



PCPG Newsletter

Communicating Key Information & Concerns
to Geologists and Environmental Professionals

Issue 1 / 2014

BOARD OF DIRECTORS

President

Jennifer L. O'Reilly, P.G.
Groundwater & Environmental Services, Inc.
joreilly@gesonline.com

President Elect

Donald R. Wagner, P.G.
Stevens & Lee, P.C.
drw@stevenslee.com

Immediate Past President

Louis F. Vittorio, Jr., P.G.
EarthRes Group, Inc.
lvittorio@earthres.com

Permanent Director

Richard E. Wright, P.G.
R. E. Wright, P.G., LLC
rewrightpg@comcast.net

Board Members

Dan A. Billman, P.G.
Billman Geologic Consultants, Inc.
danaret@zoominternet.net

Barbara Dunst, P.G.
EQT Production
bdunst@eqt.com

William Gough, P.G.
Moody & Associates, Inc.
bgough@moody-s.com

Martin F. Helmke, PhD, P.G.
West Chester University of Pennsylvania
mhelmke@wcupa.edu

Valerie Holliday, P.G.
Geologos, LLC
vholliday5@comcast.net

Mark Ios, P.G.
Skelly & Loy, Inc.
mioos@skellyloy.com

Tracy Jeremias, P.G., PMP
Bluestone Engineering, Inc.
tracy@bluestoneenginc.com

Gary Kribbs, P.G.
AEON Geoscience, Inc.
gkribbs@verizon.net

James LaRegina, P.G.
Herbert, Rowland & Grubic, Inc.
jlairegina@hrg-inc.com

Richard Wardrop, P.G.
Groundwater & Environmental Services, Inc.
wardrop@gesonline.com

General Information: info@pcpg.org

INSIDE THIS ISSUE...

PCPG January 21, 2014 Annual Meeting Recap	2
News of the Pennsylvania Bureau of Topographic and Geologic Survey (BTGS)	4
New PGs and GITs	5
Act 2 Reviews by the Numbers.....	5
Changes to PG Licensing Regulations	6
Student Corner	7
Member Spotlight: Skelly & Loy, Inc.....	8

MESSAGE FROM THE PRESIDENT

Hello! Please join me in wishing PCPG a Happy 25th Anniversary! PCPG was founded on July 12, 1989, but we've decided that this monumental quarter-century celebration shouldn't be limited to just one day. We kicked off the 25th Anniversary at our 2014 Annual Meeting in Harrisburg on January 21, despite the winter storm. If you were already in the area, or were able to brave the elements to get there, you were treated to two excellent speakers. Ron Cole, professor at Allegheny College, presented on volcanoes and colliding terranes in Denali National Park, Alaska; and David DeKok, author, presented on the Centralia mine fire, as told in his book *Fire Underground: The Continuing Tragedy of the Centralia Mine Fire*. We appreciate all those who contributed to the success of this year's Annual Meeting, and if you were unable to attend, you will have an additional opportunity to celebrate with us during our Spring Meeting in May. There will be more details forthcoming, so please keep an eye on the news blasts for more information.

With the start of a new year, our members have voted, and we have some changes to the Board of Directors. I am pleased to introduce Tracy Jeremias, Martin Helmke, and Rick Wardrop as our newly-elected Board members, and Don Wagner and Gary Kribbs, who are returning for a second term. The Board of Directors also confirmed Don Wagner as our 2014 President-Elect. Congratulations to all!

I want to express my sincere gratitude to our outgoing Board members who have completed their terms this past year: Kelly Kinkaid, Sean Chelius, and Bryan McConnell. Thank you for your years of volunteer service to PCPG and commitments of time and effort which were all above and beyond your professional responsibilities. Your dedication has contributed to the growth of the organization and has advanced the practice of the Professional Geologist.

Continued on Page 2



PRESIDENT *Continued from Page 1*

Although our goals have evolved since PCPG was founded back in 1989, and many of the faces have changed throughout the years, our commitment to *advance the practice of geology and allied sciences and the success of our members through **advocacy, education, and networking*** remains the same. We are fortunate to have very talented and diverse members and directors, and I encourage each of you to share your ideas, join a committee, and get involved in your organization. I look forward to seeing you at one of our upcoming events!

Please feel free to email your questions and comments to me at joreilly@gesonline.com, and check out our website for more information at www.pcpq.org.

Very Truly Yours,



Jennifer L. O'Reilly, P.G.
PCPG President

PCPG JANUARY 21, 2014 ANNUAL MEETING RECAP

Barbara Dunst, P.G., EQT Production

In spite of uncooperative weather, PCPG's 25th Anniversary Celebration and Annual Membership Meeting, held on January 21, 2014 at the Harrisburg Holiday Inn East, was very successful. The celebration was well attended and filled with informative presentations, scholarship essay winners, and lots of good food.

We started the day with a delicious Past President's luncheon attended by several past presidents. During lunch conversations around the room centered on memories of the organization and the early struggles of the founding members. President Jennifer O'Reilly, P.G. (Groundwater & Environmental Services, Inc.) began the meeting by reviewing some of the highlights from 2013, including: hosting over 16 continuing education events; presenting at the Shale Gas Insight Conference; exhibiting at the AAPG National Conference and at the PA Brownfields Conference; continued outreach to PA colleges; and helping to sponsor the PA Field Conference.

President O'Reilly announced the election of this year's new members to Board of Directors: Martin Helmke, PhD, P.G. (West Chester University), Tracy Jeremias, P.G., PMP, (Bluestone Engineering, Inc.), and Rick Wardrop, P.G. (Groundwater & Environmental Services, Inc.). Re-elected to the Board were incumbents Gary Kribbs, P.G. (AEON Geoscience, Inc.) and Don Wagner, P.G. (Stevens & Lee). PCPG is also pleased to announce Don Wagner is PCPG President-Elect.

PCPG offers its sincere gratitude for the service and commitment provided to the organization by outgoing board members: Sean Chelius, P.G. (H&S Environmental), Kelly Kinkaid, P.G. (Liberty Environmental, Inc.) and Bryan McConnell, P.G. (Tenaska, Inc.).



PCPG presidents, past and present: (from left) Paul Nachlas P.G., Lane Schultz P.G., Bill Ponticello P.G., Rick Wardrop P.G., Jim LaRegina P.G., Fred Bopp, P.G., and Jennifer O'Reilly P.G.

Continued on Page 3

ANNUAL MEETING RECAP *Continued from Page 2*

Jim LaRegina, P.G. (HRG, Inc.) announced the 2013 scholarship winners. Renne Krynock from Duquesne University was awarded first place and received \$1000 while Will Nachlas from the University of Minnesota took home \$400 for second place.

President O'Reilly outlined plans for 2014 which include exhibiting at the GSA Northeastern Conference scheduled for March 23-25 in Lancaster and continuing the 25th Year celebration with a picnic and field trip planned for Gettysburg on May 23.

Jim LaRegina provided an Education Committee update highlighting courses that are in the development stage. With feedback from the DEP and our 2013 course reviews, PCPG is planning an Act 2 overview course which will review when to use Act 2, how to select MSCs, and attainment demonstration, among other things. PCPG is also in the process of developing a geology of the regions course and several shale gas topics, including frac'ing.

Don Wagner began the Government Affairs Committee update by requesting that someone volunteer for committee chair since his duties as President-elect will leave a vacancy. Upcoming legislation that is being watched concerns the continuing efforts on a Water Well Construction Standards bill, professional licensure for Soil Scientists, and Act 2 revisions.



PCPG's Past Presidents' Luncheon



Presenting copies of "The Geology of Pennsylvania" to student attendees. Each student received two books: one for personal use and one for their campus library.

The past presidents were then provided with an open microphone to share their thoughts. Bill Ponticello, P.G. and Lane Schultz, P.G. took to the stage and encouraged others to get more involved with PCPG, expressing the sentiment that PCPG's mission of advocacy, education, and networking is an opportunity for all to be involved in the geologic profession and help to do great work for Pennsylvania.

Ted Tesler, P.G. took to the microphone to give an update from the State Board for Professional Engineers, Land Surveyors and Geologists. Some things to look for are new regulation changes for geologic licensing. Also being developed are regulations for the use of embedded electronic professional seals which disappear if there are any changes to a document.

The afternoon education session was amended due to the weather, with Chari Towne's presentation on the Schuylkill River History being cancelled along with the anniversary reception entertainment by the Jazz Assassins. The delicious reception food however was brought out early and lasted throughout the afternoon.

Ron Cole, PhD, Professor in the Department of Geology at Allegheny College spoke on the links between volcanoes and plate tectonic processes in Alaska. Professor Cole started by pointing out that the weather in Anchorage was rainy and warmer compared to the cold and snow in Harrisburg that day! Professor Cole's research identified vertical and lateral facies changes in the rhyolite lava and pyroclastic eruptions which shaped Denali National Park and Mt. McKinley. The volcanic history of the area can also be traced through various plutonic events that have been displaced along

Continued on Page 4

ANNUAL MEETING RECAP *Continued from Page 3*

the Denali fault by post volcanic strike slip movement. Convergent plate movement has resulted in accreted terranes. These unique collisional magmatics along with sedimentary river and lake deposits and debris avalanche flows have shaped the modern landscape of the national park.

Author David DeKok gave a fascinating talk on the Centralia Mine Fire. Mr. DeKok was a young reporter when he first started writing about the underground fire in November of 1976, essentially documenting the fire control efforts and politics over the decades. Mr. DeKok has an intimate knowledge of the residents and spoke about the Centralia residents' personalities, families, struggles, and endurance. Coal was surface and deep mined around Centralia from the 1850s in several small mines which were all shut down by the time of the fire. The fire started in a strip mine pit. The strip pit was connected to old mine workings that had not been sealed. Various attempts by state and federal agencies to end the fire included digging out the fire, pumping liquid slurry, establishing fly ash barriers, leaving vents open to draw the fire in certain directions, and later closing vents, but all attempts either failed or ran out of funding. There were many missteps along the way as the fire spread and eventually consumed the town. After large sinkholes developed and became very dangerous, a relocation referendum was passed in 1983 and Congress appropriated \$42 million for the residents' relocation. There are currently only about a dozen houses and fewer than ten people living in Centralia while the fire still burns; the ground literally still smolders.

The day ended with door prizes. Steve Zbor, P.G. won a beer tasting kit, Chris Tuttle, P.G. received a rock set, and Kutztown University student Brandon Stickler won a Brunton Compass. Despite the weather the day's events were very well received and member feedback has been very positive. We look forward to seeing all of you, and hopefully some new faces, at an upcoming PCPG continuing education or networking event. Educational opportunities and events can always be found on the PCPG website: <http://www.pcp.org/>.

NEWS OF THE PENNSYLVANIA BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY (BTGS)

George Love, P.G., Pennsylvania State Geologist

Geologic Mapping – We have a new/upgraded web mapping application (<http://www.gis.dcnr.state.pa.us/geology/index.html>) that anyone can view. This tool allows one to select an area, and then have the system generate a report of the geologic publications that pertain to the selected area. Of course, one can see the basic geology, topography, etc.

BTGS and DCNR's Bureau of Information Tech (BIT) are continuing to update the PA Ground Water Information System (PAGWIS) and the PA Internet Record Imaging System (PAIRIS). These systems provide data on both groundwater wells in PA and the activities of the hydrocarbon industry in PA, and are heavily used by the public, academia, industry and other government agencies, both state and federal.

- o The Ground Water Information System has been modified to make searches of data easier, and more importantly, data from old databases is being moved into the system. We expect the public interface will be operational within the next few months.
- o The Internet Record Imaging System is in the early stages of renovation. The obsolete operating platform will be replaced, the data will be more readily searchable, and the longer range plan calls for a mapping capability. That's the good news. The bad news is that the effort is in the contracting stage, which by state definition means it is plodding forward at the square root of a snail's pace. Our goal is to have portions of the upgrade operational by December.

The Bureau has been conducting some research in Sullivan and Bradford counties. The Sullivan County report, Groundwater and petroleum resources of Sullivan County, Pennsylvania, was released to the public in September of 2013; the data on a drillhole in Bradford County, Geohydrologic and water-quality characterization of a fractured-bedrock test hole in an area of Marcellus shale gas development, Bradford County, Pennsylvania, was also released in September of 2013. Both reports are available on our website, <http://www.dcnr.state.pa.us/topogeo/news/index.htm>.

ANNOUNCING: NEW PGs AND GITs

The State Board of Professional Engineers, Land Surveyors and Geologists has provided PCPG with the following list of individuals licensed as Professional Geologists and certified as Geologists-in-Training between August 8, 2013 and January 10, 2014. Congratulations to all!

New Professional Geologists:

PG005126	BARE, MARK PAUL
PG005127	DRUMMOND, ANDREW DAVID
PG005128	BILLINGS, JAMES GAGE
PG005129	ZEMAN, KRISTIN ELIZABETH
PG005130	LEAHY, TIMOTHY
PG005131	BURKERT, LORI ANN
PG005132	BUBB, MICHAEL LEE
PG005133	PORTER, THOMAS WILLIAM
PG005134	GOSACK, HEATHER LYNN
PG005135	LARRISON, WILLIAM JAMES, JR
PG005136	ESHETE, DANIEL W
PG005137	DWYER, BENJAMIN JOEL
PG005138	BEARES, DONNA KATHLEEN
PG005139	HALE, BRIAN CHRISTOPHER
PG005140	OROSZ, MARIA THERESA
PG005141	SONZOGNI, BLAIR G
PG005142	SHADLER, BRIDGET EILEEN
PG005143	STARKE, RICHARD WILLIAM
PG005144	DRAGHICIU, CAMELIA M
PG005145	PULICE, DANIEL ALBERT
PG005146	GLENN, RAYMOND DONALD
PG005147	REYNOLDS, MATTHEW DRAKE

New Geologists-in-Training:

GT000046	SMITH, KEVIN MICHAEL
GT000047	ANTONACCI, THOMAS E
GT000048	FILOON, JOHN LOUIS
GT000049	PARKINSON, RANDALL WILLIAM
GT000050	CATALFAMO, STEPHEN EDWARD
GT000051	KOHUT, DARYL L
GT000052	BASEHOAR, ANDREW RYAN
GT000053	HULBURT, SEAN C
GT000054	MERCURIO, EMILY CONSTANTINE
GT000055	ELLSWORTH, CHAD JONATHAN
GT000056	ENZWEILER, KRISTEN MICHELLE
GT000057	CONNELLY, PATRICK CHRISTOPHER
GT000058	SVOLTO, KENNETH ANDREW
GT000059	DEMARCO, CHRIS JOHN
GT000060	FERNANDES, ERIC ROBERT
GT000061	DINKELACKER, ANDREW DONALD
GT000062	CICERO, DANIELLE MARIE
GT000063	LAWSON, SHELBY ANNE
GT000064	LIPIK, DUSTIN ANDREW
GT000065	TAYLOR, ROGER D
GT000067	MASCHO, SETH WILLIAM

ACT 2 REVIEWS BY THE NUMBERS

Frank Nemec, P.G., PA Dept. of Environmental Protection Licensed Professional Geologist/PCPG Liaison

The Pennsylvania Department of Environmental Protection's Land Recycling Program's (LRP) overall objective has been to provide continuous improvement of the LRP process. That effort includes internal procedures and external training. A recent initiative to achieve our overall objective is the development and implementation of a Standard Operating Procedure for Handling and Reviewing Notice of Intent to Remediate and Report Submissions to standardize the process.

Over the past few months, the Department of Environmental Protection (DEP) has been closely monitoring report response correspondence issued statewide. By analyzing each disapproval/technical deficiency letter issued under the new standard operating procedure (SOP) for the 6-month period from July 1, 2013 through December 31, 2013, the department has determined which Act 2 requirements commonly result in deficient submissions.

The following breakdown indicates the top reasons and the respective incidence rate for report disapprovals/deficiencies:

Percentage	Problematic Activities
45.5%	Incomplete/unclear report writing (i.e. missing figures, tables, lab data, geologic data, inconclusive or unclear discussions, etc.)
43.2%	Inadequate/missing vapor intrusion assessment
31.8%	Incomplete site characterization/delineation
20.5%	Failure to demonstrate attainment of the selected cleanup standard
15.9%	Missing/incomplete ecological assessment
15.9%	Inadequate/faulty fate & transport assessment
15.9%	Improper application of selected cleanup standard

Continued on Page 6

ACT 2 *Continued from Page 5*

Additionally, we have analyzed the duration of DEP review time and responsiveness regarding submittals since the inception of this SOP. For the same 6-month period from July 1, 2013 through December 31, 2013, LRP staff statewide have averaged 36.5 days to respond to a Final Report submittal detailing a Statewide Health standard cleanup; 43.3 days to respond to a Final Report detailing a Background standard cleanup; and 60.3 days to respond to a Final Report detailing a Site-Specific or combination of standards cleanup.

In moving forward, the LRP will be working closely with PCPG to produce additional classroom opportunities that focus on these and other commonly observed errors in Act 2 submissions. Look for additional PCPG/Act 2 Toolkit training offerings in the coming months at the PCPG website for more information.

CHANGES TO PG LICENSING REGULATIONS

Louis F. Vittorio, Jr., P.G., EarthRes Group, Inc.

On January 16, 2014 the Independent Regulatory Review Commission (IRRC) approved final form regulations updating 49 Pa Code Chapter 37, which governs the Professional Licensure of Engineers, Land Surveyors and Geologists. This brief article summarizes the changes in the regulations that will affect obtaining registration as a Geologist-in-Training and as a Professional Geologist. Overall the updated regulations provide the following:

- Updated Definitions for “Professional Geological Work,” and “Responsible Position”;
- Provision of requirements for obtaining “Geologist in Training” certification;
- Provisions for equivalency evaluation of geological degrees obtained from foreign universities;
- Quantification of required education experience to include field geology and structural geology;
- Enabling full-time university teaching in a geological curriculum as qualified experience enabling exam candidacy; and
- Additional requirements for provision of candidate references.

The above bulleted changes are simply an overview, but all the changes affect those seeking to obtain licensure; not currently practicing Professional Geologists. The regulations enable, and PCPG encourages students to start, the Geologist-in-Training certification process while still in school by applying and sitting for the fundamentals of geology examination in their junior or senior years. There are many good reasons to begin early, which I will cover in a future article, along with “how to” tips for starting and completing the Geologist-in-Training (GIT) process.

The updated definitions provided in the regulations are significant and should be duly noted by entry level geoscientists and GITs looking to obtain their PGs. The required 5 years of experience to enable sitting for the examination is to include “Professional Geological Work”, and such work should not include routine sampling, laboratory work, or drafting, for example. Rather, geological work in “Responsible Position” will be required for exam candidacy, which is work that shows the exercise of independent judgment, competence and accountability in the performance of professional geological work.

Additional significant changes include the qualification of college geological teaching experience to enable exam candidacy and the addition of education requirements of field geology and structural geology. As indicated in the IRRC regulatory analysis document: “Proficiency in field geology and structural geology is not only necessary to pass the license examination, but is also essential for the general practice as a professional geologist.”

The complete changes in the regulations can be found on the IRRC Website at the following link:

http://www.irrc.state.pa.us/regulation_details.aspx?IRRCNo=2926

UPCOMING EVENTS

March 23-25, 2014

Geological Society of
America Northeastern Section
49th Annual Meeting
Lancaster, PA

April 23, 2014

Act 2 Toolkit: An Overview
of (and dive into) the
Pennsylvania Land Recycling
Program
Harrisburg, PA

May 7, 2014

2014 Pennsylvania
Groundwater Symposium
State College, PA

May 13, 2014

Act 2 Toolkit: An Overview
of (and dive into) the
Pennsylvania Land Recycling
Program
Monroeville, PA

May 23, 2014

Gettysburg Battlefield Field
Trip and 25th Anniversary
Picnic

Gettysburg, PA
Continued on page 8



STUDENT CORNER

*Martin F. Helmke, PhD, P.G., West Chester
University of Pennsylvania*

Welcome to the Student Corner, a forum for information exchange between students and geologic professionals across the Commonwealth.

This month we offer five tips for students as they plan for careers as geologists. While completing your degree and maintaining a high grade point average may be foremost on your mind as a student, employers are also interested in your practical knowledge of geology, communication skills, and professional activities that will set you apart from other applicants. Consider the following:

1. **Network and join professional organizations.** Develop professional relationships with working geologists, alumni, faculty, students, and acquaintances. Maintain your network by communicating in-person, by e-mail, or through professional social media. Join professional organizations such as PCPG, GSA, AEG, AAPG, or AGU. Attending meetings and volunteering to serve on committees is an excellent way to demonstrate your commitment to the field.
2. **Focus on pertinent coursework.** Make sure you take courses that cover the eight content areas of the ASBOG exams (visit www.asbog.org to download a current copy of the Professional Geologist's Candidate Handbook). Think outside the box. Working geologists spend much of their time communicating and running a business. Consider taking courses in technical writing, public speaking, business, and accounting.
3. **Internships and research.** Internships allow you to learn what the job is like, make contacts, and develop your skills as a geologist. Seek paid internships, but you should also consider volunteering or earning college credit for internship work. Even working with a geologist for a day in the field could be considered an internship. Research demonstrates specialization in your field, ability to manage a project, and excellent communication skills. Presenting or publishing your research is highly regarded in the professional world.
4. **Certifications.** Earning certifications such as Pennsylvania Geologist in Training, HAZWOPER 40-hour, or even a commercial driver's license could open the door for employment.
5. **Develop a resume.** Your resume is a living document that highlights your pertinent skills and accomplishments. Use on-line resume services, but don't forget to keep a 1- or 2-page paper resume on hand in case one of your network contacts requests one.

Good luck with the job search! Please submit suggestions or questions regarding students and geology to Dr. Helmke at mhelmke@wcupa.edu.

UPCOMING EVENTS

Continued from page 7

June 20, 2014

**Soil Science: Basic & Practical
Field Methodologies &
Applications**

State College PA

July 17-18, 2014

**Introduction to Inorganic
and Organic Groundwater
Geochemistry**

Monroeville, PA

July 21-22, 2014

**Introduction to Inorganic
and Organic Groundwater
Geochemistry**

Malvern, PA

August 7-8, 2014

**Rock Slope Stability
Two Day Short Course**

Monroeville, PA

***Don't forget to check the
"Courses & Events" link
on PCPG's [home page](#)
frequently for up to date
information on upcoming
educational opportunities.***

MEMBER SPOTLIGHT: SKELLY & LOY, INC.

On July 14, 1969, Robert C. Skelly and LeRoy D. (Bud) Loy formed a professional partnership providing civil, environmental, and mining engineering services. Their first contract was associated with the design of a small dam for the Pennsylvania Fish Commission. Over time, Skelly and Loy would add staff and services leading to projects as challenging as the Environmental Impact Statement for the Lackawanna Valley Industrial Highway in northeastern Pennsylvania, and the mine reclamation and coal ash management of a surface mine in Schuylkill County, Pennsylvania.

Skelly and Loy's reputation as a family-friendly company started early in its history when all of the Loy family worked for the firm. Anne Loy, Bud's wife, worked as a receptionist and their children, Mike and Sandi, worked part-time during their high school years. As Skelly and Loy grew, this family-first culture was a major factor in the firm's ability to recruit talented, experienced staff.

During its early years, Skelly and Loy developed relationships with many coal mining companies throughout the country, and became known as one of the nation's leading acid mine drainage consultants. By the late '70s, Skelly and Loy was performing projects for the U.S. Bureau of Mines throughout the United States and was at the top of its game when we received an \$8 million contract from the Bureau to serve as a mining and research and development consultant.

In the early 1980's, Skelly and Loy gained national and international publicity through a series of articles on our work in **Coal Age** magazine and other national periodicals. This led to international projects in countries including Great Britain, Germany, France, Spain, Poland, China, and Australia. In all, Skelly and Loy has completed projects in nearly every American state and in 15 foreign countries.

Despite this growth in the international market, Skelly and Loy's domestic focus changed significantly during the early 1980's. The Reagan Administration terminated the U.S. Bureau of Mines research programs and growing concerns, and regulations associated with air pollution and mining impacts dramatically affected the coal industry. Our efforts in support of the industry continued, though at a greatly reduced level. Meanwhile, public interest in environmental impact mitigation on transportation projects was growing. As the decade progressed, Skelly and Loy became known as a "go-to" environmental consultant to the Pennsylvania Department of Transportation as well as other trans-



Continued on Page 9

SKELLY & LOY, INC. *Continued from page 8*

portation agencies. At the same time, hazardous materials remediation was also drawing public attention. By the time the Asbestos Hazard Emergency Response Act (AHERA) was passed in 1988, Skelly and Loy had established itself as an expert in asbestos hazards management, later expanding its reach to include lead, underground storage tanks, and brownfields remediation.

Today, Skelly and Loy is a privately owned, mid-sized corporation with six Mid-Atlantic offices. The firm provides a diverse portfolio of professional engineering and environmental services to various public and private sector clients throughout the United States and abroad. As trends change and markets emerge, Skelly and Loy continues to build on its strong foundation and enhances its offering of professional services of mining, civil, and environmental engineering; National Environmental Policy Act (NEPA) compliance studies (EISs, EAs, CEEs, etc.); natural resource management including wetlands, aquatic studies, and wildlife management; environmental, mining, and wastewater permitting; noise and air quality investigations; hazardous waste management investigations and remedial design; industrial hygiene studies; archaeological, cultural, and historical studies and documentation; digital information technology; and equipment sales, installation, operation, and maintenance of municipal, industrial, commercial, and private water, wastewater, and remediation treatment systems.

In July 2014 Skelly and Loy will celebrate its 45th year in business as a full service environmental and engineering firm. Since its founding in 1969, the company has undergone many changes, but remains a family-friendly company, employing a talented staff, and finding creative and cost-effective solutions for our clients' projects.



Providing insight & solutions.

PROVEN TECHNOLOGY
UNRIVALED COMMITMENT
SUPERIOR QUALITY

Site Investigation Services

- Subsurface imaging
 - Precision utility locating
- Concrete mapping
 - Well logging

Northampton Generating Company, L.P.

"DELTA performed a utilities clearance at our site prior to the drilling of ground water monitoring wells. They were professionals. They listened to our concerns, took their time to do the job right, and explained their findings." — Dan Traynor, Environmental Manager

deltageophysics.com

738 Front Street, Catasauqua, PA 18032 T (610) 231-3701 F (610) 266-5344 E info@deltageophysics.com

DEADLINE FOR OUR NEXT NEWSLETTER IS MAY 19, 2014

For more information, contact our PCPG Newsletter Editor and Communications Committee Chairperson - Valerie Holliday, P.G., by **Email** or telephone at 610-517-7898.

2014 PCPG NON-MEMBER

AD RATES

(Rates are listed as amount per issue)

Size	Commitment:	1x	4x
1/2 Page		\$300	\$240
1/4 Page		\$185	\$150
Business Card (H or V)		\$100	\$80

2014 PCPG MEMBER

AD RATES

(Rates are listed as amount per issue)

Size	Commitment:	1x	4x
1/2 Page		\$225	\$150
1/4 Page		\$140	\$95
Business Card (H or V)		\$75	\$50

**ADVERTISERS: Please remit payment to
PCPG, 116 Forest Drive, Camp Hill, PA 17011**

DON'T FORGET TO CONTRIBUTE TO THE PA GEOPAC!

Through PA GEOPAC, the official political action committee (PAC) of PCPG, you have an effective way to lend financial support to candidates and legislators who support the legislative goals of our organization, or who are willing to lend an ear to our members. More than 200 trade and professional organizations in the state have formed PACs including doctors, dentists, lawyers, bankers, and builders.

Your donation will help to strengthen our voice when and where it is needed most...right now at the state Capitol, where decisions are being made regarding many topics that affect the business of geology in Pennsylvania.

Mail your check made payable to GEOPAC:

GEOPAC

116 Forest Drive, Camp Hill, PA 17011

Contributions may be made by personal check or company check only if from a sole proprietorship or partnership. Otherwise, no corporate or business checks may be accepted.



Please consider the environment before printing this newsletter.