



Groundwater and Environmental Professionals - Since 1891

Statement of Qualifications



TABLE OF CONTENTS

Why Moody.....	3
Who We Serve	4
What We Offer	5
Safety	6
Locations and Regions	7
Groundwater Services.....	8
Energy Services.....	13
Mining Consulting Services	18
Environmental Services.....	23
Ecological Services	28
History	33

WHY MOODY?

- Rich history
- Unparalleled experience
- Deep commitment
- Extensive knowledge
- Proven capabilities

These are just a handful of the many qualities and attributes that have made Moody and Associates, Inc. the choice when it comes to environmental and groundwater services. When you work with Moody, you can rest assured knowing you are backed by a team of experts whose commitment to innovation, understanding of your unique challenges and ability to create sound, practical solutions will stand the test of time.

Moody is a privately-held, family-owned company whose roots date to 1891, when it first began delivering groundwater development services to clients. Moody has retained its position as an industry leader through a combination of experience, knowledge and expertise that has led to proven solutions in tough environments and patented technologies that have helped clients achieve success, regardless of how they define it.

Moody is comprised of licensed professional geologists, senior scientists and seasoned project managers who lend high levels of expertise to every assignment and guide clients to successful project completion. Moody's blend of professional geological and hydrogeological expertise and in-house well drilling and testing capabilities enables it to provide greater insight into all aspects of groundwater throughout Pennsylvania, New York, Ohio, West Virginia and surrounding states.

WHO WE SERVE

Moody serves a wide range of clients in virtually any industry or market where groundwater and environmental services are necessary.

Typical clients are those who are looking to overcome challenges, become more competitive, drive innovation, achieve cost savings, solve a pressing problem or ensure the highest standards of safety. When measurable results are a must and the bottom line is at stake, Moody delivers cost-efficient, sustainable solutions. Focusing on the effects of resource development activities on groundwater and soil, Moody maintains close ties with oil and gas, coal and steel industries.

Among the markets we serve:

Resource Development

- Underground and Surface Mining
- Oil and Gas
- Lumber Industry

Commercial and Industrial

- Bulk Petroleum Facilities
- General Retail and Commercial Customers
- Utility Supply Companies
- Manufacturing
- Small to Large Facilities

Municipal

- State and Local Municipalities
- Water Authorities

Financial Services

- Lending Institutions
- Insurance Providers

Private and Public Agencies, Associations and Commissions

- Industry Associations
- State Regulatory Agencies
- River Basin Commissions
- Watershed Associations

Redevelopment Agencies and Regional Planning Commissions

- Real Estate Developers
- Attorneys
- Engineering Consultants
- Landfills
- General Contractors

WHAT WE OFFER

Groundwater Services

- Hydrogeologic Evaluation and Well Site Selection
- Test Well Drilling and Production Well Construction
- Wellhead Protection
- Pump Design, Installation, Service and Repair
- Performance Evaluations and Inspections
- Well Cleaning and Rehabilitation
- Airburst® Well Maintenance Technology

Energy Services

- Pre-drilling Inventories and Sampling
- Post-drilling Compliant Investigations and Resolution
- Gas Well and Disposal Well Permitting for Conventional and Unconventional Plays
- Water Sourcing Assistance and Permitting
- Spill Prevention Control and Countermeasure (SPCC) and Disposal Plans
- Erosion and Sedimentation Control Planning
- Wetland Delineation and Determination
- Stray Gas Migration Investigations
- Expert Witness Testimony
- Spill Cleanup Supervision and Oversight
- Pad Location Evaluations / Abandoned Well Evaluations
- Underground Injection Permitting
- Regulatory Compliance

Mining Consulting Services

- New Mining Site Research and Assessment
- Permitting Services
- Hydrologic Impact Assessment
- Post-mining Applications
- Stream Remediation and Restoration
- Pre-mining Inventories, Sampling and Well Performance Testing
- Minepool Predictions and Evaluations

Environmental Services

- Phase I and Phase II Environmental Site Assessments
- Brownfield Site Identification, Evaluation and Remediation
- Remediation of Contaminated Soil and Groundwater
- Long-term Monitoring and Sampling of Contaminated Sites
- Environmental Drilling
- Permitting Services
- Underground Storage Tank Removal
- Expert Witness Testimony
- Groundwater and Contaminant Fate and Transport Computer Modeling

Ecological Services

- Wetland Determination and Delineation
- Stream and Pond Monitoring
- Federal and State Assessment Protocols
- Regulatory Agency Coordination
- Aquatic Resource Permitting
- Mitigation Site Selection and Design Plans
- Monitoring Services
- GIS (Geographical Information Systems) and Database Support

OUR COMMITMENT TO SAFETY

Moody is dedicated to the safety of employees and all those with whom we work. Because one mishap is one too many, Moody goes above and beyond to provide a safe and healthy workplace. Tough and challenging environments demand our industry-leading and comprehensive approach to minimizing risks. Program goals:

Prevent Injury and Accidents

- Perform work to the highest quality in the most responsible manner
- Eliminate recognizable hazards and address unsafe situations
- Identify potential risks that are not top of mind
- Take a proactive approach to achieve safer outcomes

Perpetuate a Safety Culture

- Foster safety and health as enduring values
- Ensure effective, frequent communication of safe practices
- Empower staff to participate in safety programs
- Provide incentives for adherence to safety
- Reward safe work habits

Exceed Regulatory Standards

- Be an example of stellar safety practices
- Maintain up-to-date compliance and training records
- Exceed Occupational Safety & Health Administration, Mine Safety and Health Administration, Department of Transportation and state and local regulations

Exceed Customer Safety Expectations

- Integrate customer safety requirements into project-level performance
- Contribute positively to safety performance of customers
- Coordinate site safety with partners and contractors

SAFETY PROGRAM HIGHLIGHTS

Job Hazard Analysis/ Tailgate Safety Meetings

Field employees participate in daily job hazard analysis reviews and tailgate safety meetings, which are audited weekly to ensure corrective action is implemented.

Managerial Site Safety Visits

Management performs field safety audits, monitors safety compliance and provides constructive direction.

Safety Committee

An active nonmanagement safety committee meets monthly to provide recommendations to management.

Stop Work Authority

Stop Work Authority is a stop, notify, correct and resume approach for the resolution of a perceived unsafe condition, act, error, omission or lack of understanding that could result in an undesirable event.

Driver's Safety

Employees participate in intensive safe-driving classroom training and a "commentary drive," an assessment tool that is proven to improve defensive driving habits.

Training

All field personnel receive ongoing SafeLand orientation and OSHA training.

Contractor Management Database

Moody has profiles on ISNetworld and PICS.

LOCATIONS AND REGIONS

Moody and Associates, Inc. maintains four office locations to provide services across multiple states, including Pennsylvania, New York, Ohio and West Virginia.

Meadville, Pennsylvania

CORPORATE HEADQUARTERS

11548 Cotton Road
Meadville, PA 16335
800.836.5040

Houston, Pennsylvania

199 South Johnson Road
Building #2, Suite 101
Houston, PA 15342
724.746.5200

Waverly, New York

685 Broad Street Ext.
Suite 1
Waverly, NY 14892
877.602.3120

Canton, Ohio

7100 Whipple Ave. NW
Suite B
North Canton, OH 44720
330.966.3848





Moody
and Associates, Inc.

Groundwater and Environmental Professionals - Since 1891

Groundwater Services



Challenging environments and unique situations demand the best.

Since 1891 and through thousands of commercial and municipal water supply projects, Moody has provided clients with unparalleled experience and resources to deliver proven solutions that ensure accountability, reliability and results. Moody's team of professional geological and hydrogeological experts – coupled with advanced in-house well drilling and testing capabilities – provide the complete range of services for the development and maintenance of industrial and municipal groundwater supply wells.

Hydrogeological Evaluation and Well Site Selection

Hydrogeological Evaluation

Confidential Client

Allentown, Pa.

The hydrogeological characteristic of numerous spring sources were evaluated for consideration as possible commercial sources of spring water. Moody also assisted in the completion of Susquehanna River Basin Commission permit application for consumptive water withdrawal and use.

A critical and foundational task in developing groundwater supplies involves aquifer evaluation and well site selection.

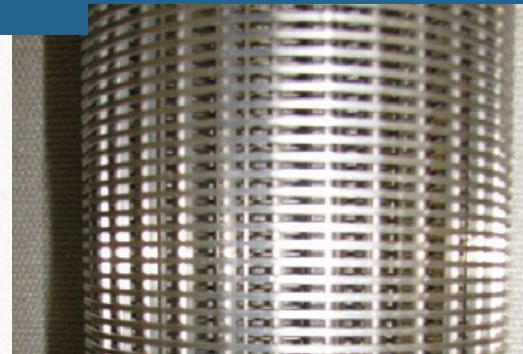
Moody's registered and highly experienced professional geologists apply their expertise to all aspects of hydrogeological studies for the successful completion of groundwater supply development projects. Moody can execute all necessary steps to evaluate and select a successful well site.

- Groundwater feasibility studies
- Groundwater resource evaluations
- Water well site location and selection
- Fracture trace mapping
- Water supply permitting (state and federal)
- Exploration and test well drilling to locate water-producing aquifers
- Test well installation for aquifer evaluation
- Aquifer test evaluation for monitoring

Test Well Drilling and Production Well Construction

A successful well operates at optimum efficiency and productivity while adhering to the highest standards of environmental responsibility and minimizing future maintenance.

That's where Moody comes in. Moody takes ownership of the project from start to finish, designing and drilling the well to produce at maximum yield.



Certified drilling crews and division managers have extensive and diverse experience with all types of drilling methods and complex subsurface conditions. They can handle any drilling job with the utmost skill and efficiency. Drilling capabilities range from standard auger drilling, coring, air and fluid rotary to small-to-large diameter cable tool holes.

Wellhead Protection

It is imperative to maintain the integrity and safety of groundwater supplies once they are in place.

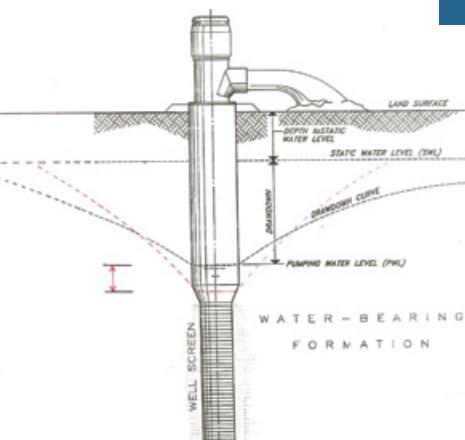
Moody develops and implements proactive wellhead protection strategies to ensure a continual uncontaminated and safe water supply. This strategy eliminates the potential for pollution of groundwater and serves to protect the source for drinking water. Protecting water wells proactively can help avoid the high costs for clean up or alternate sourcing that can result from the failure to adopt the right strategy from the outset.



New Municipal Water Supply **Town of Erwin, N.Y.**

To meet the fast growing demand for water as the Town of Erwin expanded, Moody worked with the town to locate, explore, develop and test multiple groundwater wells exceeding 1.5 MGD. Stringent guidelines and testing requirements established by the SRBC and the NYSDEC were followed and the groundwater sources were permitted for public use.

Pump Design, Installation, Service and Repair



There is tremendous value in working with a partner who understands the broad spectrum of pump applications, from design to field installation, service and repair.

As a dealer for several of the leading pump manufacturers, Moody is unmatched for service and repairs to vertical line shaft turbine pumps. Additionally, Moody provides vertical turbine and submersible pump design application as well as pump sales and service, which include pump selection, installation, performance testing and troubleshooting.

Performance Evaluations and Inspections

Pennsylvania Department of Environmental Protection (PA-DEP)

Moody worked as a subcontractor to complete work on the PA DEP-funded Source Water Protection Technical Assistance Program. This statewide program replaced the Source Water Protection Program, which was conducted to help protect public drinking water sources from the threats of future contamination. The efforts included forming a steering committee with public participation, delineating the source water protection area, completing a potential contaminant source inventory, implementing a source water protection care management strategy, which included contingency planning and preparation for new water sources if the current sources became unusable.

Performance evaluations and inspections make the difference when it comes to ensuring wells and associated pumping systems operate at peak performance.

Moody's field service teams leverage their extensive experience and special tools to conduct performance evaluations of groundwater delivery systems. Analysis of these field tests can determine if wells have plugging problems, pump performance issues or if other factors could cause operational difficulties. Identifying issues or potential problems is the first step. Moody also provides comprehensive services to correct a well yield or pump performance problem.

Well Cleaning and Rehabilitation

Clients often have specific needs for well cleaning and rehabilitation based on the operational environment and application.

Moody selects the proper combination of chemical and mechanical cleaning methods to provide maximum benefit when rehabilitating wells. Moody's well and pump service teams have the resources, equipment and tools available to effectively and efficiently service water well pumps, whether they are line shaft turbine or submersible well pumps.



Environmentally Safe AirBurst® Technology

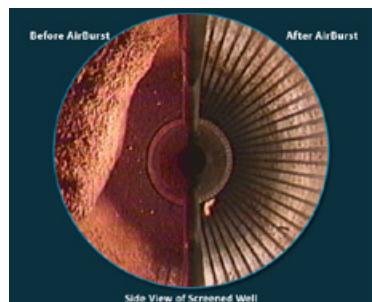
Technological advancements are regularly incorporated into Moody's groundwater services.

Moody is the exclusive provider of AirBurst® Well Maintenance Technology, a patented technology for well rehabilitation. A Bolt Air Gun delivers a small volume of inert gas to generate high-intensity "pressure pulses" in the well, replacing chemicals that are common with other methods. The pulses create high-frequency acoustic waves that break up and remove mineral scales and bio-films from a bore hole wall or well screen.

AirBurst® extends cleaning beyond the screen into the formation where true sources of many well problems exist. More well capacity is restored with this method than conventional practices, and the results last longer. AirBurst® projects can be deployed quicker and accomplish results sooner, generating greater efficiency and cost benefits. Without transportation, handling or discharge of large volumes of acid, AirBurst® technology is environmentally safe.

AirBurst® is the copyrighted trademark of Frazier Industries, Inc. Moody and Associates, Inc. is proud to be the exclusive provider for the technology in Central and Western Pennsylvania, New York and parts of Ohio and West Virginia.

AirBurst® Well Maintenance Technology



Moody

and Associates, Inc.

Groundwater and Environmental Professionals - Since 1891

Energy Services



Moody has been involved in many aspects of oil and gas exploration and development for more than 30 years.

With expertise surrounding groundwater development, environmental protection and regulatory requirements, Moody has the capabilities, staff and experience to provide clients with all the trusted support services they require.

Pre-drilling Inventories and Sampling

Moody has collected thousands of water samples in compliance with regulatory and industry guidelines for pre-drilling baseline water analysis.

Moody's staff of degreed technical personnel has a thorough understanding of the regulations and their application. Moody utilizes state-of-the-art instruments for water and gas monitoring. Moody offers turn-key, streamlined processes combined with detailed record keeping to generate site maps, landowner reports and submittal packages for client utilization. When defensible records are important, Moody's pre-drilling teams deliver.



Post-drilling Dispute Resolution and Investigations

Whether a client plans for post-drilling sampling or a landowner complaint requires additional water source and soil sampling, Moody's staff of trained and experienced geologists, scientists and technicians can evaluate the complaint and provide assistance.

From collection of additional water and soil samples to mitigation measures, Moody can help remedy the situation. With the support of in-house well and pump service technicians combined with more than 120 years of well experience, Moody can offer effective solutions for post-drilling investigations.



Gas Well and Disposal Well Permitting for Conventional and Unconventional Plays

Moody helps clients gain the lawfully required, state-specific permits for various types of oil and gas projects.

Water Sourcing Assistance

From groundwater development to stream intakes or surface water source evaluations, Moody's team of hydrogeologists offer the experience needed to select sources that can meet client demands.

Providing groundwater services since 1891, Moody has the expertise to either work with municipal providers and private water sources or to develop new sources of water. Additionally, Moody professionals have a thorough understanding of the regulations concerning water sourcing to assist producers to develop a reliable water supply for drilling and well stimulation. Following regulatory agency guidelines, preparation of water management plans for the developed sources can additionally be generated.

Water sourcing services include:

- Hydrogeologic studies
- Fresh water determination studies
- Surface water withdrawals
- Development of high-capacity groundwater supply wells
- Water management plan preparation

Spill Prevention Control and Countermeasure (SPCC) and Disposal Plans

Moody has helped numerous clients properly prepare for accidental spills.

Additionally, in the event that spills do occur, Moody takes the next step and helps clients put strategies in place to mitigate the possibility for the spills to reach surrounding water sources and sensitive areas.

Underground Mining of Oil Sands

Confidential Client
Venango County, Pa.



Section of Rock Core for Overburden Analysis

Moody provided geologic consultation and regulatory expertise to permit a facility to produce oil from an underground mine tunnel below selected oil sands of western Pennsylvania. The concept involved installing a vertical mine shaft and horizontal mine entry below a historic oil bearing sandstone reservoir with multiple upward angle drill holes to gravity drain oil into the entry. The project involved bringing together oil and gas permits, mining permits, mine safety permits and environmental permits into a single regulatory package. Moody was able to facilitate interaction and cooperation of multiple Bureaus within the Pennsylvania Department of Environmental Protection.

Erosion and Sedimentation Control Planning



From planning to implementation to reclamation, Moody has extensive experience in site stabilization and erosion and sedimentation control best management practices.

Over the years Moody has employed both traditional and creative techniques to ensure the protection of local waterways during many different earth disturbance projects, including groundwater drilling and development.

Wetland Delineation and Determination

Moody has conducted numerous delineations and determinations for conventional and unconventional oil and gas operations, water well development, water withdrawal locations, coal resources and commercial developments.

Projects include site visits where all potential jurisdictional resources are located, flagged and mapped using sub-meter GIS (Geographical Information Systems) units. Comprehensive reports are compiled for clients in response to regulatory requirements, including detailed descriptions of the resources found, maps of all resources, supplemental information and recommendations concerning potential permits needed for project completion.

Stray Gas Migration Investigations

Moody geologists' understanding of the potential travel paths of stray gas and the potential sources of the gas is key in developing a plan to investigate the source of a stray gas problem.

Moody has a unique understanding of the geological features that control migration pathways. Combined with experience in isotopic identification of gas types and evaluation of gas well construction, Moody has been able to assist clients with determining the potential source of the problem so effective mitigation plans can be developed.





Expert Witness Testimony

Moody's geologists continually provide expert testimony and expert opinions on a wide spectrum of oil and natural gas issues.

Expertise comes from Moody's work in the oil and gas industry since the 1980s and experience with drilling conventional oil and gas wells in Pennsylvania.

Spill Cleanup Supervision and Oversight

The environmental experience Moody has gained from evaluating and remediating tank sites, spills and brownfield cleanups, allows Moody's staff to provide an effective approach to spills related to oil and gas development activities.

From fuel spills or brine releases to surface water, groundwater or soil impacts, Moody draws from decades of experience in site investigations and cleanups to develop effective solutions for clients. Teaming with environmental cleanup contractors, Moody can assist with excavation, monitoring well installations, site characterization, interim remedial measures and site remediation solutions for unexpected events.

Pad Location Evaluations

Pad Location Evaluations (PLE) provide clients with a quick environmental evaluation tool for well pad construction and placement.

A PLE investigates the potential impacts of well pad construction and natural gas development operations on surface water, ecologic receptors, groundwater wells and gas wells in the immediate vicinity of proposed well pads. Moody leverages GIS software to provide an ideal tool for managing, organizing and displaying the results of this analysis. The mapping includes a 10,000 and 5,000 foot radius analysis overlay on USGS quad maps and aerial imagery. In addition, a detailed analysis of the local geology is also mapped.

To minimize the risk of negatively impacting orphaned and abandoned wells with the drilling of new wells, Moody also offers investigatory services. To locate sites of abandoned or orphaned wells, Moody reviews public documents, uses GIS mapping to locate and plot the wells, locates and confirms the reported well locations, and conducts field investigations using geophysics, soil gas surveys and groundwater sampling to search for undocumented well utilization.

Moody

and Associates, Inc.

Groundwater and Environmental Professionals - Since 1891

Mining Consulting Services



Moody has been associated with the mining industry for more than 30 years, employing licensed geologists with nationally recognized mining expertise and focusing on all three stages of the mining process:

- **Environmental research and assessments**
- **Mine operations**
- **Environmental restoration**

Moody's mining group works to accommodate and plan for the developing and future needs of the industry. Moody is uniquely familiar with all client and project needs.

Sensitive to environmental concerns, Moody evaluates mines and mining methodologies that allow for the extraction of coal and other earth materials without undue harm to the land and water resources. Moody also leverages sophisticated technologies to service all mining projects. From specialized monitoring equipment to instrumentation and drilling rigs, Moody is equipped to perform at the highest level. Aware of the importance for credibility and safety, Moody focuses on quality assurance and quality control.

New Mining Site Research and Assessment

Helping clients to gather and interpret geologic and hydrologic data is the first step in researching successful mine sites.

Moody helps with data analysis and mining plan development, ensuring the protection of the environment.

Related and encompassing services include:

- Probable hydrologic consequence statements
- Regional hydrologic evaluations
- Wellhead protection plan and delineation
- Groundwater and surface water evaluation and inventories
- Underground and surface mine permitting
- Wetland impacts
- Surface water hydrology and hydraulic evaluations
- Siting of waste facilities
- Exploratory drilling



Post-mining Mine Pool Hydrogeologic Evaluation

Confidential Client

Monongalia County, W. Va.

In response to a request from the West Virginia DEP, Moody assisted a major coal company by performing a detailed hydrogeologic evaluation of the projected post-mining mine pool conditions at one of their principal mines. A significant GIS (Geographical Information Systems) mapping task was undertaken to create detailed base mapping from copies of old mine maps. After a comprehensive review of regional mine water management data and mine characteristics, a hydrologic model was developed. Employing this model, a determination was made of the post-mining mine pool conditions and an evaluation was provided in the context of potential impacts to surface water or private water supplies.

Mine Operations

Pennsylvania Longwall Stream Monitoring Program

Confidential Client
Southwestern Pa.



Moody currently manages an ongoing qualitative and quantitative stream monitoring program in southwestern Pennsylvania to assess impacts as a result of underlying longwall mining. Streams are measured for flow at discrete locations and are inspected through visual observation of multiple parameters throughout the entire reach. Observation includes documentation of the stream flow condition, geomorphology, channel conditions, water chemistry and biological data. All field data is documented on handheld GPS units and downloaded to a custom designed database and reproduced in GIS generated graphic representation.

Once mines are established, Moody helps with the maintenance of permit requirements, the mitigation or restoration of water losses and stream flows and the expansion of facilities.

The strength of experience and understanding of groundwater behavior – coupled with its response to mining activities – makes Moody the ideal partner for managing mine maintenance.

Operational services include:

- Stream and surface water monitoring
- Stream mitigation and restoration
- Water supply evaluations and replacement
- Groundwater monitoring wells and piezometer installations
- Regulatory compliance sampling
- Post-mining hydrologic evaluations
- Waste disposal monitoring
- Treatment system monitoring

Moody has monitored hundreds of different sites located on dozens of different streams and has assisted clients with the design, development and implementation of a comprehensive environmental Data Management System (eDMS) to track their surface water and groundwater quality data along with other physical indices.

Post-mining Applications

Moody's consulting services are designed to provide prediction, evaluation and mitigation of post-mining conditions.

These services include the economical treatment of impacted water discharges and water courses and the creation of altered but environmentally acceptable post-mining land use.

Operational services include:

- Minor and Chapter 105 stream restoration
- Post-mining water supply compliant investigation
- Water supply performance testing
- Water supply replacement
- Stream condition assessment mapping
- Stream augmentation program
- Expert testimony



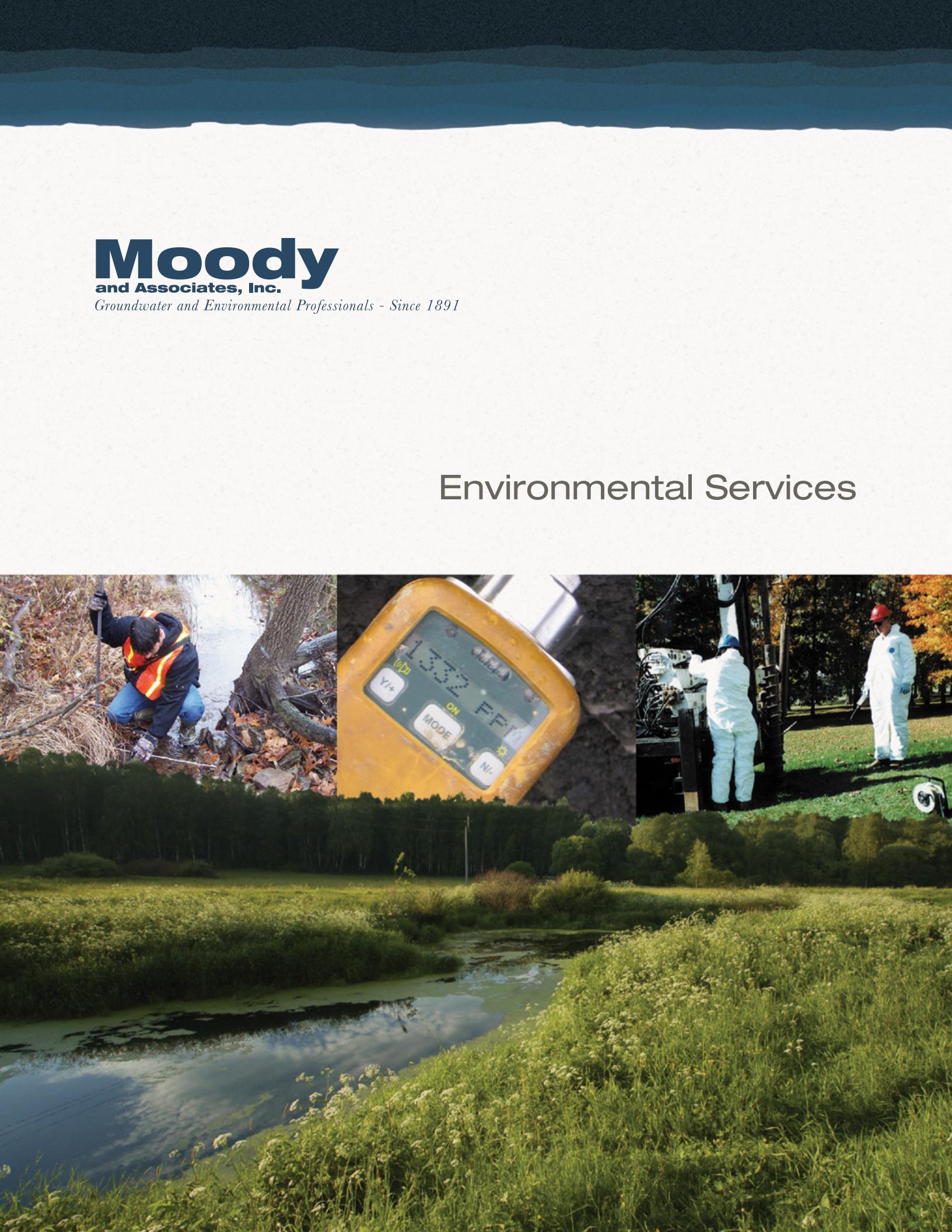
Moody is additionally prepared to assist in innovative post-mining applications relating to the uses of land and mine pools.

A history of successfully converting closed or abandoned mines into positive resources is a testament to Moody's unique water management capabilities.

Projects may involve:

- Predicting post-mining mine pool elevations and water chemistry
- Predicting the timing of post-mining pool sequential mine inundation

- Pumping rate analysis to maintain pool elevation and dewatering times relative to mining
- Investigating the use of mine pools for wetlands and sources of water for industrial applications and geothermal energy



Moody

and Associates, Inc.

Groundwater and Environmental Professionals - Since 1891

Environmental Services



Moody's licensed geologists and hydrogeologists have been providing clients with professional environmental and geologic consulting services since the 1950s.

Environmental Site Assessments

Environmental Site Assessments (ESA) are imperative to the safe and legal transfer, mortgaging or collateral financing of industrial or commercial real estate properties.

Moody's experienced environmental experts can help determine if property has potential contamination, assess the extent of possible pollution and outline steps for remediation. Moody takes the industry-standard two-phase approach:

Phase I ESA

Environmental due diligence, in accordance with applicable ASTM standards, is necessary to identify potential or existing contamination liabilities. Through in-depth historical and on-site investigations, Moody determines the potential hidden risks. Clear and concise reports are provided for documentation.

Phase II ESA

If a site is possibly contaminated, an intrusive and more detailed assessment is conducted to determine whether environmental hazards exist. Physical testing may be conducted to provide hard data for cleanup efforts. Moody helps clients to analyze and evaluate present liabilities, making recommendations if additional characterization or remediation work is warranted.

Brownfield Site Identification, Evaluation and Remediation

Brownfields

Abandoned, idled or underused industrial and commercial facilities/sites where expansion or redevelopment is complicated by real or perceived environmental contamination.

- The Environmental Protection Agency



Strategies to redevelop brownfield sites rely on safe and effective cleanup initiatives.

Moody has a long history of identifying, evaluating and remediating environmental contamination at brownfield sites in Pennsylvania, New York, Ohio and West Virginia.

Remediation of Contaminated Soil and Groundwater

Clients appreciate working with a partner who can deliver cost-effective and results-focused remediation services that keep their projects on schedule.

Moody's expertise expands beyond evaluation to remediation. Moody's teams leverage their vast knowledge in environmental services to develop cost-effective cleanups. All projects are approached with the understanding that remediation systems must limit the impact to adjoining property owners and businesses and meet regulatory requirements.

Long-term Monitoring and Sampling of Contaminated Sites

Regular sampling of contaminated sites often is required by regulatory agencies or for the owner's peace of mind.

Working with a wide range of facilities, Moody's geologists and technicians have the resources to collect and evaluate thousands of groundwater samples. Sample data is assessed for potential regulatory reporting requirements.

Environmental Drilling

The flexibility to meet complex drilling needs helps clients keep their projects moving and within budget.

Moody has been an expert in environmental drilling since the 1950s, adopting many of the same principles and approaches that contributed to its success as a leading water well drilling company since 1891. Moody's auger, coring, air rotary and cable tool rigs allow teams flexibility to meet complex drilling needs.



Landfill Permitting

Geologic consulting services are valuable in securing necessary permits for municipal construction and demolition of landfills.

Moody's environmental experts excel at gathering and interpreting the data needed for the evaluation of the geologic and hydrologic conditions at all types of landfill sites.

Underground Storage Tanks (USTs)

Geologic consulting services provide an extra dimension to tank removal projects that involve potential environmental issues.

During tank removal, a geologist has the ability to make expert field decisions that ultimately can save significant costs. Moody's UST management services range from the preparation of spill prevention and response plans to full-scale remediation of contaminated sites. Certified and OSHA trained teams help provide full-service underground storage tank removals.



Expert Witness Testimony



Moody's geologists continually provide expert testimony and expert opinions on a wide spectrum of geological and groundwater issues throughout several different industries.

Groundwater and Contaminant Fate and Transport Computer Modeling

Predictive modeling has saved clients significant costs in active remediation projects and ensured adherence to the highest standards of environmental safety.

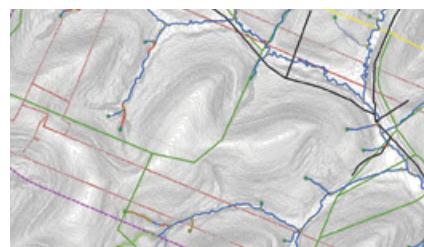
Modeling is an integral part of Moody's consulting work. Moody leverages numerical and analytical computer models to evaluate the fate and transport of environmental contaminants, including the prediction of contamination movement in the subsurface to accurately select monitoring well locations for characterization purposes and proper placement of remediation systems. Moody has saved remediation costs for clients by demonstrating to the satisfaction of regulatory agencies that contamination plumes meet stability requirements.

Large-scale Stream Assessment and Monitoring

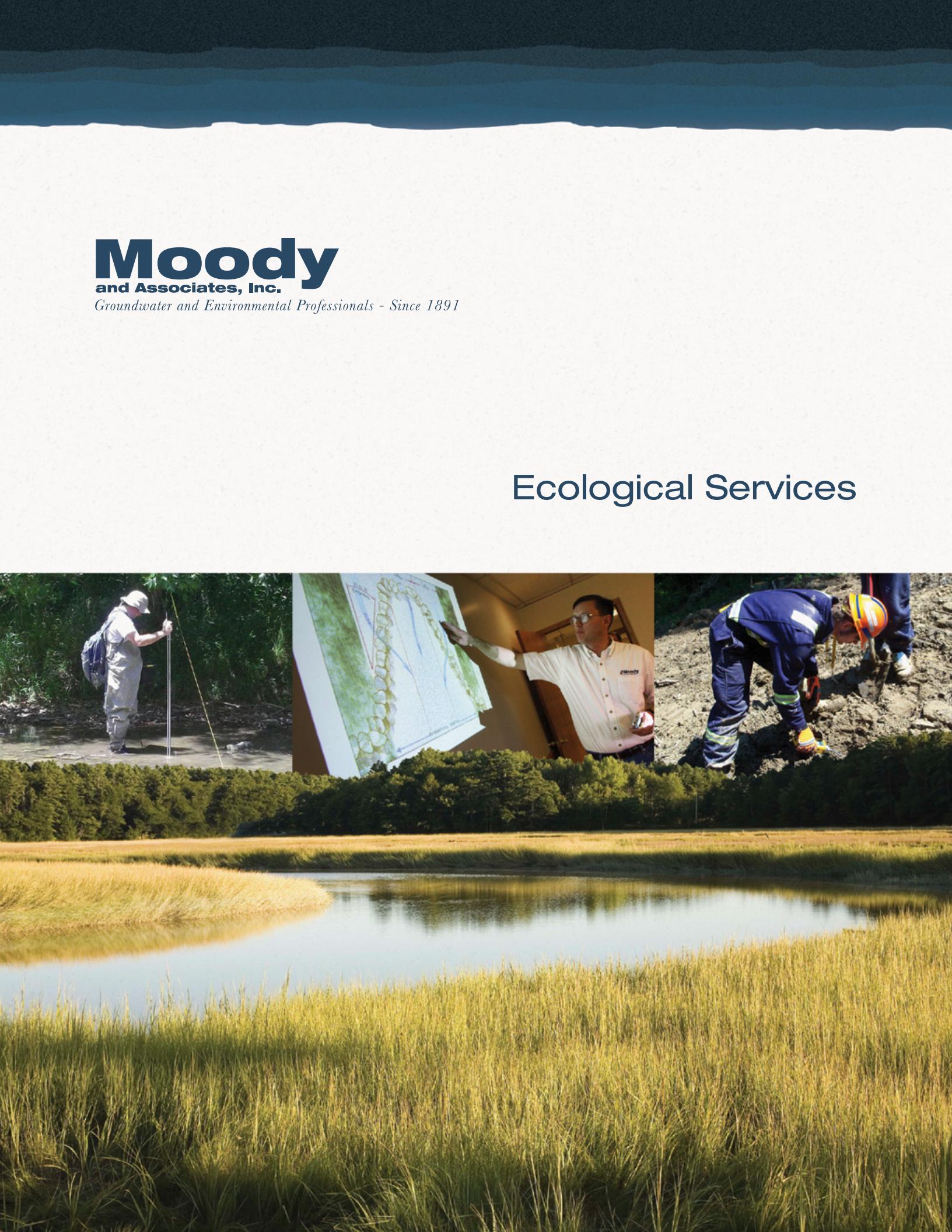
Confidential Client

Greene County, Pa.

In preparation for a client underground mining initiative, Moody was tasked with providing detailed stream hydrology and condition monitoring services. Monitoring locations to acquire stream discharge data were established on every stream shown to support aquatic life within the mining area. Using customized GIS* mapping installed on handheld GPS units, stream reach information that documents the flow condition was noted in the field, uploaded into tabular datasheets and used in GIS to dynamically segment and color code GIS layers to represent each stream's flow regime. Additional project work included pre-mining watershed assessments, groundwater monitoring and interaction with the regulatory agencies.



* **GIS (Geographical Information Systems)** - The final maps generated from GIS technology provides daily and often critical information to Moody's management teams so they can quickly and accurately detect potential impacts on resources and develop timely action plans.

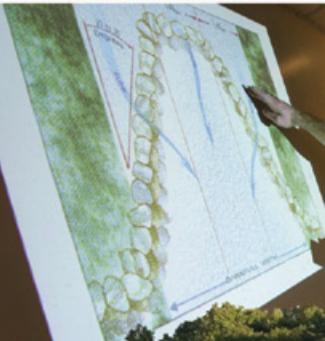


Moody

and Associates, Inc.

Groundwater and Environmental Professionals - Since 1891

Ecological Services



Moody's experienced teams can deliver on all your aquatic resource management, permitting and mitigation needs.

As the complexity of regulatory compliance grows, so does your need to work with a partner who can successfully guide you to project completion. Moody's relationships with regulatory agencies and deep understanding of policies enable teams to complete the due diligence needed when planning a comprehensive project. With experienced biologists and senior management integrated into every project, you are assured that jobs are completed in a timely and professional manner.

Wetland Determination and Delineation



Moody has conducted numerous delineations and determinations for conventional and unconventional oil and gas operations, water well development, water withdrawal locations, coal resources and commercial developments.

Projects include site visits where all potential jurisdictional resources are located, flagged and mapped using sub-meter GIS units. Comprehensive reports are compiled for clients, including detailed descriptions of the resources found, maps of all resources, supplemental information and recommendations concerning potential permits needed for project completion.

Functions and Values Assessments

Routinely conducting assessments – baseline and post project – of water resources potentially impacted by industrial releases, Moody has the experience to make recommendations for remedial action based on site-specific documentation and conditions.



Data derived from baseline assessments is used to develop monitoring plans and to compare pre- to post-development activities. Potential sources of contamination include spills from storage tanks and failing septic treatment systems.

Moody is also routinely employed by developers and law firms to perform assessments on impacted resources to determine if impacts are related to development activities

Remote Stream Monitoring

Moody has expertise in monitoring streams, springs and wetlands during industrial activities.

Situations include surface water and groundwater withdrawal for hydraulic fracturing activities in oil and gas well production, drilling oil and gas wells and coal production. Monitoring can include installation of monitoring points – piezometers or drive points – field data collection utilizing task-specific instrumentation, and a quick response network and reporting system.



Regulatory Agency Coordination

Moody provides consultation and leadership to aid clients in managing federal and state agency reviews and investigations.

Vast experience and earned relationships with regulatory agents helps the coordination of processes and protocols run smoothly.

Aquatic Resource Permitting and Assessment Protocols



Moody helps clients remain in compliance with state-specific requirements and federal protocols.

When clients begin new initiatives, Moody makes sure all guidelines set forth by regulatory agencies — such as the State Environmental Department, U.S. Environmental Protection Agency or U.S. Army Corp of Engineers — are met. Additionally Moody helps clients gain the lawfully required permits, such as:

- PA Chapter 105
- Federal Sections 404 and 101
- Ohio EPA 401 Certification
- West Virginia DEP 401 Certification

Mitigation Site Selection and Design Plans

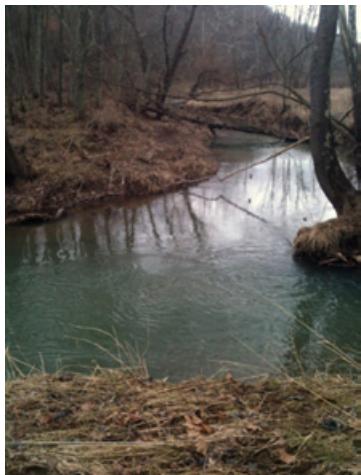
Moody can provide site selection and design plans to ensure a successful and cost-effective solution.

Considerations include physical and ecological characteristics, social and economical impacts, and compliance with state and federal mitigation guidelines. Mitigation options can include:

- Onsite
- In-lieu-fee programs
- Conservation easement and deed restrictions
- Offsite
- Mitigation banking

Monitoring Services

Moody has significant experience in setting up long-term monitoring plans and procedures for surface and groundwater withdrawal sites that can detect negative impacts quickly, provide remedy and ensure compliance with permits.



Wetland and Resource Due Diligence

Confidential Client

Greene County, Pa.

Moody was tasked with providing resource identification, delineation and clearance for numerous water withdrawal sites. With a short permitting window, Moody needed to respond quickly to facilitate the development of the needed water management plans. With a quick and efficient mobile workforce, Moody successfully identified and documented resource locations and provided the client with detailed mappings of protected areas. In zones that were tagged for sensitive species or habitats, Moody provided consultation and regulatory expertise to address concerns and cleared all sites for use without the need of additional permits that could have delayed the projects.



Rich history. Unparalleled experience.

As a family-owned company with more than 100 years of experience, Moody and Associates, Inc. has a rich history of industry leadership.

1800s

- 1891** James Moody obtains a steam-driven drilling rig and his son, Kay, begins drilling water wells in Crawford County, Pa.

1900s

- 1946** Dwight Moody returns after WW II from U. S. Navy service in the Pacific to take over the family business.
- 1964** Moody is the first Pennsylvania firm to use the fracture trace method to locate high-capacity groundwater supply wells.
- 1968** Moody opens a Harrisburg, Pa., office, expanding into geological and groundwater studies and the environmental market.
- 1972** Moody constructs a new corporate headquarters in Meadville, Pa.
- 1980** Moody geologists complete extensive groundwater investigations in response to new federal hazardous waste regulations.
- 1985** Jeff Moody becomes president and fourth-generation owner. Moody further expands geological consulting services.
- 1989** A gas well drilling boom hits western Pennsylvania and eastern Ohio, and Moody conducts thousands of sampling events of water sources.
- 1991** Moody celebrates 100 years of serving water supply, environmental, coal and oil/gas clients.

2000s

- 2002** Moody opens an office in Washington, Pa., to better serve the coal region.
- 2004** Moody expands to Houston, Pa., to accommodate coal industry growth.
- 2010 - 2011** Moody opens an office in Sayre, Pa., and relocates it to Waverly, N.Y., to serve Marcellus Shale natural gas development.
- 2012** Moody opens an office in Canton, Ohio, offering full hydrogeologic services to support oil and gas development in eastern Ohio and the Utica Shale.

Moody and Associates, Inc.

Groundwater and Environmental Professionals - Since 1891

Protect your assets.
Partner with Moody today.

www.moody-s.com

Meadville, PA • 800.836.5040

Houston, PA • 724.746.5200

Waverly, NY • 877.602.3120

Canton, OH • 330.966.3848