



# Decision-Making Framework for Cleanup of Sites Contaminated with LNAPLs

**NAPL**  
**Cleanup**  
**Alliance**

Rev 0 Draft Document  
Presented in Dallas TX  
May 21, 2003

# Today's Objectives

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- Conduct collaborative discussion regarding Rev 0 of Draft Decision-making Framework with NAPL Alliance core team and invited guests, including specific review comments
- Establish schedule for receipt of written comments and preparation of Rev 1 of the document



# Document Outline

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- Executive Summary
- Introduction and Objectives
- Organize Resources, Develop End-state Vision, and Establish LNAPL Management Goals
- Collect and Analyze Supplemental Data
- Develop LNAPL Management Strategy
- Establish Endpoints
- Implement and Monitor
- Revisit the LNAPL Management Plan

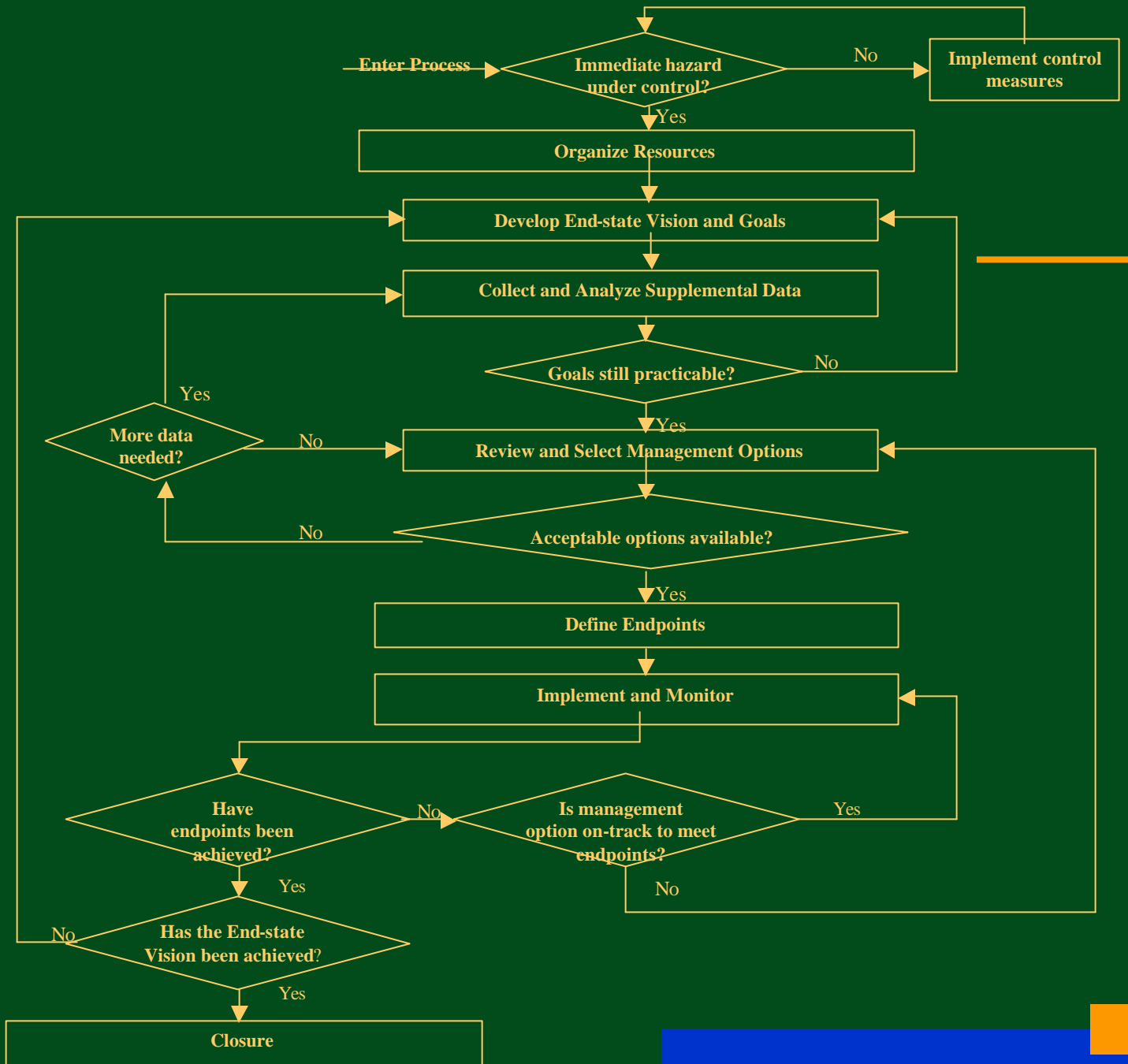


# Introduction and Objectives

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- Purpose of the document: provide a decision-making framework to guide development of reasonable and practicable approaches for cleanup and/or long-term management of LNAPLs in the subsurface at large complex sites





## II. Organize Resources, Develop End-state Vision, and Establish LNAPL Management Goals

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- Organize Resources (human, \$, info)
  - Assess current state of knowledge
  - Organize the stakeholder process
  - Identify stakeholders
  - Design, agree to and implement a consensus-based process
- Develop End-state Vision
  - Discuss stakeholder interests
  - Develop a common understanding of the problem
  - Prepare the end-state vision statement



## II. Organize Resources, Develop End-state Vision, and Establish LNAPL Management Goals cont....

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- Establish LNAPL Management Goals (specific, measurable, achievable, results oriented, and time-bound)
- Document and Communicate the Consensus Process, End-state Vision, and LNAPL Management Goals
- Write the Long-term LNAPL Management Plan



# III. Collect and Analyze Supplemental Data

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- Objectives and Targets
- LNAPL Distribution
- LNAPL Mobility
- LNAPL Recoverability
- Field Data Collection
- Laboratory Analyses
- Data Interpretation





## IV. Develop LNAPL Management Strategy

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- Evaluate LNAPL Management Options
- Identify Treatment, Removal, and Containment Technologies
- Select and Test Technology



## 5.0 Establish Endpoints

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- Define an endpoint for each of the goals
- Endpoints are specifically defined to measure progress towards meeting the goals



## 6.0 Implement and Monitor

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- Implementation occurs in phases to address specific goals for each phase.
- Monitoring of progress at regular intervals is critical both during active and passive phases.



## 7.0 Revisit the LNAPL Management Plan

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- The Plan provides a roadmap to achieve the end-state vision for reasonable and practicable LNAPL management.
- A flexible, living document describes the collected understanding and desires of the stakeholder group.



# Appendices

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- A. Current Conditions Checklist
- B. Selection of LNAPL Management Options, including decision criteria and checklist
- C. Selected LNAPL Remediation and Characterization Technology References
- D. References

