

2020 ITRC Project Proposal Template

Effective Application of Multiple ITRC Guidance Documents to Hydrocarbon Sites

Proposal Date

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Proposal Summary

The original intent of this effort was to better communicate the complimentary nature of existing ITRC documents related to petroleum. During the phone conference, the suggestion of combining this proposal with the ISS expansion team was provided. This Team is interested in pursuing an integration with the Integrated Site Strategy Team. It was indicated over email they preferred to submit separately. The intent of this effort was to open up possibilities for how ITRC presents existing material to support development of the professionals in the industry. The intent of this effort does not need to be limited to petroleum rather how can we best support professional development in the industry for improved project outcomes. While this team is hydrocarbon focused it is willing to integrate with other expertise as requested by ITRC. The theme of the proposal is to more effectively communicate ITRC documents, new or existing. As technology evolves the use of YouTube and webinars is becoming more common for training. Historic webinars have been limited by time and aim to cover large 300+page document content.

Utilizing a shorter but personal webinar to identify broad themes of documents and their overlap and complimentary nature would provide the initial foundation to then either reference the documents themselves for more detailed and technical questions. Short YouTube like videos could be generated similar to the API baildown test video recently converted into Mandarin for ITRC and Brisea. These videos would represent the specific tasks that often require additional instruction for individuals in the field or developing a conceptual site model but too detailed to cover in a webinar.

Problem Statement – Did you know that LNAPL saturation and TPH are the same thing, just expressed in different units? How are the concepts of “maximum extent practicable, LNAPL transmissivity and NSZD applied to manage TPH risks? NSZD and biodegradation can be used to address LNAPL, can they be used for assessing TPH risk?

I have LNAPL in my well, TPH values are >1,000 mg/kg, my PID readings at 10 feet depth are 200 ppm or less, I have elevated oxygen 5 feet below ground surface and my site is a railyard. Do these data make sense? Do I have a PVI problem? How will bioventing affect PVI and risks related to residual LNAPL?

I have a project for redeveloping a former petroleum tank farm. Which ITRC guidance provides a roadmap for the redevelopment related to LNAPL cleanup that can satisfy regulators?

PVI, LNAPL-3 and the TPH ITRC tech regs all have guidance on conceptual site models, do I need to read all three? The three documents are over 1,000 pages combined.

The questions above are examples of situations where two or more of ITRC’s documents overlap in providing guidance and represent questions from regulators and practitioners. Hydrocarbon-impacted sites have regulations directed at petroleum vapor intrusion, total petroleum hydrocarbons in soil, and LNAPL. These regulations do not always acknowledge the interrelated nature of these concerns. ITRC has worked over the past four years to provide guidance related to each concern. When all three of ITRC documents are reviewed together, they can answer the questions above; however, a transparent roadmap to guide practitioners through these three documents would be beneficial and provide practitioners additional confidence.

Having practitioners walk away from a document or a training with confidence is one of the primary goals and measures of success (Feedback from Yelkin Group on training development). One of the main comments that trainers received during development on the LNAPL-3 webinar training was it was too technical. While the LNAPL training and document were directed at both LNAPL site strategy and technical gaps in understanding, an overall roadmap (prior to diving into the technical details) would be beneficial for applying the concepts covered in these multiple ITRC documents.

Proposed Project – Developing classroom and/or web-based training that applies these three documents to case study examples would help bridge the complimentary aspects of existing ITRC documents.. This project would leverage existing TechRegs and training materials and would effectively extend and enhance the implementation phase of the LNAPL, PVI, TPH Risk, Mass Flux Mass Discharge and ISS teams.

By providing a training on the implementation of these guidance, professionals will understand what information is contained within each document and how to apply the concepts holistically at a site. A practical roadmap to use and integrate ITRC documents would give practitioners the ability to use tools provided in each ITRC document to address their own sites.

As specific tasks are identified that represent a larger issue are identified a discrete topic would be

identified that could be covered by video media and YouTube type distribution. ITRC would be the owner of such video's.

Primary Project Deliverables

The training would be focused on developing a roadmap for three to four typically encountered case examples. A single 2-hr webinar would cover one of these case examples; a longer duration classroom would include multiple case examples. Up to three YouTube videos would be developed for key detailed topics where one webinar training would be developed for the broader document linkage.

The developed material could be applied to classroom training for local conferences and professional organizations. The evolved model of ITRC presenting at local professional organizations such as the Missouri Waste Coalition Council and regional conferences (e.g., AEHS West Coast Conference in San Diego and Midwestern States Environmental Consultants Association, MSECA) that are attended by federal and state regulators is proving to be successful. The model would not necessarily require ITRC to organize trainings at hotel venues for 200+ people, but rather, leverage existing venues at established conferences.

Project Schedule

Kickoff call 2020 followed by Monthly calls

Develop Draft Training Materials by 3rd Qtr 2020

Finalize 4th Quarter 2020

Proposed Team Composition

- State Leads - Tom Fox, State of Colorado
- Regulatory support from Colorado, Virginia, Minnesota, California, Michigan, Kansas
- Unites States Navy
- Supported by BP and Shell
- ITRC and non-ITRC discussions have been provided to the Midwestern States Environmental Consultants Association and the Missouri Waste Control Coalition over the past two years. Both of these groups represent non-profit organization concerned with environmental issues. Both were appreciative of alternate perspectives to vendors as that is their current primary source of training material. Both indicated a desire for more alternate training opportunities.

Additional Information

Comments Received from regulatory community included:

“I hope ITRC funds it as there seems to be a lot of turnover/retirements in state LUST programs (at least in MN) so training like this is very timely.” Mark Toso, MPCA

Daniel Newman of KDHE, indicated the proposed training provides the ability to combine multiple ITRC

documents into a “road map” of sorts to help professionals better understand application of specific ITRC documents to their site. Teaching the application of concepts rather than just the concepts alone is more beneficial in that it helps develop critical thinking. This proposal appears to address that aspect.