

Writing a Request for Proposals: a primer for brownfield pilots

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HAZARDOUS SUBSTANCE RESEARCH CENTERS



Cleaning up and redeveloping brownfields is essential if we are going to preserve our neighborhoods, slow down urban sprawl, and stop the continuing development of new industrial and commercial facilities on farmland. Federal and state governments are taking action to encourage redevelopment of brownfields, including making funds available for evaluating, cleaning up, and redeveloping these properties. For example, EPA Brownfield Pilot Grants for up to \$200,000 are awarded to communities for the purpose of assessing the environmental conditions of brownfields.

Communities that receive a Brownfields Pilot Grant typically need to hire a contractor to do an environmental assessment of the property. The purpose of this primer is to guide those who need to solicit proposals for environmental assessments of brownfields. This document is a general guide only and is intended to help those soliciting proposals to clearly state their requests and requirements. It does not include any procedural information that may be required by the specific city or entity requesting proposals, nor does it contain any legal information. For these types of questions, consult an attorney or appropriate person within your organization.



Acknowledgment: Although this article has been funded in part by the U.S. Environmental Protection Agency under assistance agreement R-819653, through the Great Plains/Rocky Mountain Hazardous Substance Research Center, it has not been subjected to the agency's peer and administrative review and, therefore, may not reflect the views of the agency. No official endorsement should be inferred.



Communities benefit when brownfields are redeveloped.

Soliciting proposals for environmental assessment work involves producing a “Request for Proposals” which spells out the goals of the redevelopment project and environmental site assessment. This document should include the following:

Glossary of Terms

ASTM—American Society for Testing and Materials, an organization that writes technical standards and guidelines

Brownfield—Abandoned, idled, or underused industrial or commercial facility where expansion or redevelopment is complicated by real or perceived environmental contamination

EPA—United States Environmental Protection Agency

ESA—Environmental Site Assessment

Phase I Environmental Site Assessment—Identifies potential environmental concerns. A Phase I Environmental Assessment involves a review of records, a site reconnaissance (walk-through), and interviews to evaluate whether past or current activities at the site raise environmental concerns. Further described in ASTM E1527 standard.

- a description of the site, including maps and diagrams;
- a discussion of the scope of the project and expected deliverables;
- a statement about any preferences or requirements regarding assessment approaches, data quality, and reporting requirements;
- time constraints for completing the work;
- directions for access to relevant records (such as previous environmental (work) and to the site for bidders);
- directions for submitting proposals; and
- criteria that will be used for review and selection of proposals.

The Request for Proposals (RFP) should be specific to your brownfield project and describe as clearly as possible goals for the project and work to be done. Typically, the RFP is divided into sections, each addressing specific project requirements.

The following examples of such sections may be useful as you prepare an RFP for the environmental assessment of your site.

Introduction

The introduction of the RFP should identify your organization, explain the type of work for which you are seeking proposals, give a brief explanation of the project, and mention any pertinent factors such as having an EPA grant for funding the work. The following is an example of an RFP that has these elements:

1. Introduction: The City of Utopia is soliciting proposals for conducting an ASTM Phase II Environmental Site Assessment. The assessment will be conducted on a five-acre, city-owned brownfield site containing three abandoned buildings, two known underground storage tanks, and a wastewater lagoon. The work will include recommendations for remediation of the property and community outreach/education services. This Request for Proposals (RFP) provides specifications and requirements for prospective applicants to complete a proposal with cost estimates for services. Proposals submitted no later than 5 p.m. on January 10, 2001, will be considered.

The United States Environmental Protection Agency (EPA) has selected this site as a Brownfields Pilot Project. Proposed work should meet any federal requirements for work funded by an EPA Brownfields Grant.

Site Description

The property to be assessed should be described as fully as possible in the RFP. A more detailed property description will enable contractors to make

Glossary of Terms

Phase II Environmental Site Assessment—Evaluates potential concerns identified in the Phase I ESA. Phase II ESAs are tailored to meet site-specific needs and, at a minimum, may involve limited sampling and analysis to confirm or rule out potential environmental concerns.

QAPP—Quality Assurance Project Plan, a formal document describing in comprehensive detail the necessary quality assurance, quality control, and other technical activities that must be implemented to ensure results of sampling and laboratory work will satisfy stated performance criteria

RCRA—Resource Conservation and Recovery Act

RFP—Request for Proposal

TOSC—Technical Outreach Services for Communities, an EPA-funded program to provide assistance to communities with hazardous waste issues

better estimates of the time needed for and cost of environmental assessment work. Maps of the site should be included in the RFP or made available to contractors upon request. Likewise, any previous environmental assessment reports and any written materials about the history of the site that are in your possession should be made available. Continuing with the above example, the following is a detailed site description including instructions for obtaining more information:

2. Site Description. The brownfield on which the Phase II Environmental Assessment is to be completed is a five-acre site currently owned by the City of Utopia. This property was an orphanage in the early 1900s. Since then, it has been the location of various businesses, including a crop dusting business, dairy operation, and auto repair shop. The property was abandoned in 1979. In 1996, a Phase I assessment showed that the site includes three abandoned buildings, two underground storage tanks, and a wastewater lagoon. Structures on the property are in various phases of deterioration and structural failure. Deteriorating insulation encasing furnaces and piping in two of the buildings may contain asbestos. Odors from the lagoon during heavy rains may be indicative of oils or industrial cleaning fluids. There are a few partially submerged 55-gallon barrels in the lagoon.

The City of Utopia plans to redevelop this property into a city park including a swimming pool, playground area, and sheltered picnic area.

A recent aerial photo of the site is included with this RFP. The Phase I assessment, additional maps, and other historical documents are available upon request to assist in preparation of proposals. These materials may be obtained by contacting Mr. Smudge at City Hall (see Project Contacts section).

Objectives and Scope

Clearly stating objectives of the project and scope of work that you are contracting will help contractors write their proposals specifically for your project. The following is an example of an Objectives and Scope section of an RFP, again using the City of Utopia as the model case:

The overall objective of this project is to evaluate the environmental condition, and clean up and redevelop the property into a place for community activities and recreation.

Scope of services, as outlined in this RFP, is preliminary. The final scope of services will be negotiated with the selected firm and modified as needed, depending on site conditions. Scope of the project includes the following:

- Phase II Environmental Assessment following ASTM guidelines, including drilling and sampling
-

Prospective contractors need to know the level and timing of contingency development that will be expected from them. Will the contractor be expected to preplan specific courses of action for various types of findings encountered during the assessment?

activities as needed to evaluate the presence and extent of suspected contaminants in the soil and ground water, and characterizing the buildings for asbestos- and lead-containing materials

- Screening risk assessment
- Final report on field sampling activities and analytical results with conclusions on releases of hazardous substances and risks to human health and the environment, and recommendations for remedial alternatives
- Educational materials for the community which explain the environmental and human health risks and cleanup options in layman's terms
- Coordinating and participating in a community involvement plan

Methodology for Environmental Assessment

If you wish to have the contractor approach the project in a certain way, any guidance that you can give will help ensure that you receive proposals that meet your requirements. If you expect specific sampling and analytical procedures to be done, state this expectation in the RFP. Likewise, if your decision to hire a contractor will be based on the contractor's ability to determine risk-based goals and proceed with the project accordingly, state this in the RFP. Prospective contractors need to know the level and timing of contingency development that will be expected from them. Will the contractor be expected to preplan specific courses of action for various types of findings encountered during the assessment?

Prospective contractors also need to understand how the project will be managed by your organization. Will decisions be reviewed/approved by your staff, a steering committee of citizens, or others? Continuing with the example of an RFP for the City of Utopia, two different approaches to project methodology are presented below:

Prescriptive Approach (specifies how to do work):

All proposals and subsequent work plans will be reviewed by the Utopia City Council to determine if activities will meet stated objectives of the project before the start of environmental assessment activities. The final scope of services will be negotiated and modified as site conditions warrant.

The contractor will work in cooperation with the City of Utopia to determine the type and number of soil and ground-water tests to be conducted at specific locations on the site. Field sampling and analytical testing will be conducted based on information from a previous Phase I Environmental Site Assessment. All environmental drilling, sampling, and analytical procedures will be consistent with EPA and state guidelines.

Sampling activities must be adequate to determine the magnitude and extent of contamination and to identify remediation options for contaminants that may pose a threat to redevelopment and future land use.

The proposal should include estimates for installing 50 temporary wells with borings and associated logs, including soil vapor monitoring at five-foot intervals consistent with conventional drilling rigs. Procedures and costs for abandoning the wells should be included. A comparison should be made of costs, data quality, and anticipated results for conventional sampling and off-site laboratory analysis with the same sampling and analytical results, using the direct push method and a mobile lab.

Soil sample analyses will include total petroleum hydrocarbon (TPH), by EPA SW 846-8015 modified; volatile organic compounds using EPA Method 8260; benzene, toluene, ethylbenzene, and xylene (BTEX) using Method OA-1; total extractable hydrocarbons using Method OA-2; total heavy metals including arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver; base neutral and acid extractables using EPA Method 8270; polychlorinated biphenyls (PCBs); and trichloroethylene (TCE). Groundwater sampling analyses will include BTEX using Method OA-1; total extractable hydrocarbons using Method OA-2; dissolved heavy metals including arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver; base neutral and acid extractables in water using EPA Method 8270; volatile organic compounds using EPA Method 8260; polychlorinated biphenyls (PCBs); and trichloroethylene (TCE).

Performance-Based Approach (specifies the end goal of work):

All proposals and subsequent work plans will be reviewed by the Utopia City Council to determine if activities will meet the stated objectives of the project before the start of environmental assessment activities. The final scope of services will be negotiated and modified as site conditions warrant.

Sampling activities must be adequate to determine the magnitude and extent of contamination and to identify remediation options for contaminants that may pose a threat to redevelopment and future land use. All work will consider appropriate federal, state, and local regulatory standards and may include identifying likely exposure pathways and characterizing risks to establish cleanup goals and to evaluate remediation options. Contingency options for sampling will be developed by the contractor and approved by the City Project Manager.

The proposed work will follow accepted practice guidelines for environmental assessments and brownfield redevelopment, including EPA laboratory analytical methods, ASTM standards, and State Department of Health requirements. Use of cost- and time-saving equipment and methods is encouraged if the quality of data and results is adequate. In-

novative methods and procedures must be justified by anticipated time and cost savings and provisions to ensure data quality.

Analysis of remediation options will be based on cleanup goals, methods, and costs considered acceptable to city representatives, community members, and regulators. The contractor will provide information on a selected number of options and obtain feedback from stakeholders through a community participation process. Evaluation criteria will initially be public health risk; safety; ease of implementation; effectiveness; consistency with federal, state, and local laws; degree of permanency; time; and cost.

Quality Assurance

An important aspect of the field and laboratory work done for environmental assessments is quality assurance. In order to make good decisions about cleanup and redevelopment of your brownfield site, you need to have high quality information. Errors in the field or laboratory can nullify assessment results and cause increased costs. A Quality Assurance Project Plan (QAPP) is required for any environmental project funded by EPA. Therefore, it is a good idea to write your quality assurance requirements into the RFP. The following is an example of how to accomplish this task:

The proposal should describe the procedures to ensure that defensible and quality data are collected and reported. Proposals must describe and provide a rationale for selecting locations, types, quantities, and analyses of proposed samples. Proposals should also include general equipment and methods for proposed sampling and analyses with references to specific federal, state, and professional practice guidelines. Proposed analysis and measurement methods must be capable of reliably detecting concentrations equal to or below applicable cleanup standards for future land use.

The contractor will prepare a Quality Assurance Project Plan (QAPP) containing required information for approval by the EPA, per document EPA 540-R-98-038, Quality Assurance Guide for Conducting Brownfield Site Assessments, September 1998.

Health and Safety Requirements

The Occupational Safety and Health Administration (OSHA) prescribes programs of safety and health that cover a variety of occupational and construction activities involved with brownfield assessment or redevelopment (e.g., excavation, drilling, water safety). Brownfield sites and assessing issues of environmental impairment involve safety and health issues beyond traditional physical and mechanical hazards. OSHA prescribes training requirements for workers involved with hazardous waste operations subject to OSHA

Brownfield sites and assessing issues of environmental impairment involve safety and health issues beyond traditional physical and mechanical hazards.



Environmental site assessment and redevelopment activities require health and safety training.

1910.120. These requirements very often include workers performing environmental site assessments or cleanup of brownfield sites.

EPA requires health and safety training and a health and safety project plan for most programs of assessment (e.g., Superfund and RCRA). Brownfield assessments using federal funds must use EPA's Guidance for Quality Assurance Project Plans EPA QA/G-5 (EPA/600/R-98/018, February 1998) which requires consideration of safety and health training, and documentation as part of designing sampling and analysis plans as used in brownfields.

Sampling and field activities under state-level voluntary programs involving a brownfield site may also be subject to OSHA and EPA health and safety training and planning requirements.

Sampling and field activities under state-level voluntary programs involving a brownfield site may also be subject to OSHA and EPA health and safety training and planning requirements. Therefore, it is in your best interest to assure that any contractor you hire has an adequate health and safety plan and appropriate training. The following is an example of how health and safety requirements may be written as part of an RFP:

The project manager or technical lead for the project must have advanced health and safety training as specified in OSHA, 29 CFR 1910.120. The proposed individual must be present on site during any on-site work and sampling activities. All individuals working at the site must have appropriate health and safety training, including 40-hour Hazardous Waste Site Operations and 8-Hour Refresher courses. A site-specific health and safety plan must be prepared by a

certified safety professional or certified industrial hygienist, and submitted prior to performing on-site work. The proposal should provide an example outline or describe the type of information that will be included in the health and safety plan. Such a plan must be submitted as part of the work plan for the final negotiated scope of services and revised, as necessary, for subsequent work plans.

Typically the brownfield redevelopment process involves communicating with community organizations and citizens who may be affected by the project.

Community Outreach/Environmental Education Plan

Typically the brownfield redevelopment process involves communicating with community organizations and citizens who may be affected by the project. The level of community involvement varies. You may wish to establish a Citizen Steering Committee to oversee and provide input to the project and to participate in project decisions, or you may simply want to keep citizens informed, know their concerns, and answer their questions. This activity may be accomplished by your own staff or an organization such as Technical Outreach Services for Communities (TOSC), or you may wish to have the contractor assist with community involvement activities by preparing educational materials and participating in public meetings or educational sessions. The level of contractor involvement in community outreach may be dependent on your budget. However, attendance at a few community meetings to explain the work and answer questions is a recommended minimum level of community involvement for contractors. The following is an example of the City of Utopia's request for community outreach support:

The City of Utopia plans to solicit community participation in the redevelopment project. The proposal should include a Community Outreach/Environmental Education Plan that describes the outreach approach and schedule, and examples of educational materials that will be used to communicate technical aspects of the environmental assessment to the community. On-site community meetings should be included and personnel who will be involved in on-site community training activities should be identified. Information presented to the community must be in layman's terms and will include summaries of cleanup standards, assessment plans and results, and recommendations as related to project objectives and decisions.

Deliverables

There will be a minimum expected number of reports, informational meetings, or other deliverables depending on the nature and scope of your project. Listing deliverables for the project will help contractors provide better time and cost estimates. The City of Utopia put the following deliverables section in their RFP:

All deliverables should be submitted to the City of Utopia Urban Renewal Coordinator in both electronic and hard copy formats. The proposal should provide a description or out-

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line of work plan and reports that are part of the deliverables for the project. At a minimum, the following project deliverables are expected—

- **Work Plan for Final Negotiated Scope of Services—** This document will be a revision of the original proposal, as negotiated with city representatives. It will also include a Quality Assurance Project Plan and required health and safety documents.
- **Monthly Progress Reports and Invoice Submittals—** Progress reports should contain short summaries of progress for all phases of work, data, and findings. Also, information that relates to decisions for subsequent assessment work or redevelopment will be reported in a timely manner.
- **Work Plans for Additional Investigations (if needed)—** Applicable only as negotiated with the city.
- **Final Phase II Environmental Assessment Report—** This report will summarize assessment procedures and results, including definition of the lateral and vertical extent of contamination and recommendations for cleanup or other measures with cost estimates. It will also include a brief summary of quality assurance/quality control performance, and an appendix containing boring logs, field data, laboratory analytical data, sample chain-of-custody records, photograph logs, documentation of proper management of investigation-derived wastes, and abandonment records for boring and monitoring wells.
- **Final Quality Assurance Report—** This report will describe measures taken to assure high quality data and analytical results, and evaluate the reliability of assessment results for making cleanup and redevelopment decisions.
- **Community Outreach/Environmental Education Report—** This report will summarize the information presented and feedback received relevant to redevelopment objectives and scope of the assessment work.

Qualifications

You will need information about the firms that respond to your RFP to make a good decision about which firm to hire. Defining the information you need and requesting references will save time and effort later in the decision-making process. Continuing with the City of Utopia example, you may want to indicate your expectations in a similar manner to the example below:

Qualifying proposals will include a description of the business organization, including the name and address of the firm, year established, number of employees, and descrip-

tive breakdown of staff and types of services qualified to perform. Qualifications for boring and monitoring well installations, certifications from analytical laboratories that may be used, and demonstrated ability to use alternative technologies (if applicable) should be included. Familiarity with brownfields or equivalent processes should be demonstrated by describing recent projects. Include references and names of staff persons involved in the projects described.

Key personnel assigned to the project will be identified and resumes provided. An organizational chart showing management structure and project staffing will be provided. The proposal should emphasize recent experience of personnel and their roles in similar projects.

Schedule and Costs

Time constraints for the project should be explained to prospective contractors so they can develop a project schedule that meets your needs.

Time constraints for the project should be explained to prospective contractors so they can develop a project schedule that meets your needs. If your decision to hire a firm will be based on cost as well as other criteria, the RFP should include a request for cost information. An example of this section of an RFP is below:

The proposal should include anticipated schedule and time/material cost estimates for the activities listed below, to be completed by November 30, 2001. Time should be allowed in the schedule for the city to review and revise draft deliverables and for preparation of final documents. Unit rates on which costs are based should be included with the proposal and also a timeline and project milestones.

Submit cost estimates and unit rates for the following:

- Final negotiated work plan preparation
- Surveys, field sampling, and analytical testing (If innovative techniques are proposed, submit a cost comparison to conventional methods.)
- Report writing and project management activities
- Quality assurance activities
- Providing environmental remediation strategies
- Participation in public education activities

Project Contacts

A listing of people involved in the project, their roles, and how to contact them may be helpful to contractors who want to gather additional information.

Contacts for the City of Utopia:
Mr. Brown
Urban Renewal Coordinator

Utopia City Offices
200 Main Street
Utopia, KS 66666
Phone:123-456-7890

Ms. Fields
City Planner
Utopia City Offices
200 Main Street
Utopia, KS 66666
Phone: 123-456-8901

Mr. Smudge
Documents Keeper
Utopia City Hall
100 Main Street
Utopia, KS 66666
Phone: 123-456-9012

Directions for Submitting Proposals

Giving clear directions for submitting proposals and information on how proposals will be evaluated will help ensure that you have a sufficient number of proposals to review. This section of the RFP should include the proposal deadline, directions on how to obtain maps or other documents, and contact information for obtaining additional information and submitting the proposal. A description of how proposals will be evaluated is also helpful for contractors. An example of this section of an RFP is shown below:

Firms responding to this RFP should submit five copies of their proposal to Mr. Brown (see Project Contacts). Proposals must arrive no later than 5 p.m. on January 10, 2001. Questions about the project should be directed to either Mr. Brown or Ms. Fields. Copies of maps and relevant documents may be obtained by contacting Mr. Smudge.

Proposals from responding firms will be evaluated by the following criteria:

- 10% The firm's reputation for personal and professional integrity and competence; ability to work with and comply with federal, state, and local government agencies and persons in official oversight/compliance capacities; and familiarity and experience with the type of project/process and site
- 15% Professional and educational experience of key personnel to be assigned to the project
- 25% Ability of the firm to provide required services and to perform the required work within the project period
- 25% Cost of services provided
- 25% Convincing scientific and logical strategies and innovative approaches

Giving clear directions for submitting proposals and information on how proposals will be evaluated will help ensure that you have a sufficient number of proposals to review.

All proposals will be reviewed by a Proposal Review Committee, who will select the firm to be awarded the contract.

Conclusion

A clearly written RFP will benefit both the entity requesting proposals and the contractor responding to the request. Key elements include a detailed description of the site, maps, scope of the project, expected deliverables, preferred approach, time constraints, directions for submitting proposals, and criteria for selecting a contractor. Provisions for complying with federal, tribal, state, and/or local laws are important and should not be overlooked.

Community involvement in brownfield projects is important and should be considered in the proposal development process.

Additional Resources

If you need additional assistance in preparing an RFP, please contact the Great Plains/Rocky Mountain TOSC program at 1-800-798-7796. TOSC staff will provide the additional assistance you need or guide you to other sources of assistance.

The primary function of the TOSC program is to bring university educational and technical resources to communities affected by hazardous substance contamination. TOSC is a nationwide program funded by EPA and operated by the five Hazardous Substances Research Centers (HSRCs). TOSC provides technical assistance, community outreach, and educational services to communities with hazardous waste issues. TOSC services are divided regionally among the five HSRCs and the Great Plains/Rocky Mountain HSRC provides technical assistance to communities in EPA Regions 7 and 8. Services are provided at Superfund, RCRA, DOD, and brownfield sites.

About the Author

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Acknowledgments

The author gratefully acknowledges the assistance of Blase Leven and Wendy Griswold, Kansas State University; Mary Ahlstrom, U.S. EPA-Region VIII; and David Koch, Terracon, in preparing this primer.

This publication is published by the Hazardous Substance Research Centers as part of their Technical Outreach Services for Communities (TOSC) program series of Environmental Science and Technology Briefs for Citizens. If you would like more information about the TOSC program, contact your regional coordinator:

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