



# 2014 ITRC PROJECT PROPOSAL

## Remediation Projects Only

### Evaluation of the Effectiveness of Long Term Contaminant Management using Institutional Controls

**Instructions:** The Interstate Technology and Regulatory Council (ITRC) requests proposals for ITRC projects **in the remediation area only** for a 2014 start. Proposals should be submitted according to the process outlined in the 2014 ITRC Request for Proposals for Remediation Projects (RFP-Rem) (<http://www.itrcweb.org/Documents/Planning/2014/2014-ITRC-RFP-Rem.pdf>) and 2014 Project Selection Process and Criteria (<http://www.itrcweb.org/Documents/Planning/2014/2014-ITRC-Process-Rem.pdf>), which are also available on the ITRC website ([www.itrcweb.org](http://www.itrcweb.org)) under About ITRC – Planning.

Proposals must be prepared using this proposal template. The page limit for the proposal is 5 pages, and the proposal must be printable on a standard black and white laser printer. Only one Microsoft Word file containing the proposal will be accepted (other formats or attachments will not be considered). The file size must be less than 5 MB. Proposers are reminded to present a proposal with a well-focused scope that ITRC can address (e.g. the proposal should be technical in nature and not policy-oriented; research or demonstration projects are not valid). Receipt will be acknowledged by email within one business day of proposal receipt. It is the responsibility of the proposer to follow up, if receipt confirmation by ITRC is not received.

Questions can be addressed to Anna Willett, ITRC Director, [awillett@ecos.org](mailto:awillett@ecos.org), 202-266-4933. More information on ITRC is available at [www.itrcweb.org](http://www.itrcweb.org).

*Please use brief statements or bullet items to input the requested information*

**PROPOSAL DATE: June 14, 2013**

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#### Proposals Topical Area

**LONG Long term stewardship and land use controls:** Systems and approaches for implementing, monitoring, tracking, and managing long term stewardship of contaminated sites, including engineered and institutional controls, as well as optimization strategies.

## Proposal Summary

The proposed project, "Evaluation of the Effectiveness of Long Term Contaminant Management using Institutional Controls" will address the questions of 1) What institutional control (IC) mechanism is most effective for protecting public health?; 2) Does the effectiveness of an IC decline over time? 3) What is the most efficient and effective method to monitor the efficacy of ICs over time? i.e. How are state or local agencies notified if the land use changes or the ICs are altered or removed?; and 4) What is working? What isn't working? What can be improved to make them better?

At many sites of environmental contamination, even with active remediation, ICs are used to minimize the potential for human exposure to hazardous substances or protect the integrity of a remedy by limiting land or resource use or controlling how the property is used. As more sites and more contaminants, including non-aqueous phase liquids (NAPL), are being managed through the use of ICs, there is a need for a comprehensive guide on selecting, implementing, monitoring, and enforcing ICs at contaminated properties.

For many of these sites, if active remediation is conducted or an "unrestricted" closure is sought, the site will be scrutinized to verify that the conditions are met. For example, groundwater will be monitored on a regular basis until several sampling events determine the groundwater can be used for any purpose or with an excavation, verification soil samples will be collected. Conversely, if an IC is placed and meets the individual state's approval, the site may be closed and no further actions are completed. While the exposures are controlled using the ICs, the long term effectiveness of these mechanisms has not been fully evaluated. Further, being that these documents are filed on the deeds of properties, each State, County, City, and/or Township will file these differently and allow access of these documents differently.

It is proposed that the ITRC assemble a team to review currently recorded ICs and assess and rank the effectiveness of the ICs based on predetermined screening criteria.

To conduct the IC survey, subgroups from the team representing several states select at least ten random or biased random closures from different regions of the state. The selected ICs should span a length of time as well - some recent to some very old. The individuals conducting the review should act as an "outsider" and not research the closure file prior to conducting the review. The review should consist of at least the following:

- 1) Determine what ICs are available in the different states and what alternatives may exist. Determine how each state implements the IC programs for site closure.
- 2) Go to the court house (or use database if the city/county utilizes those mechanisms) to determine how easy or difficult it was to find and understand what is being managed with the IC.
- 3) Interview the pertinent individuals connected with the property to determine their knowledge of the restrictions on the property. For example, property owners, local agency issuing drinking water well permits, storm water managers, local units of government. If these individuals have no knowledge, it should be determined if these individuals have the ability and knowledge to find this information.
- 4) Go to the properties and see if the conditions in the IC are being followed.

- 5) Interview the state agencies to see if there are programs in place to monitor the ICs and, if so, how is it done. If land use or IC changes occurred on a property, determine if the state agency was notified or approved the changes.

Upon completion of the case studies, the ITRC would publish a research/guidance document that outlines the findings as well as makes recommendations for what was found to be working and what does not work. The document could contain any forms for monitoring or example ICs that were found to be the most effective. The document should outline any processes that were used by the local agencies that were found to be most effective in conveying the ICs. The document could determine if a certain "RBCA pathway" is more adequately addressed with an IC and if there is an "effective lifespan" discovered for the ICs. It is assumed that one year is necessary to conduct the case studies and one year would be required to compile results and draft the document.

### **Proposed Personnel**

The personnel required to complete this project would include: US EPA, State Agencies, Federal and State Attorney General staff, Private Environmental Attorneys, Local Units of Government, Agencies issuing Permits, and Private Parties utilizing the ICs for Corrective Actions.

The team leader with experience in both the ITRC processes and knowledge in implementing a state's IC program would be ideal and could be selected after the project is selected. A few other states including, but not limited to: Utah, Pennsylvania, and Minnesota have expressed some level of interest in the project.

### **Summary of Deliverables (primary project product(s))**

The expected project deliverable would be a technical and regulatory guidance document to summarize the state IC programs, summarize the available ICs, provide the results of the case studies, and to provide any guidance for making the ICs more protective. This could be either a web-based document or hard copy and could be followed up with internet training.

### **Targeted Users (who will use products generated by this project?)**

The targeted user for the products will be the Federal and State Agencies who are approving plans using ICs and risk based corrective action. The Federal and State Agencies can also use the document to aid in development of a monitoring program for the ICs. Local agencies that implement the ICs and/or permits can also use the case studies to develop their policies to better protect public health. Finally, the environmental attorneys and consultants drafting the ICs can use the guidance to draft better documents.