2026 ITRC Project Team Proposal

Environmental Topic: Petroleum Contamination/Workforce Development

Proposed Project Title: Petroleum Contamination Training Curriculum for New Environmental Professionals

Project Deliverables:

The ITRC Workgroup would develop a list of petroleum concepts and topics that need to be learned by new staff and prioritize the order in which this information should be shared. Once the outline of the topics is agreed upon, the Workgroup members will identify ITRC and non-ITRC resources that could help teach these concepts. This will be a combination of ITRC training courses, ITRC guidance documents or fact sheets, and non-ITRC training resources (e.g., other association videos, checklists). The Workgroup will also identify areas to improve archived ITRC resources (both training and guidance documents) and develop a list of potential needs to address in the future. This may include creating additional tech sheets, resource guides, or training modules.

Training Curriculum: Develop a curriculum (job aid) to help train new staff by putting together existing ITRC and non-ITRC materials (focusing on publicly available) in an order to teach petroleum contamination and cleanup. The Workgroup will evaluate existing ITRC resources (e.g., training archives) and may propose updates to existing materials if needed (e.g., modules, updated slide decks if missing).

Missing Training Elements List: Identify areas of petroleum training that do not exist and might benefit from ITRC training development.

The value of the Workgroup is to organize information to meet the needs of the changing workforce, improve usability and access to ITRC materials, and pilot a new component for the ITRC training program by enhancing environmental workforce education opportunities. The Workgroup would be a way to recruit veteran ITRC members and emerging environmental leaders to work together on an ITRC project team. The new ITRC Strategic Direction has five core priorities, which align perfectly with this Workgroup:

- Addressing Environmental Challenges: The Workgroup is developed to reduce barriers to the deployment of environmental technologies and address challenges related to environmental cleanup and remediation.
- Educating the Environmental Workforce: The focus is to improve our training opportunities and support the evolving environmental workforce.
- Empowering the Next Generation of Environmental Leaders: The intersection of membership of experienced and emerging environmental leaders for the Workgroup and the target audience of onboarding new staff will be a model for supporting and empowering the next generation.
- Improving Usability and Accessibility of ITRC Solutions: The evaluation of existing ITRC resources will help identify areas of improvement for information exchange.
- Enhancing Partnerships: Recognizing and including existing non-ITRC resources will bring additional attention and relationships with like-minded organizations.

Problem Statement

Our national workforce is experiencing a large turnover of staff and influx of new hires to the environmental cleanup field. BLS estimates a 7% growth in environmental scientists and specialists between 2023-2033 due to the need to replace works (BLS).

With retirements increasing, there are less mentors to help share knowledge and teach on the job. While numerous resources exist, they are often fragmented and not tailored to onboarding new staff. The lack of a structured, topic-based curriculum creates inefficiencies in training and knowledge transfer. This project will address these gaps by organizing and curating existing materials into a coherent training path. This is an opportunity for ITRC to pilot developing a course catalog by environmental topics to help all new employees in the environmental field (e.g., state, industry, federal). While the information may not help with specific job function (e.g., RPM duties), it will help provide an overview of the environmental contaminant throughout the lifecycle of a cleanup site.

There are plenty of existing resources that can help a new employee learn about petroleum contamination and cleanup. A recent success was the development and delivery of the Hydrocarbons 101 training course. For example, for the first live training, Hydrocarbons 101 had 761 attendees (December 2024). Only PFAS Introductory training has seen higher numbers for a first-time training. To compare, the PFAS Beyond the Basics 5-part series had first time live attendee numbers in the 500s (671; 594; 527; 458; 540).

ITRC has a strong membership and many resources to pull from to pilot this course curriculum on this topic. The Industry Affiliates Program (IAP) has previously contributed significant time and resources to help with petroleum resources (e.g., LNAPL, TPH, Hydrocarbons). In addition, state members have a lot of knowledge to share and transfer and have contributed significantly in the past to these same teams. It is expected that membership interest would be high from some core ITRC members.

Additional Information

The goal is to leverage the numerous existing ITRC resources (guidance and training), evaluate and promote potential partner resources, and explore and develop a new deliverable model (e.g., EPA Federal Facilities Academy).

Petroleum Vapor Intrusion

TPH Risk Evaluation at Petroleum-Contaminated Sites

Effective Application of ITRC Guidance Documents

LNAPL Site Management: LCSM Evolution, Decision Process, and Remedial Technologies

ITRC: Introduction to Hydrocarbons Training

ASTSWMO Training - Tanks Resource Compendium

EPA Federal Facilities Academy