



Working With An Environmental Consultant

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The purpose of this publication is to describe the types of services available from multi-media environmental consultants and to provide tips for the selection, contract negotiation with, and management of an environmental consultant.

INTRODUCTION

How well have you kept up with the changes in federal, state, and local environmental, health, and safety (EHS) laws and regulations affecting your industry? If you are like many small and medium-sized business owners, the task can be overwhelming, especially when your firm has limited internal resources. Every year, companies seek assistance from sources outside of their own businesses. These assistance providers are commonly referred to as “consultants.”

AS A SMALL OR MEDIUM-SIZED BUSINESS, WHAT ARE YOUR ENVIRONMENTAL OBLIGATIONS?

One primary obligation is to maintain compliance with federal, state, and local EHS regulations. Often this involves performing one or more of the following activities:

■ **Conducting Compliance Audits**

Identifying all applicable federal, state, and local requirements; rules and regulations; codes and permit conditions; and noting the compliance status for your facility.

■ **Processing/Filing Paperwork and Environmental Training**

involving permit applications, general record keeping and reporting, and employee certifications and instruction.

■ **Process Related Activities**

Reducing the release of air, ground, and water contaminants through the substitution of raw materials, alteration of operating methods, and modification/upgrade of process equipment and containment devices.

For more information, contact the

**ENVIRONMENTAL ASSISTANCE DIVISION
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
PO BOX 30457
LANSING MI 48909-7957**

**Environmental Assistance Center
1-800-662-9278**

March 2002 • #9605

Printing Authority: PA 451 of 1994
Total Cost: \$1,490.96 • Total Copies: 1,000
Cost Each: \$1.49



Jennifer M. Granholm, Governor
Steven E. Chester, Director
Michigan Department of Environmental Quality
www.michigan.gov/deq

■ **Business and Public Relations**

Companies may use environmental consultants to prepare facility health, safety, and emergency response plans, or to communicate the results of analytical tests or modeling scenarios based on a federal or state statutory requirement to the general public. Often times, environmental consultants have experience with effective communication methods, or in drafting environmental reports that translate this information into a plain-English context to satisfy environmental community right-to-know requirements.

In addition to assisting a company with their public relations activities, environmental consultants can also be used to evaluate the day-to-day business aspects of a company. Consultants are often called on to study the feasibility of revenue-enhancing (i.e. setting user fees, rates, or charges) or capital outlay projects that can affect the financial stability of the company.



WHEN DO I NEED A CONSULTANT?

When is the right time to turn to a consultant to help with some or all of the activities listed above? Most businesses decide to seek external assistance when their company is in need of an independent opinion, the company is at an impasse (e.g. there is a contaminant release problem or a set of regulatory forms that need completion), or the company does not have the internal resources to address the issue. Sometimes a consultant is used to review business operations or discuss the impact of regulations before a problem arises. In other instances, qualified consultants are mandated by law, and must be certified as “qualified” by a state’s environmental program (i.e. work involving the removal or clean-up of leaking underground storage tanks). Most often, consultants are used to:

- Supplement existing staff or the business’ knowledge base.
- Provide technical or economic analyses (e.g. quality assurance of company data/reports).
- Develop alternatives and make recommendations.
- Complete a one-time project.
- Clean-up or conduct corrective actions at a site.
- Assist with equipment selection or purchase, installation, and start-up.
- Complete tasks such as facility audits, regulatory reporting, permit applications, analytical testing, employee training, etc.
- Expedite the permitting process.
- Negotiate permit conditions.
- Provide engineering support through studies, design, and construction assistance.

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Consultants are available to give your business an objective and impartial review, evaluation, or solution to your problem through specialization in one or more areas of expertise. With the right guidance from your company's management, a consultant can address both the current and future needs of your business.



TYPES OF CONSULTANTS

There are many different kinds of consulting firms with varying degrees of expertise. It is important to keep in mind the type of consultant you are selecting because each will approach your project from a unique perspective. Primarily, consultants can be classified into five categories:

Environmental consultants

The majority of environmental consulting firms offer technical support for compliance with federal, state, and local environmental laws and regulations. Compliance actions can include conducting company audits, filling out and filing permit applications or baseline environmental assessments, developing brownfield work plans and redevelopment grants, and other reporting or record keeping activities. Some of the larger consulting firms provide a more extensive array of environmental quality services such as computer-aided drawings (CAD), stack testing, ground/water contamination assessments, surveying, air dispersion modeling, equipment maintenance, completion of municipal revolving loan applications and landfill cost-share grants, laboratory analysis, and project management.

Qualified environmental consultants

There are some types of consultants that must be certified as "qualified" by the state in order to perform certain jobs or tasks. Most often, these consultants are used during the remediation activities or clean-up of contaminated sites involving the removal of leaking underground storage tanks. To become a qualified consultant, an individual goes through a rigorous screening method by the state that examines the individual's experience in many phases of contaminant site assessment, soil removal, feasibility, design, remedial system installation, redemption management activities, and site closure. Qualified consultants are required to have an active, operational role in the daily activities of a site remediation or clean-up.

Process consultants

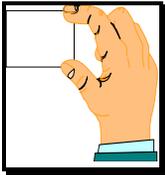
While environmental consultants concentrate on compliance issues that relate to multi-media environmental quality, process consultants focus their expertise on modifying the existing process to lower or eliminate the release of pollutants.

Product/equipment vendors

Product/equipment vendors sell new or replacement components and equipment. Once a needed process change has been identified, businesses can work with product suppliers or manufacturers' representatives to specifically identify a solution involving a process needing material, operational, or equipment changes.

Environmental attorneys

An often overlooked resource that can provide a number of the same types of service as a general environmental consultant are environmental attorneys. Although not officially designated as "consultants," these attorneys specialize in environmental law and are often able to assist businesses with their environmental permitting and reporting requirements. Some environmental attorneys provide not only general counsel but also offer additional services that measure the economic and legal impact of various environmental laws and regulations on a client's firm. In some cases environmental attorneys will contract with, or recommend the use of an environmental consultant to complete the technical portion of a project.



SELECTION, NEGOTIATION WITH, AND MANAGEMENT OF A CONSULTANT

Selection

Choosing the right environmental consultant is not an easy task because each service provider will approach your particular project with a unique perspective based on the varying degrees of his/her expertise and the experience of the consulting firm. Some of these consultants are "full service" consultants in that they offer a wide range of services, while others specialize in more defined niche areas such as air quality permitting, ground/water contamination and remediation, and underground storage tank removal and clean up. Keep in mind that your company's management will define the consultant's role through its project objectives and company operations.

Before selecting a consultant, develop a preliminary list of consultants through:

- Referrals from friends or associates in industries similar to yours.
- Local/regional trade associations or your own legal counsel.
- Inquiries with local or state environmental or regulatory agencies. For example: The Michigan Department of Environmental Quality (MDEQ) has developed three different types of consultant directories. The first one, developed by the MDEQ Environmental Assistance Division (EAD), is entitled the *Michigan Clean Air Consultant Directory*. This directory contains a list of statewide environmental consultants that provide varying levels of air pollution control services. The second type of directory, also available from the MDEQ's EAD is entitled the *Directory of Michigan Environmental and Drinking Water Testing Laboratories*. This guidance document lists a variety of multi-media environmental testing and analytical labs. Finally, the MDEQ Storage Tank Division also has a list of approved qualified consultants for underground storage tank remediation that is available for distribution to the public. See page 9 for information on how to obtain a copy of any of these directories or lists.

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Once you have obtained a list of potential service providers, **conduct a preliminary survey** of each consultant to find out which one can best service your business. Besides asking several questions pertaining specifically to your project's objective, you should also ask:

- Whether the firm is licensed to practice engineering in the State of Michigan and has licensed, professional experience in the areas of expertise required.
- Whether the consulting firm has successfully completed a project similar to yours, and if staff familiar with the project will be assigned to yours.
- What are the quality control/assurance measures the consulting firm will use to guarantee that a comprehensive site clean up or tank removal has taken place, or that collected data, sampling analyses, and/or a pollutant's emission/dispersion calculations are accurate and complete.
- How the consultant's management is structured and the type of management style to be implemented for a project such as yours (i.e. use of senior-level staff, junior-level staff, or a combination thereof).
- The type of working relationship the consulting firm has with state, federal, and local regulatory or environmental agencies or, if needed, product/equipment vendors.

Close the preliminary contact with each consultant by requesting that each potential service provider **send a description of the consulting firm to you** (including the wording and terms of their standard service agreements, billing, licenses, registrations, insurance and liability coverage, relationship to the client if subcontractors are used, and certifications and awards), the background experience and qualifications of the team members who may be working on your project, and a reference list of previous clients who commissioned work similar to what you want accomplished at your company. It is also important to request the same information from each consultant so you can make a uniform comparison of services between firms. For your convenience, questionnaires have been provided on pages 10 and 11 of this publication to help you organize each consultant's expertise.

Once you receive this information, review it carefully. This documentation will help you **narrow down your general list of consultants**. You may also choose to set up a personal meeting with the consulting firm to explain the needs of your business. An interview can help you further rerank your list of consultants. Once you have a smaller list of potential service providers, you may want to arrange them by order of preference.

Now that your "short list" of consulting firms has been established, the next step is to **request a proposal** from your top ranked firms or submit your own proposal for services. A proposal is a document that clearly delineates what services will be provided. The proposal should be tailored to address the specific needs of your business and clearly state the paths that will be taken to arrive at a remedy. The proposal should itemize the costs involved for both an anticipated personnel commitment, equipment to be used, as well as other miscellaneous incidentals such as photocopying and postage. The proposal should also include a time frame for project "milestones" (e.g. accomplishments for project stages or requirement deadlines).

When reviewing the proposal, you should keep in mind that the lowest cost or "bottom line" of a proposal may not always give you the best results. The management of a business must

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review each proposal and weigh the merits of each proposal independently of one another. Beware of hidden costs; although a consulting firm might appear to be lower in cost, it may bill your company extra for outside services (e.g. laboratory analyses, travel, telephone costs, computer time, photocopies, subcontracted work, and other such “reimbursables”) which were not included in the original proposal bid. If you have questions about whether your needs are being met in the proposal, contact the potential consultant for more definitive answers. Finally, you should send a short notification letter to those consultants who submitted proposals and whose services you have declined to use.

Help with the Selection Process

An environmental consultant should be selected based on the qualifications and work experience of both the staff and firm. For those companies with little to no previous experience working with the environmental consultant selection process, a flexible procedure known as **Qualifications Based Selection (QBS)** is available through Michigan’s QBS Coalition. The Michigan QBS Coalition was created in 1984 and works through the American Council of Engineering Companies (ACEC) to provide free QBS facilitator services to owners of companies who need assistance with the complexities of the consultant selection process. QBS facilitators can help companies set up selection criteria based on the company’s needs, however, the QBS facilitator is not able to recommend specific individuals or firms, evaluate or critique the work of specific individuals or firms, or specify the type of process to be used in the selection of an environmental professional. For more information or questions on Michigan’s QBS facilitator services, contact the ACEC directly. ACEC contact information is provided on page 9.

Contract Negotiation

In most cases, a consultant’s proposal will also serve as a contract. After you are satisfied that a particular consultant can best and thoroughly address your company’s needs, you should have legal counsel review the proposal and/or contract before signing it. If the proposal is not in contract form, you may want to **request that a contract be prepared**. You may want to have the consulting firm prepare one for you based on the proposal, or you may want to prepare your own through your legal counsel. When preparing to sign a professional services agreement (the contract), there are a minimum number of items that should be specified in the document:

- *The Scope of Work* defines the services you and the consultant have agreed upon. The Scope of Work should be as detailed as possible and include a general description of the work (including a description of the consultant’s project approach), an approximation of the time frame(s) in which the work will be completed, the type and groups of personnel that will provide the technical assistance, and the form of the completed project (e.g. tank removal, modified process, new equipment, permit application completion, etc.). The Scope of Work may include drawings and specifications as needed. The Scope of Work should also be flexible enough to allow modifications to the project as they arise (i.e. changes involving input materials, equipment, alteration of deadlines, additional sampling/testing, delays, etc.). Any work or product assumptions on the part of the environmental consultant or business should be clearly stated in the Scope of Work portion of the contract.

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- *The Cost and Payment Terms* will also be detailed in the professional services agreement. This information, along with the description specified in the “Scope of Work,” is the major component of your contract. The cost provision should clearly list amounts that will be charged for each type and use of product or service performed with an estimation of the total cost. The payment terms should list when and how often payment will be made to the consultant. The management of a company may want to structure the payment terms to coincide with specific deadlines or total project completion. A complete agreement should also state by which party and under what circumstances the contract can be terminated, as well as the consequences of termination.
- *Limits on Liability* are generally delineated in the contract by both parties. Businesses should be aware that there are many ways in which a consultant could limit the liability of their firm:
 - ❑ Limit total liability to the amount equivalent to the contractual fee or a designated percentage of the contractual fee. This means that if there are any external problems generated from the project (i.e., lawsuits), the consultant limits his/her firm’s liability from the project to the amount received from the contract.
 - ❑ Limit total liability to a fixed value as stated in the consultant's general liability insurance policy, which is to be in force at the time the contract becomes binding.
 - ❑ Limit total liability to a discretionary fixed dollar amount as set by either the company or the consultant.

All businesses should carefully review this portion of the professional services agreement to determine whether the stated limits on liability protect their business interests. You may want to limit your company’s liability by including language allowing the consultant to indemnify you (or cover your company’s liability under the consultant’s general liability insurance). Prudent consideration should be given to the level of liability risk your business is willing to accept. It is important to know what recourse is available to your company in case of “errors or omissions” in the work performed. For more information, business managers may want to review the “Standard Form of Agreement between Owner and Engineer for Professional Services,” prepared by the National Society of Professional Engineers, American Council of Engineering Companies, and the American Society of Civil Engineers. To obtain a copy of this form, see page 9.

- *Certifications* should be made by including statements in the services agreement to cover the following areas:
 - ❑ **Compliance:** Work performed should be in compliance with all applicable federal, state, and local laws and regulations.
 - ❑ **Confidentiality:** To prevent the unauthorized disclosure of information given to or generated by the consultant.
 - ❑ **Insurance:** All general and professional liability insurance (known as "errors and omissions") should be current, in force, and provide adequate coverage for your company as the firm’s customer. Environmental

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consultants carry professional liability insurance to protect establishment owners in case there is an error or omission in the services they provide. Other types of general and professional liability insurance which should be current include workers' compensation; employer liability insurance; comprehensive automobile liability insurance; and, if needed; insurance coverage against certain environmental liabilities such as hazardous waste or asbestos removal. All insurance should be of an adequate amount that is satisfactory in case of loss or liability.

Your company may also wish to include a statement that provides a performance guarantee or warranty on any equipment purchased/installed or services rendered. Finally, it is highly recommended that all professional service agreements and contracts be prepared and/or reviewed by your company's legal counsel prior to the execution of the contract to ensure that your rights are well protected.



Managing The Consultant

Once the contract has been signed and the project is underway, what is your role as a client? Your company hired the consultant to review information and make technical recommendations on how to solve your problem. The consultant in turn will produce and document data or test results, and draft preliminary reports for recommended courses of action to be taken by your business. It is important that the management in your company take a proactive role with the consultant. To best assist the consultant, you or your company's designee must cooperate with the consulting staff by forwarding records upon request; allowing access to facilities, machinery, and information; assisting in the problem-solving process as needed; and reviewing and commenting on preliminary and progress reports as soon as possible. Often costs can be minimized with this type of client/consultant relationship. Remember: the consultant's role is to aid you in achieving or attaining compliance. Ultimately, the responsibility for maintaining compliance with all of your company's environmental requirements rests with you, not the consultant.

Finally, here are some additional tips to ensure smooth progress on your environmental project while maintaining an open line of communication between you and your environmental consultant:

- Require the consultant to notify you when certain stages or milestones of your project have been completed, and when they will be interacting with the regulatory agency.
- Establish a payment schedule that is flexible enough to account for idle or down time during the project's completion (e.g. delays caused by poor planning).
- Require the consultant to bill you at regular intervals and pay only for completed work.
- Establish an understanding with the consultant that you expect a level of both professional and quality work.

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- ❑ Encourage the consultant to first seek pollution prevention alternatives (e.g. material reuse, recycling, reduction, elimination, substitution, or sustainability) at the beginning of the job's problem-solving stage. In some cases, businesses with 100 employees or less may qualify for a low interest loan through the Small Business Pollution Prevention (P²) Loan Program. For more information on this program, contact the Michigan Department of Environmental Quality's Environmental Assistance Division at 1-800-662-9278.

Keep in mind that you are the client, and only you can evaluate what will work for your company. The consultant's job is to make technical recommendations on a project. In the end, it is you who must make the final decision. Remember, reporting and compliance obligations are the responsibility of your business; but with careful selection and management, the right environmental consultant can best help you meet those obligations.

SOURCES FOR MORE INFORMATION

Assistance Available From the State:	Other Resources:
<p><i>To obtain a copy of any MDEQ publication, directory, or list, or for more information on the Small Business P² Loan Program contact:</i></p> <p>ENVIRONMENTAL ASSISTANCE DIVISION MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY PO BOX 30457 LANSING MI 48909-7957 1-800-662-9278/FAX (517) 335-4729 E-mail contact: deq-ead-env-assist@michigan.gov www.michigan.gov/deq</p>	<p><i>To obtain a copy of the "Standard Form of Agreement between Owner and Engineer for Professional Services" contact:</i></p> <p>NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS 1420 KING ST ALEXANDRIA VA 22314-2715</p> <p>(703) 684-4811 E-mail contact: customer.service@nspe.org www.nspe.org</p>
<p><i>For general information on statewide consultants and/or free Qualifications Based Selection (QBS) facilitating services, contact:</i></p> <p>AMERICAN COUNCIL of ENGINEERING COMPANIES (ACEC) MICHIGAN CHAPTER 1407 S HARRISON SUITE 225 (Nisbet Building) EAST LANSING MI 48823 (517) 332-2066/FAX (517) 332-4333 E-mail contact: wagner.steve@acd.net www.acec-mi.org</p>	

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GENERAL GUIDE FOR WORKING WITH AN ENVIRONMENTAL CONSULTANT

(This questionnaire is provided as a courtesy for businesses by the Michigan Department of Environmental Quality [MDEQ], Environmental Assistance Division and is not required to be returned or submitted to the MDEQ.)

PRE-SELECTION PREPARATION	Completed?		Need Further Clarification/ More Information	
	Yes	No	Yes	No
Identify a specific project, need, or problem				
Identify project parameters such as schedules, types of tests & analyses, techniques, cost, etc.				
Identify the capabilities/limitations of your company toward your project, need, or problem				
Develop a list of consulting firms to contact				
KEY AREAS/ISSUES/QUESTIONS TO BE COVERED WITH THE ENVIRONMENTAL CONSULTANT	Addressed?		Need Further Clarification/ More Information	
	Yes	No	Yes	No
Has the consultant <i>recently</i> (within the last 2-3 years) completed a similar project?				
What type of relationship does the consultant have with federal, state, and local regulators or environmental agencies?				
Is the consultant required to be an approved “qualified consultant” (QC) in order to perform a certain environmental activity?				
What type of relationship does the consultant have with product/equipment vendors?				
What quality control (QC) and quality assurance (QA) measures will the consultant use to guarantee accuracy on the project?				
Does the consultant’s proposal for services cover:				
The overall relevant experience/qualifications of the consulting firm				
The consultant’s management structure for your project:				
List of staff-specific workload requirements				
Names/background experience of management and staff				
List of other technical resources to be used on your project				
Subcontractors				
Billing rates and total “not to exceed” cost breakdown for assigned resources				
For staff and equipment				
Outside services (i.e. testing/analytical lab work)				
Licenses, registrations, and certifications for both staff and firm				
▪ Professional Engineer (PE) certification				
▪ HAZWOPER Certification (40 & 8 hr. updates)				
▪ MIOSHA (worker safety compliance)				

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GENERAL GUIDE

FOR WORKING WITH AN ENVIRONMENTAL CONSULTANT *(continued)*

(This questionnaire is provided as a courtesy for businesses by the Michigan Department of Environmental Quality [MDEQ], Environmental Assistance Division and is not required to be returned or submitted to the MDEQ.)

KEY AREAS/ISSUES/QUESTIONS TO BE COVERED WITH THE ENVIRONMENTAL CONSULTANT <i>(continued)</i>	Addressed?		Need Further Clarification/ More Information	
	Yes	No	Yes	No
Payment terms and termination of contract rights <i>(continued)</i>				
Types of insurance coverage and extent of liability				
▪ General business (i.e. personal liability, property damage, etc.)				
▪ Workers' compensation				
▪ Comprehensive automobile insurance				
▪ Contractor's pollution liability insurance				
Types of insurance coverage and extent of liability				
▪ Errors and Omissions (i.e., environmental liability)				
Confidentiality				
Time frame for project completion				
A review of the completed project with company staff				
Reference list of previous clients who have commissioned similar work				
CRITERIA REVIEW/PROPOSAL SELECTION	Completed?		Comments	
	Yes	No		
Obtain additional information/clarification on proposal (if needed)				
Assign a weighted percentage to each key area based on importance to the company				
Set up a ranking system for each key area (i.e. 1= poor , 10= excellent)				
Compare and score each key area for each firm, factoring in the weighted percentage				
Sum up the scores, choosing the firm that best addresses your company's needs				
Attorney review of selected proposal/contract				

APPENDIX

The questionnaires provided on pages 15 –31 can be used as an additional guidance tool by companies to determine what *type* of environmental consultant is needed for a particular task or job. Below are short descriptions of specific environmental areas, along with some of the typical instances that might require the use of a consultant's expertise. These descriptions are not inclusive, but are meant to be used as a guide to determine which questionnaire is appropriate to use for consultant evaluation and selection.

Air Quality Consultant Questionnaire: Use this questionnaire if you need to complete work in the following topic areas relating to air pollution control:

- Assessing applicability of permit requirements.
- Completing applications for a Permit to Install or a Renewable Operating Permit;
- Air dispersion modeling.
- Air toxics evaluation.
- Analytical sampling, performance testing, or stack testing for metals or other pollutants.
- Design and installation of pollution control equipment.
- Submission of annual Michigan Air Pollution Reporting System (MAERS) forms.
- Initial notification, monitoring, or reporting requirements for compliance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for such areas as Asbestos, Electroplating, Halogenated Solvent, Wood Finishing, or Dry Cleaning.
- Air pollution control violations resulting in enforcement or consent order negotiation.

Public Water System Consultant Questionnaire: Use this questionnaire if you need help with a public water supply project for: a municipality, campground, public swimming pool, or manufactured housing site which requires:

- Indoor radon testing.;
- Analytical testing for Coliform bacteria, metals, organic, and inorganic compounds.
- Construction, inspection, and painting of portable water storage tanks and reservoirs.
- Sanitary surveys.
- Monitoring and recordkeeping for organic and synthetic inorganic compounds.
- Certification of drinking water laboratories and well driller/pump installations.

Environmental Remediation Consultant Questionnaire: This questionnaire can help you if you are required to clean up or revitalize a contaminated site resulting from accidental releases, environmental spills, or the removal of underground storage tanks where there is a need for:

- Ground or groundwater clean-up;
- Removal and disposal of contaminants;

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- Environmental investigation, sampling, monitoring, and testing.
- Well construction and abandonment.
- Ecological risk assessments.
- Feasibility studies.
- Remedial design and construction.
- Air, soil, or ground and surface water monitoring or treatment.
- Financing options for remediation.
- Brownfield redevelopment activities.

Geological Services Consultant Questionnaire: This questionnaire is designed to help companies evaluate the services of a consultant when duties call for:

- Conducting hydrogeological studies.
- Installing groundwater monitoring wells around secondary containment areas.
- Preparing baseline environmental assessments (BEAs) prior to transferring oil and gas permits.
- Preparing mining and reclamation plans.
- Preparing soil erosion and sedimentation control plans at oil and gas facilities.
- Investigating groundwater contamination.
- Preparing final closure plans for mining operations.
- Preparing environmental assessments or environmental impact statements.
- Preparing contingency plans for evacuation of the general public when drilling through sour gas zones.
- Conducting dispersion modeling to address odor complaints.
- Plugging of oil and gas wells.
- Sealing of underground mine shafts.

Water Quality Consultant Questionnaire: This questionnaire can be used for work that must be completed for:

- National Pollution Discharge Elimination System (NPDES) permits.
- Municipal and industrial pre-treatment development, construction, modifications, and monitoring.
- Stormwater design, construction, and monitoring.
- Non-point source system grant proposals and design and construction.
- Aquatic toxicity testing.

Wetland, Lake, and Stream Consultant Questionnaire: Use this questionnaire for activities at the land/water interface such as:

- Dredging or filling a lake, stream, or wetland.
- Constructing or dismantling a dam.
- Constructing a marina.
- Placing shore protection or docks.
- Building in a designated critical sand dune, wetland, or floodplain.

Waste Management Consultant Questionnaire: Use this questionnaire if you need help managing solid, liquid, and/or hazardous wastes that require:

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- ❑ Waste characterizations, including groundwater sampling and analysis.
- ❑ Groundwater permitting.
- ❑ Construction and disposal from, or well design and installation for, wastewater treatment plants.
- ❑ On-site management of hazardous waste accumulation and labeling.
- ❑ Waste minimization or pollution prevention projects.
- ❑ Secondary containment projects.
- ❑ Transportation of waste off-site.
- ❑ Large quantity generator biennial reporting.
- ❑ Landfill construction, permitting, monitoring, and well design.

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SAMPLE QUESTIONNAIRE FOR EVALUATING THE SERVICES AND QUALIFICATIONS OF AN AIR QUALITY CONSULTANT

This questionnaire is provided as a courtesy to business and industry by the Michigan Department of Environmental Quality (MDEQ), Environmental Assistance Division. It is a tool to be used in conjunction with the "General Guide" questionnaire, and can help you evaluate the qualifications of environmental consultants. **This questionnaire is not required to be returned or submitted to the MDEQ.**

Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact	
Permitting Assistance	Years of Experience in the Field	Total Number of Jobs Completed	Work Performed for What Type of Emission Source?	
			Minor	Major
Permit to Install				
Renewable Operating Permit				
Air Dispersion Modeling				
Air Toxics Evaluation				
Control Equipment Engineering				
Permit Condition Negotiation				
Enforcement/Consent Order Negotiation				
Air Quality Reporting				
Michigan Air Emissions Reporting System				
National Emission Standards for Hazardous Air Pollutants (NESHAP)				
Initial Notification Forms				
Reporting Forms				
Risk Management Planning (RMP) for Accidental Releases				
Auditing, Testing, and Sampling				
EPA Sampling and Testing Methodology				
CEMS/COMS Performance Testing				
Lab analyses of pollutants				

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SAMPLE QUESTIONNAIRE FOR EVALUATING THE SERVICES AND QUALIFICATIONS OF A PUBLIC WATER SYSTEM CONSULTANT

This questionnaire is provided as a courtesy to business and industry by the Michigan Department of Environmental Quality (MDEQ), Environmental Assistance Division. It is a tool to be used in conjunction with the "General Guide" questionnaire, and can help you evaluate the qualifications of environmental consultants. **This questionnaire is not required to be returned or submitted to the MDEQ.**

Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact
Community Public Water Supplies (Type I)			
Testing and Sampling	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Coliform Bacteria			
Copper			
Cyanide			
Lead			
Nitrates/Nitrites			
Other Metals			
Radiological Contaminants			
Synthetic Organic Compounds			
VOCs			
Inorganic Compounds			
Monitoring and Recordkeeping			
Inorganic Compounds			
Synthetic Organic Compounds			
VOCs			
Reporting			
Drafting Consumer Confidence Reports (CCRs)			
Non-Community Public Water Supplies (Type II)			
Transient Suppliers			
Testing and Sampling			
Coliform bacteria			
Nitrates/Nitrites			
Non-Transient Suppliers			
Testing and Sampling			
Cyanide			
Lead			

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Sample Questionnaire for Public Water System Consultant

Page 2

Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact
Non-Community Public Water Supplies (Type II) <i>(continued)</i>	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Monitoring and Recordkeeping			
VOCs			
Synthetic Organic Compounds			
Inorganic Compounds			
Reporting			
Drafting Consumer Confidence Reports (CCRs)			
Portable Water Storage Tanks & Reservoirs			
Construction Permits			
Interior tank painting & repair			
Testing and Sampling			
Coliform bacteria			
Diving Inspections			
Community/School Water Supply and Treatment			
Fluoride Design Standard Planning and Maintenance			
Fluoride Monitoring			
Well and Dewatering Well Drilling/Pump Installation			
MDEQ Contractor Registration			
Sanitary Surveys			
Testing and Sampling			
Transient Supplies			
Coliform bacteria			
Nitrate			
Nontransient Supplies			
Coliform bacteria			
Nitrate			
Other			
Metals			
VOCs			
Synthetic Organic Chemicals			
Cyanide			
Lead			
Copper			
Monitoring and Recordkeeping			

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SAMPLE QUESTIONNAIRE FOR EVALUATING THE SERVICES AND QUALIFICATIONS OF AN ENVIRONMENTAL REMEDIATION CONSULTANT

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Company Name: Address: City: State: Zip Code:	Telephone <u>Number</u>	FAX <u>Number</u>	<u>Primary Company Contact</u>
Environmental Spill/Release Clean-up	Years of Experience in the Field	Total Number of Jobs Completed	Agency for Whom Environmental Work Was Performed
Containment & Characterization Methods			
Contracted Work (24 hr. response)			
Drum Removal & Disposal			
Free Product Recovery Systems			
Groundwater Cleanup			
Professional Resource Staff (i.e., geologists, hydrogeologists, engineers, etc.)	Y or N		
Response Equipment (i.e., booms, spill pads, absorbent materials, vacuum truck, emergency lighting, personnel, etc.)	Y or N		
Staff that are certified as state-approved “Qualified Consultants”			
Soil Cleanup			
Surface Water Cleanup			
Environmental Investigation and Sampling			
Chain of Custody	Y or N		
Containment & Characterization Methods			
Drum Removal & Disposal			
Federal US EPA Sampling & Testing Methods	Y or N		
Field Monitoring Equipment (i.e., HNu, PID, H ₂ S, HCN, pH, Spec. Conduct., DO, etc.)	Y or N		
Investigation Equipment (i.e., soil & groundwater sampling equipment, etc.)	Y or N		
Professional Resource Staff (i.e., geologists, hydrogeologists, engineers, etc.)	Y or N		

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Sample Questionnaire for An Environmental Remediation Consultant

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Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact
Environmental Investigation and Sampling <i>(continued)</i>			
State Sampling & Testing Methods	Years of Experience in the Field	Total Number of Jobs Completed	Agency for Whom Environmental Work Was Performed
Well Construction/Abandonment (ASTM Standard D5299-92 “Standard Guide for the Decommissioning of Ground Water Wells, Vadose Zone Monitoring Devices, Bore Holes, and Other Devices for Environmental Activities.”)	Y or N		
Ecological Risk Assessments			
Aquatic Toxicity Testing			
Ecological Risk Assessments			
Federal Endangered Species Inventory			
Michigan Features Inventory			
Natural Resource Damage Assessments			
Professional Resource Staff (i.e., biologists, botanists, hydrogeologists, hydrologists, etc.)	Y or N		
Feasibility Studies			
Environmental Risk Assessments			
Human Health Risk Assessments			
Professional Resource Staff (i.e., engineers, statisticians, etc.)	Y or N		
Remedial Action Plan			
Remedial Cost Analyses			
Remedial Information Management			
Remedy Selection/Alternatives Array			
Remedial Design			
Air Treatment System and Monitoring			
Best Available Treatment Technology			
Federal Clean Air Act			
Free-Product Recovery Systems			
Groundwater Treatment Systems			
National Emission Standards for Hazardous Air Pollutants (NESHAP – i.e., asbestos, vinyl chloride, beryllium, mercury, etc.)	Y or N		
Permitting and Reporting System			

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Sample Questionnaire for An Environmental Remediation Consultant

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Company Name: Address: City: State: Zip Code:	<u>Telephone Number</u>	<u>FAX Number</u>	<u>Primary Company Contact</u>			
Remedial Design <i>(continued)</i>	Years of Experience in the Field	Total Number of Jobs Completed	Agency for Whom Environmental Work Was Performed			
Professional Resource Staff (i.e. civil, environmental and mechanical engineers, etc.)	Y or N					
Soil Treatment Systems						
Surface Water Treatment Systems						
Remedial Action/Construction						
Air Treatment System Installation and Monitoring						
Containment and Characterization Methods	Y or N					
Drum Removal and Disposal						
Environmental Permits/Compliance						
Equipment Engineering Control Systems						
Free-Product Recovery Systems						
Groundwater Treatment System Installation						
National Emission Standard for Hazardous Air Pollutants (NESHAP – i.e., asbestos, vinyl chloride, beryllium, mercury, etc.)	Y or N					
Professional Resource Staff (i.e., civil, environmental, mechanical engineers/scientists, etc.)	Y or N					
Soil Treatment System Installation						
Surface Water Treatment System Installation						
Operation and Maintenance (O & M) of Treatment Systems						
Air, Soil, and Ground and Surface Water Monitoring						
Control System Operation and Maintenance						
Cost Tracking and Projection						
Environmental Permits/Compliance						
National Emission Standard for Hazardous Air Pollutants (NESHAP – i.e., asbestos, vinyl chloride, beryllium, mercury, etc.)	Y or N					
O & M Parts Inventory Tracking						
O & M Recordkeeping						
O & M Schedule						
Professional Resource Staff (i.e., environmental, mechanical engineers/scientists, etc.)	Y or N					
Routine Operation and Maintenance						
Treatment System Operator Certification	Y or N					

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Sample Questionnaire for An Environmental Remediation Consultant

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Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	<u>Primary Company Contact</u>
Long Term Remedial Action and Monitoring	Years of Experience in the Field	Total Number of Jobs Completed	Agency for Whom Environmental Work Was Performed
Air, Soil, and Ground and Surface Water Monitoring			
Control System Operation and Maintenance			
Cost Tracking and Projection			
Environmental Permits/Compliance			
HAZWOPER Certification (40 & 8 hour refresher)	Y or N		
MIOSHA (worker safety compliance)	Y or N		
National Emission Standards for Hazardous Air Pollutants (NESHAP – i.e., asbestos, vinyl chloride, beryllium, mercury, etc.)	Y or N		
O & M Parts Inventory Tracking			
O & M Recordkeeping			
O & M Schedule			
Professional Resource Staff (Environmental/Mechanical Engineers, Geologists, Scientists, etc.)	Y or N		
Routine Operation & Maintenance			
Site Closure and Delisting			
Treatment System Operator Certification	Y or N		
Brownfield Redevelopment Activities			
ASTM Compliant Phase I & II Environmental Site Assessments			
Baseline Environmental Assessment (BEA) Development			
Brownfield Plans and Work Plans			
Pollution Incident Prevention Plans (PIPP)			
Spill Prevention and Control Countermeasure (SPCC) Plans			
Financing			
Revitalization Revolving Loan Program Applications			
Municipal Landfill Cost-Share Grant Applications			
Site Assessment Grant Applications			
Clean Michigan Initiative Grant Applications			
Site Survey and Identification for Redevelopment			

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SAMPLE QUESTIONNAIRE FOR EVALUATING THE SERVICES AND QUALIFICATIONS OF A GEOLOGICAL SERVICES CONSULTANT

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Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact
Permitting Assistance	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Permits to Drill and Operate Oil And Gas Wells			
Permits to Drill and Operate Mineral Wells			
Permits to Mine Dune Sand			
Permits to Mine Metallic Minerals			
Preparation of Baseline Environmental Assessments (BEAs)			
Preparation of Environmental Impact Statements			
Environmental Investigations			
Hydrogeological Studies			
Groundwater Monitoring Well Installations			
Sampling			
Laboratory Analysis			
Dispersion Modeling			
Odor Complaints			
Radius of Exposure Determinations			
Corrective Actions			
Plugging Oil, Gas, and Mineral Wells			
Sealing Underground Mine Shafts			
Abatement of Acid Mine Drainage			
Subsidence Control Measures			

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SAMPLE QUESTIONNAIRE FOR EVALUATING THE SERVICES AND QUALIFICATIONS OF A WATER QUALITY CONSULTANT

This questionnaire is provided as a courtesy to business and industry by the Michigan Department of Environmental Quality (MDEQ), Environmental Assistance Division. It is a tool to be used in conjunction with the "General Guide" questionnaire, and can help you evaluate the qualifications of environmental consultants. **This questionnaire is not required to be returned or submitted to the MDEQ.**

Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact
NPDES Permits	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Permit applications			
Permit Compliance Monitoring			
Permit Compliance Negotiation			
Treatment System Construction/Modification			
Industrial Pretreatment			
Municipal			
Development of Maximum Allowable Headworks Loadings (MAHLs)			
Development of local limits			
Assistance with determining federally applicable categorical standards			
Development of local ordinances			
Sampling/permit compliance monitoring			
Industrial			
Permit Applications			
Permit Compliance Monitoring			
Permit Compliance Negotiation			
Formulation of Treatment Options			
Formulation of Waste Reduction Options			
Treatment System Construction/Modification			

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Sample Questionnaire for A Water Quality Consultant

Page 2

Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	<u>Primary Company Contact</u>
Wastewater Treatment	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Municipalities			
Collection System Design			
Pump Station and Trunk Transport System Design			
Treatment Facility Design			
Industrial			
Treatment Facility Design			
Stormwater			
Stormwater Control System Design			
Construction of Stormwater Control Systems			
Monitoring of Stormwater Control Systems			
Development of Pollution Prevention Plans			
Development of Local Ordinances			
Assessment and evaluation of control equipment effectiveness			
Selection of best management practices			
Public relations/educational outreach			
Certified operator training			
Non-point Sources			
Grant Proposal Development and Submission Experience			
System Design (e.g. best management practices for streambank stabilization, erosion control, livestock exclusion, etc.)			
System construction			
Stream characterization			
Physical			
Biological			
Chemical			
Development of local ordinances			
Public relations/educational outreach			

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Sample Questionnaire for A Water Quality Consultant

Page 3

Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	<u>Primary Company Contact</u>
Aquatic Toxicity Testing	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Wet Laboratory Assessment			
State and federal certification	Y or N		
Date of last state or federal lab inspection			
Results of inspection – (Acceptable, Minimally Acceptable, or Unacceptable Ratings)			
Performance on the EPA Discharge Monitoring Report-Quality Assurance (DMR-QA) studies (for those labs that work with permitting)			
Lab Staff Qualifications			
Reference Toxicant Tests for Test Methods (Quality Assurance)			
Recordkeeping			
Standard Operating Procedure (SOP) Development (e.g. Test Methods, Cultures, and Quality Assurance)			
Cultures			
Daily Test Raw Data			
Toxicity Test Reports			
Reference Toxicity Tests			
Lab <i>Ceriodaphnia Dubia</i> Test Success Rate			

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SAMPLE QUESTIONNAIRE FOR EVALUATING THE SERVICES AND QUALIFICATIONS OF A WETLAND, LAKE, AND STREAM CONSULTANT

This questionnaire is provided as a courtesy to business and industry by the Michigan Department of Environmental Quality (MDEQ), Environmental Assistance Division. It is a tool to be used in conjunction with the "General Guide" questionnaire, and can help you evaluate the qualifications of environmental consultants. **This questionnaire is not required to be returned or submitted to the MDEQ.**

Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact
Wetlands	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Wetland Delineation – wetland plants, hydrology, and hydric soils identification			
Permit Applications			
Wetland Restoration			
Wetland Mitigation			
Wetland Monitoring			
Project planning, including site design, alternatives analysis, defining project purpose, wetland avoidance, and impact minimization			
Threatened and endangered species identification/surveys			
Wetland Protection			
Construction Plans and Implementation			
Inland Lake Management			
Aquatic Plant Identification and Mapping			
Aquatic Nuisance Control Permit Applications			
Plant Management Techniques and Tools			
Lake Water Quality Monitoring and Assessment			
Watershed Assessment and Planning			
Lake Restoration and Protection			
Permit applications and other issues associated with dams, lake levels, or construction activities in lakes			

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Sample Questionnaire for A Wetland, Lake, and Stream Consultant

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Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact
Shorelands Protection and Management	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Permitting			
High Risk Erosion Areas			
Setback Requirements			
Structure Types			
Permanent			
Readily Moveable			
Shore Protection Design			
Bulkheads			
Rock Revetments			
Great Lakes Submerged Lands			
Permitting			
Shoreland Protection			
Bulkheads			
Rock/Riprap			
Dredging			
Sediment Sampling			
Dock Design and Construction			
Marina Design and Construction			
Sand Dune Protection and Management			
Engineering/Architectural Design			
Foundation Design and Engineering			
Driveway Design and Engineering			
Stormwater Management			
Retaining Wall Construction			
Preparation of Site Plans			
Preparation of Restoration Plans			
Knowledge of Slope Stability			
U.S. Clean Water Act/Rivers and Harbors Act			
Federal Clean Water Joint Application MDEQ/USCOE			

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Sample Questionnaire for A Wetland, Lake, and Stream Consultant

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Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	<u>Primary Company Contact</u>
Dams	Years of Experience in the Field	Total Number of Jobs Completed	Additional Comments
Permitting			
Development of Emergency Action Plans (EAPs)			
Modeling Software for Dam Failures	Y or N		
Design Projects			
Slope Stability			
Structural Stability			
Hydraulics			
Hydrology			
Net Flow Analysis			
Repair Projects			
Removal Projects			
Inspection Projects			
Dam Safety			
Hydraulics			
Foundation Engineering			
Geotechnical Engineering			
Dam Design and Construction			
Evaluation of Existing Concrete Structures			
Legal Lake Level			
Reservoir Routing			
Reporting			
Dam Safety			
Legal Lake Level			
Membership in the Association of State Dam Safety Officials (ASDSO)	Y or N		
Membership in the American Society of Civil Engineers (ASCE)	Y or N		

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SAMPLE QUESTIONNAIRE FOR EVALUATING THE SERVICES AND QUALIFICATIONS OF A WASTE MANAGEMENT CONSULTANT

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Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	Primary Company Contact
Wastewater Treatment for Groundwater Discharge	Years of Experience in the Field	Total Number of Jobs Completed	Agency With Whom Environmental Work Was Performed
Wastewater Characterization			
Groundwater Sampling and Analysis			
Groundwater Permitting			
Water Resource Protection			
Plant Construction			
Design			
Oxidation Ditch			
Surface Batch Reactor (SBR)			
Lagoons			
Ground Water Disposal			
Lagoon Method			
Rapid Infiltration Method			
Title Field Method			
Spray Irrigation			
Monitoring Well Design & Installation			
Decommissioning of Monitoring Wells			
Facility Closure			
Operation and Maintenance of Plant			
Creation of Operation & Maintenance Manuals			
Hazardous Waste			
Management On-site			
Waste Accumulation Evaluation			
Labeling			

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Sample Questionnaire for A Waste Management Consultant

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Company Name: Address: City: State: Zip Code:	Telephone Number	FAX Number	<u>Primary Company Contact</u>
Hazardous Waste (continued)	Years of Experience in the Field	Total Number of Jobs Completed	Agency With Whom Environmental Work Was Performed
Waste Minimization or P ² Projects			
Waste Testing, Evaluation & Classification			
Secondary Containment			
Tank Installation and Certification			
Personnel Training			
Transportation off-site/Waste Transporters			
Manifest documentation			
Permitted & Registered with the State			
Groundwater Sampling and Analysis			
Permit and Operating License for Designated Facility			
Monitoring Well Design & Installation			
Decommissioning of Monitoring Wells			
Insurance (for accidents & environmental spills)			
Treatment Options Prior to Disposal			
Service to Small Quantity Generators (SQG)			
Trained Contaminant Transport Staff			
HAZWOPER Certification (40 & 8 hour refresher)			
MIOSHA (worker safety compliance)			
Professional Resource Staff (i.e., environmental engineers/scientists, etc.)			
Large Quantity Generator (LQG) Biennial Reports			

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Sample Questionnaire for A Waste Management Consultant

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Company Name: Address: City: State: Zip Code:	Telephone <u>Number</u>	FAX <u>Number</u>	<u>Primary Company Contact</u>
Landfills	Years of Experience in the Field	Total Number of Jobs Completed	Agency With Whom Environmental Work Was Performed
Construction			
Solid Waste Management			
Permitting and Licensing			
Professional Resource Staff (i.e., environmental engineers/scientists, etc.)			
Groundwater Sampling and Analysis			
Monitoring Well Design & Installation			
Decommissioning of Monitoring Wells			
Developing Corrective Action Guidelines			
Contaminant Transport			

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