

# PCPG Newsletter

Communicating Key Information & Concerns  
to Geologists and Environmental Professionals

Issue 3 / 2016

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## MESSAGE FROM THE PRESIDENT



OK I'm going to mention politics. I normally steer away from the topic, but our geoscience disciplines have been quiet for many years. Making sound public policy decisions requires a thorough understanding of Geology and related sciences. We, that's all of us, need to get our knowledge out to the public.

Advancing geology for public policy decisions requires a complete understanding of the important aspects of resources such as water, minerals, energy, natural hazards, and human impacts on the environment. Differentiating between factual science and perceived conditions is a difficult topic in today's world. PCPG supports active involvement by members and other scientists in the academic, industrial and consulting sectors. We as an industry need to share information to improve the knowledge and understanding of all the geosciences not only among ourselves, but for the general public. We need to advance this knowledge, so informed decisions can be made by agencies at federal, state, county and municipal levels, as well as by citizens.

Two key topics discussed today are climate change and natural hazard preparedness. Most people have not had formal geoscience education since middle school. Many do not realize how they are impacted by the geoscience disciplines on a daily basis. Many federal agencies have mandated sharing of information. Academia has done a good job of sharing through publications. Typically the private sector has not. I would suggest that the private sector share their information, such as drill logs, geological interpretations, water quality data, etc. to expand scientific knowledge of the public in general. Of course there will be situations where sharing creates a conflict and cannot be offered. Those cannot be helped. Where sharing is possible I would suggest seeking a local university, state, or county agency. The Pennsylvania Geological Survey would be a great place to share raw data.

Private sectors can help to house the information by supporting employees with training to manage and extend geoscience education and outreach for public engagement. Also encourage employee involvement in local agencies by rewarding service within the corporate structure. Provide formal recognition of employees' efforts to increase public understanding of Earth and the environment by rewarding these activities with favorable salary and promotion decisions and with company/organization staff awards.

As I have discussed previously, PCPG needs your help getting the word out. Please consider this discussion topic within your company. Also, I encourage comments about PCPG's vision, mission and operation.

Sincerely

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

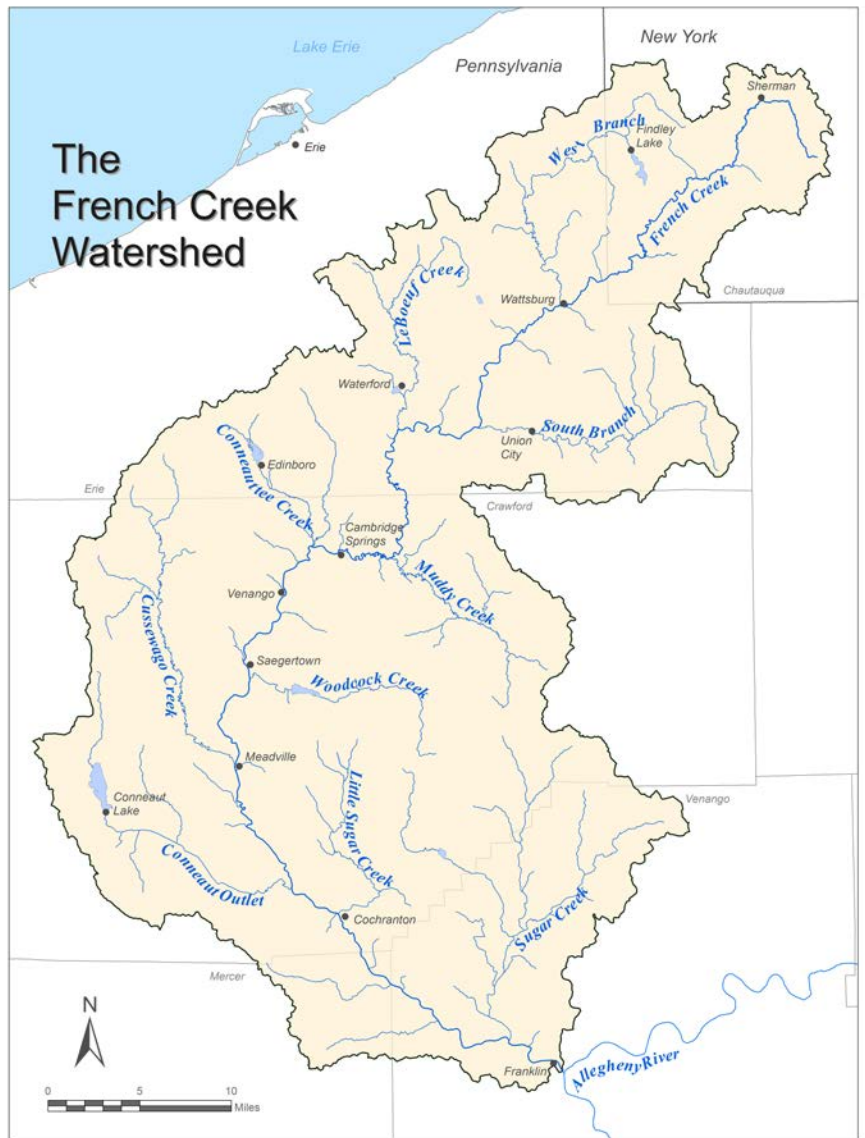
## FRENCH CREEK

*Brenda Costa, P.G., French Creek Valley Conservancy*

French Creek flows southward 117 miles from the headwaters in Chautauqua County, New York through Erie, Crawford, Mercer, and Venango Counties in Pennsylvania before joining the Allegheny River in the City of Franklin. It wasn't always that way; in ancient times, French Creek began near the mouth of the current day Clarion River. An extensive glacial history of the area caused a reversal in flow, redirecting it from flowing northward into Lake Erie.

Northwestern Pennsylvania experienced numerous episodes of glaciation over the last two million years, activity known as the Erie Lobe. This lobe advanced seven times between the Illinoian and Wisconsin Ages, severely altering the geology and topography of the region. Glaciers blocked the northward flow of the creek and left massive deposits in its wake, causing French Creek's reversal of flow.

With this reversal, French Creek became a part of the Allegheny and Ohio River systems, which feed the Mississippi. This dramatic change resulted in French Creek acquiring an incredible mixture of aquatic species by blending biology from multiple watersheds. Today French Creek, in NW PA, is one of the most biologically diverse waterways in the United States, hosting organisms from the Ohio River basin, the Great Lakes, and the Susquehanna River watershed. The Nature Conservancy has designated the French Creek Watershed one of the "Last Great Places" for its beauty, biological diversity, and exceptional water quality.



*Eastern Hellbender found in French Creek.*

In the watershed, the glaciers created broad uplands separated by linear valleys and long, rounded ridges. Vast deposits of glacial drift—clay, silt, sand and gravel—resulted in an array of soil types found throughout the region. Glaciation also created many of the wetlands and glacial lakes in the French Creek Watershed, such as Conneaut and Pymatuning marshes, and Conneaut and Sugar Lakes. Conneaut Outlet, the remnant of an ancient streambed filled with glacial drift—is the largest marsh complex in Pennsylvania.

The regional glacial deposits continue to play a major role in maintaining the water quality in the French Creek Watershed. The high limestone content, scoured from Canada, acts as a natural

*Continued on Page 3*



## **FRENCH CREEK** *Continued from Page 2*

buffer to the acidic rainfall in the area. The creek supports over 80 species of fish and 26 species of freshwater mussels (for comparison, the entire continent of Europe has eight freshwater mussel species). It is also home to a thriving population of Hellbenders, a giant salamander species that can grow to almost 30 inches in length and have a life span of more than 25 years.

The massive glacial deposits also benefit the people of the French Creek Watershed, acting as a vast fresh water aquifer. These sand and gravel deposits yield significant high quality drinking water for most residents in the 1,270 square mile watershed.

And why the name French Creek? It is believed that the French named the waterway Rivière au Bœuf in reference to the abundant eastern bison population present in the area. In 1753, as British and French conflict escalated, a young surveyor traveled north on a waterway he named "French Creek" to evict the French from Fort LeBeouf. The young man kept a journal of his perilous travels, including a report of capsizing in the icy waters of the creek in December. It's fortunate for all that the young George Washington was successful and survived, and went on to become our first President of the United States.



*French Creek*

## BE THERE OR “BE SQUARE” – THE LIFE AND LEGACY OF PENNSYLVANIA OILMAN THEODORE NEWTON BARNSDALL

*Amy Randolph, P.G. – retired, Commonwealth of PA*

What do the Potter Sand in California, the Barnsdall Formation and soil series in Oklahoma, and the Barnsdall Sand within the Premont field of Texas have in common? They all have ties to Pennsylvania oil and gas pioneer Theodore Newton Barnsdall, who, while not well known, left traces of his life and legacy spread across North America.

Born and raised in the shadow of Edwin Drake’s landmark well in the Oil Creek Valley of Pennsylvania, it may have been no surprise that Theodore Barnsdall followed in dreams of his own petroleum ventures. Indeed, by the end of his relatively short life at age 65 in 1917, “Thede” Barnsdall was an oil man well-known to the American public, and the companies he created and held interests in were often reported to be the only formidable rival to Standard Oil. However, while “the Standard” and John D. Rockefeller are names still widely recognized today, it seems that Barnsdall’s role in the early exploration and development, transportation and refining of petroleum products has faded in U.S. petroleum history.

Theodore Newton Barnsdall was born in the summer of 1851 in Titusville, PA. His father, William Barnsdall, had emigrated from England and was a shoemaker-turned-petroleum pioneer in his own right. William partnered in the drilling of the second Oil Creek Valley well (Barnsdall, Mead, Rouse & Co. well no.1) following Drake’s success, and is credited with building the first multiple-still kerosene refinery in Pennsylvania in 1860. Theodore reportedly learned his trade as a young teenager by first assisting with a well in Pithole, PA, owned by his father.

Theodore Barnsdall later amassed numerous interests in coal, gold, silver, copper and silica mines; railway companies; and oil and gas companies within the U.S., Canada and Mexico. He both competed against and reportedly collaborated with Standard Oil. One of his most contentious business dealings involved allegations that he acted as a front man for Standard Oil’s acquisition of the Osage Indian Territory lands in northern Oklahoma in the early 1900s.

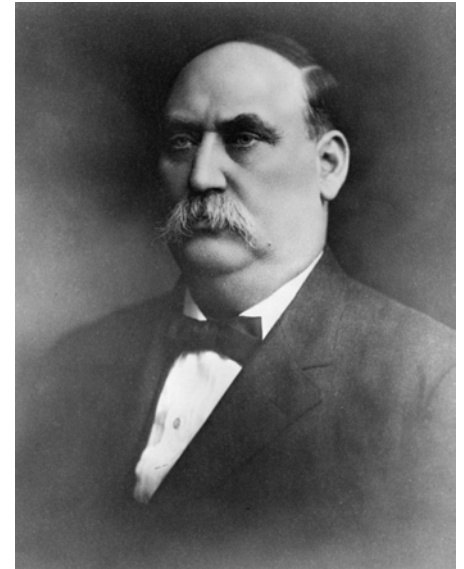
Following Barnsdall’s death in 1917, his son-in-law, Robert Law, Jr., took over all of Barnsdall’s interests and consolidated them into the Barnsdall Corporation.

In 1920, Barnsdall Corporation merged with the Bigheart Producing and Refining Company in Oklahoma, to create the Barnsdall Refining Company, which marketed its line of lubricating oils and other products under its “Be Square” and “Be Square to Your Motor” slogans.

The International Barnsdall Corporation was incorporated in October 1921, with the Barnsdall Corporation owning a majority interest of its stock. In the early 1920s the company provided drilling equipment and personnel to improve development of the Baku oil fields under an agreement with Soviet Russia.

In mid-1922, controlling interest in the Barnsdall Corporation was bought out by the Atlantic Refining Company. Barnsdall Oil Company survived until 1950 when it was acquired by Sunray Oil Corporation. Barnsdall Oil Company’s west Texas properties were reportedly bought by Amoco. Cities Services Company (a Citgo predecessor) had previously bought certain Barnsdall holdings in 1912.

The Barnsdall Refining Company was renamed “Bareco” in 1940 and in 1946 it ceased refining operations in order to concentrate on the manufacture of specialty waxes. That company later became Bareco Wax Company, was eventually bought by Petrolite Corporation, and is now owned by Baker Hughes, which manufacturers wax products using both the “Bareco” and “Be Square” trade names.



**Theodore N. Barnsdall, 1851-1917**

Photo credit: DW9012

Courtesy of Pennsylvania Historical & Museum  
Commission, Drake Well Museum, Titusville, PA

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## PCPG's GOVERNMENT AFFAIRS COMMITTEE (GAC) UPDATE

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

### Legislatives Bills

On June 30, 2016, the House and Senate passed a \$31.52 billion General Fund budget bill (Senate Bill 1073). Governor Wolf allowed this bill to become law without his signature at midnight on July 11. Since early July, both the House and the Senate have been in recess for the summer. The PA House and the PA Senate are scheduled to reconvene on September 19<sup>th</sup> and September 26<sup>th</sup>, respectively.

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 legislative activity has occurred since June 2016.

### House

#### • Environmental Resources & Energy Committee

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

**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. Reported as committed on March 16, 2016; First consideration, March 16, 2016; Laid on the table, March 16, 2016; Removed from table, March 21, 2016; Second consideration, March 22, 2016; Re-committed to APPROPRIATIONS, March 22, 2016; Re-reported as committed from APPROPRIATIONS, April 4, 2016; Third consideration and final passage, April 4, 2016 (189-0). In the Senate, Referred to ENVIRONMENTAL RESOURCES AND ENERGY, April 12, 2016, Reported as committed from ENVIRONMENTAL RESOURCES AND ENERGY, June 14, 2016; First consideration, June 14, 2016; Re-referred to APPROPRIATIONS, July 11, 2016.

**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.

**HB 1895** - Storage Tank Indemnification Board. New legislation amending the 1989 Storage Tank and Spill Prevention Act to address a vacancy within the makeup of the Underground Storage Tank Indemnification Board. Referred on March 14, 2016 [House]; Reported as amended from ENVIRONMENTAL RESOURCES AND ENERGY, March 16, 2016; Re-committed to APPROPRIATIONS, March 22, 2016; Re-reported as committed from APPROPRIATIONS, April 4, 2016; Third consideration and final passage, April 4, 2016 (189-0); In the Senate, Referred to BANKING AND INSURANCE, April 12, 2016; Reported as committed from BANKING AND INSURANCE, May 18, 2016; First consideration, May 18, 2016; Second consideration, June 15, 2016; Laid on the table, June 28, 2016; Removed from table, June 28, 2016; Laid on the table, July 13, 2016.

**HB 2103** - Natural gas severance tax and establishing the Severance Tax Restricted Account; New legislation that will enact a severance tax on the value of wet and dry natural gas extracted in Pennsylvania; Referred to ENVIRONMENTAL RESOURCES AND ENERGY, May 25, 2016.

**HB 2223** - Amending Titles 27 (Environmental Resources) and 58 (Oil and Gas), New legislation to raise statewide municipal waste tipping fees; Referred to ENVIRONMENTAL RESOURCES AND ENERGY, June 28, 2016.

**HB 2249** - Amending the Pennsylvania Safe Drinking Water Act, New legislation to clarify that religious institutions would no longer be considered community water systems when they are relying upon their own privately-own water wells as their water source; Referred to ENVIRONMENTAL RESOURCES AND ENERGY, July 10, 2016.

**HB 2275** - Environmental Quality Board, New Legislation that will change the makeup of the EQB; Referred to ENVIRONMENTAL RESOURCES AND ENERGY, Aug. 5, 2016.

**HB 2277** - Amending Title 58 (Oil and Gas), New Legislation that will require drilling entities, to post a \$2 million dollar bond for each well to be held in escrow; Referred to ENVIRONMENTAL RESOURCES AND ENERGY, Aug. 5, 2016.

**HR 908** - Water Use Fee Resolution directing the Legislative Budget and Finance Committee to conduct a study of the establishment, implementation, and administration of fees for the consumptive use and the use and return of "Waters of the Commonwealth" by industrial and commercial users; Referred to ENVIRONMENTAL RESOURCES AND ENERGY, May 24, 2016.

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## GAC UPDATE *Continued from Page 5*

### • 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.

**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.

**HB 1704** – Engineer, Land Surveyor and Geologist Registration Law – Amendment;

New legislation that amends the Engineer, Land Surveyor and Geologist Registration Law. The legislation makes a number of changes to current exemptions and cleans up some loose continuing education language. This is similar to a bill (HB 1253) introduced earlier this session that removed an exemption commonly referred to as the “industrial exemption”. This new bill drops that change. 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. Referred on Nov. 16, 2015 [House]; Reported as amended from PROFESSIONAL LICENSURE, March 16, 2016; Third consideration and final passage, May 18, 2016 (187-3); In the Senate: Referred to CONSUMER PROTECTION AND PROFESSIONAL LICENSURE, May 26, 2016.

### • 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.

**HB 2114** – Pennsylvania Water Resource Act, new legislation to register extraordinary nonagriculture and nonmunicipal water users and impose a water resource fee for water users; Referred to CONSUMER AFFAIRS, June 27, 2016.

**HB 2308** – PA One Call Law, Introduction of legislation to reauthorize the Underground Utility Line Protection Law; Referred to CONSUMER AFFAIRS, Sept. 1, 2016.

### • 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 653** – Water Well Construction & Decommissioning Standards; legislation submitted on March 23, 2015. No Action.

**SB 1273** – Unconventional Well Reports; new legislation which will amend the Unconventional Well Report Act (Act 173 of 2014) that will require unconventional well operators to submit a waste report to PADEP every six months; Referred to ENVIRONMENTAL RESOURCES AND ENERGY, May 25, 2016.

**SR 385** – A Resolution directing the Joint State Government Commission to conduct a study to analyze and identify which environmental laws and regulations of this Commonwealth have more stringent standards than Federal law requires; Referred to Senate on June 6, 2016.

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## STUDENT CORNER

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

### Is College Just a Series of Dull Stand-Up Acts?

*Kurt Friehauf, Ph.D., P.G., Kutztown University*

If you are reading this, then you're probably not the type of student who enrolled in college to drunkenly party away a few procrastinating years before working for the rest of your life. You're therefore also likely to be heading into a fruitful career that challenges you and gives you satisfaction – a career that will *require* you to be prepared – a career as a professional geologist.

Although *your own* enthusiasm is high, you've likely yawned through plenty of lectures flaccidly phoned in by uninspiring professors whose minds were as far away at the time as yours was. It can seem like a Kafkaesque cycle of going to lecture, taking some notes, reading the textbook, and taking exams ... repeat .... and that might be the extent of your four years-long college learning experience is if you're not careful! Lectures, however, are only a tiny fraction of your opportunity for learning in college.

#### **Library and Interlibrary loan**

Published journal articles typically cost \$35-50 *per individual article* – but you get them for **free** through your university library! Journals present 1) overview articles that help catch you up to speed if you're starting from zero, and 2) report cutting edge research to tune you up in subjects in which you're already familiar. You can get free interlibrary loan access to hundreds of journals to which your library does not subscribe with a few mouse clicks. Your wide-open window of opportunity closes when you graduate.

#### **Visiting speakers**

Whether or not your professors are inspiring presenters, your school sponsors speaker series that bring famous people to your university. Your school chooses these speakers for their roles in history-making decisions, or because they're prominent thinkers with big ideas. Such speakers commonly charge \$30,000-80,000 (or more!) in fees, so go see them while your university is picking up the bill.

You can also work with your university department or geology club to invite speakers from the geology industry to present their research or work experiences. The **PCPG** can connect you with willing professional geologists in your area!

#### **Tours of geological sites**

Universities often get special access to mines, drill sites, and other geologic sites that are closed to the general public. Your professors organize class field trips to these sites – never miss those opportunities. You, as an organized student geology club, can also organize tours yourself, if you have some initiative. *Carpe diem!*

#### **Undergraduate research**

Motivated college students can potentially do *extracurricular* cutting-edge research with faculty guidance. This is an opportunity for hands-on experience trains you to be a practicing scientist, as opposed to an organic encyclopedia of geologic trivia. Students who complete extracurricular research projects can travel to major geological conferences (e.g., **Geological Society of America**, **American Geophysical Union**) to present their results and meet successful geoscientists as peers. Many universities will even help fund your travel to the conference!

## PCPG ANNUAL STUDENT ESSAY COMPETITION

#### TOPIC:

**How Does Geology  
Affect Your Life?**

#### ENTRY DUE DATE:

**January 31, 2017**

**Winning Essay will  
receive a \$1,000  
scholarship.**

*Winner will be awarded  
at the March 7, 2017  
PCPG Annual Meeting.*

## GAC UPDATE *Continued from Page 6*

### • 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**

The PADEP's Chapter 78a regulations govern "unconventional" drilling sites, such as those tapping into the Marcellus Shale to release gas within the rock using hydraulic fracturing, or fracking.


On June 23, 2016, Governor Wolf signed SB 279 (designated Act 52), which cut off plans to tighten what is known as Chapter 78a of the state's oil and gas regulations from changes to conventional drilling. Specifically, the passage and signage of this bill split plans to update regulations aimed at protecting the environment from the effects of "fracking" from changes to conventional drilling rules.

The passage of SB 279 was an accord between the Governor's office and State Republicans. The Governor's office got approval of the more stringent Chapter 78a regulations for governing "unconventional" O&G wells, and the State Republicans made arrangements allowing the Chapter 78 regulations for governing "conventional" O&G wells to be redeveloped.

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## DOWNHOLE LOGGING



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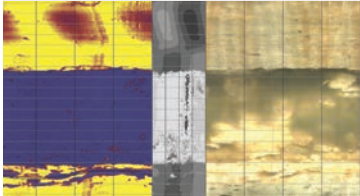
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## **GAC UPDATE** *Continued from Page 8*

On August 25<sup>th</sup>, 2016, The Joint Senate/House Committee on Documents voted unanimously to direct the Legislative Reference Bureau (LRB) to publish PADEP's final Chapter 78a unconventional (Marcellus Shale) drilling regulations in the PA Bulletin. The LRB said it would publish the restored Chapter 78 language in the Bulletin when the final rules are published. The regulations may take as long as 3 to 6 weeks to appear in the Bulletin, due to the length of the package and the publication process. More information on the Chapter 78 & 78a regulations is available on PADEP's [Oil and Gas Regulations](#) webpage.

### **Chapter 250 Regulations, Land Recycling Program (Act 2)**

On June 30, 2016, the Independent Regulatory Review Commission (IRRC) unanimously approved the final form amendments to the Chapter 250 regulations. The Final Chapter 250 Rulemaking made it through review of the Environmental Quality Board (EQB), the Independent Regulatory Review Commission (IRRC), and the Office of the Attorney General and were published in the Pennsylvania Bulletin on August 27, 2016. The new regulations became effective upon publication.

Major revisions to the rulemaking include:

1. Updating the statewide health Medium-Specific Concentrations (MSCs).
2. Clarifying the public notice documentation required for cleanups; and
3. Clarifying the application of the EPA Health Advisory role.

The notice published in the PA Bulletin regarding the Chapter 250 regulations can be viewed via the following link:

<http://www.pabulletin.com/secure/data/vol46/46-35/1508.html>

The new MSC standards can be viewed on the PADEP website via the following link: [http://www.dep.pa.gov/Business/Land/](http://www.dep.pa.gov/Business/Land/LandRecycling/Standards-Guidance-Procedures/Pages/Statewide-Health-Standards.aspx)

[LandRecycling/Standards-Guidance-Procedures/Pages/Statewide-Health-Standards.aspx](http://www.dep.pa.gov/Business/Land/LandRecycling/Standards-Guidance-Procedures/Pages/Statewide-Health-Standards.aspx)

### **Cleanup Standards Scientific Advisory Board**

On July 13<sup>th</sup>, 2016, the Cleanup Standards Scientific Advisory Board (CSSAB) met in Harrisburg to discuss the following issues:

- Land Recycling Program (LRP) Program Updates
- Final Vapor Intrusion Guidance document
- Draft Section III of Technical Guidance Manual (TGM)
- Discussion on the Draft Sections I and II of the TGM

The minutes to the meeting are still pending.

To view the CSSAB presentation on the draft-Final Vapor Intrusion Guidance, please see the following link:

<http://files.dep.state.pa.us/EnvironmentalCleanupBrownfields/LandRecyclingProgram/LandRecyclingProgramPortalFiles/CSSAB/2016/July13/CSSAB%20VI%20Presentation.pdf>

To view the CSSAB presentation on the changes to Section III of Technical Guidance Manual, please see the following link:

<http://files.dep.state.pa.us/EnvironmentalCleanupBrownfields/LandRecyclingProgram/LandRecyclingProgramPortalFiles/CSSAB/2016/July13/TGM%20Section%20III%20Revisions%20Presentation.pdf>

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Arnold G. Doden, Ph.D., P.G.  
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### **Course #1002**

*Pyrite at Skytop: Local Geology*

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## **GAC UPDATE** *Continued from Page 9*

### **Proposed Water Use Fees**

Water withdrawn from Commonwealth waterways in excess of 10,000 gallons a day is currently required to be reported to the Pennsylvania Department of Environmental Protection (PADEP). House Bill 2114 ([HB 2114](#)) would result in a charge of 1/100th of a cent per gallon if water is withdrawn for use and eventually returned to the source. Water withdrawn and not returned beyond 10,000 gallons a day would be charged 1/10th of a cent per gallon. Based on such charges, the water resource use fee would be levied on an estimated 4.4 billion gallons of daily water withdrawals in Pennsylvania, potentially generating \$245 million annually. Revenue generated from House Bill 2114 would be used to fund water-related programs and general governmental operations in the PADEP (\$30 million), Department of Conservation and Natural Resources (\$25 million), and Fish and Boat Commission (\$5 million). The remaining dollars would be used to fund water-related projects within Pennsylvania's six major watersheds.

In June 2016, Representative Garth Everett (R-Lycoming) introduced a bipartisan resolution (House Resolution 908 [[HR 908](#)]) calling for a study of a new water use fee to fund water quality improvement programs. This resolution directs the Legislative Budget and Finance Committee to conduct a study of the establishment, implementation, and administration of fees for the consumptive use and the use and return of "waters of the Commonwealth" by industrial and commercial users.

The study would look at the establishment of both a royalty fee for the consumptive use of water and a royalty fee for water used and returned. It would examine proposed and successful attempts of other states to assess fees for the use of water; identify the uses to which the fees would apply; estimate the revenue generating potential of the fees; and evaluate how to assess, collect, and manage the proceeds of the royalty fees. The study would also make recommendations on creating a new Water Quality Improvement Fund and on how the proceeds of the fees might be apportioned among the major watersheds in the Commonwealth and the departments and agencies involved in water quality efforts in Pennsylvania. Please note that both [HB 2114](#) and [HR 908](#) are still pending.

### **Geologic Licensure in New York State – Application Period Now Open**

On July 25<sup>th</sup>, 2016, the New York State (NYS) Education Department released information that the planned regulations and application forms for Licensure of Geologists in NYS are now available online via the website for the Office of the Professions. Applications will be accepted immediately and licenses will be issued to those applicants meeting the qualifications for licensure through the grandparent provision starting November 21, 2016. The "grandfathering" period extends until November 20, 2017, after which the ASBOG exam will be required for all applicants. To find out more, please see the following link: <http://www.op.nysed.gov/prof/geol>

## **BARNSDALE** *Continued from Page 4*

Vestiges of Barnsdall and ties to Pennsylvania remain scattered across the country. In addition to the geologic and soil series references named above (the Potter Sand In CA Sand was named after the Potter Oil Company, controlled by Barnsdall's Potter Natural Gas Company of Potter County, PA which supplied natural gas to northern PA and southern NY, including the Corning Glass Works in Elmira, NY), the town of Bigheart, Oklahoma was renamed Barnsdall in 1922 after the company's numerous wells and refinery located there. A packet steamboat which operated on the Ohio River was built in 1890 and named the "T.N. Barnsdall".

Barnsdall Park, located outside of Hollywood, CA, was donated to the city of Los Angeles by Barnsdall's older daughter, Aline, who used her inheritance to commission Frank Lloyd Wright to design a home for her there in 1919; "Hollyhock House" was designated a National Historic Landmark in 2007. Within the park is a plaque which reads, "In Memory of Theodore N. Barnsdall, 1851-1917 - Our fathers mined for the gold of this country. We should mine for its beauty."

Theodore Barnsdall is buried in Titusville, PA along with numerous other early oil pioneers who played important roles in the discovery and development of oil and natural gas resources within and far beyond the boundaries of Pennsylvania.



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