental education and research. Over the past two years, Summit has volunteered hours to design, obtain grant monies, build, and plant an organic garden at the Swain School in Allentown, PA. The Swain School is a small, coed independent day school offering a college preparatory education to students from preschool through 8th grade. Swain's 300 students come from more than 22 area school districts and as far away as France and Korea. They are a non-sectarian institution that welcomes boys and girls from many different cultures, races and creeds.

Along with construction of the garden infrastructure, Summit has been developing cutting edge curriculum for the school students to study the environment in their new gardens, which include a small shelved pond/wetland area. Children as young five years of age are learning about plant pathology and the natural cycles in the environment. First and second grade students discover entomology, herpetology, and ornithology as the new outside classroom offers a unique and safe environment for the children to learn on a daily basis. Third and fifth grade students complete water analyses and soils analyses similar to that of a professional laboratory. Fifth grade students utilize the pond/ wetland area during a unit that focuses on limnology where they are educated about how to complete a wetlands delineation report.


Area on Swain school grounds prior to garden construction


Area after construction – spring plantings


Children learning how to research and discover the environment

The curriculum has been developed to allow for the children to learn about agriculture, nutrition, meteorology, chemistry, and much more with a focus on environmental education and environmental stewardship. It is the hope of our company that educating our youth with hands on environmental experiences while they are young will lead to a better understanding of how human needs can be balanced with a healthy environment.

As a result of the new program developed for the school, Pennsylvania Department of Agriculture Secretary Dennis Wolff recognized Swain as one of five Pennsylvania organizations who received "Keeping Pennsylvania Growing" awards in January at the 2009 Pennsylvania Farm Show dinner in Harrisburg.

Cynthia Bardman
Principal
Summit Environmental Consulting, LLC
-Providing natural resource environmental services since 1996 -

IMPORTANT…. Read all about it

PAEP Board Planning Activities: Reexamining and Revitalizing our Organization

Based on the PAEP Board's desire to reassess PAEP's purpose and benefits to its membership now and for the future, the Board held a planning session in March of this year with an outside consultant who specializes in the organization and function of professional associations like PAEP.

The Board defined "Environmental Professional" and specifically examined the organization's target and secondary audiences for membership. Discussions followed on what PAEP should provide to their primary audience, organizing those activities into defined Program Areas. The Program Areas were then ranked in order of importance, taking into account the availability and need for PAEP resources (volunteer time, funds, professional staffing, etc.). The Program Area ranking is as follows:

Program Area #1 – Education – help members become the best in their fields; facilitate innovation; serve as a source of relevant information.

Program Area #2 – Marketing and Promotion – reinforce the validity and credibility of our profession and our organization; increase the visibility of PAEP as a unique multi-disciplinary organization.

Program Area #3 – Networking – support the career advancement of our members; improve business practices in our profession; provide peer/colleague support for our members.

In addition to these Program Areas, Supportive Services was identified as an essential component to the operation of the organization.

Supportive Services – increase the size and diversity of our membership; increase volunteer efforts that benefit our communities; maintain financial stability as an organization; ensure personal and professional leadership growth.

Under each Program Area, the Board designated and ranked specific measurable objectives to work towards over the next year or so. The Board is currently working to finalize its approach to meet the objectives, as well as to assign schedules for implementation.

More information on the specific objectives will be available on PAEP's website in the next month. The Board will be asking for member volunteers to serve on select task forces focused on specific, short-term deliverables, and everyone's participation is encouraged!

Thank You...

Interested in becoming a member of PAEP? You can join, visit our website www.paep.org.

2009 Corporate Members

To all the Corporate Members for the Pennsylvania Association of Environmental Professionals. Without their support which helps with the overall costs of the meetings and help PAEP deliver a quality program. The Board of Directors gratefully acknowledges the commitment the Corporate Members that have made to strengthening the industry and developing the skills of all PAEP members. To learn how your company can become a corporate member and support education go to the PAEP website www.paep.org or email info@paep.org.

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