

DTSC's Remedial Investigation & Feasibility Study Process

The Remedial Investigation & Feasibility Study (RI/FS) is a process focusing on defining the nature and extent of contamination, assessing risk to human health and the environment, and developing a cleanup strategy to eliminate potentially harmful human health and environmental impacts. The RI/FS process generally applies to larger, technically complicated projects anticipating cleanup action; smaller, more focused projects may prefer to implement the Supplemental Site Investigation process. Data collected in the RI influence the development of remedial alternatives in the FS, which in turn affects the data needs and scope of treatability studies and additional field investigations. This phased approach minimizes the collection of unnecessary data and maximizes data quality.

RI/FS tasks include the following:

- Evaluate existing site data
- Conduct a site visit
- Conduct a limited site investigation
- Define the conceptual site model
- Develop risk assessment parameters
- Identify preliminary applicable or relevant and appropriate requirements (ARARs)
- Develop preliminary remedial action objectives and goals
- Develop preliminary analysis of remedial technologies
- Develop specific objectives of the RI/FS
- Develop data quality objectives (DQOs)
- Prepare an RI/FS Work Plan and sampling and analysis plan
- Prepare a Quality Assurance Project Plan (QAPP)
- Prepare a health and safety plan
- Prepare a community relations plan
- Conduct Phase I site investigations
- Evaluate Phase I data
- Refine remedial action alternatives
- Conduct Phase II site investigations, if necessary
- Evaluate remedial action alternatives
- Present details of implemented activities, findings and recommendations in an RI/FS Report

RI/FS Work Plan

The typical content of the Work Plan includes:

- Introduction – Site information and background, goals and objectives, regulatory framework, and stakeholder identification
- Conceptual Site Model
- Data Quality and Management Plan
- Remedial Investigation Tasks – project planning, sample collection and analysis, data validation and evaluation, and assessment of risks
- Feasibility Study Tasks – Development and screening of alternatives
- Schedule
- Project Management Plan

An RI/FS Work Plan includes the following site-specific supporting documents:

- **Field Sampling Plan** – Provides the guidance for all field work by defining in detail the sampling and data-gathering methods to be used on a project. The field sampling plan should be written so that a field sampling team unfamiliar with the property would be able to gather the samples and field information required.
- **Quality Assurance Project Plan (QAPP)** – Describes the policy, organization, functional activities, and quality assurance and quality control protocols necessary to achieve the data quality objectives dictated by the intended use of the data.
- **Health and Safety Plan (HASP)** – Supports the field effort and must conform to the firm or agency's health and safety program that must, in turn, be in compliance with requirements of Cal/OSHA.

Remedial Investigation & Feasibility Study Process (CONTINUED)

For detailed information, be sure to refer to:

- [U.S. EPA guidance document for conducting a Remedial Investigation/Feasibility Study \(RI/FS\) under CERCLA](#)
RI/FS is defined in Title 40 Code of federal Regulations Chapter I Subchapter J Part 300 Subpart E Section 300.430
- [Triad: Systematic Planning, Dynamic Work Strategies, and Real-Time Measurement](#)
- [DTSC's Proven Technologies and Remedies Guidance](#)

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