

Example  
Scope of Work  
Project Planning

1.0 Project Description

List specific addresses of properties to be assessed, known or suspected site activities, and briefly summarize results of any previous site investigation or cleanup activities. Clearly identify what future site uses are if they have been determined.

2.0 Project Objective

Conduct systematic planning to ensure that the requisite type, quality, and quantity of data are obtained to satisfy project objectives that lead to informed decisions and site close out in a cost effective and timely manner.

3.0 Description of Work

3.1 Project Planning Facilitation

The EPA requires a systematic planning process for all data collection and use by or for the agency (EPA 1998). Comprehensive, up-front planning is essential to effectively complete any environmental project. Proper planning will assure that the data collected will lead to defensible decisions. The contractor will provide facilitation services to develop the following:

- Define project objectives
- Identify stakeholders, timelines, or other constraints
- Establish decisions to be made by:
  - Specifying data and resource needs
  - Identifying boundaries and decision criteria
  - Defining acceptable levels of uncertainty
  - Translating needs into sampling, analysis, and decision-making requirements.Site reuse plans will be used to guide the decision logic.

To support this process, the contractor will be responsible for the following:

- Document Review. The contractor will perform a detailed review of available site information and documentation regarding past site use and ownership, regulatory or enforcement actions, site assessment or investigations, and corrective actions. Additional information not originally provided may need to be acquired and reviewed during the course of the systematic planning process.
- Project Meeting Facilitation. The contractor will be responsible for setting up, preparing agenda, facilitating, and preparing notes for project planning meetings with team

members or stakeholders on an as-needed basis. The contractor will work closely with the CLIENT to determine when a meeting is necessary and who should attend.

- Develop Initial Conceptual Site Model (CSM). A CSM is a functional description of everything that is known about a site and the contamination present. The CSM is developed at the start of a project and is carefully maintained and updated throughout the life of activities at the site. The contractor will provide a draft CSM based on the document review and project planning meetings. The CSM will include:
  - Location of contamination or waste sources
  - Types and expected concentrations of contaminants
  - Potentially contaminated media and migration pathways
  - Potential human and ecological receptors
  - Modifications to the scope of services required
  - Potential interferences and other contingency plans

The CSM should be in a flowchart type format showing sources, migration pathways, exposure pathways, and potential receptors, with a narrative including project-specific details.

- Develop Technical Scope of Work. Following the development of a CSM and defining data needs, the contractor will develop a technical scope of work suitable for inclusion in a Request for Proposal (RFP) to secure environmental consulting/engineering services to perform site investigation work.
- Develop Project Work Schedule and Estimated Project Investigation Costs. The project investigation schedule will be developed to balance the technical investigation needs with the need for information needed for property purchase, cleanup, and construction decisions. The contractor will provide estimated investigation costs that balance available funding with data needs.
- Review Quality Assurance Project Plan (QAPP). The contractor will review and provide technical comments on the Draft QAPP provided by the environmental consulting/engineering services firm selected for the site investigation work. The review will be performed to assure that investigation work will meet project objectives and support decision making.
- Provide Field Investigation Oversight. The contractor will be present during site investigation activities where real-time measurement data are collected. The contractor will assist the CLIENT and subcontractor in determining when the data collected are sufficient to meet project objectives.
- Provide Technical Review Comments on Draft Site Assessment Report. The contractor will review the Draft Site Assessment Report and provide technical comments on the adequacy of the report to document site activities, report results, interpret chemical and physical data, and draw conclusions.

### 3.2 Deliverables

- Meeting agendas
- Meeting notes
- Draft CSM
- Draft and final technical scope of work for subcontractor
- Project Work Schedule
- Estimated project investigation costs
- Review comments on Draft QAPP
- Review comments on Draft Site Assessment Report

### 3.3 Project Planning Reference Documents

Technical Project Planning (TPP) Process. US Army Corps of Engineers. EM 200-1-2. August 31, 1998.

(<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em200-1-2/toc.htm>)

Guidance for the Data Quality Objectives Process. EPA QA/G-4. EPA/600/R-96/055. August 2000. (<http://www.epa.gov/quality/qs-docs/g4-final.pdf>)

US EPA Office of Superfund Remediation and Technology Innovation (OSRTI). Information and guidance documents on the Triad Approach to systematic planning, dynamic work plans, and real-time measurement technologies to achieve more cost-effective hazardous waste site cleanup strategies.

(<http://www.epa.gov/tio/triad/index.htm#educ>)

Triad Resource Center. (<http://www.triadcentral.org/ref/index.cfm>)

EPA Requirements for Quality Assurance Project Plans. EPA QA/R-5. EPA/240/B-01/003. March 2001. (<http://www.epa.gov/quality/qs-docs/r5-final.pdf>)

### 4.0 Qualifications

Work completed under this contract must be performed by an Environmental Professional as defined by 40 CFR Part 312. Such a person must:

- 1) Hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or
- 2) Be licensed or certified by the federal government, a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries as defined in § 312.21 and have the equivalent of three (3) years of full-time relevant experience; or

- 3) Have a Baccalaureate or higher degree from an accredited institution of higher education in a relevant discipline of engineering, environmental science, or earth science and the equivalent of five (5) years of full-time relevant experience; or
- 4) Have a Baccalaureate or higher degree from an accredited institution of higher education and the equivalent of ten (10) years of full-time relevant experience.

A person who does not qualify as an environmental professional under the foregoing definition may assist in the conduct of all appropriate inquiries if such person is under the supervision or responsible charge of a person meeting the definition of an environmental professional provided above when conducting such activities.

#### References

U.S. Environmental Protection Agency. 1998. The Environmental Protection Agency's Policy and Program Requirements for the Mandatory Agency-wide quality System (Order 360.1 CHG 1).