

# ITRC Harmonizes State Regulator Decision-Making

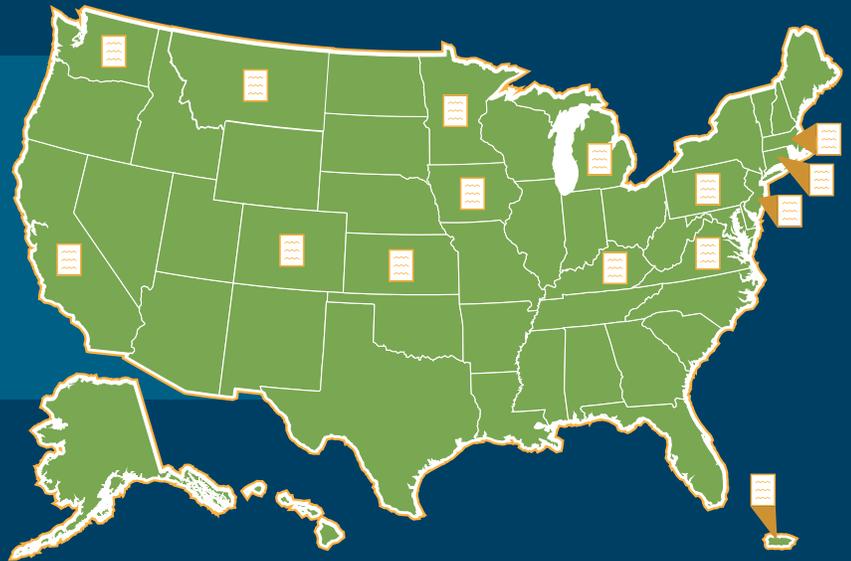
## Solutions for LNAPL Contamination



States where ITRC LNAPL resources have been used to develop current or draft state guidance



States where ITRC LNAPL resources are used at contaminated sites



Over the past few decades, Light Non-Aqueous Phase Liquid (LNAPL) remedial technologies have greatly evolved; however, there are still many challenges and misperceptions regarding LNAPL contamination. The Interstate Regulatory and Technology Council (ITRC) has developed resources to help correct these misperceptions and provide a better understanding of LNAPL behavior and remediation options. To assist regulators and environmental managers in properly assessing LNAPL contamination and identifying the best-suited remediation solutions, ITRC developed two guidance documents, a three-part Internet-based training course, and a two-day classroom training course. These resources are aimed at improving the understanding of LNAPLs and assisting environmental practitioners with applying science-based solutions to contamination problems.

### A Sound Understanding

LNAPLs are a group of contaminants that are typically petroleum based and are lighter than water. They are prevalent at contaminated sites across the nation and may be found at gas stations, airports, military bases, and refineries. LNAPL-contaminated sites present significant challenges and are difficult to characterize because of the profound effect hydrologic conditions can have on LNAPL behavior. ITRC LNAPL resources provide a sound understanding of these conditions, which is necessary to effectively characterize and assess sites and potential risks. Applying concepts from these resources helps to evaluate and identify appropriate remediation technologies at sites, which can avoid unnecessary costs and save time. These, and many more ITRC resources, are available for free at [www.itrcweb.org](http://www.itrcweb.org).

### A Framework for Remediation

ITRC LNAPL materials have prompted state regulatory agencies across the nation to update their own internal guidance and some states are even incorporating ITRC LNAPL concepts and language into their guidance. This helps to streamline remedial technology selection and regulatory approval and facilitate completion of LNAPL remediation projects. At least fourteen states, depicted in the map above, have used ITRC LNAPL guidance documents or training courses as resources for developing their state guidance. This creates harmonization across the country for handling LNAPLs.

Environmental professionals in nearly every state and from a variety of sectors have used ITRC LNAPL resources at contaminated sites, helping them to better complete LNAPL cleanup.

### Benefits of ITRC LNAPL guidance documents and training courses:

- Provide up-to-date information on LNAPLs and their behavior
- Increase technical knowledge to help all parties agree on decisions
- Highlight a variety of LNAPL remedial technologies
- Present a framework and scientific basis for selecting remedial technologies

## Measures of Success



**California:** ITRC LNAPL guidance documents are referenced in the California *Leaking Underground Fuel Tank Guidance Manual*, which provides guidance for informed decision-making to investigate and clean up fuel-impacted sites.

**Colorado:** After attending the ITRC classroom training course on LNAPLs, the Colorado Department of Labor and Employment Division of Oil and Public Safety is now revising its guidance to incorporate concepts from ITRC training courses and guidance documents.



**Michigan:** The Michigan Department of Environmental Quality cites ITRC LNAPL resources throughout its guidance document on handling petroleum non-aqueous phase liquids. Proposals submitted to the Michigan DEQ for managing LNAPL contamination are following the site management process outlined in ITRC training courses.

**Minnesota:** The Minnesota Pollution Control Agency relied on ITRC LNAPL guidance documents as a primary resource during development of its *Light Non-Aqueous Phase Liquids Management Strategy*. ITRC materials are being used to evaluate LNAPLs and determine remedial actions throughout the state.



**Montana:** ITRC LNAPL guidance documents were an important reference in Montana's preparation of its *Montana Light Non-Aqueous Phase Liquid (LNAPL) Recovery and Monitoring Guidance*.

**New Jersey:** The New Jersey Department of Environmental Protection cites ITRC LNAPL guidance documents in its Site Remediation Program's *Light Non-Aqueous Phase Liquid (LNAPL) Initial Recovery and Interim Remedial Measures Technical Guidance*.



**Pennsylvania:** The Pennsylvania Department of Environmental Protection attributes changes in its state guidance to the ITRC classroom training course and staff participation on the ITRC LNAPLs team. Its updated guidance includes references to ITRC LNAPL guidance documents, which are also being used to assemble site conceptual models.

**Vermont:** After Vermont state regulators and site consultants attended the ITRC LNAPL Internet-based training course, they applied the technology decision process outlined in ITRC guidance documents to a contaminated site. It was determined that the various technologies being considered at the site were not appropriate, allowing them to save money and time associated with conducting feasibility investigations.



**Virginia:** The Virginia Department of Environmental Quality references ITRC LNAPL guidance documents in its Storage Tank Program's *Case Closure Evaluation of Sites with Free Product* guidance.

