

ON THE ROCKS

A Newsletter of the Michigan Basin Geological Society



2020-2021 Edition 3

www.mbgs.org

December 2021



MBGS DECEMBER MEETING

Please join us on December 8th 2021 for an informal social meeting for members at Lawton Ridge Winery. Lawton Ridge Winery is located at 8456 Stadium Dr., Kalamazoo, Michigan 49009. [Map/Directions – Lawton Ridge Winery](#)

MBGS has made a reservation for a group in the tasting room from 4:30PM to 6:00PM. Appetizers will be available. Cost is \$10 per person to cover expense for the appetizers. The cost for wine tasting is \$6 to taste six wines or wine can be purchased by the glass. ***Please RSVP to Peter Rose at delta13cpupik@gmail.com by December 6th, 2021***, and include Lawton Ridge Winery in the subject line. Reservations are important so we can plan accordingly.

“Welcome to Lawton Ridge Winery! We’ve been growing wine grapes at our vineyard in Lawton, Michigan since 1974, and we opened our production facility and tasting room on Stadium Drive in Kalamazoo in 2008. All of the wine that we produce comes from grapes grown either in our vineyard or in neighboring vineyards in the Lake Michigan Shore AVA. While we make a variety of wines, we strive for well balanced, food-friendly wines ranging from elegant, dry reds to dessert wines, many of which have already won awards. The grapes are in Lawton...your fun is in Kalamazoo!” To learn more visit: Lawton Ridge Winery: <http://www.lawtonridgewinery.com/>

OPPORTUNITY FOR PRESENTORS

MBGS is seeking presenters for Michigan Basin geologically-related topics for our 2021-2022 membership meetings. Our intent is to host virtual monthly one-hour meetings October 2021 through May 2022. If interested, please contact our current Vice President, Adedoyin Adeyilola, at adeyi1a@cmich.edu.

2021 MBGS E.Z. MANOS MEMORIAL SCHOLARSHIP - DEADLINE EXTENDED

Michigan Basin Geological Society will award two scholarships up to \$500 each to students conducting graduate or undergraduate research in geology related to Michigan. The scholarships will be awarded at an upcoming MBGS meeting and the winner(s) will be notified in January. We hope recipients can attend a spring MBGS meeting to present their research topic.

Candidates should complete and submit the MBGS scholarship application form by **December 20th, 2021** to John A. Yellich, MBGS Secretary, at john.a.yellich@wmich.edu with subject Line: MBGS Scholarship 2021. Applications and more information can be found on MBGS’s website: www.mbgs.org

MBGS MEMBERSHIP DUES

MBGS continues to strive to provide a platform for geologist and environmental professionals to connect and offer learning and field trip opportunities. For 2021-2022, our annual dues are \$35. *Student Membership is free.* We now offer the option to renew via PayPal. Please refer to the renewal notices that are included in the newsletter.

Student Membership is free, see website for registration details.

EVENTS

Many organizations have switched to virtual platforms or have cancelled events. We are providing links for your reference. Please visit these sites to learn more about specific events and happenings. If you have an event to share, let us know!



American Institute of Professional Geologist – Michigan Section – <http://mi.aipg.org/newsletters.htm>
Central Michigan Lapidary and Mineral Society - <http://www.michrocks.org/>
Eastern Section AAPG - <https://www.esaapg.org/>
EGLE Calendar of Events - https://www.michigan.gov/egle/0,9429,7-135-3308_3333---,00.html
Flint Rock and Gem - <https://flintrockandgem.org/events>
Michigan Association of Environmental Professionals - <https://www.maep.org/>
Michigan Basin Geological Society – www.mbgs.org
Michigan Clean Water Corps - <https://micorps.net/about/>
Michigan Mineralogical Society - <https://www.michmin.org/>
Mid-Michigan Rock Club - <http://www.midmichrockclub.com/?Page=1>
Midwest Mineralogical and Lapidary Society - <http://www.mmls.us/>
Society of Petroleum Engineers - <https://www.spe.org/events/calendar/>

On the Calendar

December 2, 2021: Groundwater Modeling for Non-Modelers. [Community Calendar - American Institute of Professional Geologists \(aipg.org\)](#)

December 8th, 2021: MBGS Monthly Meeting

December 9th, 2021: MAEP Annual Meeting, Ann Arbor, [Michigan Association of Environmental Professionals - 2021 MAEP Annual Meeting](#)

December 20th, 2021: MBGS Scholarship Applications Due. Applications are available on the website at www.mbgs.org

June 14-15th, 2022: Environmental Risk Management Workshop at the Ralph A. MacMullan Conference Center, Roscommon, Michigan

August 6-9th, 2022: 58th Annual AIPG Meeting to be held in Marquette, Michigan

www.mbgs.org

ONLINE RESOURCES

- **Central Michigan University, Clarke Historical Library, Michigan Geology:**
https://www.cmich.edu/library/clarke/ResearchResources/Michigan_Material_Statewide/Michigan_Oil_and_Gas_Industry/History_of_Michigan_Oil_and_Gas/Pages/Michigan-Geology.aspx
- **Digital Geology Library Overview:** https://www.michigan.gov/documents/deq/GIMDL-Catalog-2010-01-20_307979_7.pdf
- **Digital Geology Library Mining Overview:** https://www.michigan.gov/documents/deq/GIMDL-Catalog-2013_06_22_mining_425595_7.pdf
- **GeoWebFace:** https://www.michigan.gov/deq/0,4561,7-135-3311_60700--,00.html
- **Michigan Department of Natural Resource Calendar:** Michigan.gov/DNRCalendar
- **Michigan Geological Survey:** <https://wmich.edu/geologysurvey>
- **Michigan Geology Maps Available:** <https://www.michigan.gov/deq/0,4561,7-135-3304-116670--,00.html>
- **USGS Michigan Geological Map Data:** <https://mrdata.usgs.gov/geology/state/state.php?state=MI>
- **USGS Publications:** [U.S. Geological Survey Publications Warehouse \(usgs.gov\)](http://U.S.GeologicalSurveyPublicationsWarehouse(usgs.gov))

OTHER NEWS

The National Academies of Sciences, Engineering, and Medicine have released the proceedings of the workshop *America's Geoheritage II: Identifying, Developing, and Preserving America's Natural Legacy*. The publication, released on September 22, is now freely available on the National Academies Press website (<https://nap.edu/26316>).

Additionally, it is linked on the workshop webpage, <https://www.nationalacademies.org/our-work/americas-geoheritage-ii-a-workshop>.



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2021-2022

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MBGS PUBLICATIONS

<http://www.mbgs.org/publications.html>

Historical publications now available on USB Flash Drives". Each USB Flash Drive is 8GB

Prices include postage, handling and any applicable sales tax.
Orders for publications should be prepaid in U.S. Funds and addressed to:

MBGS — Publications
P.O. Box 14044
Lansing, MI 48901-4044

Historical CD #1: Nine out-of-print publications from 1949 through 1965 and 1998, 2000, \$15

- The Stratigraphy of Manitoulin Island, Ontario, Canada, June 19-20, 1954
- The Devonian and Silurian Rocks of Parts of Ontario, Canada and Western New York, June 22-23, 1951
- The Traverse Group of the Northern Part of the Southern Peninsula of Michigan, June 16-17, 1949
- The Devonian Strata of the London-Sarnia Area, Southwestern Ontario, Compiled by Erwin C. Stumm, Lewis B. Kellum and Jean Davies Wright, June 9-10, 1956
- The Ordovician Rocks of the Escanaba-Stonington Area, Led by R. C. Hussey, June 2-3, 1950
- The Niagara Escarpment of Peninsular Ontario, Canada, June 18-19, 1955
- Lower Paleozoic and Pleistocene Stratigraphy Across Central Wisconsin, Compiled by C. E. Prouty, Led by L. M. Cline, J. L. Hough and R. F. Black, 1960
- Classic Silurian Reefs of the Chicago Area, by Donald G. Mikulic and Joanne Kluessendorf, June 27, 1998
- Geology of Central Ontario, Canada, 1965

Historical CD #2: Four out-of-print publications from 1947, 1959, 1983 and 1991, 2001, \$15

- Copper Country Field Trip, Michigan, June 20-22, 1947
- Geology of Mackinac Island and Lower and Middle Devonian, South of the Straits of Mackinac, June 12-14, 1959
- Tectonics, Structure and Karst in Northern Lower Michigan, August 1983
- Geology of the Pictured Rocks, Upper Peninsula, Michigan, July 11-13, 1991

Historical CD #3: Six out-of-print publications from 1948, 1952, 1990 - 1995, 2001, \$15

- Pleistocene and Early Paleozoic of the Eastern Part of the Northern Peninsula of Michigan, June 18-21, 1948
- Stratigraphy and Structure of the Devonian Rocks in Southeastern MI and Northwestern OH, June 20-21, 1952
- Lower Ordovician and Upper Cambrian of Wisconsin, May 10-12, 1990
- Guidebook to the Precambrian Geology and Metallogeny of the Central Upper Peninsula of Michigan September 12-13, 1991

Historical CD #4: Six out-of-print publications from 1957, 1958, 1961, 1967, 1968 and 1970, 2004, \$15

- Silurian Rocks of the Northern Peninsula of Michigan, 1957
- Cambrian Geology of Parts of Dickinson and Iron Counties, Michigan, June 1958
- Geologic Features of Parts of Houghton, Keweenaw, Baraga and Ontonagon Counties, Michigan, May 19-21, 1961
- Correlation Problems of the Cambrian and Ordovician Outcrops Areas, Northern Peninsula of Michigan 1967
- The Geology of Manitoulin Island, June 1968
- Devonian Strata of Alpena and Presque Isle Counties, Michigan 1970

Historical CD #5: Five out-of-print publications from 1971, 1989, 2001, and Oil & Gas Fields Vol. 1 & 2, 1969 & 1992, 2006, \$50

- Oil & Gas Fields Symposium, Volume 1, April 1969, 200 pp., maps, illus., second printing with updates
- Oil & Gas Fields Manual of the Michigan Basin, Volume 2, 1992, 520 pp., maps, illus.
- Glacial Geology of Southwestern Michigan, 1989, 53 pp. by A. Kehew, L. J. Schmaltz, and W. T. Straw
- Geology of the Lake Erie Islands and Adjacent Shores, 1971, 65pp., maps, illus. by Jane L. Forsyth
- Glacial Geology of Southwestern Michigan, Landforms of the Lake Michigan Lobe, Southwestern Michigan, 2001, AAPG Eastern Section Meeting Field Trip, 32 pp., maps, illus. by A Kehew and A. Kozlowski

Historical CD #6: Six out-of-print publications from 1946, 1953, 1963, 1966, 1978 & 1987 plus the Richfield Challenge, 1952 & Tom Knapp's MS Thesis, 2007 \$15.

- Guidebook for Ordovician Stratigraphy of the Cincinnati, Ohio and Richmond, Indiana Areas, June 12, 13, 1953 by W. H. Shideler and B. T. Sandefur
- Guidebook for Ontario Geological Excursion to Kettle Point – Owen Sound- Waubauskene, June 21, 22, 23 1946 by W. A. Roliff, C.S. Evans and J.F. Caley
- Guidebook for the Stratigraphy of the Silurian Rocks in Western Ohio, May 31- June 2, 1963 by C. H. Summerson, Jane L. Forsyth, Karl V. Hoover and J. R. Ulteig
- Guidebook for Cambrian Stratigraphy in Western Wisconsin, May 21, 22, 1966 by Merideth E. Ostrom
- Geology of the Manitoulin Area, Special Papers #3, September 29, 30 and October 1, 1978 by J. T. Sanford and R. E. Mosher
- Middle Devonian Cratonic Carbonates and Shales in Southwestern Ontario, November 14, 1987 by Bruce Wilkinson
- The Richfield Challenge, A Review of the Richfield Developments in Michigan, 1952 by Gordon H. Hautan
- A Theory of Rogers City and Dundee Relationships in Central Michigan, Masters Thesis, 1947 by Tom Knapp

Historical CD #7: Field Guidebooks from 1962, 1969, 1977, 1980, 1985 & 1988, \$15

- Silurian Rocks of the Southern Lake Michigan Area, 1962, James H. Fisher, Chairman, MBGS Annual Field Conference
- Studies of the Precambrian of the Michigan Basin, by Harold B. Stonehouse, 1969
- The Geology of the Marquette District: a Field Guide By F. W. Cambray, 1977
- Ordovician and Silurian Geology of the N. Peninsula of Michigan, 1980, R.B. Votaw, 40 pp., illus., maps
- Special Paper #4: Ordovician and Silurian Rocks of the Michigan Basin and its Margins, 1985 K.R. Cercone and J.M. Budai (eds.), 96 pp., illus.
- Upper Keweenaw Rift-Fill Sequence, Mid-Continent Rift System, Michigan, 1988, P.A. Daniels and R.D. Elmore, M.S. Wollensak, ed., 150 pp., illus., maps

OTHER SPECIAL OFFERS

- **Historical CD Set - # 1 – 7 (detailed above) for a special purchase price of \$95**
- **NE Lower Peninsula Geological Field Conf.**, 2004, T. Black, M. Wollensak, On CD \$10
- **Stratigraphic Lexicon for Michigan**, 2001, prepared by MBGS and published by DEQ, \$4
- **Robert E. Mosher Geological Studies** A lifetime of geological research on Silurian Rocks with John T. Sanford. The disks are organized chronologically and include field work in North America and Europe. 2007, 2 CDs \$35.

JOB OPENINGS

Staff Geologist, [Golder](#) Farmington Hills, MI

- Subsurface site investigations involving drilling, soil classification, rock coring and logging, and well installation;
- Groundwater, surface water, soil and air sampling;
- Operation, maintenance and monitoring of remedial systems;
- Investigation-derived data tabulation and evaluation;
- Regulatory report writing; and
- Phase I environmental site assessments.
- This position will involve a mix of office and field work. The position requires overnight travel and fieldwork as dictated by project demands.

Mid-Level Geologist/Hydrogeologist, [Wood](#) Traverse City, MI

- Manages the development of work scope, schedule, and budget definition for proposals
- Directs the execution of work, including subcontractor procurement
- Assists the Project Manager and team in ensuring effective client and regulatory agency communication and relations
- Prepare reports, work plans, health and safety plans, and quality control plans under the supervision of senior staff
- Performs data quality assurance review of field and laboratory work product to determine whether data quality objectives have been met
- Direct multi-media sampling, including soil, groundwater, vapor, indoor air, asbestos, and other regulated materials
- Assists the Project Manager on technical assignments and management of specific elements of the project in the field as well as in the office (i.e., task management)
- Evaluates compliance of subcontractor work against technical specifications and scopes of work
- Demonstrates competency in a combination of areas including field supervision, technical knowledge and task management
- Conducts moderately complex scientific assessment and analysis
- Prepares or assists in preparing remedial investigation reports, remedial/corrective action plans, remedial designs, due diligence reports, and related documents; Includes work summaries, data summaries, data synthesis (e.g., conceptual site models), engineering calculations, summary tables, figures, engineering drawings and specifications, and report text
- Assists Project Manager with cost and schedule control
- Reviews payment applications, requests for information, change order requests and other subcontractor submittals
- Demonstrates and maintains competency in a diverse set of local, state, and federal environmental regulations
- Motivates, trains, and mentors subordinate staff assigned to his/her tasks or projects
- The position may entail approximately 90% office work and 10% field work on a variety of projects, primarily for industrial and commercial clients

Field Geologist, [Atlas](#) Grand Rapids, MI

- Conduct soil and groundwater drilling and sampling activities
- Groundwater Monitoring & Sampling (various)
- Technical report production for the Petroleum / Remediation service line
- Conduct construction materials testing (soil, concrete, asphalt)
- Support Phase I and Phase II Environmental Site assessments for the Due Diligence Group.
- Conduct Asbestos/Lead inspections and sampling
- Abide by Atlas's Health and Safety policies and procedures

Environmental Scientist/ Geologist, [Arcadis](#) Novi, MI On-site

- Oversight of drilling operations (installing soil borings, monitoring wells, and soil or rock descriptions) using a variety of technologies
- Soil, groundwater, and environmental media sampling in compliance in State and Federal standards
- Oversight of subcontractors during monitoring well installation, development and abandonment.
- Field data collection, analysis, and interpretation
- Detailed field note collection in legible handwriting.
- Data management (compilation, manipulation, and evaluation of data)
- Preparation of visual, graphical, and tabular summaries of environmental data and trends.
- Figure/ map/ boring log production
- Additional fieldwork activities may include aquifer testing, excavation oversight, operation and maintenance of remediation systems, and vapor intrusion/soil gas surveys.
- Health and safety focused.

Environmental Scientist/Geologist, [Parsons Corporation](#) Breckenridge, MI

Parsons is seeking candidates with a background in Environmental Geology and Science. In this role you will be investigating, mapping and mitigating environmental concerns such as contaminated soil; abandoned oil wells, abandoned oilfield pipeline systems, abandoned underground storage tanks (USTs), asbestos flowline, underground injection wells; coordinating wetland and floodplain management requirements and general environmental restoration program activities. You will be involved in reviewing the data and contributing to the preparation of various environmental reports that are submitted to the client and regulatory agencies. You will be actively engaged in supporting the construction teams in minimizing impact of soil contamination or construction activities (dust control, construction water disposal, etc.). The key to your success will be your ability to help our client execute mitigation strategies in a fiscally responsible manner to assure compliance with local, state and federal regulations, schedule performance, and community safety.

Mid to Senior Geologist/Environmental Scientist, [AECOM](#) Southfield, MI

- Data reduction, review and interpretation
- Drafting of regulatory reports required under Part 201 and 213
- Development of site specific Safety Plans
- Completion of Safety, Health and Environment (SHE) paperwork and observations
- Sampling of various media including soil, groundwater, surface water and soil gas
- Installation of groundwater monitoring wells and vapor monitoring points
- Oversight of subcontractors performing various tasks
- Interaction with the public as a representative of AECOM

- Calibration of field instrumentation and documentation
- Completion of lithologic descriptions of soils from drilling activities

Project Manager - Geologist / Environmental Scientist / Engineer, [SES Environmental](#) Grandville, MI Hybrid

- Experience and demonstrated ability in completing Part 213 UST/LUST Initial Assessment Reports (IARs), Final Assessment Reports (FARs), and Closure Reports
- Experience and demonstrated ability in completing Phase II ESA, BEA, and DDCC/ResAP reports a plus
- Communicate with regulatory agencies (EPA, EGLE, and local counterparts)
- Detail oriented with strong analytical skills and the ability to work both independently and on project teams
- Have a can-do attitude and a willingness to perform a variety of tasks as needed to complete an assignment and satisfy project demands
- Current OSHA 40-hr HAZWOPER trained
- Proficient with MS Office tools (AutoCAD a plus)
- Valid driver's license and an acceptable driving record
- Willingness to travel, including air travel
- Bachelor's degree in geology, engineering, or other relevant scientific discipline
- Strong verbal and written communication skills

Mid-Level Geologist/Environmental Scientist, [AECOM](#) Southfield, MI

- Data reduction, review, and interpretation.
- Drafting of figures using AutoCAD.
- Familiarity with Part 213 and Part 201 of Michigan's PA 451.
- Review of junior level reports and field notes to ensure compliance with Quality Management Systems.
- Development of site specific SHE Safety Plans.
- Completion of Safety, Health and Environment (SHE) paperwork and observations.
- Sampling of various media including soil, groundwater, surface water and soil gas.
- Installation of groundwater monitoring wells and vapor monitoring points.
- Oversight of subcontractors performing various tasks.
- Interaction with the public as a representative of AECOM.
- Calibration of field instrumentation and documentation.
- Completion of lithologic descriptions of soils from drilling activities.
- Field preservation of samples in preparation for laboratory analysis.

Senior Geologist/Environmental Scientist, [GEI Consultants, Inc.](#) Lansing, MI

- Manage the technical, financial and client relationship aspects of a variety of geologic/geotechnical engineering projects throughout the Great Lakes Region.
- Prepare technical scopes of work and budgets for proposals, and prepare requests for proposals for subcontractor services.
- Plan and lead the implementation of geologic and environmental site assessments and subsurface investigations, environmental permitting, remedial system designs, review and interpretation of data and preparation of reports and work plans, project management, business development and preparation of proposals, client, subcontractor and regulatory agency interaction and development and implementation of remedial strategies, and remedial design.
- Participate actively in professional organizations and conferences; deliver presentations, and write technical papers.
- Generate new business.

- Prepare and deliver technical presentations to clients and regulators.
- This position has a field component; travel and some overnight travel are required.

Junior Environmental Scientist/Geologist – Detroit, [Tetra Tech](#) Madison Heights, MI

- Planning and oversight of operations and site health and safety.
- Work will include multi-media sampling, field audits and inspections, organizing and reviewing data, preparing reports, file reviews, collection of air monitoring data, training and exercise support, contractor oversight, and related services.
- May also include training presentations; preparation of statement of qualifications and proposals, and other consulting activities.
- Work for other government and private sector clients in these areas is also possible.

Geologist/Environmental Scientist, [GEI Consultants, Inc.](#) Lansing, MI

- Support environmental site assessments and permitting, remedial and pre-design investigations, test borings, well installations, environmental sampling of various media, aquifer testing, pilot tests, and technical oversight of subcontractors.
- Support remedial construction management services including coordination with design engineers and clients, specification and submittal review, project tracking and documentation, participating in or leading construction team meetings, acting as a client liaison, assisting with the preparation of final engineering or construction completion reports.
- Support data management and analysis, preparation/review of work plans and technical reports, and assist in preparation of presentations and proposals to clients and regulators.
- Support the development/refinement of investigation and remedial strategies for various types of sites and contaminants, and the design and installation of remediation systems.
- Interact with subcontractors, clients and regulatory agency representatives.

Geologist, [Cleveland-Cliffs](#) Ishpeming, MI

- Generating a daily blending plan for the mine operations group.
- Tracking mill operations and metallurgic performance to be fully cognizant of ore feed response as it relates to geologic and mineralogical interpretations and ore blending activity.
- Planning and executing development drilling activities, such as drill hole planning, contractor coordination, logging, site logistics, surveying, core/cutting retrieval, data input to model, maps, cross-sections, and creating and organizing final records.
- Providing geological interpretation necessary for rock mechanics/pit wall control, waste dump location, mine design, and planning
- Maintaining and updating models to reflect accurate geological and metallurgical data.
- Mapping, recording, and defining geological features as the mine develops.
- Developing programs necessary to reconcile planned vs. actual qualities and quantities.
- Providing knowledge and information for geologic and mineralogical/metallurgic interpretations as applied to ore blending and scheduling programs
- Works with the ore control/survey technicians, pit operations, and mine planning groups to maintain ore quality within safe and efficient operations.
- Tracks key process variables and provides written reports as required.
- Provides information required for budgeting processes.
- Work with mine operations to understand operational constraints or limitations, and recommend best practices.

- Recommend solutions to deviations from the plan, when work cannot/or does not meet plan.
- Communicate with plant departments to understand and meet customer requirements.
- Communicate with management and maintenance and operating departments.
- Perform various types and levels of reporting, including to management.
- Perform reconciliation of actuals to models.
- Promote and encourage teamwork and high performance standards.
- Identify opportunities for improvements in the department and operation overall, in existing plans and designs, execution, systems, tools, etc.
- Communicating with research personnel and other operations to ensure that best-in-class techniques are being utilized.
- Learn and be able to backfill for other department roles as directed.

Entry Level Environmental Geologist / Hydrogeologist, [DLZ Corporation](#) Lansing, MI

- Work in a team setting, to perform environmental and/or geological assignments of a varied nature, requiring a solid understanding of environmental and scientific principles, and regulatory requirements applicable to specific investigations or studies; and the exercise of professional judgment.
- May assume lead role in a segment of a project and/or coordinating work of specialty groups related to assigned project.
- Perform work with general guidance and supervision or provide support to more experienced personnel. Responsible for projects of minor to moderate complexity.
- Conduct all aspects of transaction due diligence projects including Phase I ESAs, Phase II Investigations, and requests for Comfort Letter documentation.
- Review title, regulatory, governmental and historical data from available sources to establish property history, including personal contact with individuals and officials. Perform site reconnaissance, physical inspections, surveying, and data collection as needed.
- Accurately log, classify, and sample soils for a wide range of environmental projects involving solid and/or hazardous waste sites, underground storage tank sites, and other sites involving petroleum fuel releases.
- Lay out borings, clear utilities, communicate drilling requirements to necessary staff, and coordinate drilling activities with drill crews.
- Perform on-site monitoring, supervision, and documentation of underground storage tank (UST) closure, corrective actions, and other field activities at solid and/or hazardous waste sites.
- Supervise and coordinate groundwater monitoring well installation; perform well development, purging and sampling, along with necessary field measurements.
- Assist in a variety of environmental investigations collecting and evaluating geological and hydrogeological information for ultimate site characterization and contaminant mitigation.
- Assist in conducting geophysical surveys, soil-gas surveys and explosive gas monitoring surveys.
- Assist in the preparation of feasibility studies, technical reports, design documents and proposal preparation.
- Perform all work in a safe and responsible manner, in accordance with the Health and Safety Plan.
- Possess aptitude to act as a positive representative of the company and its core values.

Staff Geologist or Remediation Engineer, [Geosyntec Consultants](#) Ann Arbor, MI

- Field work such as groundwater, surface water, soil, soil gas, and indoor air sampling; drilling and remediation contractor oversight; and mitigation and remediation system operation, monitoring, and maintenance;

- Chemical data and contaminant fate & transport evaluation, including assessment of vapor intrusion risks;
- Contamination assessment services such as designing and implementing sampling plans and pilot test programs;
- Remedy evaluation, cost estimation, design calculations, and implementation;
- Data management and analysis, including preparing maps, tables, and figures; and
- Preparation of technical reports, letters, memoranda, plans, specifications, and proposals.

Senior Engineer or Geologist: Environmental Remediation, [Cape Environmental Management Inc](#) Remote
 CAPE Environmental Management Inc (CAPE) is seeking an **engineer or geologist** with 10+ years of experience to support our nationwide federal remediation projects. This position will provide support in areas of technical expertise on high profile environmental remediation projects involving cleanup of contaminated soil, groundwater, and sediment, including engineering design, evaluations and assessments, senior review of plans and submittals, proposal development, and supervision of junior and mid level staff. Projects will primarily be conducted for our Department of Defense clients, including the Navy, Air Force, and US Army Corps of Engineers, on sites regulated by RCRA, CERCLA, and various other state and federal agencies.

Environmental Scientist/Engineer - Mid Level, [Tetra Tech](#) Madison Heights, MI

- Providing technical support in the areas of emergency response, removal assessment, and removal action
- The response team maintains on-call readiness to handle emergency responses and provide remedial and restoration guidance/solutions to clients in the Midwestern United States
- An R1 is responsible for the planning and oversight of operations and site health and safety
- Work will include multi-media sampling, field audits and inspections, organizing and reviewing data, preparing reports, file reviews, collection of air monitoring data, training and exercise support, contractor oversight, and related services
- Responsibilities may also include training presentations; preparation of statement of works

Environmental Scientist/Engineer, [TRC Companies, Inc.](#) Ann Arbor, MI

- Perform due diligence assessments consistent with ASTM Phase I Environmental Site Assessment (ESA) standards, including broad-based limited compliance assessments, at industrial and commercial facilities. This includes conducting the field work, completing appropriate research, file reviews, and interviews, and writing reports.
- Participate in a variety of environmental-focused project work in the due diligence and compliance fields across a variety of industries.
- Demonstrate excellence and efficiency in writing, communication, and professional judgment.
- Demonstrate strong quality assurance/quality control skills to perform technical, style, and consistency reviews.
- Manage time effectively and balance multiple fast-paced project assignments.
- Have a strong sense of responsibility and work ethic.
- Prioritize safety and have working knowledge of industry health and safety practices.
- Interface with clients and work with client service managers and account leads in securing and growing new and repeat business.
- Understand standards, regulations, and guidance that apply to environmental due diligence and/or compliance projects and perform regulatory program file reviews.
- Manage scope, schedule, and budget for assigned projects.

Environmental Project Manager, [Intertek](#) Farmington Hills, MI

- Client Maintenance and Development
- Project Site Walks / Scope Development / Proposal Preparation
- Project Estimating / Vendor Management
- Project Scheduling / Cost Tracking / Report Coordination and Review
- Participates in all QA/QC programs as appropriate
- Performs other non-typical assignments upon availability as assigned by management

Surface Water Treatment Specialist (Environmental Engineer Licensed Spl 13), [State of Michigan](#)

The surface water treatment specialist has primary responsibility for performing sanitary surveys, surveillance visits, and reviewing plans, specifications, and permit applications for community water supplies which have treatment plants subject to the Surface Water Treatment Rules. The surface water treatment specialist also has primary responsibility for reviewing monthly operation reports and serves as the main contact for communities subject to the Surface Water Treatment Rules.

This position serves as the statewide specialist in one or more of the following technical elements of surface water treatment: membrane filtration, conventional treatment (coagulation, flocculation, sedimentation, and filtration), and disinfection (alternative disinfectants, CT, and disinfection byproduct control). This specialist reviews new, complex, or unique treatment technologies in these categories being considered for installation in the state.

Environmental Scientist/Engineer, [TRC Companies, Inc.](#) Ann Arbor, MI

- Demonstrate excellence and efficiency in writing, communication, and professional judgment.
- Participate in a variety of environmental-focused project work in the compliance fields across a variety of industries.
- Manage scope, schedule, and budget for assigned projects.
- Have a strong sense of responsibility and work ethic.
- Demonstrate strong quality assurance/quality control skills to perform technical, style, and consistency reviews.
- Manage time effectively and balance multiple fast-paced project assignments.
- Understand standards, regulations, and guidance that apply to environmental due diligence and/or compliance projects and perform regulatory program file reviews.
- Prioritize safety and have working knowledge of industry health and safety practices.
- Work with client service managers and account leads in securing and growing new and repeat business.

Environmental Engineer Licensed 12 - Licensed Surface Water Engineer, [State of Michigan](#)

This position functions as the recognized resource for the engineering review and issuance of construction permits for all surface water treatment plants for a specified geographic area (Genesee, Saginaw, Sanilac, Midland, Bay, Arenac, Iosco, Alpena, Mackinac, Chippewa, Schoolcraft, Delta, Menominee, Marquette, Baraga and Ontonagon counties). This position will also be responsible for reviewing technical documents and analyzing technical data related to surface water systems.

Environmental Engineer, [General Motors](#) Saginaw, Romulus and Bay City MI

- Responsible for developing/maintaining/supporting robust and consistent environmental stewardship program strategies in support of GM's mission to deliver sustainable solutions that improve the communities in which we live and work.
- Experienced in at least one of the main environmental programs (air permits and regulation, water permits and regulations, or waste regulations)
- Engages with Domain Experts as necessary to ensure continual improvement and support new program/project implementation.
- Key collaboration with plant management and employees, FAMs, regulatory agencies, internal and external community leaders and members, legal staff, GM and external audit services, utility service provides (WWTP & PH), Project Planning teams at sites & HQ, domain experts and chemical and resource management business partners.

Principal Environmental Project Manager, [Groundwater & Environmental Services, Inc.](#) New Hudson, MI

- Handling project management for high visibility / large scale projects within the Great Lakes region, which includes: project definition, siting, assessment, permitting, data management, construction, and compliance support.
- Ensuring successful project progression, which includes: overseeing cost management / revenue & client satisfaction metrics, ensuring optimal resource utilization, and promoting the HSSE culture / stewarding safe work performance.
- Acting as primary contact for key clients by providing regular status updates, resolving project related challenges, and establishing a strong business relationship.
- Assisting in account development, sales, and delivery of GES' consulting services for clients within the Great Lakes region's environmental market.
- Developing strategy and action plan(s) that leverage GES' assessment, remediation and compliance offerings, while successfully targeting the high priority service needs of key clients.
- Expanding existing client relationships by ensuring quality service on current projects, and focusing cross-selling efforts towards new high-potential opportunities.
- Generating leads through an established professional network, as well as by attending conferences and industry events.
- Utilizing technical expertise to develop proposals, create written content, develop pricing, co-conduct presentations, and finalize contracting.
- A Bachelor's degree or higher in the sciences or engineering.
- Professional Geologist (PG) and / or Professional Engineer (PE) license is a plus.
- 15+ years of providing environmental consulting related project management and client service support within one or more of the following industries:
 - Terminals, Pipelines, and Refineries, Industrial, Power & Utilities
- Established relationships with key decision makers in one or more of the aforementioned industries, and a proven business development track record if a major plus.
- Excellent communication, teamwork, analytical, organizational, technical writing, presentation, and client service skills are required.

Environmental Engineer, [Resolute](#) Michigan Center, MI

- Understand the mill's Safety, Environmental, and Quality objectives and how your decisions affects the mill's ability to perform.
- Coordination of plant wide environmental programs and policies in compliance with federal, state, local laws, and corporate policies.
- Determine solutions for matters involving environmental controls, methods, and processes.
- Oversee environmental testing needed for air, water, waste, and groundwater regulations.
- Maintain and update permits (air, water, waste) including managing compliance sampling and reporting schedule.
- Oversee and lead ISO initiatives.
- Will be responsible for entering of purchase requisitions/PO's, monthly accruals, invoice management/SES creation, check requests, assisting with budget preparation and coordination of MSA efforts between legal and purchasing.
- Maintain wastewater discharge program (NPDES), complete monthly, quarterly, semiannual, and annual DMR reports.
- Maintain environmental management system (EMS) to maintain ISO 14001 certification.

Leadership and Technical - Dam and Flood Risk Management -[HDR](#) Ann Arbor, MI

We are seeking Design Professionals, Program Leaders, Numerical Analysts to serve as engineers of record, group managers and technical practice leaders with expertise and interest in working on complex dam, levee, and flood risk management projects. Expertise in Risk Analysis and advanced numerical analysis of soil/structure interactions and earthquake engineering is a growing need.

If you are willing to relocate or would like to be contacted about future opportunities which develop near you, we want to hear from you! HDR has over 200 locations in the United States and our Water Resource leadership teams are exploring expansion into new locations. HDR offers a flexible work environment that accommodates current health guidelines.

Environmental Qualification Test Engineer, [L3Harris Technologies](#) Grand Rapids, MI

- Plan, document, coordinate, and execute, environmental exposure tests on high-technology, high-value hardware produced for the defense industry.
- Support the documentation and investigation of anomalies and failures.
- Advise new programs on their qualification test planning.
- This position may require occasional weekend, off-shift, and overtime work.
- On-the-job training will be given regardless of experience level.

Environmental Engineer - Co-op, [Verso Corporation](#) Escanaba, MI

- Provide environmental support for Environmental compliance and treatment plant operations
- Assist with creating and performing treatment plant LOTO's and confined space entries
- Monitor, assess, analyze, and optimize environmental systems
- Reduce environmental impact
- Provide environmental support for key departments
- Provide problem solving and analytical skills

Environmental Engineer – Mid Level (Remediation Focus), [Barr Engineering Co.](#) Grand Rapids, MI

Barr is seeking an environmental engineer or geologist to join its Grand Rapids office and undertake challenging and progressive work on projects related to the investigation, evaluation, and remediation of contaminated sites. Assignments may include working as an individual or as part of a project team to assist with preparing technical work plans and reports; coordinating ASTM Phase I environmental site assessments; investigating contaminated soil, sediment, groundwater, and vapor intrusion; conducting remediation technology evaluations and feasibility studies; developing site management strategies, remedial design, and response action plans; and coordinating site remediation activities. Responsibilities will also include preparing cost estimates and contracting for investigation activities.

Mid-Senior Level Environmental Engineer, [Wood](#) Novi, MI

- Travel to project sites in Michigan and the Great Lakes Area.
- Prepare conceptual site models and remedial alternatives analyses.
- Prepare bidding documents and requests for proposals and assist in subcontractor procurement for environmental remediation projects.
- Prepare of cost estimates to implement remedial technologies.
- Review contractor submittals including equipment, work plans and QA/QC plans.
- Track payment applications, requests for information, change order requests and general construction phase submittals.
- Self-implement or oversee implementation of remediation activities. This may include managing and/or assisting junior staff involved in the project.
- Conduct project closeout activities including final inspections, completion of punch lists, record drawings, and contract closeout.
- Complete operation and maintenance inspections of remediation systems under guidance of an experienced operator.
- Office activities, including analysis and interpretation of analytical results and preparation of summary reports under the guidance of a Senior or Principal Scientist/Geologist or Engineer.
- Manage and analyze large environmental datasets with spreadsheets and other technical software, prepare plots and quantitative summaries, and document methods used to analyze data.
- Prepare engineering calculations, engineering drawings, technical memoranda, and other deliverables related to communicating and documenting a civil/environmental engineering design.
- Participate in training events, project meetings, and engineering team meetings
- Work and travel safely, follow company and site safety standards, maintain permits and training certificates

Environmental Engineer – Entry Level, [Barr Engineering Co.](#) Grand Rapids, MI

Barr is seeking an environmental engineer to join its growing Grand Rapids office and undertake challenging and progressive work on projects related to the investigation, evaluation, and remediation of contaminated sites. Assignments may include working as an individual or as part of a project team to assist with any of the following tasks on-site investigations of contaminated soil, sediment, groundwater, and soil gas; construction observation; engineering calculations; remedial design; treatment system monitoring and evaluation; construction cost estimates, plans and specifications; and technical reports. Fieldwork opportunities for this position may be year-round and will include some out-of-town travel.

Geotechnical/Tunnel Engineer, [WSP USA](#) Detroit, MI

- Serve as staff geotechnical engineer during subsurface exploration and design and construction of tunnels, trenchless, and geotechnical projects in Detroit, and other infrastructure (highway/railroad, water/wastewater, etc) and building projects throughout Michigan and surrounding states.
- Field Inspection & supervision of geotechnical investigation and construction for tunnels and other infrastructure and building projects.
- Performance of geotechnical design and analysis for foundations, embankments, retaining walls, tunnels, trenchless projects and underground structures.
- Provide support for the development and production of plans, specifications, memoranda and reports related to geotechnical and tunnel aspects of infrastructure and building engineering projects

Regional Sales Representative -Environmental Equip, [Webuild Services LLC / Webuild Staffing](#) Detroit, MI

The ideal individual would have 5+ years of experience working as a Business Development / Sales professional, with at least 2+ years in the environmental industry working within an environmental consulting, testing, laboratory and/or specialty contracting firm. Must have the abilities to generate business opportunities, cultivate relationships and establish profitable accounts for the organization; including performing activities related to developing a business plan of action, focusing sales efforts towards the companies' strategic strengths and tracking results to meet growth and revenue objectives. Additionally, candidates will be responsible for cross selling existing clients, developing new client accounts, cultivating leads (cold/warm), negotiating contracts, overseeing billing, attending industry social events as needed.

Environmental Engineer – Senior Level (Remediation Focus), [Barr Engineering Co.](#) Grand Rapids, MI

Barr is seeking an environmental engineer to join its Grand Rapids office and undertake challenging and progressive work on projects related to the investigation, evaluation, and remediation of contaminated sites. Work may include managing multidisciplinary teams; preparing technical work plans and reports; investigating contaminated soil, sediment, groundwater, and vapor intrusion; conducting remediation technology evaluations and feasibility studies; developing site management strategies, remedial design, and response action plans; and coordinating site remediation activities. Responsibilities will also include development of proposals, scopes of work, and budgets; communications, meetings, and negotiations with clients and regulatory agency personnel; and overall project management. Responsibilities may also include mentoring staff, building client relationships, and business development.

Solid Waste Engineer - Environmental Services (Multiple Locations), [Burns & McDonnell](#) Detroit, MI

As part of the Environmental Services Practice, this position will support the development and growth of our solid waste and resource recovery business practice.

- Planning, permitting, design, and site development of solid waste facilities as a project engineer and/or project manager.
- Execution of biogas feasibility studies, process design development, mass and energy balances, and equipment procurement packages
- Leachate treatment feasibility, design, construction administration, and system operation including emerging contaminants such as per- and polyfluoroalkyl substances.
- Planning and analysis for solid waste programs including, but not limited to, financial studies, procurement assistance, waste characterization, education and outreach, zero waste studies, and long-range strategic plans.

- Understanding of the solid waste industry and demonstrated ability to monitor and communicate new market drivers and regulatory changes.
- Executing civil engineering methods and practices in the preparation of bid-ready engineering designs, plans, specifications, estimates, and reports
- Supporting civil and environmental projects which may include earthwork, stormwater, wastewater, remediation, and restoration
- Using design programs such as AutoCAD, Civil 3D, GIS, MicroStation, etc.
- Other duties, as assigned.

Geotechnical Engineer, [The Mannik & Smith Group, Inc.](#) Canton, MI

The Mannik & Smith Group, Inc., a respected civil engineering and environmental consulting firm, has an immediate opening for a Staff Geotechnical Engineer with two years of experience or a degree in civil engineering with background in geotechnical engineering. Responsibilities include geotechnical investigation planning and execution, and report preparation. Candidate must be a team player who works well with other geotechnical engineers, material testing, laboratory and drilling technicians. Must have a Bachelor's degree in engineering or a related field. Master's degree is a plus.

Staff Engineer - Geotechnical (Solar Focused), [G2 Consulting Group, LLC](#) Ann Arbor, MI

G2 Consulting Group is looking for a full-time staff engineer to join our geotechnical solar team in the Ann Arbor office. Staff engineers perform field testing, laboratory testing, and engineering-report preparation related to the development of industrial-scale solar energy projects. All work will be performed under the supervision of a project engineer or project manager. Principal field duties include soil boring logging, sample collection, pile load testing, and electrical resistivity testing. Most work will be performed outdoors at sites across the country. Projects will require the engineer to travel extensively, generally 1 to 2 weeks at a time. Project frequency will vary, but multiple projects may occur consecutively. Principal laboratory duties include determination of California Bearing Ratio (CBR), soil thermal resistivity, unconfined compressive strength, dry density, Atterberg limits, organic content, particle-size distribution, and soil classification. Principal report preparation duties include analyzing and interpreting field and laboratory test data, performing complex engineering calculations, and developing recommendations for foundation and roadway design.

Environmental Compliance Scientist/Engineer, [Tetra Tech](#) Ann Arbor, MI

- Interact with commercial/industrial clients to identify needs, collect data, develop and process solutions for task completion
- Perform data analysis utilizing software, spreadsheets, databases, or other novel solutions to assist with resolving client problems
- Engage in diverse client projects that may involve multi-media knowledge including Air, Water, Waste, Hazardous Material Management, or Emergency Response/Prevention
- Develop and deliver proficient technical documents, presentations, and/or training sessions on regulatory compliance concepts, industry trends, and emerging issues
- Review and monitor changes in environmental regulations working with Sr. staff to develop client solutions
- Support client project teams and internal business development initiatives
- Apply knowledge gained in previous assignments

Project Manager (Climate Change and Sustainability), [Montrose Environmental Group](#) Remote

As a key member of the Environmental Advisory Services team, this role will be responsible for a full range of activities including:

- Lead the development of proposals and manage projects
- Develop business through marketing, existing client relationships, and networking.
- Conduct site visits to gather data and information to support environmental compliance at industrial, commercial, and institutional sites.
- Assist with environmental management system (EMS) and compliance program development.
- Support projects with a focus on sustainability including net-zero goals and Science Based Targets (SBTi).
- Provide technical advisory to clients through the development of scope 1, 2, and 3 greenhouse gas (GHG) inventories,
- Assist with communications between clients, internal subject matter experts, subcontractors and other stakeholders.
- Maintain confidentiality at all times.
- Exercises safe work practices by following all Company safety rules and OSHA regulations, including attendance at all required safety training programs.
- Participates in Company's continuous improvement programs and provide support to team efforts.
- Keeps up-to-date and current on industry trends by completing formal training, reviewing professional publications, and attending professional workshops.
- Performs other duties as assigned.