



PCPG Newsletter

Communicating Key Information & Concerns
to Geologists and Environmental Professionals

Issue 1 / 2016

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MESSAGE FROM THE PRESIDENT



I am honored and excited to once more take office as PCPG President. Granted, the last time was 10 years ago, but the growth of PCPG has inspired me to serve again. It is a great pleasure to be able to help move this organization forward with such a talented, enthusiastic board and membership. First, I want to congratulate Dan Billman, P.G. for his election, by the Board, to the President-elect position.

I look forward to working with him and Don Wagner, PCPG's immediate past-President as the Executive Committee. Secondly, I'd like to welcome newly-elected PCPG Board members Kurt Frieauf Ph.D., P.G. and Brenda Costa, P.G. Next, I congratulate Barb Dunst, P.G. on her reelection to the PCPG Board. Lastly, after some time off the Board, I welcome and congratulate Jennifer O'Reilly, P.G. and Jim LaRegina, P.G. on their rejoining and election to the PCPG Board. Don Wagner, Dan Billman and Val Holliday ended their board terms in 2015 and PCPG is grateful for their enormous contributions to PCPG throughout their service as board members. Holliday, who previously served as PCPG's Communications Chair and newsletter editor, continues to support PCPG through her work with the Communications Committee, now chaired by John Torrence.

In 2016, it is my hope to engage our membership to raise the ethical and scientific bar of our profession. This is actually easily accomplished by encouraging experienced scientists to be mentors or pass on their stories. Ethical situations, quality control/quality assurance, and/or difficult scientific problems are always present in a licensed scientific profession. It is our hope to offer more courses dealing with some of these challenging dilemmas and to start a continuous dialogue about the issues. Many of the experienced P.G.s have plenty of valuable stories and experiences to share, but that does not always happen. I'm going to ask all our colleagues, the experienced professionals, to not forget the up-and-coming generation. Share your experiences both difficult and straight forward with staff or a colleague that does not have as many years behind them. Write an article for PCPG's newsletter. Attend PCPG networking events. Loss of experience in a firm or within an industry like ours is a real shame. Let's begin to address the challenge. I encourage comments about PCPG's vision, mission and operation. Please feel free to contact me at gkribbs@verizon.net.

Sincerely,

Gary M.B. Kribbs, P.G.
PCPG President

INTERVIEWING REMINDERS

Kurt Frieauf, PhD, PG, Kutztown University of Pennsylvania

With the coming of spring, many graduating students begin what may be their very first professional job search. Interviewing can be a stressful situation, and stress can cause anyone to forget things. Here are a few important reminders one might review before and after each interview:

- Interviewing for a job is a two-way process in which employers and prospective employees evaluate the goodness-of-fit of the individual in the organization and of the organization's suitability to the individual.
- Some interviewers may seem very intense. Remember that, as the interviewee, you have a biased view due to a heightened level of stress, so you may not be perceiving things accurately. Keep an open mind and be aware that first impressions may not be representative of the other person.
- Some interviewers may seem very laid-back and inattentive. They may truly be so. They are probably more perceptive than they superficially appear to be. You're in an interview situation, so always conduct yourself honestly and professionally.
- Make sure to have a good background knowledge of the company. They have a good preview of you from your resume and recommendations. Knowing them is the respectful thing to do, and they know you can easily find the information on the internet. It will make you a better evaluator of the information you get in the interview.
- Most interviewers have had years of experience interviewing job candidates and so have evolved great skill for distinguishing deception from truth. It is unwise to misrepresent yourself both because that prevents their accurate assessment of your fit for the job, and your assessment of the company's fit for you. Interviewers are likely to see through the chaff.
- Respect is the foundation of a good interview. If you wish to be respected, showing respect for others is a good first step. This doesn't mean being a fawning sycophant – that's generally obvious. Worse yet, what if the employer is looking for an obsequious sycophant, you get the job, and then you have to continue to be a kiss-up to maintain employment! Better to be sincere – respecting others for their actual strengths and individuality. Show respect both in the interview and afterwards with a short follow-up note of gratitude.
- You might not get the job, and that's rough, but not the end of the road. Don't take rejection personally. There are many reasons you may not have been chosen for the job, and you are only one of those variables. The position's funding may be cut and no one gets the job. There may be an inside candidate. The interviewer may accidentally lose your paperwork, or confuse you with another interviewee, or...the list of possibilities is long.

In the end, you may not get the job... or you may get the job, work for a while, and circumstances someday require that you go interviewing for a new job. In either case, there will be more interviews in your future. Use each interview as a learning experience. When you get back to your car, spend a few minutes writing down your thoughts and impressions in an interview journal. Write down some of the questions you were asked and questions you wished you'd asked. Keep updating your interview journal after each interview and reflect on it prior to each interview so you become better at representing yourself in your next interview. Taking a mindful approach to developing your interview skills will ultimately help you manage your stress level and so gain greater control over your career options.

PCPG's GOVERNMENT AFFAIRS COMMITTEE (GAC) UPDATE

Mark loos, P.G. (Skelly & Loy)

Legislative Bills

Since January 2016, there has been relatively little legislative activity in Harrisburg. Discussions continue between the House, Senate, and the Administration on the Commonwealth's 2015-2016 budget. On February 9, 2016, Governor Wolf outlined his new budget for the 2016-2017 fiscal year. The Governor is asking the legislature to fund shortfalls in the 2015-2016 budget which were previously vetoed by the administration, and is requesting additional funding in the 2016-2017 budget for schools, public pensions, human services, and community and economic development.

The GAC follows legislative action in both the House and Senate. The following bills of interest to geologists are being tracked. A more inclusive list of current bills is included on PCPG's website, under Government Affairs, and clicking on "Members-Only content". The bills highlighted in yellow-colored shading are the only ones where any activity has occurred since January 2016.

House

• Environmental Resources & Energy committee

HB 81 - Water Well Construction Standards; proposed legislation submitted on January 21, 2015. No Action.

HB 398 - Vehicular Transportation of Leachate; proposed legislation submitted on February 9, 2015, Re-committed to Appropriations, June 2, 2015, Referred to Environmental Resources & Energy committee, June 12, 2015. (See Senate Bill 13 which was signed by the Governor on

HB 577 - Potomac River Basin Commission; Introduction of new legislation that provides for a General Assembly member of the Interstate Commission on the Potomac River Basin to have a designee with voting rights. Proposed legislation submitted on February 23, 2015. No Action.

HB 1743 - An Act amending Title 58 (Oil and Gas) of the Pennsylvania Consolidated; Introduction of new legislation imposing a severance tax on natural gas extraction in Pennsylvania. The proposed legislation charges a tax of 4% of the gross value of units severed. This tax is in addition to our current Unconventional Gas Well Fee, resulting in a total assessment that remains competitive with other states. Proposed Legislation submitted December 6, 2015. No Action.

HB 1825 - An Act amending the act of May 19, 1995 (P.L.4, No.2), known as the Land Recycling and Environmental Remediation Standards Act; Introduction of new legislation amending our Act 2 "Brownfields" environmental cleanup law to extend liability protection to County Conservation Districts and private firms working to reclaim abandoned mine sites. Proposed legislation submitted on February 2, 2016.

• Professional Licensure committee

HB 92 - Granting State Licensing Boards the Power to Expunge Technical Violations; legislation submitted on January 21, 2015, Approved by Committee vote on April 1, 2015; Passed House vote on April 21, 2015 (194-0); Referred to Consumer Protection and Professional Licensure committee in the Senate on May 1, 2015.

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DAYTRIPS TO OUTSTANDING GEOLOGIC SETTINGS IN PENNSYLVANIA

OIL CREEK STATE PARK

By John Torrence, P.G.

Park Entrance Address: 305 State Park Rd, Oil City, PA 16301

There are many fun ways to spend time in Pennsylvania on your days off. A favorite of mine is to go hiking with my family and friends with the goal of finding interesting geologic sites, many of which are located within Pennsylvania State Parks or found along trail systems that are open to the public. One such destination is Oil Creek State Park which resides in the northwestern part of the State, between Oil City and Titusville, in Venango County, PA. What makes this Daytrip different than others is that it reveals a combination of interesting geologic features surrounded by the remnants of the petroleum industry's first commercial oil wells and the oil boom that followed, beginning in the 1860's.

Early last fall, my family and I left our home in Southeastern Pennsylvania and headed to the northwestern part of the State. After leaving the Pennsylvania Turnpike in Harrisburg, we followed Route 322 to the northwest and then took Route 62 to Oil City. From Oil City we drove along Route 8 to Oil Creek State Park. Although taking the older roads is not as fast as the highway system, it allows you to see Pennsylvania at a slower pace and you often discover "off the beaten path" attractions. After arriving at Oil Creek State Park, we drove to the train station at Petroleum Center located in the southern portion of the Park. This region has seen a lot of changes over the years; from the oil boom that took place in the 1800's and the subsequent recovery of the natural environment, to the geologic events that shaped the land. Petroleum Center is a former petroleum boom town and is currently a train station and visitor center that provides visitors with Park maps, historical displays and photographs. It's open on weekends from noon till 5:00 PM so you may want to download a trail map if you're visiting outside that time frame. A nice and level trail system winds its way around Petroleum Center and Oil Creek with informative signs that provide details about the former boom town, Petroleum Center. Rusting metal components of the former oil well systems that used to dot the landscape are present in Petroleum Center as well.

Looking up at the surrounding hills and forest on either side of Oil Creek, which have significantly recovered since the oil boom ended, I imagined what Petroleum Center was like back in its heyday: the smell of crude oil; the commotion of people hoping to strike it rich; and the entrepreneurs who followed boom towns selling goods and services. The remnants and former oil extraction sites from the late 1800's oil boom can be found throughout the Park and many of these locations provide access to the Park's trail system.

...the smell of crude oil; the commotion of people hoping to strike it rich...



Remains of former oil well locations are evident throughout the Park.

My tour of the Park's geologic features began with a drive to the Cow Run Shelter Site to check out the local geology and Oil Creek Gorge. The Cow Run Shelter Site begins as an unpaved road and is relatively easy to hike. When you get close to the Shelter, a trail that meanders along the Oil Creek crosses the road. I headed south and noticed more rusty oil boom remnants, the remains of large wooden tanks and former foundations made of stone. In addition, there were fairly large blocks of sandstone resting on the ground at the lower elevations. The rectangular blocks of sandstone are pieces of the Shenango Sandstone, which is light gray in color and distinctly cross-bedded. In addition, the Shenango Sandstone has small zones where the cementation appears to be weaker than in other parts of the formation so weathering has created holes, or rounded depressions on

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DAY TRIPS *Continued from Page 4*

the blocks. The Shenango Sandstone is more resistant to weathering than the shales of the Pottsville Formation above and the shales and fine grained sandstone of the Cuyahoga Formation below resulting in the prominent cliffs and overhangs that are present throughout the Park. As the softer rock underneath the Shenango Sandstone erodes, the two main joint sets within blocks of rock are mechanically weathered and over time the blocks of sandstone slide or fall to the ground below. Soil creep slowly delivers the blocks down the valley where many can be seen today. DNCR publication "Oil Creek State Park, Venango County, Ice and Oil Shape the Land", Park Guide #22, provides a great summary of the geology of the Park and can be found here.

According to the DNCR publication "Oil Creek State Park, Venango County, Ice and Oil Shape the Land", Park Guide #22, the two main joint sets in the bedrock has had a significant impact on the shape of the Oil Creek Gorge. The two sets of joints are generally perpendicular to each other, one set in a NW-SE direction and the second set in a NE-SW direction. These two sets of joints have impacted the flow direction of Oil Creek. If you take a look at the trail map you can easily see that Oil Creek tends to flow to the SW, bend and flow to the SE then bend and repeat. Oil Creek's flow direction parallels one joint set and then the other. This is not a fluke or happenstance. Erosion parallel to the joints occurs faster than perpendicular to the joints. As a result, Oil Creek follows one joint set and then the other back and forth. Glaciation also had an impact on the depth of Oil Creek Gorge. Oil Creek, before the ice age, flowed in a northerly direction. However, the glaciers blocked the northerly flow and the water ponded in front of the ice. Over a period of time, the ponded water became deep enough to cause the water, or creek, to flow in a southerly direction. Swift running melt water increased the rate of erosion and carved and eroded the Oil Creek Gorge, following the same channel that parallels the joint sets, as it can be seen today.

The Daytrip to Oil Creek State Park was both fun and educational in many ways. It allowed me to tell my family about the Ice Age and its impact on Oil Creek Gorge, and the importance of joint sets controlling the flow direction of creeks, streams and rivers. The more recent anthropogenic impacts on the Oil Creek Gorge are still visible, as is the resilience of Mother Nature restoring the Gorge to perhaps, something resembling its pre-oil boom condition.



Block of Shenango Sandstone

Source: www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_015910.pdf

"Oil Creek State Park, Venango County, Ice and Oil Shape the Land", Park Guide #22, prepared by the Pennsylvania Department of Conservation and Natural Resources Bureau of Topographic and Geologic Survey

Trail leading to the Cow Run Shelter Site

GAC UPDATE *Continued from Page 3*

HB 209 – Requiring all licensees to report convictions within 30-days; legislation submitted on January 23, 2015; Passed House vote on February 25, 2015 (198-0); Referred to Consumer Protection and Professional Licensure committee in the Senate on February 27, 2015.

HB 802 - Carryover of Continuing Educational Credits; New legislation to amend Act 48 of 1993 (Bureau of Professional and Occupations Affairs Act) restricting the carryover of excess CE credits for one biennial renewal term only. Proposed legislation submitted on March 17, 2015. Committee Vote on October 20, 2015, Approved (24-0). Removed from table, Nov. 25, 2015; Laid on the table, Nov. 25, 2015; Removed from table, Dec. 9, 2015; Laid on the table, Jan. 11, 2016; Removed from table, Jan. 11, 2016; Laid on the table, Feb. 8, 2016.

HB 1253 - Continuing Education Restrictions; Introduction of new legislation that changes to current exemptions and cleans up some loose continuing education language. Change #1 - proposes to eliminate the broad exemption from licensure for engineers that work in industrial settings whether or not the engineering work affects safety, health or welfare. The elimination of this exemption will make for less confusion and better public protection. Change #2 - This bill also replaces antiquated terms like "correspondence courses" and "tutorials" with "distance learning". The intent is to strengthen the integrity of the continuing education requirements for licensees under this act. This legislation is supported by the Pennsylvania Society of Professional Engineers and the Pennsylvania Society of Professional Engineers and the Pennsylvania Society of Land Surveyors. Proposed legislation submitted on May 28, 2015. No Action.

• Consumer Affairs committee

HB 48 – Water Well Construction Standards; proposed legislation submitted on January 21, 2015, Public hearing was held on May 12, 2015. Passed Committee Vote (26-0-1) on June 24, 2015. New printer number PN 1884. Laid on the table, Nov. 30, 2015; Removed from table, Nov. 30, 2015; Laid on the table, Dec. 17, 2015; Removed from table, Dec. 17, 2015; Laid on the table, Feb. 8, 2016.

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Plan to attend the 2016 PGWA Summer Field Conference

There will be a **hands-on field demonstration of a Sediment Filter Bag BMP** to treat muddy drilling water on **Friday, June 10** in State College. **4.5 PDH's for \$45**



Managing and treating the muddy drilling water and drill-cuttings during the air-rotary drilling of a water well or a monitoring well can

be a very challenging task, particularly when the drilling water is going to flow right into a stream or flow into a storm drain pipe. Pennsylvania's Erosion and Sediment Control regulations require the use of Best Management Practices (BMP's) such as silt sox, silt fences, straw bales, and sediment filter bags.

The **2016 PGWA Summer Field Conference** program will demonstrate the use of a sediment filter bag as a BMP to contain and treat muddy drilling water and contain the drill-cuttings.

More information is a www.pgwa.org. 



A diverter on the top of the well casing is sending 30 gpm of groundwater and drill cuttings and 1,200 cfm of air through the blooie pipe into the sediment filter bag for treatment.

GAC UPDATE *Continued from Page 7*

- **Labor and Industry**

HB 430 - Mechanics' Lien Law of 1963; Reintroduction of legislation expanding Pennsylvania's Mechanic Lien Laws to add design professionals as a group that would be able to place a lien on a property if they are not paid for their work. Proposed legislation submitted on February 10, 2015. No Action.

Senate

- **Environmental Resources & Energy committee**

SB 513 - Vehicular Transportation of Leachate; proposed legislation submitted on February 19, 2015. Signed in Senate, September 29, 2015, Signed in House, September 30, 2015, Presented to the Governor, September 30, 2015, Approved by the Governor, October 7, 2015. **Act No. 45.**

SB 571 - Critical zones for surface water intakes and wellhead protection areas; Reintroduction of legislation mandating the establishment of local zoning rules to include wellhead protection ordinances and/or surface water protection ordinances. Proposed legislation submitted on March 2, 2015. No Action.

SB 653 - Water Well Construction & Decommissioning Standards; legislation submitted on March 23, 2015. No Action.

SB 875 - Beneficial use of treated mine water in oil and gas operations; proposed legislation submitted on June 4, 2015. Signed in Senate, September 29, 2015. Signed in House, September 30, 2015. Presented to the Governor, September 30, 2015. Approved by the Governor, October 8, 2015. **Act No. 47.**

SB 1011 - Prohibiting the PADEP and the Environmental Quality Board (EQB) from finalizing and adopting Chapter 78 conventional oil and gas drilling regulations; proposed legislation submitted on September 25, 2015.

SB 1092 - Act requiring PADEP to maintain a tracking system for applicants to monitor the status of permit applications; proposed legislation submitted on December 21st, 2015. No Action.

- **Consumer Protection and Professional Licensure committee**

SB 538 - Strengthening Licensee Reporting Requirements and Suspensions; legislation submitted on February 25, 2015; Approved by committee vote on May 12, 2015. Passed Senate vote (49-0) on June 9, 2015. Referred to House Professional Licensure committee on June 11, 2015. Re-referred to Appropriations committee on June 27, 2015. Passed House vote (192-0) on June 28, 2015. In the Senate, referred to the Rules and Executive Nominations committee on June 28, 2015.

SB 845 - Licensure of Soil Scientists; proposed legislation submitted on May 20, 2015. No Action.

Chapter 78 and Chapter 78a Update

As expected, on February 3, 2016, the Pennsylvania Environmental Quality Board (EQB) passed the revisions to the oil and gas drilling regulations. The "Environmental Protection Performance Standards at Oil and Gas Well Sites" (Chapters 78 and 78a) rulemaking impact the environmental controls employed by both the conventional and unconventional oil and gas production industries. The rules will now be delivered to the Independent Regulatory Review Commission and the House and Senate Environmental Resources and Energy Committees for review. After 30 days, the Independent Regulatory Review Commission will take a final vote on the package. Promulgation is expected within the 1st quarter of 2016.

Interested in Joining/Participating on the PCPG GAC?

Historically the GAC has been involved with disseminating new regulatory information to members, providing testimony on new policy and legislative bills, and interacting with members of the Professional Engineering and Land Surveying professions on joint legislative issues. If you are interested in becoming involved with the GAC, please contact Mark Ios, Chairperson PCPG Government Affairs Committee at mioos@skellyloy.com.

DEADLINE FOR OUR NEXT NEWSLETTER IS MAY 20, 2016

For more information, contact our PCPG Newsletter Editor and Communications Committee Chairperson - John Torrence, P.G., by **Email** or telephone at 609-932-7090.

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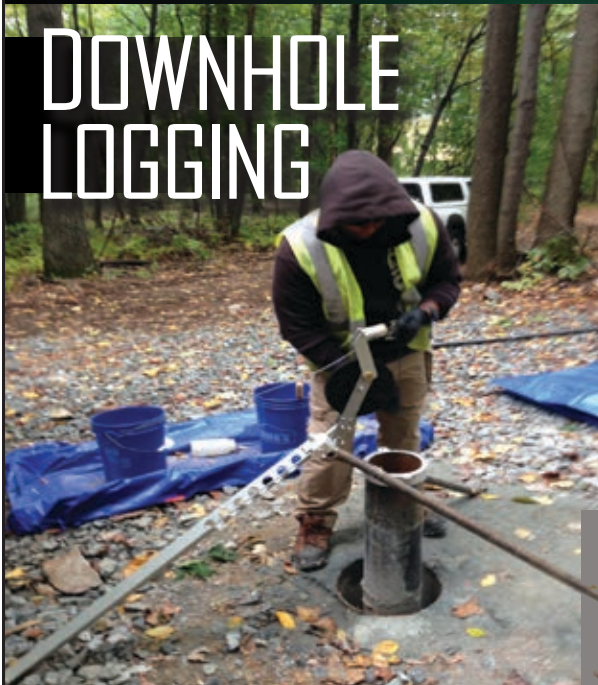
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