



MICHIGAN SECTION AIPG NEWSLETTER

IN THIS ISSUE

From the President's Desk

by Brian Burke, CPG

Since 1963, AIPG has served our profession well as a champion for the geosciences. While recent trends have taken a toll on other professional organizations, the Michigan Section of AIPG has managed to sustain our membership and grow our student chapters. As the Michigan Section approaches our 40th year, it's a good time to reflect on the value of membership for the benefit of students and our new members.

Professional certification is recognition from your peers that you have become an expert in your area of practice; you are dedicated to the advancement of geological knowledge, and you adhere to a strict code of ethics. This recognition brings status and opens doors, for you to manage higher profile work in a variety of jurisdictions. The CPG is the only US geological certification that is granted reciprocity by Canada. Open doors lead to career advancement.

At most traditional engineering and geoscience consulting firms, it's understood that the path to success – promotions, ownership, bonuses etc. - includes professional registration and active participation in at least one professional organization. The increase in compensation and opportunity for advancement that come

with professional certification make the annual dues a bargain.

AIPG is a valuable networking tool. Demand for geologists is cyclical, so there's a chance that at some point in your career you will be looking for a new job with little or no warning. In this situation, I hope you would reach out to your friends in AIPG, as so many others have. Consider this: if membership in AIPG shortens the time between jobs by a month, two months, three...a career's worth of dues have been more than paid off.

AIPG contributes to the future of our profession and the education of the general public. Last year, your participation allowed us to support four active college student sections, to provide thousands of dollars in scholarships and to donate a virtual sandbox at the Eddy Geologic Center. This year we plan to support student sections at additional colleges, significantly increase contributions to scholarships and donate another virtual sandbox, this time to the Outdoor Adventure Center in Detroit. I hope these contributions that you have made possible give you the same sense of pride that I feel.

Continued on page 4...



AIPG/MBGS Joint Meeting

The February 11, 2016 joint meeting between the Michigan Section AIPG and MBGS was a success. It saw a record number of student attendees from several of the section's student chapters, other colleges and universities, and a group of 10 students from Roscommon High School.

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Golf Outing

The 2016 Michigan Section AIPG 12th annual golf outing will be held on May 17th at the Moose Ridge golf course in South Lyon.

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From the President's Desk (cont.)

Our quarterly meetings and annual workshop provide you with information on technological breakthroughs and pending regulatory changes to keep you on the cutting edge of professional practice. Compare the cost of our meetings and work shop which are tailored to the Michigan Section to the cost of attendance at even one other topical conference offered by other organizations and I think you'll see how much value we can pack into your membership.

And of course, AIPG is a source of comradery and friendships. How do you place a value on professional friendships when so much of our time is spent under the stress of deadlines and budgets that are outside our control? Let's just say it, "Geologists are fun to hang out with!" If you haven't been on a field trip or enjoyed the campfire entertainment at our annual workshop, you're really missing out.

Each of you has your own motivations for membership in our organization, and I'd like you to share yours with us. I'm looking forward to seeing all of you at our April meeting.

Support Our Sponsors!

The Section Executive Committee would like to remind its members to support the companies advertising in the newsletter. Consider working with these companies, and when you speak with their representatives, let them know that you saw their ad in the Michigan Section newsletter

CMU Student Chapter Activities



Central Michigan AIPG heads to New Mexico ...

CENTRAL MICHIGAN UNIVERSITY

CMU Faculty members Martin

Steinbis and Cory Paliewicz chaperoned 14 students to New Mexico for spring break 2016. The group stayed Saturday night, March 5th, in Las Cruces looking at the Organ Mountains. Then headed south through El Paso, Texas and back north into Carlsbad, New Mexico to spend a day climbing the Guadalupe mountain range and observing Permian Reef structures. Our group traveled to Carlsbad Cavern Tuesday morning, where the students earned Junior Ranger badges and were rained on after their decent and ascent through the caverns. Wednesday was spent at the New Mexico Space Museum and

at White Sands National Park, discussing gypsum deposits and jumping down the dunes. After spending the night in Ruidoso, the next destination was the Currizozo lava vent, where they discussed the likely emplacement scenario, based on the petrological makeup of the vesicular basalt flow. Friday took the group to Truth Or Consequences to meet up with Cory's master's advisor Dr. Greg Mack, and do some roadside geology involving the Kneeling Nun Tuff. Then it was back to Las Cruces for one more night before flying back to Detroit, where the spring weather was quite welcome. The club enjoyed the wide variety of geological emplacements, along with Christmas Chili Enchiladas with an over easy egg.



Jumping down the dunes at White Sands National Park. From left to right: Josh Cichy, Garret Nowakowski, Clara Brennan, Katherine Dragos. Photo courtesy of Nate Zielinski.

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Coming Events

April 5-6, 2016: AIPG Water Resources Unplugged: A Multi-Dimensional Workshop, Orlando, FL. DoubleTree by Hilton Hotel Orlando Airport, 5555 Hazeltine National Drive. Registration and additional details are at:

https://netforum.avectra.com/eweb/DynamicPage.aspx?Site=AIPG&WebCode=EventDetail&evt_key=ebdddca5-ed48-492d-a3c2-01ecb744cd40.

April 13, 2016: MBGS Annual BBQ and meeting. Held at the Western Michigan University in the Michigan Geological Repository for Research and Education Building, Kalamazoo. Social hour will begin at 5:00 pm; dinner will be served at 6:00 pm; presentation at 7:00 pm; cost for members \$25.

April 14, 2016: Michigan Section AIPG Meeting, University Center at Central Michigan University, Mt. Pleasant. David Slayton of the MDEQ's Office of Waste Management and Radiological Protection will be speaking about "Naturally Occurring Metals, Glaciation and Cleanup Criteria."

Location: University Center, Central Michigan University, Mt. Pleasant.

Dinner: Grilled Chicken Breast with Cider Marinade Buffet; seasonal garden salad with balsamic vinaigrette, seasonal fresh fruit salad, pan roasted vegetables with herb vinaigrette, marinated roasted red potatoes, mini brownie and cappuccino mousse parfaits.

Schedule: Cash Bar 5:30-6:30 PM, Dinner 6:30 PM, and Speaker 7:30-9:00 PM.

Cost: Students free, Members \$30.00, Non-members \$50.00.

RSVP by April 11, 2016: RSVP for the meeting on the Eventbrite website no later

than April 11th at:
<https://www.eventbrite.com/e/michigan-aipg-section-meeting-tickets-22533357880>

April 18-19, 2016: Geological Society of America North-Central Section, Champaign, Illinois,
<http://www.geosociety.org/Sections/nc/2016mtg/index.htm>.

April 29 to May 1, 2016: Kalamazoo Rock, Gem, Fossil, Jewelry and Mineral Show, Kalamazoo County Expo Center,
<http://kalamazoorockclub.org/2016-kalamazoo-rock-and-mineral-show>.

May 5-6, 2016: Institute on Lake Superior Geology – Annual Meeting, Duluth, MN. Additional information may be found at:
<http://lakesuperiorgeology.org/Duluth2016/index.html>.

May 17, 2016: 12th Annual Michigan Section AIPG Golf Outing, Moose Ridge Golf Course, South Lyon. Full details and registration information is in the article below and in the attached flyer. Please direct any questions or inquiries for sponsorship opportunities to Bob Reichenbach at bob.reichenbach@ergp.net.

June 14-15, 2016: 6th Annual Michigan Section AIPG Summer Workshop. Topic: Environmental Risk Management: Why, When, Where and How. Save the Date! Abstracts are due on January 16, 2016. Sponsorship information will be available soon on the Section's website
<http://mi.aipg.org/workshop/workshop.htm>.

June 25, 2016: AIPG National Executive Committee Meeting, Thornton, Colorado.

September 8-11, 2016: Douglas Houghton Michigan Historical Marker Dedication, Eagle Harbor, Michigan. Contact Mark Wollansak at wollensak@voyager.net for more information.

September 9-13, 2016: 53rd Annual AIPG Meeting to be held in Santa Fe, New Mexico. Details available on the National AIPG website www.aipg.org.

September 25-27, 2016: Eastern Section, American Association of Petroleum Geologists annual meeting. Lexington, Kentucky. For additional details, please see the flyer attached to this newsletter.

September 25-28, 2016: GSA National Conference, Denver, Colorado.

September 29, 2016: Joint Michigan Section AIPG and MAEP meeting. To be held at the MDNR's Outdoor Adventure Center in Detroit. Speaker to be determined; topic will be Brownfield Redevelopment.

December 1, 2016: Michigan Section AIPG Annual Meeting to be held at Weber's Inn, Ann Arbor. Speaker and topic to be determined.

Fall 2017: 54th Annual AIPG Meeting to be held in Chattanooga, TN.

Fall 2018: 55th Annual AIPG Meeting to be held in Colorado Springs, CO.

Fall 2019: 56th Annual AIPG Meeting to be held in the Northeast Section; location TBD.

Students Break Attendance Records!

The Section held a joint meeting with MBGS on February 11, 2016 that broke a student attendance record with 30 in attendance! The featured speaker was Bob Mahin of Lundin Mining Corporation, who discussed "Exploration of the Eagle Mine."

Continued on page 6...



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John Shook (MBGS) and Brian Burke (AIPG) addressing attendees before the technical presentation. Photo courtesy of Sara Verbrugge-Pearson.

Chuck Schepke brought 10 students from Roscommon High School to the meeting. For most of them, it was their first experience interacting with geologic professionals. Here is what they had to say about the meeting:

"Seeing a 3-D representation in Mr. Mahin's presentation of a mineral deposit was really unique. I haven't seen anything so detailed or cutting and it put into perspective the sheer amount of planning that goes into such projects before they actually start a mine."



Members of AIPG and MBGS preparing to hear the technical presentation. Photo courtesy of Sara Verbrugge-Pearson.

"Being interested in civil and environmental engineering, seeing how a mine how a mine facility is actually laid out was fascinating. I never realized how much planning was used like the parent hole for the drill core being used multiple times to reduce drilling costs and seeing the map that was made from the data obtained from the coring was incredible and cool."

"All of the attendees and Mr. Shook especially, made us feel very comfortable with the friendliness they showed us, along with how they pushed the positive aspects of their jobs."



The 10 high school students from Roscommon High School that attended the meeting. Photo courtesy of Sara Verbrugge-Pearson.

"Meeting professional people with jobs relating to geology and professors from universities to learn about practical applications and suggestions of what to do in our future education was a valuable experience."



Speaker Bob Mahin presenting his talk on the Eagle Mine discovery. Photo courtesy of Sara Verbrugge-Pearson.

"Talking with all the professors, people in various geologic fields, and especially John Shook, stood out for me." "It was crazy how deep they were looking for the massive sulfide deposits and how much planning. It was cool how they planned so many methods

of shooting off many different drills from the same drill core hole to get data to map out the deposit. I also thought it was pretty cool how they used the angle or horizontal drilling of cores to try to follow the dike deposit too."

"The way they drilled on a whim and struck a potential jackpot, was really surprising. I thought they could pinpoint things like that before drilling."

"I enjoyed talking to all the scientists and learning more about how geology is used outside the classroom."

"I thought it was fascinating to see how we were learning about rocks and minerals in class and how it actually was relating back to what the presenter was explaining in his presentation."

"I like how we were able to speak to professors from colleges around Michigan and people who had jobs in geology and get to interact with them. The professors gave us input on how to be successful in college and they seemed to enjoy our company."

In closing, Chuck Schepe had the following to say about the meeting:

"I want to thank again the MBGS and AIPG for allowing my students to attend this event. They have really treasured the opportunity they had to interact with geology professionals in education and industry and how welcomed they were at your meeting. It also opened their eyes to a bigger picture of geological science in terms of all the different scientific disciplines and engineering fields that are employed in "real world" applications. It was intimidating at first for my students to be with so many scientists and science professionals, but by the end of the meeting they felt they were part of that community. I have asked the students if they could attend an event like this again in the future, would they want to? They all said yes, even the ones that could not make it last time because of school events, because of the ambassadorship of excitement exhibited by the students who did attend."

Besides the 10 high school students, there were about 14 students from various student chapters and a few from other colleges and universities present. Here is an excerpt of what one of them, Sarah VanderMeer of Western Michigan University, had to say about the meeting:



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Group photo of 11 of the 20 college students that attended the meeting. Photo courtesy of Sara Verbrugge-Pearson.

Besides the 10 high school students, there were about 14 students from various student chapters and a few from other colleges and universities present. Here is an excerpt of what one of them, Sarah VanderMeer of Western Michigan University, had to say about the meeting:

"Of course, as a student, I very much enjoyed the presentation at both this past meeting and the December meeting. They were very interesting! I also enjoyed the generous dinner at both and chatting with a few professionals. I appreciated that people seemed genuinely excited to have students in their midst at these meetings, and it's good for us students to attend to help guide expectations for our futures. Also, we SO appreciate free food and registration (THANK YOU!), but I think, even more, we appreciate the value of networking with professionals.

It was very kind to be acknowledged by the speaker(s), and it felt like people were excited that we were there attending this meeting, but it also felt a little alienating in that people seemed to stick to chatting with people that they already knew (understandable!) - of course, students did that same thing, it is just intimidating for us to try to join professional's conversations than perhaps vice-versa. We want to talk to professionals to really get to

know what positions even exist as options to pursue after graduation, and we also want to know what it's like to have these positions (what exactly do you do in your job?) and how to attain these positions in an increasingly challenging market.

Thank you for allowing us students to have great experiences at the AIPG meetings! We appreciate all of the special accommodations that you provide!

Member Input Sought

The Section Executive Committee is seeking input from members on a variety of topics. Do you have any suggestions regarding speakers/presentation topics that you would like to hear? What about field trips or other events? Some place you'd like to see us go, or something you think the membership would enjoy doing? Then make your voice heard; please send your suggestions to one of the members of the Executive Committee; any of the six members would be glad to hear from you. AIPG is your organization. Please help keep it relevant and interesting for all by participating.

EMU Student Chapter Activities



The following information was sent to the Michigan Section AIPG Executive Committee by EMU Student Chapter President Ellen O'Neill. It is a summary of recent activities by the student chapter and GeoClub...

- Held informal study sessions
 - Upper level geology students help others in classes they have already taken
- Geology External Reviewer meeting

- Dr. Dallas Rhodes received feedback on our geology program from members of the GeoClub
- Graduate School and Resume Talk
 - GeoClub held a panel discussion with Dr. Christine Clark on general and specific information regarding graduate schools and resume building
- Fossil and Mineral Raffle
 - GeoClub members sold tickets to raffle off specimens from a mineral and fossil show
- T-shirt Sales
- Field Book and Hand Lense Sales
- USGS Talk
 - Chris, a former student of Dr. Steven LoDuca, will be giving a talk on working with the USGS
- Texas A&M International Ocean Study Program
 - A graduate student here at EMU who worked on the ship for two years will be giving a talk on her experience aboard the ship
- GeoClub Picnic
 - Every May GeoClub hosts a picnic at a local park called County Farm Park
- Social Events
 - We plan social events for our group members to build community between members
- Elections
 - Our annual elections will be held before the end of the semester for all of the officer positions in the club

Welcome New Members

The Michigan Section is continuing to grow. Please welcome the following new CPGs, Professional Members, Young Professional Members, Associate Members, and Students:

Michael Begin, Josh Cichy, Katherine Dvorak, Georgina Gill, John Goodin, Joy Kiefer, Laura Lambert, Nick Moleski, Stephen Rockefeller, Morgan Shafer, Samantha Strahl, Marco Capodivacca, Roane Gaddy, Ryan Livernois, Laura O'Connor, Ellen O'Neil, Hachem Saad, Alan Snell, and Zachary Waber.

To each of our new members, the Michigan Section Executive Committee would like to welcome you to our Section, and encourage you to attend Section meetings and other events. You are also welcome to provide information for the Member's Corner articles.

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12th Annual Michigan Section Golf Outing

Now is the time to Sign Up! Please register on Eventbrite, by searching "AIPG-Michigan Section Golf Outing" or contact Bob Reichenbach bob.reichenbach@ERGrp.net. Ph. 248-773-7986, Fax 248-924-3108.

We've moved the outing to Moose Ridge Golf Course in South Lyon. Great sponsorships and spots for golfers are available, but are going fast. To assist the organizers in planning, please register early. The Registration Form is provided with this newsletter.

The AIPG K-12 Education Grant fund has provided thousands of dollars to a variety of worthy projects, made possible in part to the money raised through our annual golf outing. Your generosity has been, and will continue to be the key to enabling organizations/schools to provide meaningful environmental educational programs and activities in the Geosciences. Thank you for your support!

Open Committee Position

If you are interested in getting more involved with AIPG but are not quite ready for the executive committee, the Awards Committee is looking for a chair person. The commitment is minimal. The responsibilities include requesting nominations for section leadership award, reviewing membership list for longevity awards, preparing and presenting them; reviewing scholarship applications submitted through national and reviewing teacher grant applications.

If you are interested in this position, please contact Adam Heft (heft@pbworld.com) or Amy Hoeksema (amy.hoeksema@cmsenergy.com). AIPG would like to fill this position and announce at the next section meeting.

Did You Know?

This article is a new feature of the newsletter and is intended to remind members of various aspects of AIPG and benefits of membership. If there is something you would like to see

featured in this column, please contact the Editor...

According to the Section 2.2 of the AIPG Bylaws, there are six AIPG membership categories, including: Certified Professional Geologist (CPG), Professional Member, Young Professional Member, Non-Practicing Member, Emeritus Member, and Honorary Member. In addition to the Member categories, there are two categories of Adjuncts, namely Students and Associates. There is also a Corporate Member Category.

The following is a summary of the member categories at the present time:

Certified Professional Geologists constitute the highest grade of individual membership within the Institute and applicants are screened for required education, experience, and character. Only Certified Professional Geologists can hold designated positions within the Institute.

A Member may be designated as "Honorary" or "Emeritus" by the Executive Committee upon meeting requirements established by the Executive Committee. The Executive Committee shall have the authority to reduce or waive dues payments for Honorary Members and Emeritus Members, individually or as a category.

Professional Members shall normally hold a baccalaureate or higher degree in a geological science but are not otherwise screened prior to acceptance. **Young Professional Members** is applicable during the first three (3) years upon earning a baccalaureate but are not otherwise screened prior to acceptance.

payments for **Non-Practicing Members**, individually or as a category.

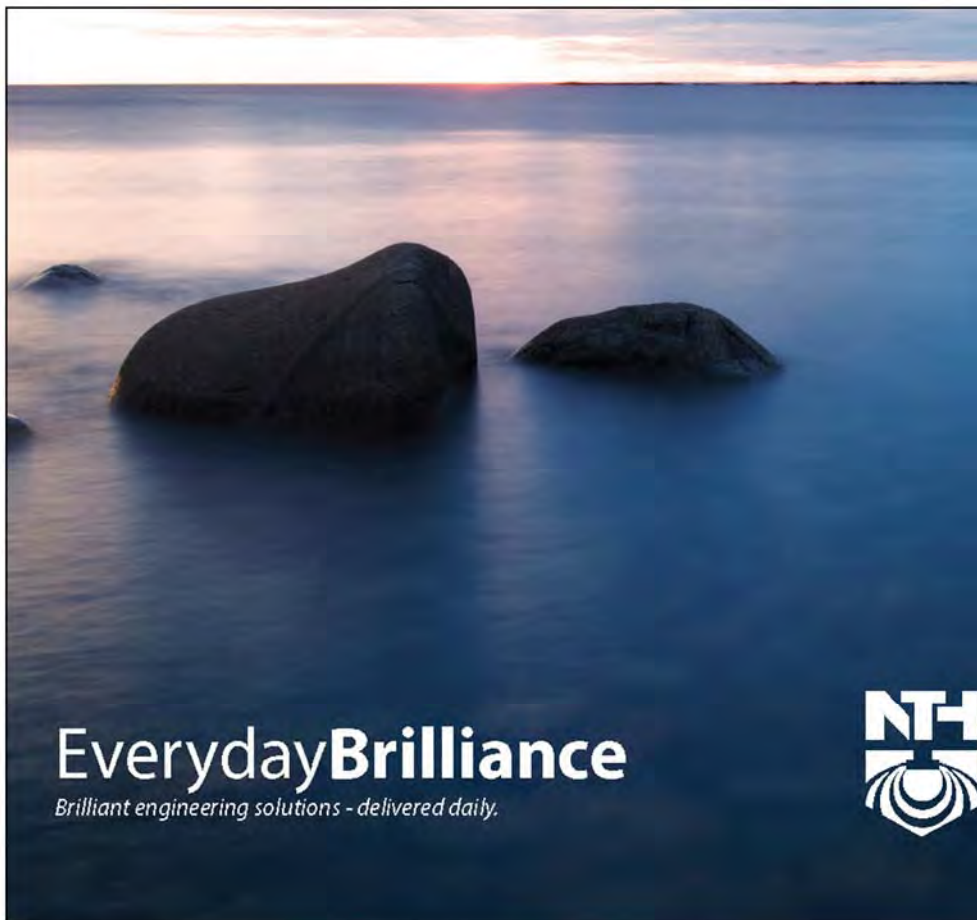
Corporations that are engaged in the practice of geology and geoscience and that meet the application requirements established by the Executive Committee may apply for **Corporate Member** status. Individuals within the Corporation who are the designated members within the Corporate Membership must qualify for, and, in the case of Certified Professional Geologists, complete the application process for Certification.

Additional information regarding the rights and privileges of each of the member

Michigan Department of Environmental Quality News

MDEQ proposes tougher drinking water standards to protect residents from 1,4-Dioxane

The Michigan Department of Environmental Quality is proposing to strengthen the drinking water clean-up standard for 1,4-Dioxane by a factor of 10 in a new rules package under consideration by the agency. The more protective standard is based on new



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Student Adjunct Members shall be currently enrolled majors in a geoscience program at a college, university, or similar institution.

Anyone interested in the profession of geology and the aims of the Institute but who is not qualified for another membership category may be an **Associate Adjunct Member**.

A Member may be designated "Non-Practicing" upon request at the age of 60 or older, provided that the Member is no longer actively engaged in the practice of geology for financial gain. The Executive Committee shall have the authority to reduce or waive dues

categories may be found on the AIPG website.

Newsletter Notice via E-mail

Please be sure that you continue to receive the Section newsletters and other announcements. Submit an updated e-mail address to Adam Heft at heft@pbworld.com. If you move or change places of employment, don't forget to send your new contact information to both the Section and to National. If you are not receiving announcements directly from the Editor, it is because your email address is not up to date.

calculations completed by the DEQ using a science-based process, including current EPA toxicity data and Michigan-specific exposure factors. The new rule would change the 1,4-Dioxane drinking water standard in Michigan from 85 parts per billion (ppb) to 7.2 ppb.

The chemical 1,4-Dioxane is an industrial solvent that has been linked to human health concerns at certain concentrations given long-term exposure. The proposed change

Dioxane continued on page 15


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would affect contaminated sites across the state where 1,4-Dioxane has been shown to be present. The DEQ and the citizens of the City of Ann Arbor have been focused on the standard as it pertains to the Pall-Gelman contaminant plume. The Pall-Gelman 1,4-Dioxane plume has contaminated three square miles of groundwater below the City of Ann Arbor.

The plume has not affected the City of Ann Arbor's drinking water supply. One Scio Township resident's well water had 1,4-Dioxane levels greater than Michigan's new proposed standard. That home has been connected to the city's water supply. Gov. Rick Snyder's proposed Fiscal Year 2017 budget includes an additional \$700,000 for addressing the Pall-Gelman 1,4-Dioxane plume.

event will take place 6 p.m. Monday, April 18, in the auditorium of the Eberwhite Elementary School, 800 Soule Boulevard, Ann Arbor.

"The Ann Arbor community and its leaders have been great partners in addressing this issue, and we look forward to continuing to work with them on addressing the Pall-Gelman plume," Creagh said.

The calculation of the 1,4-Dioxane criteria is part of a major effort by the DEQ to update the criteria for 308 hazardous substances used to determine cleanup standards across the state. The new state standard assumes an exposure period of 32 years at the level of 7.2 ppb to protect public health.

The Michigan standard will be an enforceable

The DEQ's process for updating these standards uses the latest, scientific information from reliable sources as well as Michigan-specific exposure scenarios to ensure the protection of public health, safety and welfare for all Michigan citizens.

"We are in the process of finalizing the update for the cleanup standards for all hazardous substances and their exposure routes and will be releasing all of the proposed standards in April," said DEQ Remediation and Redevelopment Chief Bob Wagner. "Review of the proposed rules will involve the Legislature as well as provide opportunity for public comment. We plan to finalize the rules as soon as possible with appropriate reviews."

Article provided by Sara Verbrugge-Pearson, CPG – MDEQ RRD Unit Chief




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"The DEQ's first priority is to protect public health," said DEQ Director Keith Creagh. "This revised standard strengthens those protections for all Michiganders. The DEQ is committed to open communications and transparency of our actions in affected communities. We will work with local stakeholders to ensure residents are informed and supported."

Creagh will take part in a town hall meeting hosted by Rep. Jeff Irwin of Ann Arbor. The

standard. It is based upon the same toxicity level as the U.S. Environmental Protection Agency screening level. However, the federal screening level of 3.5 ppb – which is not enforceable -- assumes an exposure period of 70 years. The state standard assumes an exposure period of 32 years to provide a more realistic assumption of risk and greater protections for the public. The Michigan standard will be among the most protective state standards in the country.

Section Website Reminders

As you may have noticed, the Michigan Section is building a database of geologic photographs on our website. Please submit photographs that you are willing to share to Adam Heft at heft@pbworld.com. Don't forget to include your name and a short explanation of what the photograph depicts.

The photographs will be uploaded to the website periodically.

If you have suggestions on other items that should be included on the History page, please let a member of the Section Executive Committee know.

Interesting Geology Links

The Editor has received links to various interesting geology-related sites. Some of the more interesting links are included here. If you have any links to geology-related links that you would like to share, please forward them (with a citation, if applicable) to the Editor.

Thanks to Mark Francek of Central Michigan University for sharing via the "Earth Science Site of the Week" emails.

Career opportunities in the geosciences: <http://www.americangeosciences.org/workforce/career-resources>.

Treasurer's Report

I would like to report where the Section's money comes from and how we spend it!

The majority of the Section's money comes from three main sources: annual dues, the summer workshop, and the golf outing; a much smaller amount is from advertising. For each of the Section meetings the section pays out more than it takes in – yes we lose money at each quarterly meeting. We do this purposefully to keep the cost relatively low for members (only \$30) and free for students. We are trying to support the students and get and keep them involved as we believe that they represent the future of AIPG and our profession.

So what do we do with our money? We have operating expenses that includes sending the vice-president to the annual meeting as our Section delegate to the National Advisory Board Meeting. We also pay for copies of the student issue of TPG and send them to colleges and universities to publicize AIPG and attract students to membership.

We donate a significant amount of what we make in profits each year, and keep a small amount to help fund the scholarship program. So far this year we have donated \$3,000 to the Harris Nature Center Foundation that will

help pay for the Michigan Fossil Dig project. This includes a sign that explains Michigan's fossil history and two smaller signs that depict the fossils that can be found in the dig. We provide each Student chapter annual money to support geologic activities and field trips. In addition to these, we have student poster awards at our annual meeting in December, teacher grants, and approximately five nonprofit geology related groups that we plan to support this year.

This year, the Executive Committee has been working on a student scholarship program. We plan to provide at least one \$3,500 scholarship this year. The scholarship application is attached to this newsletter.

Finally, I want to give the 10 year prospective: 10 years ago Adam Heft and a group of us were gearing up for the 2007 National Meeting we hosted in Traverse City. I was treasurer back then in 2006. At that time, the meetings were generally a break-even event. The 2007 national meeting brought in a substantial amount of money for the Section that helped springboard many of the activities that have been put in place since



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Golder Job Opportunity

Date Posted: January 28, 2016
Date Removed:
Requisition #: 2016-11887

Project Engineer Marquette, Michigan

POSITION DESCRIPTION

Golder Associates Inc. is currently seeking a Project Engineer for the Marquette, Michigan location. Your primary responsibilities will include:

- Perform engineering calculations, prepare design drawings and prepare documents for civil engineering projects;
- Conduct cost estimating activities in support of projects or proposal opportunities;
- Conduct field inspections and assessments of construction projects;
- Assist with business development activities as requested by senior business line leaders;
- Actively pursue existing or new clients to capture project work valued between 2-4 times your annual salary;
- Actively mentor staff within the Great Lakes Operations to develop their expertise in civil project design software (AutoCAD, Civil 3D, etc) to support a wide range of UDSI sector projects (e.g. brownfields redevelopment, land use planning, civil engineering services, etc);
- Manage project tasks to support Project Managers achieving Golder benchmarks for quality and financial performance on the overall project;
- Maintain personal utilization of 75% or greater after 3 months of employment.

POSITION REQUIREMENTS

The preferred candidate will possess the following skills and attributes:

- A minimum of 6 years experience successfully providing civil engineering consulting services including: land planning and site plan development, street and roadway design, sanitary sewer system and stormwater system design, municipal utility design, construction materials testing, and construction management;
- Bachelor's degree in engineering, specialization in civil engineering;
- Professional licensure (P.E. or similar) in the state of Michigan;
- Construction stormwater management certification is a plus;
- Existing strong professional experience portfolio within the Upper Peninsula of Michigan geographic area;
- Demonstrated work experience and knowledge of local and state municipal engineering and procurement practices, (e.g. Department of Transportation) and ability to pre-qualify for these types of projects;
- Requires travel as dictated by projects, business development activities, staff support and mentoring activities;
- Must be eligible for employment in the U.S., possess a valid driver's license, and pass a pre-employment physical including drug screen and pre-employment background check;
- The ability to lift a minimum of 50 pounds and operate/maintain field testing equipment;
- Local candidates only. Relocation is not available for this position.

To be considered for this position, please submit an online application at www.golder.com/careers

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Golder Job Opportunity

Date Posted: January 28, 2016
Date Removed:
Requisition #: 2016-11888

Senior Project Engineer Lansing, Michigan

POSITION DESCRIPTION

Golder Associates Inc. is currently seeking a Senior Project Engineer for the Lansing, Michigan location. Your primary responsibilities will include:

- Provide senior technical leadership in management of local and regional geotechnical engineering projects in the solid waste, power, transportation, and rail sectors;
- Serve as senior project engineer to provide engineering analysis, check calculations and work product of junior staff related to geotechnical engineering projects;
- Provide contribution to strategic planning, business development, client relationship management activities within the Great Lakes Organization for the solid waste, power, and transportation sector;
- Manage geotechnical projects involving a variety of engineering disciplines and geotechnical investigations;
- Checking laboratory (soil and rock) test results and verifying information is applicable for engineering analyses;
- Managing the overall quality and consistency in the geotechnical soils laboratory in Lansing, Michigan;
- achieving and maintaining a personal chargeability of 60% or greater within 3 months of start date;
- Managing client projects to achieve Golder benchmarks for quality and financial performance;
- Preparing proposals and assisting in business development;
- Actively pursue existing or new clients to capture project work valued between 2-4 times your annual salary.

POSITION REQUIREMENTS

The preferred candidate will possess the following skills and attributes:

- A minimum of 6 years of experience providing comprehensive consulting and geotechnical engineering services;
- Bachelor's or Master's degree in geotechnical engineering;
- Professional Engineering (PE) License in Michigan preferred;
- Focused expertise in soft-soil mechanics, foundation design, earth retention, slope stabilization, consolidation and ground modification;
- Experience with Microsoft Office Suite and a variety of geotechnical software including: QTLWEAP, LPILE, Slide, MathCAD, and Settle3D;
- Experience with performing geotechnical soils laboratory tests, including: sieves, hydrometers, permeability (flex and rigid wall), direct shear, unconfined compression, consolidation, triaxial shear, and Atterberg limits;
- Ability to manage a team of geotechnical engineers on large projects, including investigations, lab and field testing programs, engineering analysis and design recommendations/reporting;
- Enjoy working in a team environment with a variety of professionals;
- Ability to manage multiple projects and clients; and
- Organize and conduct client meetings and presentations.

To be considered for this position, please submit an online application at www.golder.com/careers

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that time. With the help of active members like Kevin Lund and Sara Verbrugge-Pearson, the Section started the Summer Workshop, which has been very successful. Now Sara and Rick Dunkin continue to run the workshop with help from the Executive Committee. And the rest... as they say... is history....

Please contact me with any questions or ideas you may have. It would be great to hear from you.

Member's Corner

The Member's Corner includes information about the Section's membership. This is your chance to provide information on where you are and what you are doing. Simply send the information to the Editor for inclusion in this section.

No Member's Corner articles were received for this edition of the newsletter.

2016 Michigan Section Executive Committee

Here are the current officers of the Michigan Section. Be sure to talk with them at the Section's events when you see them...



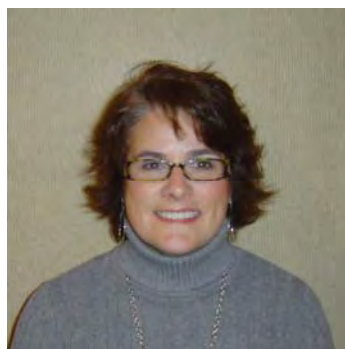
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Linda Hensel, Vice President



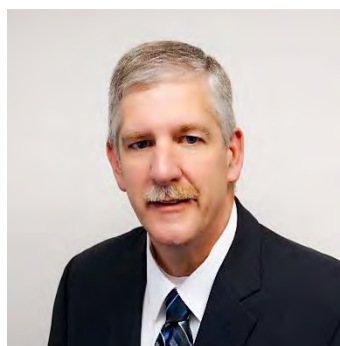
Tim Woodburne, Treasurer



Amy Hoeksema, Secretary



Dawn Prell, Past President



Adam Heft, Editor

Employment Opportunities

To serve our members, and provide added value, the Michigan Section Executive Committee has decided to allow ads for employment or other opportunities to be posted in the Section newsletters. Employment ads

will run for one edition unless renewed. There is no cost to our members or sponsors for this service. Send your employment opportunities to the Editor.

Employment Opportunities

EXECUTIVE DIRECTOR SEARCH

The AIPG is recruiting candidates for Executive Director. AIPG is a 501(c) 6 professional geoscience society dedicated to advocacy, education and competence within the profession with a membership of more than 7000 and a dedicated staff of seven at its headquarters in Thornton, Colorado.

The Executive Director is responsible for headquarters operations and for maintaining excellent relationships with appropriate professional and technical societies, especially sister geoscience societies such as the American Geosciences Institute, the Geological Society of America, and the European Federation of Geologists. The Executive Director serves at the pleasure of the AIPG national Executive Committee in promulgation of duties to advance and maintain AIPG platforms and objectives as defined in the AIPG Bylaws and Strategic Plan.

The successful candidate will:

- Hold an advanced geoscience-related degree (MS or PhD); an additional degree in marketing or business is a plus.
- Have a minimum of 15 years of successful management experience at increasing levels of responsibility.
- Have a background in fiscal management tied to annual profitability, growth, and program expansion.
- Be a team-oriented leader with strong communication and interpersonal skills, and a proven entrepreneurial record.
- Demonstrate an appreciation of policy issues affecting geoscientists and the geosciences, especially at federal and state levels.
- Demonstrate an enthusiasm for service as a professional representative of the geosciences.
- Be willing to travel as needed. The responsibilities of this position often require weekend meetings and lengthy workweeks.
- Be committed to relocating to the Denver area.

In addition to these specific qualifications, the AIPG Executive Committee expects the successful Executive Director to help propel AIPG to a higher level of involvement in the geosciences community and in increasing its

services to members. The Executive Director must be entrepreneurial, dynamic, and personable and be able to commit to an aggressive campaign to increase membership and develop additional sources of non-dues revenue. The Executive Director is also expected to seek additional alliances and collaborative arrangements with other professional societies that will serve to benefit AIPG both professionally and financially.

The Executive Director is responsible to lead the continual refinement and implementation of the AIPG Strategic Plan and ensure that both AIPG leadership and AIPG membership are engaged in its implementation.

The future of all professional societies is dependent upon the younger members of the profession becoming actively involved in the governance of the societies. In recent years, AIPG has greatly increased the involvement of students and young professionals. The successful Executive Director is expected to continue this success and vigorously engage students and younger members.

The Executive Director will report to the Executive Committee and is subject to periodic review by the Executive Director Committee. The Executive Director will also supervise the staff of AIPG and will serve as ex



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Contact Brian Root to schedule a pick-up today!



Golder Job Opportunity

Date Posted: January 28, 2016
Date Removed:
Requisition #: 2016-11888

Project Scientist Lansing, Michigan

POSITION DESCRIPTION

Golder Associates Inc. is currently seeking a Project Scientist for the Lansing, Michigan location. Your primary responsibilities will include:

- Drilling, field sampling and investigation of environmental media.
- Aquifer test data collection, evaluation and analysis.
- Oversight of on-site contractors (e.g. drilling, line locating, surveying, etc)
- Interpreting geologic, hydrogeologic, and other site information.
- Preparation of field reports, boring and well logs, final reports.
- Designing and managing field investigations.
- Preparing proposals and assisting with business development activities.
- Interacting with environmental regulators and clients.

POSITION REQUIREMENTS

The preferred candidate will possess the following skills and attributes:

- Bachelor's degree in geology, hydrogeology, environmental engineering, EMS preferred.
- 4-6 years practical environmental consulting experience, emphasis on water resources projects preferred.
- Excellent verbal and written communication skills.
- A positive attitude and the ability to work both independently and within groups, demonstrate task or team leadership experience.
- The ability to lift a minimum of 50 pounds and operate/maintain field testing equipment.
- The ability and willingness to travel; travel is estimated at 25%-50% depending on project requirements.
- Experience with software such as MS Office suite, gINT, and other common software packages, GIS expertise is a plus.
- Completed 40-hour OSHA HAZWOPER health and safety training and current 8-hour refresher course; OSHA 10-hour construction safety course is a plus.

To be considered for this position, please submit an online application at www.golder.com/careers

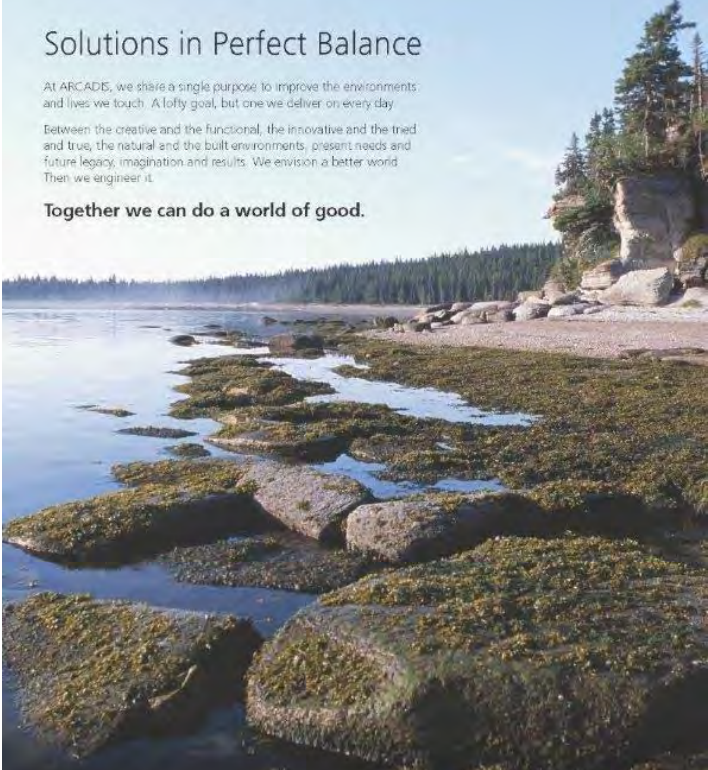
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officio board member of the Foundation of AIPG.

Applicants are required to send: 1) a complete, detailed resume, 2) the names and addresses of at least four professional references, and 3) a concise two page essay outlining the applicant's interest and the applicant's concepts for expanding AIPG service to members, visibility, influence, and financial strength. Applications will be accepted until the position is filled. Review of qualified applications will begin immediately. Salary range between \$105,000 to \$120,000 per year. Benefits include relocation assistance, health insurance subsidy, retirement plan contributions, vacation and sick leave.

Where in Michigan?

For fun, the photo on the top of the first page of this newsletter will change in each edition. The first person that correctly identifies what the photo depicts and where it was taken will win AIPG swag. Email your response to the Editor. One guess per individual per edition please. If you have photos you would like to share for this contest, please submit them to the editor with identification information.



12th Annual AIPG Michigan Section Golf Outing Tuesday May 17, 2016

Sponsor Information

Exclusive Dinner Sponsor- \$2,000

Investment includes:

- 1 foursome and 33% discount for additional golfers
- Highest Visibility Signage at the Event
- Corporate recognition*

Beverage Sponsors - \$800 (2)

Investment includes:

- Signage at the club house and on the Beverage Cart or Oasis.
- Corporate recognition*

Breakfast/Luncheon Sponsor - \$1,000

Investment includes:

- Signage at the grill/tent.
- Corporate recognition*

Hole-in-one Sponsors - \$600 (4)

Will have visible exposure on Par 3 Holes.

If a golfer hits a hole-in-one, the prize will be, either \$10,000, a golf vacation or a deluxe set of irons.

Tee Box or Hole/Flag Sponsor - \$250

(36) Available

Investment includes:

- Tee box signage or
- Pin Flag with logo

Skill Sponsors – \$600

Investment includes:

(4) Available

"Longest Drive" "Closest to Pin" awards to Male/female for each.

Putt-4-Dough – \$800 Signage on the putting area, corporate* recognition during the event (includes contest coordination at the turn and following golf provided by you).

Team Photo Sponsors:

\$500 SPONSOR FEE - if your photographer and printer

\$700 SPONSOR FEE - if our photographer and printer

Raffle Prize Sponsors:

Will contribute prizes (\$100 minimum cash or 2 prizes with \$50 minimum value each, please) to the fund used to obtain raffle prizes. Recognition by name on prize table placards will be made, along with verbal recognition by the master of ceremonies. \$100 SPONSOR FEE ("lots" needed)

Goodie Bag Sponsor - Give-away items for 120 or more golfers

Practice Tee Sponsor - \$400

(1) Available

Investment includes:

- Practice Tee/Range signage

This event is our annual Fund Raiser. The Michigan Section of AIPG Golf fundraiser benefits the Michigan Section's ability to support K-12 education grants and scholarships.

Place: **MOOSE RIDGE**

11801 Doane Rd.
South Lyon, MI 48178

Event: **18-hole Scramble**

Date: **May 17, 2016 Tuesday**

Registration: **8:00 to 9:30 AM**

Tee Time: **9:30 AM**

Rainout Date: *May 19, 2016 (based on course availability).*

Includes: Continental Breakfast, green fees, range balls, Lunch at turn, networking opportunities, and DINNER.

Also includes: 50-50 and Grand Prize raffles along with other prizes including, \$10,000, vacations, or sets of clubs for a "Hole in One", Putt-4 Dough \$2,500, men's and women's Longest Drive and Closest to Pin contests, \$20 gas cards to the four golfers traveling the furthest and goodie bag for all golfers.

Registration

Individual = \$180 if paid by April 15, \$200 thereafter

Foursome = \$600 if paid by April 15, \$680 thereafter

Player One: _____

Player Two: _____

Player Three: _____

Player Four: _____

Contact Name, Company and Phone Number for your Foursome:

Accepted forms of payment include:

Eventbrite <https://www.eventbrite.com/e/aipg-michigan-section-golf-outing-tickets-19731712082>



OR

Make Checks to:

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c/o ERG

28003 Center Oaks Ct., Suite 106

Wixom, Michigan 48393

Attn: Bob Reichenbach bob.reichenbach@ergp.net

CALL 248-773-7986 or FAX 248-924-3108 to reserve your place!
The AIPG-MI Section is a nonprofit 501(c)(6) Organization



Michigan Chapter
American Institute of Professional Geologists
FIELD TRIP ANNOUNCEMENT

July 29-31, 2016

**FIBORN KARST CONSERVANCY
PICTURED ROCKS BOAT TOUR
AND MUNISING AREA WATERFALLS**



**Locations: Mackinac County, Michigan
Munising Area, Michigan**

The AIPG Michigan Section is extending an invitation to all geologists, friends, and families to join us in a field trip to the Fiborn Karst Preserve Featuring “Michigan’s Longest Cave,” a Boat Tour of Pictured Rocks and Grand Island, and a tour of Munising Area Waterfalls.

The field trip will kick off **Friday** at 11 am at the parking lot for the Karst Conservancy’s trail to the caves. We will have lunch and provide information for the caves before heading to the cave entrance.

We will begin **Saturday** morning around 8:45 am at the docks in Munising where the group will rent pontoon boats for the day to take a self-guided geological tour of the Pictured Rocks lakeshore. We will make stops at various locations along the lake shore as far east as Spray Falls. Other stops may include beach locations along the cliffs, Murray Bay with the Bermuda shipwreck, and Grand Island.

Sunday morning we will meet at one of the waterfall locations near Munising. We will do some hiking to some of the waterfalls east of Munising in the Pictured Rocks National Lakeshore. There will be opportunities for taking some great scenic pictures.

Join us and bring the family. It’s going to be fun! A more complete itinerary will be sent to those who RSVP. Hope to see you this summer!



Cost: Estimated \$40.00 per person to cover boat rental fees assuming maximum capacity of 10 persons per boat.

Because of limitations for boat rentals, we need to know well in advance who is attending. We need an RSVP by May 27, 2016. If we have less than 10 RSVPs, we will cancel the trip.

Meals are not included. Make your own arrangements for lodging.

For more info & RSVP: Sara Verbrugge-Pearson at pearsons@michigan.gov or (517) 420-3219 or Adam Heft at heft@pbworld.com or (517) 886-7400.

**Michigan Section
American Institute of Professional Geologists
MEETING ANNOUNCEMENT**

April 14, 2016

NATURALLY OCCURRING METALS, GLACIATION AND CLEANUP CRITERIA

Featured Speaker

[David Slayton, MDEQ Office of Waste Management and Radiological Protection](#)

Location: University Center, Central Michigan University, Mt. Pleasant, MI (Map attached)

Cost: Students Free, AIPG Members \$30.00, Non-members \$50.00. **Registration is payable electronically via Eventbrite (see link below). Please note: No refunds will be given for cancellations made within 48 hours of the meeting and/or “No Shows”.**

Dinner: Grilled Chicken Breast with Cider Marinade Buffet; seasonal garden salad with balsamic vinaigrette, fresh fruit salad, pan roasted vegetables with herb vinaigrette, marinated roasted red potatoes, mini brownie and cappuccino mousse parfaits.

Time: Cash Bar 5:30-6:30 PM, Dinner 6:30 PM, and Speaker 7:30-9:00 PM

RSVP: On the Eventbrite website no later than April 11th at: <https://www.eventbrite.com/e/michigan-aipg-section-meeting-tickets-22533357880>.

Abstract: Background levels of metals and other potential contaminants are critical in decision making for the cleanup of contaminated properties. The management of excavated soils and fill material can be difficult particularly when determining if soils meet natural background, which can become cleanup criteria. The DEQ has been aware of this issue for some time and developed acceptable background levels in various forms over the years. This talk will focus on the story behind the development of those numbers including recent efforts to refine and improve the background data set. The talk will also explain the relationship between background levels and Michigan's Geology and will discuss recent changes to the regulations and the associated ramifications for implementation. The talk will be presented by David Slayton of the DEQ's Office of Waste Management & Radiological Protection, who has been working on background soil levels for three decades.

Speaker Bio: David Slayton graduated from Michigan State University with a Bachelor's of Science and a Master's Degree in Geology, both focused on hydrogeology and glacial geology. Dave is a Geologist Specialist In the Michigan Department of Environmental Quality (DEQ), and has worked in the Hazardous Waste Program (Part 111/RCRA) for 31 years, and 35 years overall for the DNR & DEQ. The responsibilities include review and oversight of operating licenses for hazardous waste treatment, storage and disposal facilities; groundwater and soil monitoring at those licensed facilities; and a great deal of corrective action work at numerous sites subject to Part 111/RCRA regulations. He serves as the DEQ expert regarding naturally occurring background levels of metals in Michigan soils/sediments. Dave is currently the Acting Chief of the Management & Tracking Unit, Hazardous Waste Section of the Office of Waste Management & Radiological Protection, DEQ.

AIPG Michigan Section Meeting April 14, 2016

University Center, Central Michigan University, Mt. Pleasant

Map of Mount Pleasant, MI 48859

