

American Institute of

Professional Geologists

Michigan Section

November, 2007

From the President's Desk

I would like to start by saying that is has been an honor and privilege to serve as your 2007 AIPG Michigan Section President and would like to personally thank all members, students and sponsors who made 2007 a most productive and accomplished year.

"The object of all work is production or accomplishment and to either of these ends there must be forethought, system, planning, intelligence, and honest purpose, as well as perspiration." Thomas Edison

I think this quote rings true in describing the planning and effort required in making the 44th Annual Meeting of AIPG in Traverse City, Michigan an overwhelming success. Please join me in providing special acknowledgement and thanks to the entire 2007 Annual Meeting Planning Committee and AIPG National for their hard work.

One of our primary objectives of 2007 was to support and promote the passage of State licensure for geologists. Our Legislative Committee has made great progress with this initiative but there is still some work to be done. Lets "get er' done" in 2008.

In addition to our two active student sections at Eastern Michigan University and Central Michigan University, solid progress has been made in establishing student sections at Wayne State University, Western Michigan University and Lake Superior State University. It is our goal to get these Student Sections up and running by the start of the winter semester. Thanks to all of those on the Membership Committee and other volunteers for making this goal achievable in the short term. It is my challenge for the next administration to continue this effort until every University or College in Michigan with a geology program has an established and active AIPG Michigan Student Section.

The 2007 Annual AIPG Michigan Golf Outing showed continued growth and improvement. I propose we continue to support and expand this venue for the purposes of raising additional funds to

be used for the increase/expansion of our existing Educational Award and/or for the establishment of an AIPG Michigan College Scholarship Fund.

Moreover, I would like to challenge the next administration to wisely use our financial resources and continue to support our mission of increased value to our members and sponsors. In support of this effort, I am proud to announce the implementation of the first annual Excellence Award program. This program will recognize outstanding group achievements for projects related to the areas of research and innovation, environmental, mining, oil & gas, and resource sustainability. Application forms for the 2008 Excellence Awards will be available at the December 6th Annual Meeting and will be posted on the website in the near future.

The state of our organization is strong, and our strength is our members. Let's keep this momentum going well into the future. Thank you again for the opportunity to serve.

Scott A. Cesarz, CPG AIPG Michigan Section President

2007 Annual Meeting Recap

After 3½ years of planning and preparation, the 2007 annual meeting has finally come and gone. By all reports, the meeting was a great success and was enjoyed by all. Nearly 300 people, including students, speakers, and exhibitors, attended the meeting. Activities started Saturday morning October 6th with a field trip to Mackinac Island. The main part of the meeting kicked off Sunday evening with the opening of the exhibit area and the Icebreaker, which featured a silent auction, chocolate fountain, cash bar, student poster contest, and nearly 30 exhibitors.

Monday featured the beginning of the technical sessions, which were very well attended, the Old Mission winery tour, short courses on the geology of the Michigan basin and low-flow sampling, and the evening at the Dennos Museum with Keynote Speaker Mark Myers of the USGS. At the conclusion of the keynote address, the Michigan

Section presented Mr. Myers with a plaque in appreciation of his continued support of AIPG and its mission.

Tuesday continued the technical sessions, a social trip to the grass river area, the very popular glacial geology short course, and a fossil collecting trip to Stoneport Quarry north of Alpena, where participants were able to collect fossils and witness quarry personnel blast a quarry bench. In the evening, the awards presentation took place in the ballroom dome after the exhibits had been removed. Traditionally, the awards presentation had been a long process during which many of the attendees grew bored and left. This year, the awards were presented in a streamlined fashion before dinner. After dinner, the planning committee had a surprise for the attendees: rather than yet another speaker who would present a dry topic, we brought out comedian David Crowe. The change of pace was well received, and everyone that attended was "seriously amused."

Wednesday saw the conclusion of the technical sessions, a mining short course, and a trip to the Leelanau Peninsula wineries. Thursday morning 14 attendees left for the two-day post meeting field trip to the Marquette Iron Range and the Tilden/Empire mine complex. Participants got to see the open mine pits, had a chance to collect ore from the Tilden Mine, and viewed the pelletizing plant. Friday morning before returning to Traverse City, participants entered the Republic Mine property to view the restoration efforts of the pit, waste rock piles and tailings basin. They also were able to collect pieces of the banded iron formation mined from the pit. At the request of the participants, an "extra" stop was also made at Jasper Knob in Ishpeming.

To everyone that attended the 2007 Annual Meeting, thanks for helping make the meeting such a great success. For those that didn't get a chance to attend, you missed a great meeting. Photographs of the events and trips were taken by several members of the planning committee, some of which are included in this newsletter. Many of the photos will be in the next issue of TPG, and all of the photos will be available on the Michigan Section website for you to download in the next month or so, so keep checking the website.

Adam W. Heft, CPG 2007 General Chairman

Candidate for Section Secretary

The candidate for the 2007 Michigan Section Secretary is Don G. Conway, CPG 9096

Since receiving my B.S. in Geology from Michigan State University in 1981, I have been fortunate to work in a variety of professional geologic positions. After graduation, I worked for Texaco and then

Texas Eastern developing petroleum exploration prospects in Louisiana and Texas. After the petroleum industry contracted in 1986, I returned to MSU and completed work on my M.B.A. I have worked for the past 17 years in the environmental consulting industry and am currently employed as a Senior Project Manager at Gosling Czubak Engineering Sciences in Traverse City, Michigan.

I initially joined AIPG because I was seeking a professional association whose mission was the advancement of the geologic profession and its professionals. The current opportunities to advance our profession are great. With the passing of legislation addressing the growing concerns about groundwater management, there is a continued need for our input in the Michigan regulatory process. We should remain active participants in the development of a state licensure program for geologists, which would be an extension of AIPG's principals of competence, integrity, and ethics.

Our section's past successes in coordinating activities with other professional organizations and participating with student sections are good ideas that I hope continue. If I am fortunate enough to serve as an officer in the Michigan AIPG section, I will continue these efforts which serve to demonstrate the value of our organization and membership.

Newsletter Notice via E-mail

Save us costs and more quickly receive meeting announcements and newsletters. Submit an updated e-mail address to Adam Heft at hefta@fitzhenne.com.

Annual Section Meeting December 6th

The Michigan Section is please to announce that Mr. Michael Wilczynski, CPG (a Senior Geologist with the MDEQ-RRD in the Southeast Michigan District) will deliver the keynote address at the December 6, 2007 Annual Section Meeting at Tony M's Restaurant and Banquet Center in Lansing, Michigan. Mike is one of a few chosen by the top brass in Lansing to discuss the MDEQ's current challenges and future outlook for the Part 201/213 programs.

The main speaker theme for this year is "Geologist's Role in Protecting and Preserving Public Welfare and the Environment". The presentation on LUST site closures is an excellent topic and will provide valued insight to our members on the subject.

DEQ and Peer Review Group Begin Re-Evaluating Free Phase Contaminants

Free phase contamination is a concern for multiple contaminant releases for both Part 201 and Part 213 sites. However, since gasoline represents a complex mixture of contaminants that affects the majority of Part 213 sites, the focus of this discussion is the significant concern related to petroleum hydrocarbon releases.

Removal of free phase contaminants often becomes the driving factor for remediating Part 213 sites. Free phase contaminants pose fire and explosion hazards from vapors (ambient and indoor air inhalation), act as a continuing source causing the expansion of dissolved phase plumes, and create risk from direct contact with saturated soils. In many cases, Part 213 closures hinge upon the demonstration that free phase contaminants have been removed and the associated risks have been abated and leads to the question...

How can you be confident that free phase contaminants have been remediated or are no longer present at a site? This question has previously been answered by showing two things:

- Free product does not collect in monitor wells for 12 months.
- Soil analytical results are below the Part 213 C_{sat} criteria.

Is this information sufficient evidence? If it is, then why does free product continue to be discovered at some sites that have been closed based on this evidence? If it is not, then how do we make this demonstration to achieve closure at these sites? Advancements in our field indicate that addressing free phase contamination is more complex than was originally envisioned.

The existing C_{sat} criteria for individual substances are calculated based on the assumption that only that substance is present. However, this assumption isn't applicable when mixtures of substances are released, as is the case in the majority of Part 213 releases. Consequently, C_{sat} criteria for individual substances are not reliable for evaluating releases of mixtures. The data demonstrates that saturation values decrease for releases with multiple compounds. This may be one factor in many to explain why some sites with soil contaminant concentrations that are below C_{sat} continue to generate measurable quantities of free product.

Additional research has also demonstrated that free phase contaminants may exist in the subsurface without collecting as free product in monitor wells. The free phase contaminants present in the pore spaces, although not accumulating as free product in wells, can remain a contributing source to dissolved phase plumes if not addressed. Is this why natural attenuation does not appear to be as effective at some sites as it is at sites where the source has been effectively remediated or removed?

The Department of Environmental Quality (DEQ), Remediation and Redevelopment Division (RRD) is working toward finding better lines of evidence to demonstrate that free phase contaminants no longer exist at a site. The RRD has evaluated methods used by the Environmental Protection Agency and other states.

Based on this evaluation, discussion of the use of Gasoline Range Organics (GRO) and/or Diesel Range Organics (DRO) analyses was included during the RRD's Criteria Training held in June 2007.

AIPG Michigan Section Officers Kevin Lund, Past-president, 888-417-4440 (<u>klund@g-eri.com</u>); Scott Cesarz, President, 734-397-3100, (<u>scesarz@manniksmithgroup.com</u>); Tim Woodburne, Vice President, 616-364-8491 (<u>twoodburne@preinnewhof.com</u>), Sara Pearson, Treasurer, 616-356-0253, (<u>pearsons@michigan.gov</u>); Jason Lagowski, Secretary, 248-994-4049 (<u>jason.lagowski@arcadis-us.com</u>).

Newsletter Editors Adam Heft, 517-887-1100 (hefta@fitzhenne.com) and Tyrone J. Black, 989-705-3402 (blackt@Michigan.gov).

Committees Awards, Jason Lagowski (jason.lagowski@arcadis-us.com); Educational Outreach, Adam Heft (Heft@fitzhenne.com); Membership and Student Chapters, Walter J. Bolt (wbolt@manniksmithgroup.com); Registration, Scott Cesarz (scesarz@manniksmithgroup.com); Screening, Kevin Lund (klund@g-eri.com); 888-417-4440; Student Chapters, Eric Wallis (Ewallis@WM.com); Quarterly Meetings, Scott A. Cesarz, (scesarz@manniksmithgroup.com); Treasury, Bruce Beltman (bbeltman@gwsi.biz); 2007 Annual Meeting, Adam Heft (Heft@fitzhenne.com).

Circulation of the Michigan Section Newsletter is to over 330 members, a number of prospective members, several geology departments, and companies for a total over 500. Distribution is by USPS and e-mail notice of web posting. Copy in PDF format is posted at http://www.mi.aipg.org.

Newsletter Sponsors and Advertisements: The Sponsor section is \$15 per name or column inch for copy ready art. Copy preparation at an additional charge is available.

Professional Postings: The Professional Posting section, where you may advertise positions, is \$10 per column inch.

Seeking Employment: Members seeking employment may submit a 50-word listing at no charge.

Articles: The newsletter will feature topics on a quarterly basis, and will have a quarterly deadline for submissions. If you have ideas for topics or articles, query us or submit it!

Authors' opinions in articles are not necessarily the opinions of the Michigan Section or National Headquarters of the AIPG.

Analyses of soils for GRO and/or DRO in a fashion that is properly representative of the site in question appears to provide a useful line of evidence with 50 parts per million as a threshold level below which free phase contaminants would not be expected to be present. Use of GRO/DRO is an option that is acceptable to the DEQ and may be used to demonstrate the lack of free phase contaminants; however, this method is not to be construed as the DEQ's policy, nor is 50 parts per million an applicable criteria. Other options may be proposed and will be considered by the DEQ in determining whether free phase contaminants have been adequately addressed.

The DEQ, through the assistance of a peer review group comprised of a variety of critical stakeholders, is examining several lines of evidence to determine which will be suitable to demonstrate that free phase contamination is no longer present at a site. The review process is currently underway and updates on progress will be given as they occur.

Sara Pearson, in collaboration with Patty Brandt – DEQ and Phil Schrantz – DEQ

Coming Events

November 6, 2007: SPE meeting will be at Clara's Lansing Station. Social hour at 5:00 pm, dinner at 6:00 pm and speaker after dinner. The speaker is Vello A. Kuuskraa from Advanced Resources International presenting "Maximizing Oil Recovery Efficiency and Sequestration of CO2 with "Next Generation" CO2-EOR". Cost is \$25.00 please contact Tammy Worden for additional details at 248-205-2510 ext. 1032 or tworden@trialon.com.

November 14, 2007: MBGS meeting will be at Michigan State University, Natural Science Building at 7:00 pm. The speaker is Dr. Andreanne Simard from Golder Associates Inc. presenting "Predicting Groundwater Flow and Transport Using Michigan's Statewide Wellogic Database".

December 6, 2007: AIPG Chapter Annual Meeting: "
"MDEQ-RRD's Current Challenges and Future Outlook
of Part 201/213 Programs " by Mike Wilczynski, Senior
Geologist in Southeast Michigan for the DEQ-RRD.

Location: Tony M's, 3420 South Creyts Road, Lansing, Michigan (517) 322-2069.

Dinner: Choose from: Prime Rib, Lasagna, or Pasta Marsala, garlic roasted redskin potatoes, California Blend vegetables, salad, bread, coffee, tea, and choice of cheesecake or chocolate cake.

Schedule: Cash Bar/Check-in 5:30 to 6:30 PM, Dinner: 6:30 Speakers: 7:30 to 9:00. Prize Raffle.

Cost: Students \$25.00, Members \$35.00, Non-members \$40.00. Dinner is buffet style.

RSVP by November 30: Telephone or e-mail registration with Name, Company, Address, Phone, Fax, and Amount Due to AIPG-Michigan Section, c/o Jason

Lagowski, Secretary, at jason.lagowski@arcadis-us.com or (248) 994-4049. Reservations not cancelled by December 4th will be billed. Checks to AIPG-Michigan.

Students attending the meeting and looking for full-time employment after graduation or a part-time summer position can bring several copies of their résumé. Leave one résumé at the sign-in desk upon arrival. Résumés obtained at the meeting are available to AIPG members seeking job candidates by contacting Kevin Lund, lundk@michigan.gov.

Annual Meeting Photos and Supporters



Mackinac Island Field Trip



Old Mission Winery Social Event



Stoneport Limestone Quarry/Fossil Collecting



Glacial Features Field Trip



Low Flow Short Course Field Demonstration









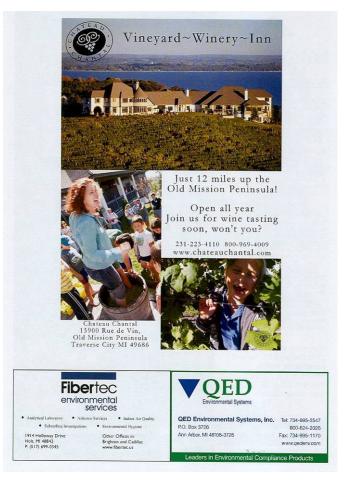
The Dennos Museum Evening Event



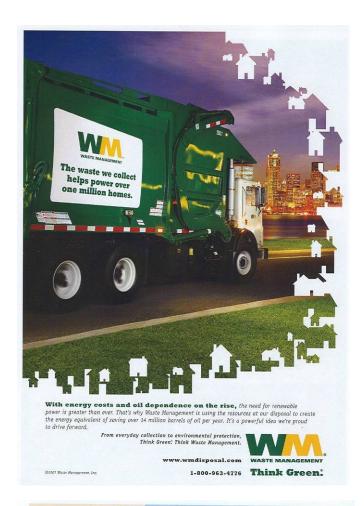
Grass River Natural Area Social Event



Tilden/Empire Mine Field Trip







Civil Engineering Road design Sanitary sewers Water supply and distribution Site planning and design

Surveying Boundary surveys Plat map preparation Topographic mapping ALTA Surveys

GPS surveying Construction staking

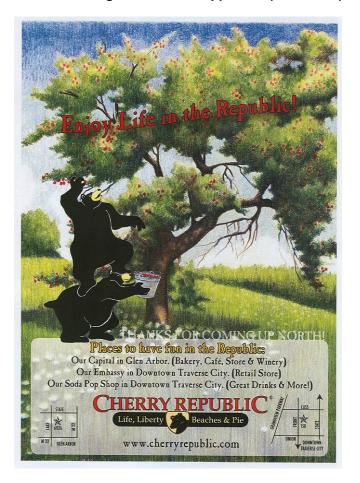
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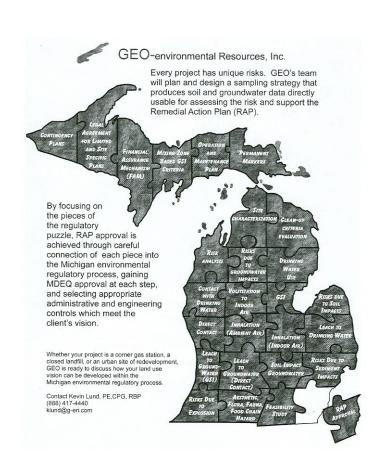
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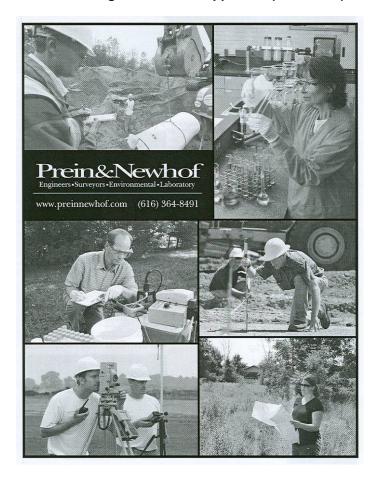
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IN-DEPTH ENVIRONMENTAL LAW SERVICES

LOG OF ENVIRONMENTAL LEGAL SERVICES NO.: 1

Project: AIPG Annual Meeting Location: Traverse City, Michigan Date: October 7-11, 2007

Depth	Legend	Services Description	Proactive Problem Solving	Cost Effective	Successful	Str %
1		Civil Litigation	Max.	+++	444	10
2	Ø0.00	State/Federal Administrative Agency Proceedings	Max.	+++	VVV	10
3	888	Real Estate and Business Transactions	Max.	***	444	10
4		Governmental Relations	Max.	+++	444	10
5	90°	Toxic Torts	Max.	+++	VVV	10
6		Insurance Coverage Claims	Max.	+++	444	10
7		Environmental Remediation	Max.	+++	444	10

Whatever level of needs your company has, the experienced attorneys of Fraser Trebilcock Davis & Dunlap, P.C. can assist you.

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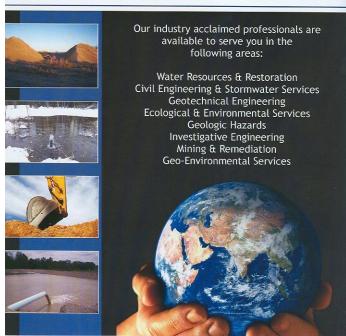
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Detroit Office: One Woodward Ave., Suite 1550 Detroit, MI 48226 313/237-7300



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MEETING ANNOUNCEMENT

December 6, 2007

Michigan Chapter American Institute of Professional Geologists

Meeting Topic:

"MDEQ-RRD's Current Challenges and Future Outlook of Part 201213 Programs"

Location: Tony M's Banquet at 3420 South Creyts in Lansing, Michigan

<u>SEĂTING IS LIMITED TO 80 PLĂCES</u>

Cost: Students \$25.00, Members \$35.00, Non-members \$40.00*

Dinner: Buffet – Choice of Prime Rib, Baked Chicken, or Pasta Primavera,

garlic roasted red skin potatoes, California blend vegetables, salad, bread, coffee, tea, ice tea, and choice of cheese cake or chocolate cake.

Schedule: Cash Bar/Check-in 5:30 to 6:30 PM, Dinner: 6:30 Speakers: 7:30

to 9:00. Prize Raffle.

Guest Speaker: Mr. Mike Wilczynski is an AIPG CPG, and is a Senior Geologist

in the Southeast Michigan District Michigan Department of Environmental Quality Remediation and Redevelopment Division. The talk will be followed by a Q&A Session.

Contact: Contact Jason Lagowski at jason.lagowski@arcadis-us.com or

(248) 994-4049 with reservations no later than November 30,

2007.

*Registration is payable at the door by cash or check; however, prepayment is preferred and speeds things up at the door. *Please Note: Cancellations made within 24 hours of the meeting and/or "No Shows" will be charged and expected to pay the registration fee.*