

Communicating Key Information and Concerns to Geologists and Environmental Professionals

Issue 1 / 2023

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General Information: PCPG Office





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# Message from the President

Happy New Year PCPG!

Thank you to all PCPG members for all your support of the organization through 2022. My thanks also go to Tiffani Doerr, P.G. for her great work as PCPG President last year. After having the opportunity to work with Tiffani and all the PCPG board members over the last six years, it is now my privilege to serve as President in 2023. I hope to both continue and expand PCPG's services to our members



this year. I would also like to thank our outgoing PCPG board members for their service: Emily Glick, P.G. for serving as PCPG Newsletter Editor and Tom Jordan Ph.D., P.G. for serving as Educational Committee Chair.

Welcome back to David Crotsley, P.G. and Steven Zbur, P.G. for returning to the PCPG Board of Directors for another term. Please also welcome our newest board members William Camp, P.G., Leslie Tintle, and David Wilcots, P.G. Last but not least, I would like to introduce current board member Jason Floyd, P.G., who will serve as President-Elect this year.

So, what is in the works for PCPG this year?

Let me start with my vision for PCPG in 2023: COMMUNITY. Pennsylvania is fortunate to have a diverse geoscience community. Whether you work in oil & gas, geotechnical, academia, government, water resources, environmental, or as a mining professional, we are all important geoscientists to the Commonwealth of Pennsylvania. The geosciences are important to our livelihoods, to our communities, to education, and to human health and the environment. Pennsylvania is unique in having many great colleges and universities that support the geosciences and provide highly qualified young geologists - the next generation - to continue the services the geoscience community provides.

We as the geoscience community do our work well. But what are new ways we can work together to strengthen the geoscience community? How can we better support one another in promoting geoscience services? Are we educating the broader community of the importance of the geosciences? In my view, the best way to support the future of the geosciences is for each of us within our personal and professional networks to support all disciplines of geoscience in the Commonwealth through education and promotion of our industry. PCPG will be that organization, which facilitates and promotes action. It is

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# **NEW PCPG ASSOCIATE MEMBER**

Please join us in welcoming our newest **PCPG** Associate Member:



Geotechnical and Evironmental Drilling Services

Interested in becoming a PCPG Associate Member? Visit our Join PCPG page to review Benefits of Membership and enroll online. Associate Members qualify for up to four (4) membership contacts, one complimentary half-page digital ad in a quarterly newsletter, and a complimentary display table at our Annual Meeting along with appearing in our Associate Member Directory in each quarterly newsletter. Telephone PCPG by dialing (717) 730-9745 for more information.

# UPCOMING PCPG EVENTS

March 23, 2023 (Thursday)

Geomorphology, river incision, and earthquakes in

Lancaster and York Counties, PA Webinar: 1:00 - 2:00 PM

April 20, 2023 (Thursday)

Basement Structure of the Appalachian Basin in

Pennsylvania

Webinar: 1:00 - 2:00 PM

May 12, 2023 (Friday)

Evaluating the Potential of REE Extraction from Coal

and Shale Deposits

Webinar: 1:00 - 2:00 PM

FOR A COMPLETE LIST OF UPCOMING EVENTS OR TO REGISTER ONLINE, CHECK OUR HOME PAGE EVENT CALENDAR, OR VISIT PCPG'S COURSES AND EVENTS WEB PAGE.

#### PRESIDENT'S MESSAGE Continued from Page 1

my goal that PCPG this year and beyond will be the "meeting house" to share our experiences, our passion for the work we do and to educate the community on the importance of geologybased services. So how can we achieve this goal?

Promoting Our Services: Several states had recently attempted to eliminate their Professional Geologist licensure. PCPG will support any effort within Pennsylvania or other states to ensure that professional geologist licensure is preserved. The geoscience community can work together to educate citizens and their governments of the important role that geologic services provide to their communities. This year PCPG will be working to educate a broader audience of Pennsylvanians by increasing our exposure. PCPG will support and present our services at several professional events such as the 2023 Pennsylvania Brownfields Conference and the 2023 Association for Pennsylvania Municipal Management Annual Conference. PCPG invites our membership to assist in identifying other professional associations across the Commonwealth where PCPG members can demonstrate the important work of Professional Geologists.

Supporting PCPG Initiatives: Increasing our exposure to a broader community, creates an opportunity to not only promote the PCPG mission, but to network and grow our initiatives. These initiatives give members the opportunity to actively participate through subcommittees. I encourage membership to jump in and assist us in our exciting endeavors!

PCPG is supporting the Pennsylvania State System of Higher Education (PASSHE) in developing the newest generations of geologists. Geology education will be combined with professional education, communication, technical writing, and other programs that will better prepare youth for Professional Geologist services. This year we introduce a junior board member, Andrea Wright, who will assist the board in making sure we better connect with and address the needs of our student population. PCPG will also provide opportunities for our membership and young professionals to connect through a developing job board and resume board on the PCPG website.

PCPG will continue to provide educational programs to support PDH credits and will also expand and diversify our programs to include the broader geology community. Members are welcome to contact PCPG with presentations or educational programs that can benefit and strengthen the geoscience **COMMUNITY**.

I look forward to working together with all members to move us into the future by defending, strengthening, and educating the COMMUNITY. Please do not hesitate to contact me or any PCPG Board Member with any thoughts or ideas of how PCPG can help you in this endeavor.

Vincent Carbone, P.G., C.P.G.

**PCPG** President

## To Whack or Not to Whack? There is No Question - DON'T! A REMINDER ON EXPLOSIVES SAFETY FOR GEOLOGISTS

by Vicki Pitman, P.G., Senior Geologist and Rick Hanoski, Vice President, PMP, CQA EA Engineering, Science, and Technology, Inc., PBC

"It's so cool to be in the field today and explore this old factory before drilling starts," John said to his coworker Mira. "That looks like sandstone in that pile over there. I wonder what they used that for?" said Mira. WHACK goes John's rock hammer! Bad decision, John!

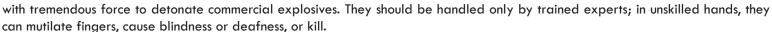
Admittedly, geologists have a natural tendency to kick, whack, touch, or break rocks—in the name of science and discovery, of course! However, recognize that what might look like a piece of weathered sandstone, even to an experienced geologist, could be weathered trinitrotoluene (TNT) with a remaining explosive potential. During our work and private lives, we may not fully consider what hazards may be lurking and that the action we take could have catastrophic consequences. Whether on-site sampling or on vacation strolling the beaches of the Atlantic or the Pacific, we can become tunnel visioned on the task at hand without fully considering the potential hazards of that activity when it comes to the broader picture with regard to the history of the area.

An important consideration before fieldwork (or poking at debris on the beach) is whether the area had previously been used by the military or miners and could have involved explosive hazards. This situation can present itself if the area was a U.S. Department

of Defense (DoD) installation, range, or training area; a former munitions or TNT factory; a historic battlefield; or other DoD area turned back over to the public. These could be private, local, state, or federal government lands, or public parks or beaches.

Typically, the areas were surveyed and the hazards mitigated or removed using the best technology at the time prior to turnover to the public. However, one's common sense should dictate that remnants of the previous hazard could remain—especially when it comes to explosive hazards in areas that were known or suspected to have been used for some type of munitions activities and or were old or abandoned mines.

Where commercial blasting has taken place, the potential for unused explosives (e.g., TNT or dynamite) may not have been removed properly or there could be discarded blasting caps left after the operation closed. Innocent looking sticks and small blasting caps are potential killers. Size does not matter when it comes to explosive hazards. Small blasting caps are designed to explode



The best advice: Do not touch or go near it. Call 911 to report to first responders. Always follow the 3 Rs of Explosives Safety Education:



If you or another person comes across an item that presents or is suspected to be an explosive hazard, DO NOT TOUCH, KICK, OR DISTURB THE ITEM! Immediately stop work, visually scan for additional hazards, retreat, and notify others.



Do not use electronic cell phones or radios near the item. Move to a safe distance first. All personnel should retreat to a designated safe area. Mark the vicinity with a painted arrow, flag, or other visual method to help trained first responders find their way to the item and keep others out. DO NOT MARK THE ITEM ITSELF.



Call 911 to report to local police/military. Do not return to the area until deemed safe by a competent authority. No matter who the landowner is, the item is no one's souvenir and CANNOT be collected. Doing so can be deadly and carries a hefty fine (\$20,000+).

Incidents have been reported in the news of unexpected items found in Pennsylvania and other Mid-Atlantic states. Know your site history and put that rock hammer away if there is even a remote risk of munitions or related storage or debris at the site! SAFETY FIRST! For more, visit this DoD website.





## **Comprehensive Environmental Services**

Since 1988, Elk Environmental Services has been providing emergency response, environmental remediation, waste management, industrial services, lab packing and compliance training to the Mid-Atlantic states. We offer a number of turnkey services, including:

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Elk opened a second office in 2011 to service the exploration and production of Marcellus and Utica Shale gas in Northern PA with transportation and disposal of waste and industrial cleaning services. Elk North serves the UpStream, MidStream, and DownStream Energy markets as well as Industrial sectors. In conjunction with the Empire Group, Elk offers cost-effective environmental solutions to a variety of industrial and commercial companies.

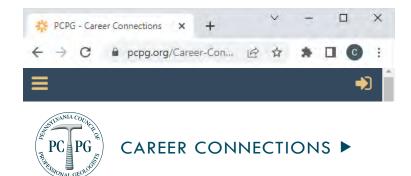
Elk can take care of your particular environmental needs. Contact us today to learn more!

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#### You asked for it and we created it!

Corporate Members are now able to sponsor open positions in the firm under our Corporate Member Open Positions page.

### CORPORATE MEMBER OPEN POSITIONS

The sponsorship fee is \$100 for a two-month listing. Sponsorships do not auto-renew.

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## Looking for a position or an internship?

We now have a Resume Board, too. Submit your resume in PDF format via email to Rose Jeffries for posting on this

page. Be sure you request that the resume be added to the PCPG resume board where your resume will be posted as a PDF download link, at no charge, for 60 days. After 60 days, the posting will be removed but you are invited to resubmit. If looking for an internship, we'll create a special category on the page. Just have the word internship appear in your PDF title along with your name, or mention it in the email.

Both features are relatively new. We hope to build-out content in the near future.

## KIDS' CORNER: SNOWY THUMBPRINT CRAFT

By Leslie Tintle, Senior Project Scientist Sanborn, Head, and Associates, Inc.

Temperatures are dropping and we are all hoping for a bit of snow to fall soon. While we wait in anticipation for the first snowfall here is a fun craft you can do with your friends and family!

Snowflake fun fact: All snowflakes have six sides, but no two snowflakes are exactly alike. A snowflake is made of frozen water, so it has two hydrogen atoms and one oxygen atom ( $H_2O$ ). Water molecules are shaped like a V, so when they align and freeze together, a hexagon shape develops. Each snowflake follows a slightly different path from the sky to the ground, encountering slightly different atmospheric conditions, making every snowflake unique.

### **Supplies:**

- One piece of white paper
- One piece of non-white colored paper
- Orange and black colored paper or markers/crayons for the face
- 3 round cups in assorted sizes
- Scissors
- Masking tape
- Blue paint (a few different shades)
- Decorations (glitter, gems, sequins, buttons, etc.)
- Paper towels/wipes for cleanup

### Time to start creating!

- 1. First make three circles out of the colored paper. Grab your three different sized cups and use them to trace three circle sizes onto the paper. Take your scissors and carefully cut out your three circles.
- 2. Tape the three circles you traced anywhere onto your white paper. Stack them to look like a snowman. See photo.
- 3. Now for the best part: finger painting!
  - a. Pour a small amount of the different colored blue paints onto a paper plate.
  - b. Dip one finger into the paint and start making thumbprints or fingerprints all along the edge of your three circles (outlining your snowman) this is really going to make your snowman stand out. See photo.
  - c. After making fingerprints along the edge of your snowman shape, add scattered fingerprints all around the paper to make your snowflakes. It's fun to try a few different shades of
  - blue paint but will still look just as great if you only want to use one color!
- 4. After you have finished adding your fingerprint snowflakes all around, clean your blue fingers on a paper towel. Then slowly peel up and remove the three circles that made the snowman's shape.
- 5. Now decorate! This is the part where you add the eyes, nose, mouth, and any other accessories with your decorating items.
  - a. Using your black paper, cut out very small circles for your snowman's eyes and mouth (representing your choice of anthracite or bituminous Pennsylvania coal)!
  - b. Using orange paper, cut a triangle shape for your snowman's "carrot" nose.
  - c. Other suggestions: make a top hat, buttons, vibrant colored scarf, cane, boots! Be creative!
  - d. You can even add some woodland creatures into your snow scene like birds, owls, or deer!



Figure 1: Example craft from the https://www.adabofgluewilldo.com/

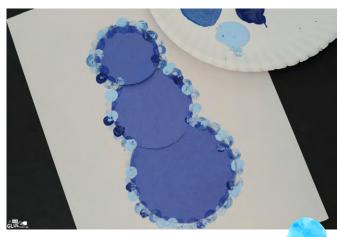


Figure 2: Making the Snowperson Outline

## Love is in the Air in the ROCKS!

Coincidentally timed with Valentine's Day in some regions of the world, each February, Gentoo Penguins (no, not Pittsburgh Penguins!) start building their nests out of rocks.

In a unique mating ritual, male Gentoos spend their time searching for a perfectly smooth, round pebble to present to their love interest.

If the female accepts the male's specially selected pebble, it's a match - they build a nest together!

Which CLEARLY must mean the female Gentoo's love-language is

GIFTS! In particular - gifts of rocks! For geologists who have been searching for their spirit animal - you're welcome!

Photo credit: Vicki Pitman Jake Pitman and an African Penguin at the Maryland Zoo.







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# Surface Geophysics used in Water Supply Development nterpreted Thrust Faults 1,300 gpm in fault breccia zone Horizontal Distance (feet)

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# SUNDAY APRIL 2, 2023 IS



Be sure to be especially kind to yourself and fellow geologists this day!



## **DEADLINE FOR OUR NEXT NEWSLETTER IS APRIL 30, 2023**

Articles are suggested to be about 700 words maximum. For more information, contact our PCPG Newsletter Editor and Communications Committee Co-Chair - Vicki Pitman, P.G., by

#### PCPG ASSOCIATE AND CORPORATE MEMBER **SPONSORSHIP RATE**

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ADS MUST BE SUBMITTED AT CORRECT SIZE AS STATED ABOVE AND MUST BE PRINT-READY, 300 DPI FILE FORMATS ACCEPTED: .PDF, .TIF, .JPG, OR .PNG

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