

American Institute of Professional Geologists Michigan Section

September 2015

From the President's Desk



I hope you all managed to take some time off this summer and experience "Pure Michigan." Your AIPG executive committee has continued to meet (virtually) throughout the summer to make plans for the remainder of 2015 and begin the planning process for the 2016 technical workshop.

September brings the typical back to school schedules. With a focus on education and geosciences at both K-12 and University levels, AIPG has made a commitment to support the Academy of Natural Resources which provides K-12 earth science teachers with education training and hands on tools for their classrooms. AIPG has also put together an augmented reality sandbox and will donate this to the Gerald Eddy Discovery Center at the Waterloo Recreation area in September 2015.

AIPG Michigan takes pride in our commitment to education and growing our profession. Geoscience students who are active in AIPG are provided with tremendous opportunities to advance their education. They are introduced to professional geologists and geological engineers who quickly become mentors who can provide technical guidance and career advice.

I hope to see you at the next AIPG meeting on October 1, 2015 in Grand Rapids.

Dawn Prell, CPG – 2015 Michigan Section President

Section Officers Reports

President: Information presented in the "From the President's Desk" article above.

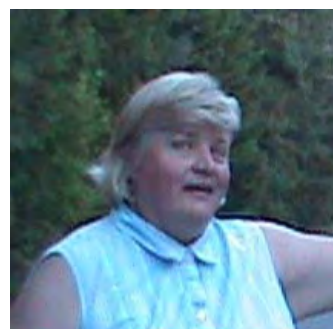
Vice President (Brian Burke): In less than a month I will be in Anchorage serving as the Michigan



Section's delegate at the National meeting. There will be one full day of business meetings during my visit, along with numerous networking opportunities, but I will also be taking advantage of several of the field trips offered. I will be attending a day long trip to the Matanuska Glacier – a valley glacier- and a half

day lecture on the 1964 Great Alaska Earthquake. Although it involves some work on behalf of the section, the trip to the national meeting is one of the great benefits of serving on the executive committee. If you are looking for a way to contribute to the geology profession in Michigan, please consider running for office. In addition to working with dedicated professionals, you will have the rewarding experience of viewing our nation's geologic wonders first hand. Photography is not my strong suit, but I will definitely put together a slideshow for our October meeting. If I don't see you in Alaska, I hope to see you at our next meeting.

Treasurer (Linda Hensel): Thank you to all the



attendees of the recent AIPG 2015 summer field trip on Drummond Island, Michigan. AIPG also wishes to thank Drs. William Harrison III and Peter Voice, WMU and Core Lab, and John Esch, MDEQ-OOGM, for

accompanying us on our trip and providing their geologic expertise, while guiding us to the various locales we visited to view outcrops. They each greatly enhanced what we viewed and learned about this area and I appreciate their time and effort to prepare for and attend the fieldtrip.

We had a great trip, weather cooled off by time we met on Drummond Island on late morning of Friday, July 31, 2015. We all gathered at the ferry dock and entrance to the Osborn Materials Drummond Island Quarry. The Osborn Quarry staff surprised us when we met them at their office with the announcement that we would be able to spend the rest of the afternoon in the current active quarry as operations had ceased the day before for the weekend. It was a great opportunity to inspect and collect fresh specimens of the Engadine formation which contained various fossils, post-depositional crystallization and other sedimentation features. The short lived thundershowers may have suspended our sampling and exploration for a little while but did not dampen our enthusiasm to be in this active quarry.

AIPG is very appreciative of their allowing us to visit the active quarry for the afternoon. We had a great group barbecue on the grounds of the Drummond Twp. Park facility. We had a covered picnic area and used an old fireplace, without a grate, to cook our entire dinner directly on hot coals. The breeze from the nearby DeTour Passage water was wonderful and kept the bugs away. Saturday morning dawned clear, and we spent an hour at a local rock shop that cut and polished various stones including "puddingstone" (jaspillite-bearing arkosic metaconglomerate) and other rocks found on the island. We then travelled to the northwest part of the island to visit the Fossil Ledges where we spent several hours. These outcrops are known for spectacular examples of well-preserved fossils of various types. I encourage others to think about visiting Drummond Island for the rock outcrop exposures and to spend time in a very peaceful and quiet place.

Our section remains in a good fiscal position. Our primary goal is to continue to cultivate interest in the geosciences as a career and provide scholarships to students and sponsorships for events agreed to by the Executive Committee.

Please feel free to contact any of us on the 2015 Executive Committee if you have any suggestions or ideas for future activities.

Secretary (Tim Woodburne): Although we have each likely been very busy with our work and personal lives, in general the MI-AIPG does not have much work to do after the Workshop. We will start to gear up for the fall presentations and meetings.



During July and August,

two major events occurred for the Michigan Section, as follows:

- Our own Adam Heft from MI-AIPG was elected to the National AIPG position of 2016 President Elect. The election ran during the spring and into summer. Many of us voted for Adam. Thank you very much for your vote for Adam. It means so much to our Section. Congratulations Adam! This is a huge honor for him as well as for MI-AIPG.
- Our summer field trip at Drummond Island was on July 31-August 2, and it was led and organized by Linda Hensel, our Treasurer. Those who attended enjoyed a great field trip.

The Michigan Section decided to donate funds to WMU Geosciences to support their 50 year celebration. We congratulate WMU and appreciate their support of MI-AIPG and their student section.

Finally, we agreed to purchase a hydrogeology groundwater model from WMU Student Chapter. We plan to either donate it to a good cause such as water shed council or a school for education purposes. The chapter plans to use the funds they raised for student research grants.

Past President (Craig Savage): No report.



Coming Events

October 1, 2015: Michigan Section AIPG Meeting, Eberhard Center at Grand Valley State University, Grand Rapids. Mark Sweatman, Director of the MDNR Office of Minerals Management, will be speaking about "Minerals Management of State Owned Properties."

Location: Eberhard Center, Grand Valley State University, Grand Rapids.

Dinner: Cherry Pecan Chicken - Fresh grilled boneless skinless chicken breast glazed with fruit chutney. Served over a pasta rice blend of wild rice, white rice, and toasted orzo and garnished with steamed sugar peas, Honey Maple Salmon - An eight-ounce hand cut filet of salmon enhanced with a blend of honey and maple. Served with wild rice and fresh steamed asparagus, or Cheese Tortellini - A tangy blend of cheeses, fresh vegetables and spinach are baked to perfection.

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 September 28, 2015: RSVP for the meeting on the Eventbrite website no later than September 28th at: <https://www.eventbrite.com/e/aipg-section-meeting-tickets-17532144115>.

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

December 10, 2015: Michigan Section Annual Meeting to be held at the Kellogg Center in East Lansing. Speaker and meeting details to be announced.

June 13-15, 2016: 6th Annual Michigan Section AIPG Summer Workshop. Topic TBD.

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.

2015 Annual Meeting Reminder

Editor's Note: This article appeared in the last two editions of the newsletter. We ask that if you plan to attend the annual meeting, to contact either Adam Heft or Brian Burke. We would like to get a group photograph of all Michigan Section attendees at the meeting.

If you hadn't already heard, the AIPG 2015 Annual Meeting will be held in Anchorage, Alaska!! If you have even considered visiting The Last Frontier at any point in the past, this is your opportunity to make the trek.

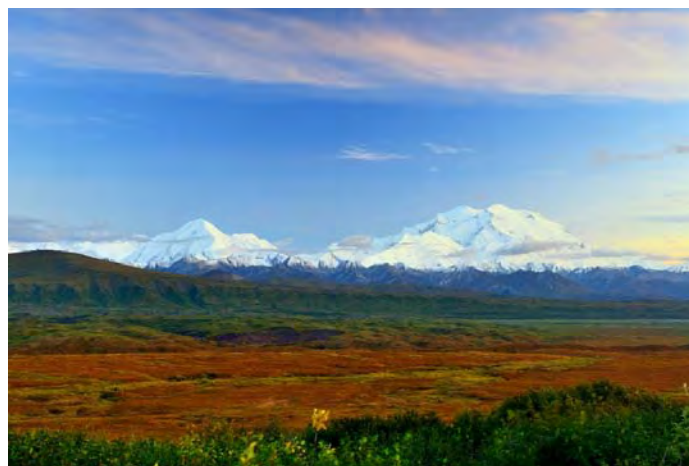
The Alaska Section is looking forward to sharing so much that our amazing state has to offer; unique and complex geology, northern flora and fauna, and breathtaking scenery!! The meeting location is at the Hilton Hotel in the heart of downtown Anchorage, with access to the rich history of our town (Anchorage celebrates the 51st anniversary of the 1964 earthquake and its Centennial this year!), modern amenities (shopping and entertainment), plus quick access to some of the country's most incredible state and national parks.

The appeal of Alaska speaks for itself, but if you need further convincing, we have several excellent field trips and speakers lined up (the call for abstracts is open at <http://www.aipg.org/abstract/>). The full field trip descriptions will be provided soon on <http://www.aipg.org/>, but below is a sampling of the fantastic field trips we have lined up:

- Turnagain Arm Geology Tour (Portage Glacier, Whittier Tunnel, Seward Highway Geology)
- Anchorage Geology Tour (1964 Earthquake tour, Alaska Geological Materials Center)

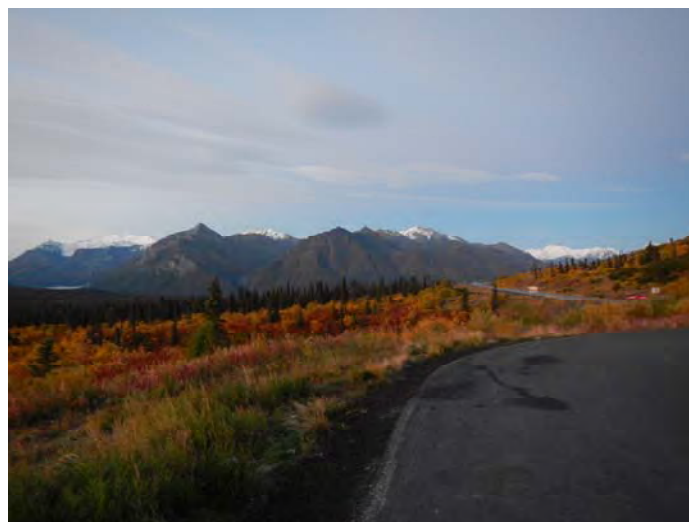
- Denali National Park and Healy Valley Coal Mine (two days)
- Glacial Geology of the Upper Kenai Peninsula (two days)
- Wishbone Hill and Matanuska-Susitna Valley (fossil hunting and coal deposits)
- Pre-meeting Fairbanks trip (Permafrost Tunnel & Fort Knox Gold Mine)

September weather in South-central Alaska is typically mild, with evening and morning temps in the 40s and daytime highs in the 50s. We recommend dressing in layers, and being prepared for rain and cool weather, especially along Cook Inlet and Turnagain Arm.



Denali National Park. Photo courtesy of the National Park Service.

Downtown Anchorage hosts a variety of activities within walking distance of the Hilton, with many fabulous restaurants and local bars, several art galleries and historic buildings, and the Tony Knowles Coastal Trail to stretch your legs and offer sightseeing vantages. For more information in planning your stay, please be sure to visit the Anchorage Visitor's Convention Bureau (<http://www.anchorage.net/>).



Sunrise north of Palmer. Photo courtesy of Keri Nutter.

We look forward to seeing the Michigan Section in September!!!

Keri Nutter, CPG – Alaska Section Vice-President and 2015 Meeting Planning Committee Co-Chair

Seeking Candidates for 2016 Section Secretary

The Section Executive Committee is seeking candidates interested in running for 2016 Michigan Section Secretary. This is a five-year commitment to the Executive Committee, however, the level of effort is fairly light. Benefits to serving on the committee include helping guide the Section's activities, networking with your colleagues, and serving as the Section delegate to the Annual Meeting when you are serving as Section Vice President.

Please submit a short statement of interest and a bio to the Editor by October 15, 2015, so that the information may be placed in the next edition of the newsletter, and will be available when the election opens.

If you have any questions about serving on the Executive Committee, please contact any one of the current officers; they will be happy to discuss it with you.

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.

2015 Summer Field Trip Summary

The Michigan Section AIPG 2015 summer field trip was held on Drummond Island in the very easternmost sections of Chippewa County. A total of 13 participants attended the two day trip.

The trip started on Friday afternoon, July 31st with a visit to the Osborne Materials Drummond Island Quarry. The quarry owner escorted the trip participants into the quarry, which had operations shut down for the weekend for maintenance. They explained the operation of the quarry and answered questions. We were then turned loose for the afternoon to examine the Engadine Formation. A brief rain shower wetted the rocks and cleared some

of the dust and dirt to bring out the details and make fossils more visible.



Group photo at the Osborn Materials Quarry. Photo courtesy of Sara Verbrugge-Pearson.

Participants were able to find pieces of rock with stromatoporoids and other fossils. Some of the pieces of the bedrock surface from the top of the quarry were also seen; the surface had been glacially polished with glacial scratches on it; two different directions of glacial movement were evident on the pieces.



Larry and Robbie Austin examining Engadine Formation in Osborn Materials Quarry. Photo courtesy of Sara Verbrugge-Pearson.

Friday evening the trip participants gathered in the township park for a whitefish dinner cooked over coals in foil. Potatoes, vegetables, s'mores, and a variety of tasty beverages completed the fare. Thanks to Linda Hensel for preparing the food and securing the pavilion for the evening.

Saturday morning, participants gathered at The Rock Shop to view their puddingstone cutting and processing operation and buy souvenirs. From there, participants made a roadside stop on the way to the northern side of the island. Following a poor quality road to the northeast side of the island

allowed participants to view the fossil ledges. This mile-long outcrop along the water's edge contained numerous different fossils. Participants enjoyed lunch on the ledges, and saw three bald eagles circling overhead. Although an afternoon rain shower cut short the visit to the ledges by most participants, others stayed to enjoy a walk along the water's edge and view additional fossil exposures farther from the parking area. On the way out, a black bear was sighted crossing the road. Participants gathered for dinner at the Northside Restaurant that evening.



Trip participants at the fossil ledges on the northeast side of Drummond Island. Photo courtesy of Sara Verbrugge-Pearson.

The planned itinerary for Sunday changed due to the presence of a large manhunt for a murderer at the planned destination, so instead of going to Neebish Island, participants went to Scott Quarry on the mainland, where the Schoolcraft Formation and Cordell Formation were present. Heavy rain dampened those few participants who went to the quarry, but all felt it worthwhile.



Cluster of stromatoporoid fossils. Photo courtesy of Sara Verbrugge-Pearson.

The trip home was complicated by the weather; the Mackinac Bridge was closed following the passing of severe storms with high winds that flipped a trailer on the bridge and blocked traffic. Several hours passed after the bridge reopened before traffic had sufficiently unsnarled to allow a crossing. And travel was further delayed by a power line that crossed I-75 at Grayling fell and completely blocked traffic.

We hope you will join us for the 2016 Summer Field Trip! Details of next year's trip will be forthcoming.

Adam Heft, CPG – Newsletter Editor

AIPG Section Leadership Award

The Michigan Section is pleased to announce that one of the 2015 Section Leadership Award recipients is our own **Sara Pearson!**

This award is given by the National Executive Committee during the Annual Meeting, and is intended to recognize members that have demonstrated a long-term commitment and have been long-term contributors to AIPG at the section level.

Please join the Section Executive Committee in thanking Sara for the active role she takes in the Section's activities.

Congratulations Sara!!

Michigan Department of Environmental Quality News

Environmental Remediation and Risk Management Conference – Registration is Now Open!

October 1

Suburban Collection Show Place, Novi

October 7

Park Place Hotel, Traverse City

October 14

Crowne Plaza, Grand Rapids

The Michigan Department of Environmental Quality (DEQ) Remediation and Redevelopment Division (RRD) is pleased to announce that registration is now open for the Environmental Remediation and Risk Management Conference.

The conference is being offered in three prime locations across the state and features case studies highlighting areas where significant changes to Michigan's regulatory framework have been made in recent years. Significant regulatory changes have created opportunities for promoting cost effective

remediation solutions and managing risks using sound science and mechanisms to promote the protection of human health.

These areas highlighted in the conference include Groundwater / Surface Water Interface, Vapor Intrusion, Land and Resource Use Restrictions, and No Further Action/Technical Highlights. Case studies will be presented in four concurrent tracks on each of the topics offering attendees the opportunity to select sessions based on interest in a specific topic or site. Each conference date will also offer some variation in content featuring sites from the region where the conference is located.

The case studies will feature real sites and real site conditions concentrating on how the DEQ staff and consultants and/or owners have worked in partnership to achieve environmental remediation or risk management objectives at sites.

This conference is not one to be missed. It provides examples of real strategies for solving complicated problems associated with managing risks and addressing releases of hazardous substances.

Who should attend?

The conference presentations will be beneficial for state and local government agencies; environmental consultants, attorneys, and practitioners; federal and tribal agencies; owners and operators of contaminated properties; and environmental organizations.

Sponsor and Exhibitor Opportunities Are Available.

Conference at a glance:

- 7:30 am Registration and Continental Breakfast
- 9:00 am Welcome and Opening Remarks
- 9:15 am Keynote Speaker
- 10:00 am Break – Networking/Exhibits
- 10:30 am Part 201 Overview
- 11:00 am Multiple Short Case Studies
- 12:00 pm Lunch
- 1:00 pm Four Concurrent Tracks: Case Studies
- 3:00 pm Break – Networking/Exhibits
- 3:30 pm Four Concurrent Tracks: Case Studies

Article provided by Sara Verbrugge-Pearson, CPG – MDEQ RRD Program Specialist

CMU Student Chapter Thank You

Editor's Note: The following text is a transcript of a letter from student chapter faculty sponsor Sven Morgan to the Section Executive Committee in response to the 2015 sponsorship of the student chapter.

Dear Dawn and Linda,

Thank you so much for your very generous contribution to our AIPG student Chapter at CMU! The \$1,000 donation will assist chapter members in attending professional conferences and meetings (including AIPG meetings) and going on field trips to local landfills, well-sites, core facilities at Western Michigan, and assist members in their outreach activities at local schools and children's events in town.

Again, thank you! Our students have made valuable connections through AIPG and have also gained much insight concerning our profession. Many of our Alumni are active members (including Adam Heft!).

Sven Morgan, Professor, Department of Earth and Atmospheric Sciences, CMU

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.

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.

YouTube Videos on Archival Photographs and Video of the 1906 San Francisco Earthquake: <https://www.youtube.com/watch?v=mvve8YiYGSo>.

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.

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.

Employment Opportunities

EXECUTIVE DIRECTOR SEARCH

The American Institute of Professional Geologists 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 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.

Mailing address:

AIPG Executive Director Search Committee
American Institute of Professional Geologists
12000 North Washington Street, Suite 285.
Thornton, Colorado 80241

Seeking Employment

Entry Level Geologist Seeking Employment:

My name is Eric Rademacher. I currently graduated from Central Michigan University with a Geology major. I'm looking for full-time employment. Working with different teams while using unique skills to succeed in a required task. Persistent, punctual, polite and hardworking. Please contact me at 989-388-6666.

Newsletter Sponsors

**Brand New Name.
Decades of Experience.**

FMC Environmental Solutions is now PeroxyChem.



 **PeroxyChem**
www.peroxychem.com/remediation

PEARSON DRILLING CO.

6100 West Blue Road (M-55) • Lake City, Michigan 49651

William F. Pearson, P.E.
President

231-839-4444
231-839-3678 Fax

Email: wpearson@pearsondrilling.biz
www.pearsondrilling.biz



**Concerned about Site Remediation Budgets,
Timelines and Technology Performance?**

We can help.

- Scalable site remediation solutions for almost any budget
- Expertise and experience to meet timeline expectations
- Proven remediation technologies on over 20,000 sites worldwide
- Combined remedy approaches to maximize performance and cost savings

www.regenesisis.com
(949) 366-8000



EQ – THE ENVIRONMENTAL QUALITY COMPANY

Total Waste Management
Industrial Cleaning
Waste Treatment
Transportation
Remediation
Recycling
Waste Disposal
Technical Services
Emergency Response
Wastewater Treatment



EQ IS THE ANSWER

36255 Michigan Avenue
Wayne, Michigan 48184
(800) 592-5489 www.EQonline.com

We
Now
Offer

Full Service
Sonic
Drilling

www.stockdrilling.com



Stock DRILLING, INC.

Licensed in...
Michigan
Ohio
Indiana
Kentucky
Tennessee
Pennsylvania
New York



Our Services

- 1/2 inch thru 10 inch well installation
- 2.25 inch thru 12.25 inch hollow stem auger drilling
- Sonic Drilling 4" to 12"
- Solid stem auger drilling
- Mud & air rotary drilling
- Cable tool drilling 4 inch thru 8 inch
- Core drilling
- Geoprobe drilling
- Geoprobe water sampling
- Ground water sampling
- Hydropunch sampling
- Inflatable packers
- Screened augers
- Vertical aquifer profiling
- Chemical and mechanical well development and rehabilitation
- ORC & injection services
- Well repair and cleaning
- Well removal and abandonment
- Remediation system installation and repair/abandonment
- Methane extractions points
- Pumping system installation, repair & service
- Remote water pumping systems
- Trenching and light excavation services
- Airknife services
- Direct Imaging Services
 - MIP
 - EC
 - LIF
 - HPT
 - CPT
 - Gamma Logging
 - Downhole Video

Contact Us At:

rich@stockdrilling.com

734-279-2059

734-279-2076 fax

NTH Consultants, Ltd. (NTH) employs a team of geologists, engineers, and regulatory professionals with extensive knowledge and experience in performing geologic, geotechnical, and environmental site investigations.

As a nationally recognized engineering firm, NTH has been specializing in geotechnical, environmental, and facilities engineering since 1968.

EverydayBrilliance

Brilliant engineering solutions - delivered daily.



NTH Consultants, Ltd.

Infrastructure Engineering
and Environmental Services

(800) 736-6842

www.nthconsultants.com



Fibertec

The Choice of Environmental Professionals

- » Analytical Laboratory
- » Geoprobe/Subsurface Investigations
- » Industrial Hygiene
- » NELAC Accredited
- » Electronic Data Deliverables (EDDs)
- » Private Utility Locating

Holt • Brighton • Cadillac (517)699-0345 www.fibertec.us

when your
research
demands
quality data



EDAC

**ENVIRONMENTAL DRILLING
AND
CONTRACTING INC.**

KIRK JOHNSON
PRESIDENT
4692 - 136th Avenue
Holland, MI 49424

Ph. (616) 738-9300
Cell (616) 403-6723
Fax (616) 738-8135
email: edac@tds.net



Characterization – Instrumentation – Remediation

David A. Wardwell
President

417 Rosewood Ave. SE
Grand Rapids, MI 49506
Office (616) 459-2849
Mobile (616) 450-5788
Fax (616) 459-2856

dave@dunetechnologies.com
www.dunetechnologies.com



Geotechnical & Environmental Drilling Services
Since 1974

MATECO Drilling
Introduces the
Geoprobe® 8140 DT Rotary Sonic

- Impressive Power / Compact Package
- Powered with a Geoprobe® GV-4 Sonic Head
- Equipped with Remote Control and Rubber Tracks
- Handles 4x6 Tooling

800-968-3475 • www.mateco.com



L · A · B S · C · I · E · N · C · E · S

YOUR LAB OF CHOICE

Founded 1970

ESC is the largest and most certified single location lab in the US

Analytical Services

Water - Drinking Water - Mold
Solid/Solid Waste - Biological - Air
NELAP, A2LA, AIHA, DOD
IHLAP, ELLAP, EMLAP, USDA

Internet Access - Password Protected Web site
Custom Sampling Kits - Saturday Receiving

ESC Lab Sciences is equipped and certified to support your work nationwide from one location.

ONE phone call, ONE point of contact, ONE Laboratory

No other lab is as accessible or prepared to handle your needs through the country.

ESC is pleased to announce that we are accepting the Reduced Volume methods for Groundwater samples for PAHs, DROs SVOCs PCBs & Pesticides in Michigan. Using 40 mL amber vials and/or 100 mL amber jars, these Reduced Volume methods replace the 1 liter amber bottles that have previously been used.

Please contact Duane Hattem (616) 307-1587 or dhattem@esclabsciences.com
www.esclabsciences.com

RENTALS • SALES • SERVICE



A Sample of Our Rental Inventory:

- GPS
- Groundwater Sampling Equipment
- PIDs/FIDs
- Soil Sampling Kits
- Toxic Gas Monitors
- XRF Analyzers for Soil Sampling
- And much more!!

Consumables and PPE Supplies:

- Ear, Head and Eye Protection
- Gloves
- Safety Apparel
- Custom Logo Imprinting Available
- And much more!!

To view our complete inventory on line visit www.ashtead-technology.com

Call us toll-free 800-242-3910

The Ashtead office servicing your area is located at:
Park 100 7144 Zionsville Rd., Indianapolis, IN 46268 • 317-238-3441



Engineering Innovation



Gannett Fleming

*Excellence Delivered **As Promised***

Infrastructure • Environment • Technology • Civil • Transportation • Geotechnical
Water/Wastewater • ITS • Industrial/Commercial • Mechanical Electrical • Construction Management

Brian R. Kardos, PE • bkardos@gfnet.com • 734.973.8580 • www.gannettfleming.com • Offices Worldwide

ISO 9001:2008
CERTIFIED

The logo for amec, with the word "amec" in a bold, lowercase, sans-serif font, followed by a stylized blue and white globe icon.

amec

- Hydrogeologic Services
- GeoEnvironmental and Remediation Services
- Solid Waste Services
- Industrial Minerals and Mining Services
- Legal Support

248-926-4008

AMEC

Environment & Infrastructure, Inc.

46850 Magellan Drive

Suite 190

Novi, MI 48377

For a list of office locations,
visit us online at amec.com





Accutest is a national environmental testing laboratory network successfully delivering defensible data for over 50 years. Accutest is the nation's 3rd largest environmental testing laboratory combining advanced technology and experienced personnel to deliver "Total Performance You Can Count On".

Environmental Testing Services & Capabilities

- Water
- Waste Characterization
- Soil, Solids & Sediments
- Petroleum Forensics
- Ambient Air, Indoor Air, Soil Vapors
- Emerging Contaminants
- Energetics & Explosives
- DoD Laboratory Accreditation
- Real Time Data Access
- Electronic Data Deliverables (EDDs)

Courier Service Available at No Additional Charge

Accutest Mid-West, Traverse City, MI
Jason Myers • 734-545-3176 • jasonm@accutest.com

Locations Nationwide www.accutest.com



Founded in 1988, ECT is a multidisciplinary environmental consulting firm with more than 200 employees to serve your needs throughout the world.

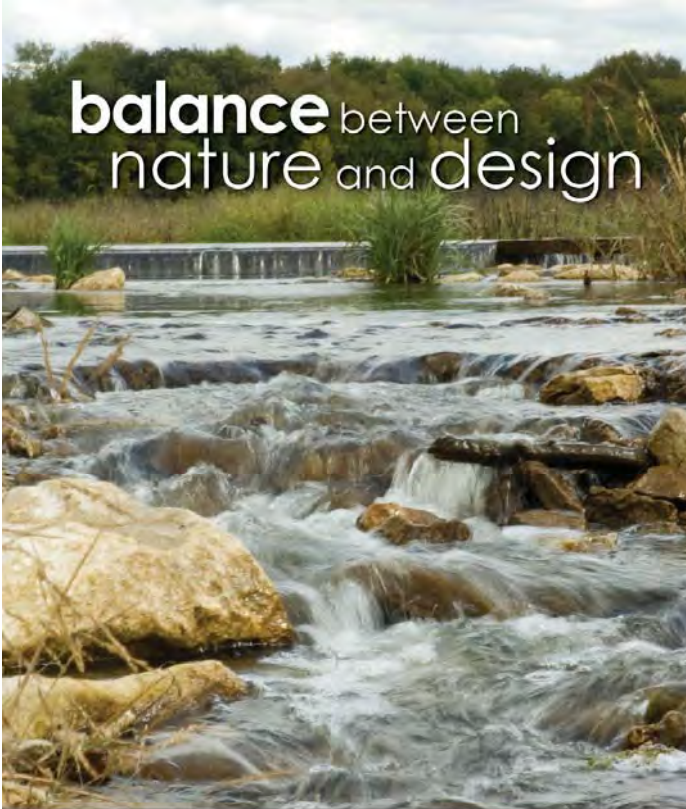
Services provided include:

- Economic feasibility evaluation
- Remediation alternatives evaluations
- Remedial action planning and design
- Tank removal and soil excavation management
- Remediation and site closure
- Expert witness testimony
- Emergency response plans
- Industrial hygiene surveys
- Worker health and safety
- Indoor air quality/sick building syndrome, mold
- Asbestos, lead paint, and radon surveys and abatement
- Environmental risk and liability management
- Wetland and biological impact assessments
- Hazardous waste and petroleum contamination investigations and assessments

An Engineering News Record Top 200 Environmental Firm since 1995.

www.ectinc.com

Operating within North Carolina as "Environmental Consulting & Technology of North Carolina, PLLC."



balance between nature and design



www.ftch.com | 1.800.456.3824 | Follow us on:
Fishbeck, Thompson, Carr & Huber, Inc.
engineers | scientists | architects | constructors

Applied Water Quality and Environmental Sciences
Since 1992



- Ecological Assessments
- Vibracore Sediment Sampling
- Water and Sediment Toxicity Testing
- Groundwater - Surface Water Interface Studies

• John Barkach ph:238-538-0900 jbarkach@glec.com



▶ CREATING FLUID SOLUTIONS

Let our Water Services Group work with you—from characterization and evaluation, to design-build and compliance—to deliver effective strategies for all your water management needs.

- Water & Wastewater Treatment
- Groundwater
- Coastal & Marine
- Surface Water & Hydrogeology

Technical excellence. Sustainable solutions. Global reach.

golder.com/water



LimnoTech

Water | Scientists
Environment | Engineers

LimnoTech is an international leader in helping clients make informed decisions to solve their water resource challenges using the latest water science and engineering.

- Watershed Planning and Management
- Environmental Modeling
- Aquatic Ecosystem Assessment and Restoration
- Drinking Water Supply and Protection
- Contaminated Site Evaluation and Remediation
- Surface Water and Groundwater Characterization
- Stormwater and nonpoint source water management
- Permitting and Regulatory Assistance
- Hydrogeological Studies
- Green Infrastructure, Water Footprinting and Low-Impact Development Solutions
- Climate Change Adaption and Water Sustainability

www.limno.com

Ann Arbor, MI • Washington, DC
Minneapolis-St. Paul Region • Los Angeles Region



**PROVIDING SUSTAINABLE SOLUTIONS
FOR DEVELOPMENT, CONSTRUCTION,
RESTORATION AND REDEVELOPMENT
CHALLENGES FOR OVER
50 YEARS**

**Passionate People Building and
Revitalizing our World**

**(800) 837-8800
www.sme-usa.com
Indiana • Michigan • Ohio**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica offers local service and access to our network of laboratories to meet all your environmental testing needs.

- Largest network of full-service laboratories in the U.S.
- Experienced personnel, knowledgeable about Michigan's environmental regulatory program
- Local, personalized customer service, technical support, courier and sampling services
- TotalAccess® 4.0 - the industry's leading real-time online data management tool

For more information, please contact:

Gail Carr | Tel: 734.276.7655
Gail.Carr@testamericainc.com

Dave Lanzola | Tel: 216.857.2972
Dave.Lanzola@testamericainc.com

www.testamericainc.com



Engineering
Environmental Consulting
Program Management
Construction
Technical Services

www.tetrattech.com

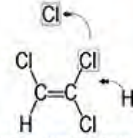
710 Avis Drive
Ann Arbor, MI 48108
734-213-2204



ORIN Technologies



Chemical Oxidation



Reductive Dechlorination



Free Product Removal



Metal Remediation



Traditional and Advanced Oxidation



Wastewater Treatment

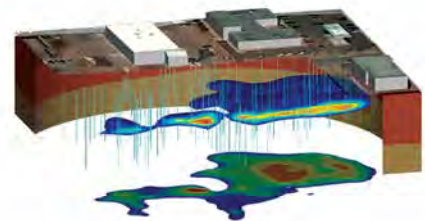
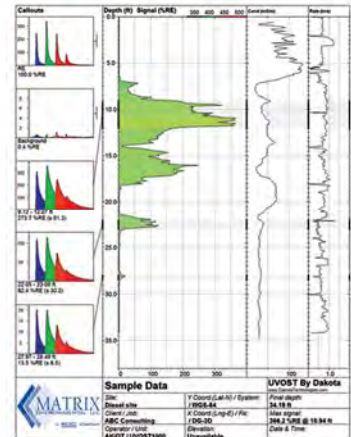
ORIN Technologies, Inc. (ORIN) mission is to provide innovative remediation and water treatment services using emerging and proven technologies resulting in total client satisfaction.

ORIN TECHNOLOGIES
405 INVESTMENT COURT
VERONA, WI 53593
(608) 838-6699
lkinsman@orinrt.com
<http://ORINRT.com>



Site Characterization Professionals

- ◆ **Geoprobe®**
Track Units, 4x4 Trucks and Portable Units
- ◆ **Direct Sensing**
UVOST - Laser Induced Fluorescence
MIP - Membrane Interface Probe
HPT - Hydraulic Profiling Tool
EC - Electrical (Soil) Conductivity
SCOST - Soil Color
- ◆ **Integrated Site Visualization (ISV™)**
2D and 3D visualizations of direct sensing data



Galena, OH
(740) 965-8271

MATRIX ENVIRONMENTAL LLC
www.matrixenv.com
email: customerservice@matrixenv.com

Maple Grove, MN
(763) 424-4803
Morris, MN
(320) 489-4610



SE Somat Engineering,
INCORPORATED

Specializing in engineering services vital to our community and quality of life.

- Environmental Engineering ■ Construction Testing ■ Civil Engineering
- Geotechnical Engineering ■ Structural Engineering ■ UVOST Services

660 Woodward Avenue
Suite 2430
Detroit, Michigan 48226
313.963.2721
www.somateng.com

Detroit ■ Taylor ■ Grand Rapids ■ Cleveland ■ Brooklyn Heights ■ Beltsville ■ Washington, DC

URS



100+ Years of Complete Environmental
Unmatched, Reliable and Sustainable

ENVIRONMENTAL SERVICES

- Due Diligence
- Compliance Audits
- Remediation and Redevelopment
- Remedial Investigation, Design and Construction
- Ecological and Wetlands
- Groundwater Modeling/Contaminant Transport
- Risk Assessment
- Air Quality



For more information, please visit us at:
www.urs.com



Service from a larger **footprint**

Conestoga-Rovers & Associates
(CRA) and GHD have come
together in an exciting merger
unparalleled in our industry

We have joined together to create
a global leader in engineering,
environmental consulting,
architecture, and construction
services

For more information about GHD,
visit **www.ghd.com**



TECHNICAL SKILL .
CREATIVE SPIRIT .

Celebrating Over 55 Years of Award Winning Service

Engineering Solutions that work for your business

SURVEYING
GEOTECHNICAL ENGINEERING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL CONSULTING
CONSTRUCTION ENGINEERING



Canton, MI
(734) 397-3100

Detroit, MI
(313) 961-9500

Lansing, MI
(517) 316-9232

Monroe, MI
(734) 289-2200

Traverse City, MI
(231) 929-7330

Maumee, OH
(419) 891-2222

Columbus, OH
(614) 441-4222

Cleveland, OH
(216) 378-1490

WWW.MANNIKSMITHGROUP.COM



Superior

ENVIRONMENTAL CORP



- Hydrogeological Investigations
- Remedial Investigations
- Remediation System Design And Construction
- LUST Management
- Phase I/II ESA
- Baseline Environmental Assessments
- Pilot Studies
- Fate and Transport Modeling
- Drilling
- Badger Injection

Superior Environmental Corp
1128 Franklin Street
Marne, MI 49435
(800) 968-4006

**Serving the Great Lakes Region
and beyond.**

For a complete list of locations,
please visit us at
www.superiorenvironmental.com



PROFESSIONAL SERVICES OFFERED BY GLOBAL REMEDIATION TECHNOLOGIES, INC.

Field Investigation Services

- Remedial investigation
- Phase I & Phase II ESA
- Hydrology/Surface water assessment
- Environmental sampling & monitoring
- Hydrogeology assessment (aquifer testing/profiling)

Mapping & Modeling

- Groundwater flow maps
- Cross-section development
- Reactive transport modeling
- Environmental impact mapping
- 3D contaminant solids modeling

Environmental Engineering

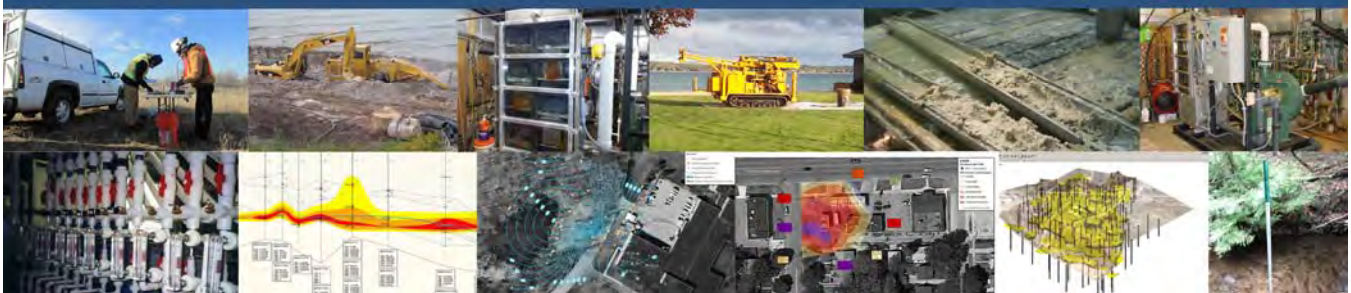
- Feasibility studies
- Bid specifications
- Treatability study design
- Remediation system design & engineering
- System start-up, evaluation & optimization

Compliance

- Risk assessments
- Low-cost closure strategies
- Air permitting & emissions reporting
- Litigation support & expert testimony
- NPDES permitting & regulatory strategies

GRT, Inc. 1102 Cass Street - Traverse City, Michigan 49684 · PHONE: 231-941-8622 FAX: 231-941-4131 · Website: www.grtusa.com

Contact: Richard Raetz



GEOSCAPE

EST



2010


Rock Shop



ROCKS - MINERALS - FOSSILS
JEWELRY - LANDSCAPE ROCKS

Open Weekends: Fri&Sat: 11am-7pm
Sun: 11am-5pm

37111 RED ARROW HWY,
PAW PAW, MI

 Like us on
Facebook!



Contact Brian Root
+1 616 399 6070
www.alsglobal.com

Full-Service Analytical Testing

- Soil
- Water
- Sediment
- Leachates
- Dust
- Air
- Gas
- Biota

Plus:

- Webtrieve™
Online & Mobile
Data Access
- After-hour &
Weekend
Sample
Receipt



Our Holland, MI laboratory is an **Ohio VAP-certified** facility.
We provide **daily courier service** to the
greater Columbus, Cleveland and Cincinnati areas.

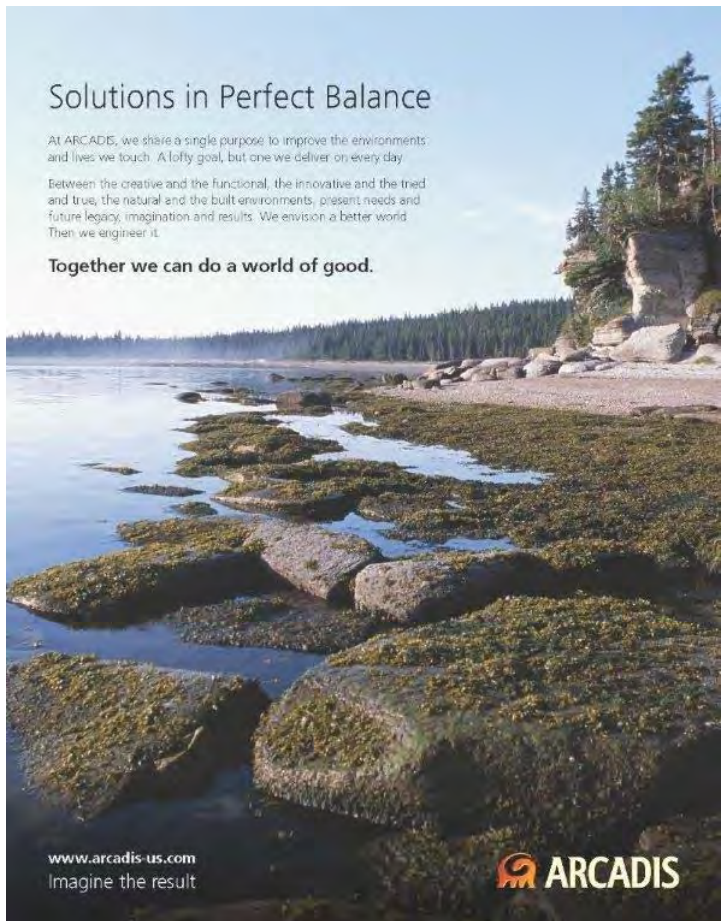
Contact Brian Root to schedule a pick-up today!

Solutions in Perfect Balance

At ARCADIS, we share a single purpose to improve the environments and lives we touch. A lofty goal, but one we deliver on every day.

Between the creative and the functional, the innovative and the tried and true, the natural and the built environments, present needs and future legacy, imagination and results. We envision a better world. Then we engineer it.

Together we can do a world of good.



www.arcadis-us.com
Imagine the result

 ARCADIS



Innovative Remediation TECHNOLOGIES

Innovative Remediation Technologies (IRT) is a complete turnkey remediation service based in Chicago that works for you to achieve your remediation goals by utilizing our own state-of-the-art mixing and injection equipment. Since 1997, IRT has successfully remediated hundreds of sites in 26 states. We routinely handle sites contaminated with VOCs, such as chlorinated solvents, herbicides, and various petroleum products, including motor oils, kerosene and heating oils. With us, you have a proven and trusted partner to aid in achieving your site remediation goals.

IRT offers innovative solutions to your site remediation issues by providing site evaluation, customized remedial design, and complete field application services. We work solely with environmental consultants and engineers and provide innovative site remediation solutions, including In-Situ Chemical Oxidation (ISCO) with enhanced bioremediation, activated carbon (AC) and soil mixing at a wide array of industrial and commercial sites in a variety of subsurface environments.

For more information about IRT's services, visit our website at www.irtechllc.com.

ERG Environmental Resources Group
Assessment • Remediation • Compliance • Risk Management
ergrp.net

Assessment
Remediation
Compliance
Risk Management

28003 Center Oaks Ct., Ste. 106
Wixom, MI 48393
248.773.7986 p 248.924.3108 f

75 W. Walton Ave., Ste. C
Muskegon, MI 49440
231.747.8556 p 231.747.8558 f



Civil & Environmental Consultants, Inc.



CEC Detroit's team of engineers and professionals offers integrated expertise to tackle diverse challenges in the Michigan communities where we practice.

If you're looking for a strategic business partner or meaningful employment with opportunity for growth, look to CEC.

Contact: Ryan Dunning | rdunning@cecinc.com
44725 Grand River Avenue, Suite 104
Novi, MI 48375
Local: (248) 374-8600 | Toll-Free: (866) 380-2324

Services

- ▶ Civil Engineering
- ▶ Ecological Sciences
- ▶ Environmental Engineering & Sciences
- ▶ Waste Management
- ▶ Water Resources

Industries

- ▶ Manufacturing
- ▶ Mining
- ▶ Natural Gas
- ▶ Power
- ▶ Public Sector
- ▶ Real Estate
- ▶ Solid Waste



www.cecinc.com

Geosyntec[®] consultants



Providing exceptional project solutions related to the environment, natural resources, and civil infrastructure

Contact
Rob Ferree
3520 Green Court
Ste. 275
Ann Arbor, MI 48105
(734) 332-8004

geosyntec.com

NATURAL RESOURCE TECHNOLOGY, INC.

"smarter solutions, exceptional service, value"

Natural Resource Technology provides environmental consulting services to private and public clients in the energy, industrial, real estate, government, and legal sectors.



- Ecotoxicology
- Sediment Management
- Site Characterization & Permitting
- Brownfield Redevelopment
- Contaminated Site Closure
- Water Resource Management
- Solid & Hazardous Waste Management
- Corporate Risk Management
- Compliance

2260 E. Saginaw Street
East Lansing, MI 48823
517-896-1288



www.naturalrt.com ■ 414-837-3607

BIG OR SMALL
WE ALL
CAN MAKE A
WORLD
OF DIFFERENCE



Incorporated in 1992, Global Environmental Engineering Inc. is a full service environmental engineering firm specializing in a variety of environmental services and wastewater treatment. Global employs engineers, geologists, biologists, environmental scientists and technicians with offices in Traverse City and Flint, Michigan.



LEARN MORE AT
WWW.GLOBALEEI.COM





**High Resolution
NAPL Characterization
Since 1993**

**UVOST®
TarGOST®
Darts™
DyeLIF™**



learn more at www.dakotatechnologies.com



The BARR logo consists of the word "BARR" in a bold, blue, sans-serif font, positioned below a solid blue square.A black and white photograph of two construction workers in hard hats and safety vests. One worker is on the left, looking towards the right. The other worker is on the right, looking up at a piece of machinery being lifted by a crane. The machinery is a large, dark, cylindrical component with a hook attached to the top. The background shows a field with trees and a utility pole.

great opportunities

Barr's employee- and community-focused culture has earned us repeated recognition as a "best place to work" locally and nationally. *CE News*, *Environmental Business Journal*, and *ZweigWhite* frequently name us one of the top environmental and civil engineering firms in the nation to work for. What differentiates Barr from other firms?

- positive relationships between employees and company leaders
- career coaching and mentoring
- an annual training budget for self-directed development and training for every employee
- flexibility and commitment to the importance of worklife balance
- community involvement
- a compensation structure that rewards performance, compensates every hour worked, and includes ESOP and dividends

who we are and what we do

Barr is an employee-owned firm that integrates engineering and environmental expertise to help clients develop, manage, process, and restore natural resources.

We serve the fuels, power, and mining industries, natural-resources management organizations, and other clients with complex problems. Barr makes a company-wide commitment to client service, applying the principles of exceptional service to staff and client interactions.

Barr is seeking engineers and scientists at all levels to join us in solving our clients' problems. View our current openings and apply online at www.barr.com/careers.



Barr Engineering Co.
800.632.2277
www.barr.com

Linked in

f Find us on
Facebook

resourceful. naturally.®

MICHIGAN | MINNESOTA | MISSOURI | NORTH DAKOTA | ALBERTA

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

October 1, 2015

MINERALS MANAGEMENT OF STATE OWNED PROPERTIES

Featured Speaker

[Mark Sweatman, Director, Michigan Department of Natural Resources Office of Minerals Management](#)

Location: Eberhard Center, Grand Valley State University, Grand Rapids, 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: Cherry Pecan Chicken - Fresh grilled boneless skinless chicken breast glazed with fruit chutney. Served over a pasta rice blend of wild rice, white rice, and toasted orzo and garnished with steamed sugar peas, Honey Maple Salmon - An eight-ounce hand cut filet of salmon enhanced with a blend of honey and maple. Served with wild rice and fresh steamed asparagus, or Cheese Tortellini - A tangy blend of cheeses, fresh vegetables and spinach are baked to perfection.

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 September 28th at: <https://www.eventbrite.com/e/aipg-section-meeting-tickets-17532144115>. 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: In 2014 over 45 Million dollars of royalty revenues were generated from leasing activities of State of Michigan owned minerals. These minerals included Fuels (oil and gas) as well as Non Fuels (Metals and Non-Metals). Revenues, none of which are general fund revenues, are used to manage State Parks and also to fund the purchase of critical habitat lands. Mr. Sweatman will discuss his new role as the Director of the Office of Minerals Management, how the OMM views its role in the management of State owned properties and/or mineral rights and ongoing minerals initiatives.

Speaker Bio: In July 2015 Mark Sweatman joined the Michigan Department of Natural Resources as its director of the Office of Minerals Management, overseeing mining and oil and gas development on state-managed public lands. Mark is a certified professional geologist with over 30 years of experience in environmental, geologic, hydrogeologic and regulatory compliance issues. He has completed hundreds of projects throughout the Midwest and has broad knowledge and experience working with private industry as well as regulatory agencies at all levels of government. Prior to joining the DNR, Mark was principal hydrogeologist at AMEC Foster Wheeler in Novi, MI. Previously, he was vice president, Midwest Region, for BCI Engineers & Scientists in Lakeland, FL, and co-founder and president of Insight Environmental Services in Michigan. Mark has a master's degree from Eastern Michigan University and a bachelor's degree from Fitchburg State University. Mark has served as an expert witness in a number of legal cases. He co-authored several publications in the field of geotechnical services, served an adjunct professor at Cleary College and Eastern Michigan University, is on the American Institute of Professional Geologists national screening committee, past president and national treasurer and is active in community activities in the Brighton area. He has two sons, is an avid fisherman, and enjoys hunting and mineral collecting.

AIPG Michigan Section Meeting October 1, 2015

Eberhard Center, 301 Fulton W, Grand Rapids

