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5.6 Develop and Implement Work Plan

The purpose of this step in the fractured rock site characterization process is twofold:

1. Assemble and integrate the objectives that have been formulated to fill the data gaps in the CSM into an executable work plan. This work plan can be accepted by stakeholders and used to guide the data collection and analysis process.
2. Implement the work plan and evaluate the results so that the CSM can be updated and evaluated for remaining data gaps.

5.6.1 Develop Project Work Plan

Developing a project work plan is not necessarily difficult. Depending on the scope of the characterization activities and regulatory requirements, the work plan can be a focused and streamlined document that can be prepared relatively quickly. A typical fractured bedrock characterization work plan should include the following criteria:

- Emphasize characterization and data collection objectives.
- Present a data collection process.
- Include the tools selected.
- Discuss the procedures/software/models that will be used for data evaluation and interpretation.

An well-designed work plan is flexible enough to allow changes to the characterization approach based on real-time results obtained during the investigation. A dynamic field approach using TRIAD principles, to the extent practical, is effective at fractured rock sites. This approach may require frequent (up to daily) calls or data uploads between the field team and project stakeholders. Frequent communication allows the team to review field activities and data, make decisions based on real-time data, and discuss next steps for efficiently completing the characterization. The work plan outlines the process for documenting field changes or adjustments during the site investigation. In addition, the work plan outlines the process for handling substantial changes to the investigation plan—beyond what is considered a standard field change.

The work plan includes sufficient information about selected tools to describe how each tool will be used, the investigation locations, types of data and to be generated, DQOs, data management, and data interpretation that will be performed. If the selected tools generate real-time data or nonstandard data (such as data beyond traditional analyte concentrations, or data generated by profiling or logging tools), the work plan describes how the data will be obtained and communicated to the project team. Also, the work plan describes how the data will be managed and stored along with other data used in the overall CSM.

5.6.2 Implement the Site Investigation

Once the work plan has been developed and approved, the next step is to implement the site investigation. Depending on the tools that are selected for the investigation, portions of this step may run concurrent to the initial phases of data management, interpretation, and presentation. If real-time or near-real-time data are being generated during the investigation, then these results can be evaluated as they are generated to help guide further data collection activities.

This guidance describes the overall process and framework for site characterization, rather than details on specific techniques or approaches for implementing field investigations. Sites should be investigated according to generally accepted principles and procedures for environmental fieldwork and should rely on the expertise of the project team. Any subcontractors or vendors that are used to deploy the selected tools should follow specific operating procedures and protocols.