



American Institute of Professional Geologists Michigan Section

November 2014

From the President's Desk

I can't emphasize enough to our younger staff how important it is to stay relevant from a technical perspective in your chosen profession as you advance through your career. We all start out as fresh-faced "kids" just out of school, eager to land that first job that lets us use that science degree and launches our careers as earth scientists while making a buck. We are ready to demonstrate to our peers, bosses, and the world how smart we are and what we learned during our years in college.

As we advance in our careers, some of us follow the quest for knowledge and evolve into our company's high-powered senior scientists and technical "gurus." Others of us follow the quest for what we think will be fame and riches, and become project managers, client managers, staff managers and office managers. This article is mainly targeted at the latter group, those of us, myself included, who have been lured to or pushed into the management camp.

When I started doing environmental consulting, aquifer pump and treat was the soup du jour for addressing groundwater contamination. I had an MS in geology with a hydrogeology emphasis and was a guru in every sense of the word. But when the demand for pump & treat technology slowed, and attention turned to vapor enhanced groundwater recovery, then air sparging and soil vapor extraction, then enhanced bioremediation, then in-situ chemical oxidation, then reductive dechlorination, etc., my earlier skill sets became, well, somewhat dated. I had to adapt and learn new technologies and understand new concepts (microbiology - seriously?) to stay relevant.

It became harder to keep abreast of the new technical alternatives as I got pulled away from being a geologist and got pushed into more administrative responsibilities. I found that as I advanced to project management, then client management, then staff and regional office management, that much of the technical side of what I did in the past is no longer relevant. Instead of groundwater remediation seminars, I was attending management, marketing

and personnel management seminars. Instead of having Driscoll's Groundwater and Wells an arm's reach away, I had *The Empowered Manager*, *Swimming with Sharks*, *In Search of Excellence*, and *Rainmaking* at the front of my shelf. How does this happen?

It happens because being a project manager or staff manager is hard, and it takes a lot of time and effort to learn the things that managers need to do. These are not the things that we learned in Geology 101 or in a field camp in Arizona. We basically had to go through on-the-job training to learn the skill sets of an MBA, and accountant, and HR professional. Add growing family responsibilities to the mix, and there is little time to focus on doing the things we once did, the things that made us special in our business, the things our companies are expected to provide for our clients.

Think about it; how many times have you gone to a prospective client on a marketing call, and said "We at XYZ, Corp have the best department managers in the consulting industry, and we can balance our books to the penny, and our overhead ratios have been reduced 4% from last year, and our compensation package is excellent!" Probably zero! Clients want to know how you can fix their technically based business problems, and to do that, you have to maintain the technical edge and industry knowledge that is required to solve their dilemma, no matter what your current role within your organization.

Business today is different than it was a few decades, or even a few years ago. Who amongst us hasn't gone through a messy acquisition, or a knee jerk layoff reaction to an economic downturn? If you have, you know how upper management (guys with REAL MBAs or on the board of directors) deals with lower managers in these situations – they allow them to leave "to pursue other opportunities." But not so much the technical Gurus, those who still know what the current trends are in their industry and know how to put the plans in motion. Knowledge and the ability to use it to solve your client's problems is the key to

avoiding the blood-letting, while managers become “redundant assets.”

My recent adventure to “pursue other opportunities” has made me realize that a geologist’s value is in understanding geology and to be able to extrapolate that understanding to a useable and relevant end. I now have the chance to restore my technical smarts and will make a better effort to do a few web searches every day, peruse a few technical journals, and attend a few conferences to get my geology/hydrogeology mojo back. I can’t wait to get back up to speed so I can demonstrate to my peers, bosses, and the world how smart I am and what I learned through continuing education.

Craig Savage, CPG – 2014 Michigan Section President

Section Officers Reports

President: Information presented in the “From the President’s Desk” article above.

Vice President (Dawn Prell): As 2014 comes to a close, I am looking forward to 2015 and serving at AIPG-Michigan section president once again. We have a great team working together to grow and support our membership. We are working through the details of a few exciting events in 2015 including a special event meeting co-hosted with the Wayne State University Student Chapter in March, the annual technical workshop in June and sponsorship of a student field camp at the Gerald Eddy Geology Center in Chelsea, MI in August.

We are working closely with the student chapters and meeting with University students to activate new student chapters. With a focus on students and education, AIPG’s efforts are providing our University students with opportunities to expand their experience.

Members interested in participating and/or volunteering for any of the upcoming events are welcome to contact the executive committee. We welcome the support.

Treasurer (Brian Burke): As we near the end of 2014, I am pleased to announce that the Michigan Section is in a strong position financially for 2015. The success of our golf outing and GSI Conference, along with an unanticipated windfall from the State of Michigan will allow us to continue funding scholarships and sponsorships as we have in the past. The careful management of our Section’s finances will also allow us to expand our investments in the future of our profession in 2015 and beyond. This is a testament to the commitment of our membership and the hard work of executive committees, past and present. It has been an honor

serving as your Treasurer in 2014 and I look forward to serving as Vice President in 2015.

Secretary (Linda Hensel): No report.

Past President (John Barkach): No report.

Coming Events

November 12, 2014: MBGS Membership Meeting. The speaker will be Ronald B. Chase, Professor Emeritus of Geosciences, Western Michigan University presenting “The Pros and Cons of Living on a Hill. Great Views? Great Headaches? Great Subject for Engineering Geologists!” The meeting will be held at Michigan State University, Natural Science building at 7:00 pm in Room 204.

November 15, 2014: AIPG OSU Student Chapter afternoon at the Cincinnati Museum of Natural History. For more information and directions, please visit <http://www.cincymuseum.org/visit>.

November 20, 2014: AIPG Ohio Section Meeting at the Faculty Club at the Ohio State University, 181 South Oval Drive, Columbus. Dr. Larry Kressek of OSU will be presenting “Geologic Drilling in Antarctica: Drilling Back to the Future.” RSVP President-Elect Tom Jenkins at tjenkins@eagon.cc.

December 3, 2014: MBGS Membership Meeting. The speaker will be Phil Robertson, Professor of Ecosystem Science, Michigan State University presenting “Climate Change Implications for Michigan Agriculture: Productivity, Water and Greenhouse Gas Impacts.” The meeting will be held at Michigan State University, Natural Science building at 7:00 pm in Room 204.

December 11, 2014: Michigan Section AIPG Annual Meeting, Polo Fields East, LLC, Ann Arbor. Jim Brode of Fleis & Vandenbrink will be speaking about “A 30 Year Perspective of a Large-Scale Groundwater Remediation Project: A Case History of Pall/Gelman Site in Ann Arbor (Scio Township), Michigan.”

Location: Polo Fields East, LLC, Ann Arbor.

Dinner: Buffet with choice of Michigan Chicken or Sliced Sirloin of Beef with Mushroom Brown Sauce, salad bar, seasonal vegetables, potato, rolls & butter, and fruit pie.

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 December 8, 2014: RSVP for the meeting on the Eventbrite website no later than December 8th at: <https://www.eventbrite.com/e/aipg-michigan-section-annual-meeting-tickets-13282655781>.

January 5-7, 2015: No-Spills conference. The conference will be held at Soaring Eagle Casino in Mt. Pleasant. Additional information attached to this newsletter and may be found at www.no-spills.org.

March 27, 2015: Michigan Section AIPG Meeting in collaboration with the Wayne State University Student Chapter. The meeting will be held at the Detroit Historical Museum, Detroit. Hal Fitch will be

presenting on Hydrofracking. All proceeds for this meeting will go to the Wayne State University Student Chapter. The meeting will include a silent auction and entrance to the museum. See additional information in this newsletter and in a separate email announcement.

September 19-22, 2015: 52nd Annual AIPG Meeting to be held in Anchorage, Alaska. Details available on the National AIPG website www.aipg.org.

Wayne State University Student Chapter Update

Wayne State University Chapter of AIPG, 2014 – 2015		
OFFICERS	President	Andrew Church
	Vice President	Mellisa Allen
	Treasurer/ Secretary	Amanda Pruehs
ADVISOR	Jeffrey Howard, Ph.D., Associate Professor, Department of Geology	

Upcoming Student Chapter Events:

November 19	Geology Department Annual Thanksgiving Potluck
December 3	Midtown Detroit Noel Night- Club bake sale, mineral sale and geology demonstration and display
December 9	Student Chapter Meeting and Final Exam Study Marathon
December 18	Mt. Brighton Ski Trip
March 27, 2015	AIPG Michigan Section Meeting/ WSU Chapter Fundraiser at the Detroit Historical Museum
Spring 2015	Weekend fieldtrip to Traverse City: Discovering the Geomorphology of the Traverse Bay Region
Reoccurring Weekly	Sunday Study: AIPG WSU Section Sponsored Group Study Session

The 42nd annual Noel Night will take place on Saturday, December 6th, from 5:00-10:00 p.m. in Detroit's Midtown District. Over 70 institutions will open their doors to the public free of charge during this Cultural Center-wide holiday open house.

Come join the AIPG WSU Student Section for a mineral and bake sale, spectacular rock, mineral, and fossil display, mineral thin section demonstration, hydrogeological contamination tank demonstration and more! These events take place in the basement of Old Main next to the WSU Planetarium on Cass and Warren.

For more information about Noel Night, please visit: <http://midtowntodetroitinc.org/events/noel-night/noel-night>
Or contact Mellisa Allen at: MellisaAllen@wayne.edu

2015 Golf Outing – Save the Date!

The Michigan Section AIPG 11th Annual golf outing will be held on May 19, 2015 at Lyon Oaks Golf Club in Wixom. Please plan to attend and support the Michigan Section. Proceeds from the golf outing

support a variety of educational awards and scholarships given by the Michigan Section each year. Information and a registration form will be available in the January 2015 edition of the newsletter and on the Michigan Section website after the first of the year.

Bob Reichenbach - Golf Outing Chairman

2014 Section Leadership Award to Adam Heft!

The National Awards Committee has acknowledged Adam Heft and has awarded Adam the 2014 Section Leadership Award. An excerpt from AIPG Michigan Section nomination letter is presented below....

Adam has shown outstanding dedication to AIPG and, in particular, the Michigan Section and has the unanimous support of the executive committee for this award. Adam has continuously held leadership positions in the Michigan Section and his ongoing involvement with the executive committee is highly appreciated. Adam doesn't advertise his achievements; however, over the years, his efforts have directly and indirectly led to significant improvement in the Section's finances, achieved, in part by a dedication to presenting cutting edge information at well attended annual workshops. It was Adam's leadership that was instrumental in executing the successful 2007 AIPG National Meeting in Traverse City.



Photograph of Section Award Winners (Adam is second from right) with 2014 President Ray Talkington (far right). Photograph courtesy of Wendy Davidson.

Adam has also provided leadership in the day-to-day operation of the Michigan section, volunteering for numerous committees, organizing many section field trips, and volunteering to man registration tables and assist in numerous ways during our many member events. Somehow, Adam has also found time to demonstrate his love of geology by assembling and proudly displaying a collection of rock samples for the entire Michigan Stratigraphic Sequence.

As the Michigan Section newsletter editor, Adam has acquired a great deal of historical knowledge of past AIPG events and issues, and is a very important resource and point of continuity that helps anchor the section as executive committees change over the years. Without Adam, the section would be at a loss to smoothly maintain Section operations without his help and selfless service. If anyone represents the spirit behind the intent of this award, it is Adam Heft.

Please congratulate Adam for this achievement.

Dawn Prell – 2014 Section Vice President

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.

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:

Rachel Nagy, Ian Stauffer, Raymond Powell,
Heather Moule, Sarah VandereMeer, and Kathryn Hillenbrand.

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.

Michigan Department of Environmental Quality News

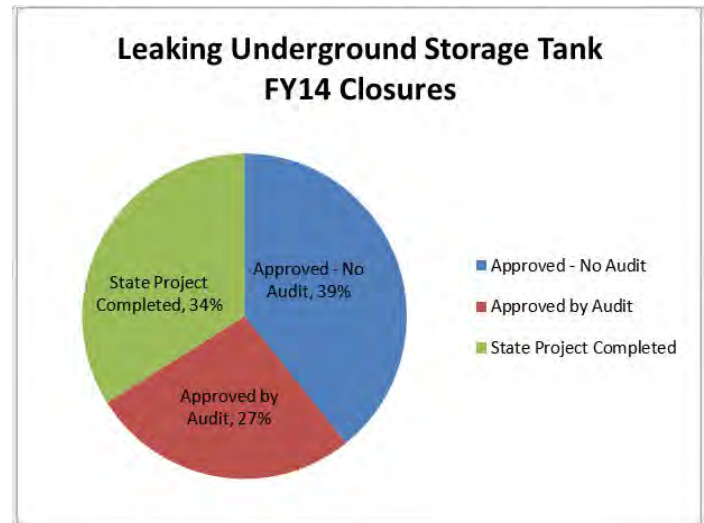
MDEQ RRD Tallies Record Number of LUST Closures

The Michigan Department of Environmental Quality (MDEQ) Remediation and Redevelopment Division (RRD) has released the total number of leaking underground storage tank (LUST) closures for fiscal year 2014, and the number is impressive. There are 488 LUST closures on the books this year.

It has been more than a decade since the MDEQ RRD recorded more than 400 LUST closures. The

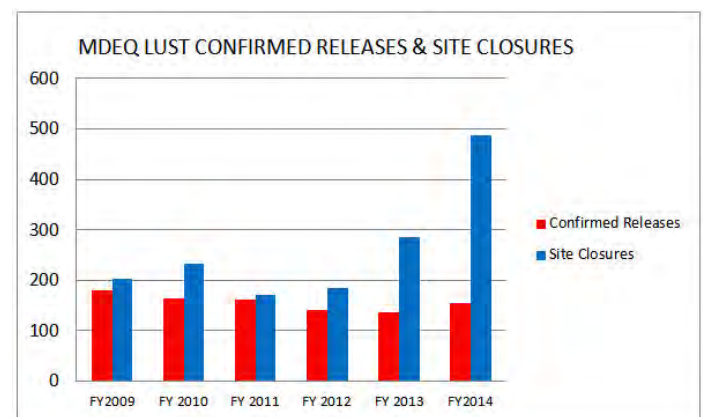
numbers this year are one closure shy from the all-time high of 489 closures in 2002, which is a striking improvement.

The graph below provides a breakdown of the approval percentages for the closures recorded.



Michigan experienced a decline in the number of LUST closures in the 2000's, but that trend appears to be turning around. Last year's upswing of 285 closures showed positive progress after the passage of the LUST amendments in 2012. This year's dramatic increase by more than 200 closures is even more encouraging.

While the number of new confirmed releases has remained relatively stable between 100 and 200 annually, the MDEQ is optimistic that the increasing number of closures can start to reduce the backlog of approximately 9,000 open LUST releases throughout the state.



RRD Chief, Robert Wagner, believes that the partnerships being formed every day between staff and site operators are one key to success. The total number of LUST closure reports submitted to the MDEQ in 2014 was 248, which is up from the 235 submitted in 2013. Wagner said, "Owners, operators and the MDEQ share the same goal: site closure. Working together can lead to successful closure."

In addition to closing hundreds of sites through closure report submittals, RRD staff are also making a focused effort to reach out to hundreds of owners/operators to assist them with achieving site closure. There are hundreds of sites where releases were reported and no further work was done or a minimal amount of work was done to address the release.

The RRD's efforts have resulted in bringing more than 600 sites back into active status. Now that the sites are active, information is being collected that will help bring them closer to closure. The site operators can now take advantage of the opportunities for risk-based closure that recent statutory amendments made possible, and realize the benefits of partnering with RRD staff who can help them achieve closure.

"Our staff have years of experience that can be of great benefit when a person is seeking closure. We want to help and assist with the closure process," said Wagner.

There are also many more LUST sites where there is little to no information where the MDEQ has implemented a Triage program. The Triage program includes the collection of limited soil and groundwater water samples to evaluate the condition of the contamination at multiple sites. The sites are packaged into single contracts to promote cost savings for data collection.

The data collected is used to determine whether the releases pose a threat to human health and the environment. In cases where the release poses a threat, actions are being taken by either the owner/operator or the MDEQ to address them. The MDEQ is also finding locations where releases have occurred that do not pose any threat and are eligible for closure. This year the MDEQ funded triage investigation at 325 sites across the state, surpassing last year's total of 208 sites.

Sara Pearson, MDEQ Technical and Program Support Team Coordinator, CPG #10650

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.

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.

Section Website Reminders

As you may have noticed, the Michigan Section is working on building a database of geologic photographs on our website. We would like to continue building this collection. 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 periodically uploaded to the website once several have been received.

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.

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 information for the Member's Corner was provided to the Editor for this edition of the newsletter.

Employment Opportunities/Seeking Employment/Member 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.

2015 Wayne State Student Section Fundraiser and Michigan Section Meeting

The AIPG Wayne State University Student Section will be co-hosting a formal fundraiser with the Michigan Section to raise money for the student section. Funds are used to support student activities, department field trips, and student scholarship funds. Save the date for a night of dinner, live music, silent auction/raffle and a talk on fracking in Michigan. Tickets will go on sale in November, 2014.

When: March 27, 2015 5:00 pm to 11:00 pm

Where: Detroit Historical Museum

Speaker: Hal Fitch, Chief of the MDEQ Office of Oil,
Gas and Minerals

Do you have any interesting mineral/rock samples or other cool geology or environmental science related items? Please consider donating items to the auction/ raffle for the fundraiser. Please contact Mellisa Allen, WSU Student Section Vice President, at MellisaAllen@wayne.edu.

Donations can be sent to:

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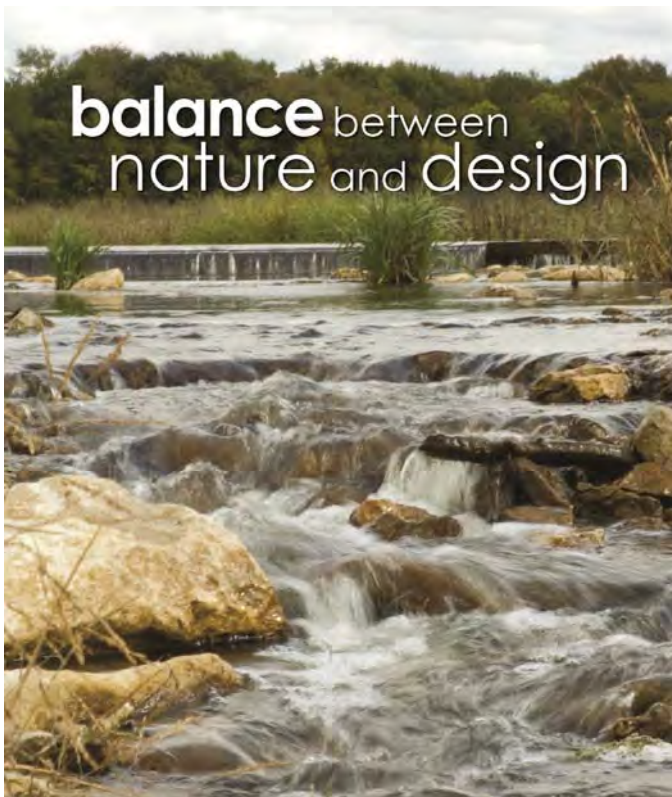
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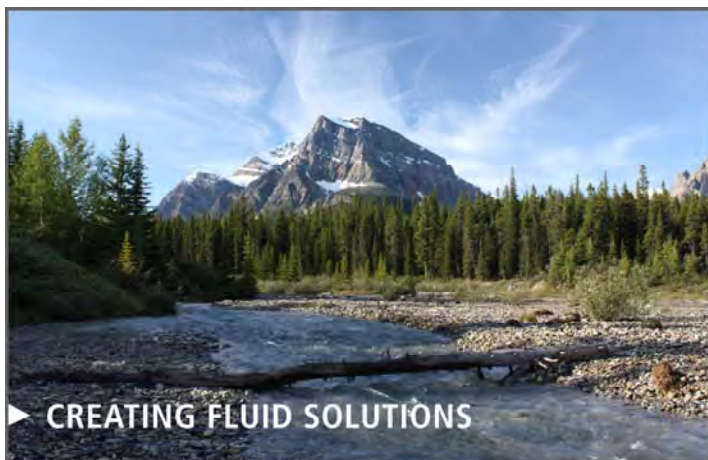


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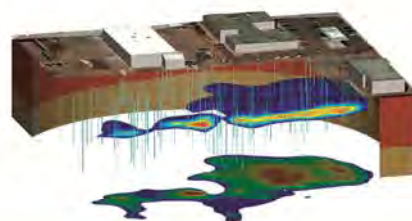
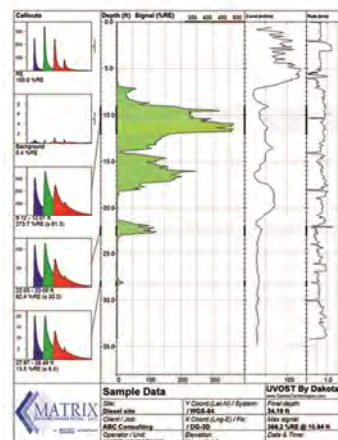
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AIPG MI Section 4th Annual Workshop GSI Characterization, Evaluation, and Compliance

Tuesday, June 17

1:00 p.m.–1:30 p.m.

A New Paradigm for GSI Pathway Compliance & Putting 10 "Options" into Perspective

Presented by: Gary Klepper and Jennifer Quigley

3:30 p.m.–4:00 p.m.

**Pore Water Characteristics as Indicators of Venting Groundwater and
Depth-Integrated Water Column Sampling (Kalamazoo River)**

Presented by: Gary Klepper and Michael Coram

Wednesday, June 18

4:00 p.m.

GSI Q&A and Viewpoints (Panel Discussion)

Presented by: Gary Klepper (CRA), Jason Lagowski (Arcadis),
Grant Trigger (Racer Trust), Bob Wagner (DEQ-RRD)

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American Institute of Professional Geologists— Wayne State University Student Chapter 1st Annual Fundraiser at the Detroit Historical



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The Wayne State Student Chapter of the AIPG Michigan Section is looking for donations for a silent auction at their first annual fundraiser to be held on March 27, 2015.

All proceeds will benefit the AIPG– WSU Student Chapter to support department field trips, club activities and student scholarship awards.

Please contact:

Mellisa Allen, Student Chapter Vice President, at MellisaAllen@wayne.edu

Donations can be dropped off or sent to: Wayne State Department of Geology,
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Be sure to include your name, address and description of item being donated.

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

December 11, 2014

**A 30 YEAR PERSPECTIVE OF A LARGE-SCALE GROUNDWATER
REMEDATION PROJECT: A CASE HISTORY OF PALL/GELMAN SITE
IN ANN ARBOR (SCIO TOWNSHIP), MICHIGAN**

Featured Speaker

Jim Brode, CPG, of Fleis & Vandenbrink

Location: Polo Fields East, LLC, Ann Arbor, MI (Map attached)

Cost: Students Free, Members \$30.00, Non-members \$50.00. **Registration is payable electronically via Eventbrite (see link below) or at the door by cash or check; however, prepayment is preferred and speeds up the check-in process at the door. Please note: Cancellations made within 48 hours of the meeting and/or "No Shows" will be charged and expected to pay the registration fee.**

Dinner: Taste of Italy: Buffet with choice of Michigan Chicken or Sliced Sirloin of Beef with Mushroom Brown Sauce, salad bar, seasonal vegetables, potato, rolls & butter, and fruit pie.

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 December 8th at: <https://www.eventbrite.com/e/aipg-michigan-section-annual-meeting-tickets-13282655781>. You can select your meal choice and pay online if you choose, or pay at the door by cash or check if you prefer.

Abstract: A significant mass of 1,4-dioxane was released to the subsurface at the Gelman Sciences site in Scio Township. 1,4-Dioxane is a highly mobile/recalcitrant compound. Additionally, the Gelman site is in an area of complex glacial stratigraphy and prolific aquifers. The combination of these and other factors resulted in the development of extensive groundwater plumes emanating from the facility. These plumes have advanced into Scio Township (northwest) and the City of Ann Arbor (east/northeast).

The discovery of 1,4-dioxane at the Gelman Site sparked technical investigations into the chemistry, toxicology, treatability and transport characteristics of this emerging contaminant. Information derived from this site has been valuable to others dealing with this vexing compound. It also became a catalyst for an examination of our regulatory policies regarding how we address environmental cleanups in Michigan and local environmental activism.

This talk will present an overview of the site hydrogeology, contaminant transport processes and remedial activities at the Gelman site. Some of the lessons learned from observing the technical, legal and social aspects of this complex site for 30 years will also be presented.

Speaker Bio: Jim Brode has been a consulting hydrogeologist for over 30 years. He is currently a Senior Project Manager/Associate with Fleis and Vandenbrink Engineering. He is a Certified Professional Geologist and holds a BS in Geology and an MS in Hydrogeology. He is a past President of the Michigan Section of AIPG.

Mr. Brode works with clients on a variety of projects. His projects are mostly centered around finding, developing and protecting water supplies. He is also involved in projects related to soil and groundwater remediation.

AIPG Michigan Section Annual Meeting December 11, 2014

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