



Summary of Steps & Associated Timeline for Projects Starting in January 2019

PROCESS STEP	TIMELINE
Request for Proposals & Proposal	June 7, 2018 – July 13, 2018
Submission	
Preliminary Evaluation by ITRC Board of	July 16 – July 20, 2018
Advisors	
Updated Proposals Upon Request	July 20 – July 23, 2018
Detailed Evaluation by federal agencies,	July 23, 2018 – August 14, 2018
SEP, IAP and stakeholders	
ITRC Board of Advisors Select Proposals	August 16, 2018 (Board Call)
Select Team Leaders	August 31, 2018
Contractor RFP	August 20, 2018 – September 21, 2018
Contractor Interviews/Selection &	September 24, 2018 – October 31, 2018
Negotiation	

June 7, 2018 – July 13, 2018

Request for Team Proposals - Proposal Submissions Due No Later than July 13, 2018

ITRC Board of Advisors issues request for team technical proposals on June 7, 2018, with all proposals due by July 13, 2018.

Proposal Criteria – State Priorities

Proposals to ITRC will be evaluated against the 2018 survey results from the States on priority issues in Remediation (i.e., traditional CERCLA and/or RCRA focused issues) and Remediation Plus (i.e., Clean Water Act and Clean Air Act focused issues) sectors of environmental protection. As ITRC is a State-led organization, it is important to address the environmental priorities of the States along with those of our funders.

The 2018 ITRC State Environmental Priorities survey results beginning on <u>page 6</u> of this document explains in depth the top eight state priorities under the Remediation (Soil and Groundwater) and Remediation Plus (Air and Water) categories. We encourage proposals to address these priorities.



Remediation Issues (Soil and Groundwater)	
1	Emerging Contaminants (e.g., 1,4-Dioxane, etc.)
2	Contaminated Sites / Brownfields (e.g., assessment and cleanup technologies)
3	Vapor Intrusion / Petroleum Vapor Intrusion (e.g., identifying, investigating, and mitigating)
4	Risk Assessment (e.g., risk-based standards, evaluating risk to ecology and human health)
5	Cleanup Regulations, Standards and Measures (e.g., best practices on cross-program/state application and consistency of standards)
6	Groundwater Contamination (e.g., plume delineation, cleanup technologies)
7	Management of Metal Contamination (e.g., mercury, lead, manganese, etc.)
8	Legacy Mine Issues (e.g., acid mine drainage, remediation technologies)

Remediation Plus Issues (Air and Water)		
1	Public Water Supplies (e.g., infrastructure, aquifers)	
2	Air Quality (e.g., pollution reduction, ozone transport)	
3	Surface Water Quality (e.g., harmful algal blooms (HABs), road salt, non-point source, contaminant impacts)	
4	Wastewater Treatment Plant Systems (e.g., effluent, septic)	
5	Resiliency and Vulnerability Assessment and Planning / Disaster Planning (e.g., disaster planning related to extreme weather events, greenhouse gas mitigation)	
6	Concentrated Animal Feeding Operations (CAFOs) (e.g., management of associated contaminants)	
7	Risk Communication (e.g., communicating complicated technical data to the public)	
8	Fracking (e.g., best practices to address fracking fluid impact and other associated impacts)	





July 16, 2018 – July 20, 2018

Board of Advisors Preliminary Evaluation

The ITRC Board of Advisors will conduct a preliminary evaluation of all proposals received by the deadline and in the proper format. The purpose of this preliminary evaluation is to select 1-5 proposals that will be considered further in a final ranking phase. The ITRC Board of Advisors will consider the following criteria for each of the qualifying proposals (ITRC Board Liaisons will also be asked whether or not their agency's current funding to ITRC can be used to fund the proposal if it moves forward):

- 1) Proposal shall be scoped and aligned with ITRC's strategic plan and mission
- 2) Proposal shall address solutions to state environmental technical issues (as listed in the 2018 "ITRC Priorities Proposal Sheet" information document published on ITRC's web page), not policy decisions
- 3) Proposal shall be scoped to avoid replicating existing ITRC products and projects
- 4) Proposal shall incorporate a clear and concise problem statement which identifies barriers to solutions for state environmental technical issues
- 5) Proposal shall include a description on how the project will solve or partially solve the state environmental technical issues
- 6) Proposal shall address the clear value and need for solutions by the states
- 7) Proposal shall identify the support/participation of at least 5 ITRC member states, and at least 2 stakeholders (i.e. non-governmental organizations, tribal, academic, etc.) with the skills to address the technical issues
- 8) Proposal shall identify 2 state employees as potential co-team leaders
- 9) Proposal may identify potential public and private funding sources to support 1 to 3 years of development and implementation efforts (this funding could be used to offset or add to existing available funds).

July 20, 2018 - July 23, 2018

Updated Proposal Upon Request

Proposers will respond to any clarifying questions regarding their proposals upon request by the Board prior to final evaluation.

July 23, 2018 – August 14, 2018

Detailed Evaluation of Proposals by Federal Agencies, ITRC State Engagement Program, IAP, and ITRC Stakeholders

ITRC will collect detailed input from the federal agencies that fund ITRC, the ITRC State Engagement Program, Industry Affiliates Program (IAP), and ITRC public/tribal stakeholders. The ITRC Voting Board of Advisors will review the information collected through the detailed evaluation and will use this information to identify which projects ITRC will fund in 2019. The final decision to fund the projects will be made by the ITRC Board on the August 2018 board call based on a preliminary 2019 budget.

Detailed Evaluation by Federal Agencies – Due August 14, 2018

ITRC Board Liaisons will consider the following factors when completing the detailed evaluation and will reach out to others in their agency (however, only Board Liaisons should fill out the survey).





- What is your level of interest in the proposal? (1) This project is of interest to our agency/group, and we support funding it and/or will provide team members, (2) This project is not of interest to our agency/group, but is a project ITRC should pursue, or (3) This project should not be funded by ITRC.
- Is the timing right for the project (topic is relevant, but not too new)?
- Would the proposed project accelerate smart environmental decision-making and increase the effectiveness of the regulatory process?
- Would the proposed project increase ITRC's status as the "go-to" provider of guidance & training on innovative solutions to protect human health and the environment?

ITRC State Engagement Program Input Collected – Due August 14, 2018

ITRC's State Engagement Program will survey state environmental agencies to collect input on the proposals. State Points of Contact (POCs) will also identify any potential ITRC Team Leaders from their state and provide input on the following assuming the proposal became an ITRC Team.

- Is this proposal covering a topic your State submitted as being a priority issue in the 2018 Priorities Survey? If yes, to what degree does it address the constraint(s) preventing solution?
- Team member, product development input, and implementation activities State plans to have a team
 member for the proposed project and will reply to surveys, conduct reviews, attend training dry runs,
 and work to get products used.
- Will provide product development input and implementation activities, but no team member State is interested in the proposed project and will reply to surveys, conduct reviews, attend training dry runs, and work to get products used, but does not expect to have a team member.
- May provide product development input and implementation activities State is not especially
 interested in the proposed project but may respond to surveys, conduct reviews, attend training dry
 runs, and work to get products used
- **No Interest** State is not interested in the proposed project and will not have a team member or respond to surveys, conduct reviews, attend training dry runs, nor work to get products used.

Industry Affiliates Program (IAP), Academics, Emeritus and Public/Tribal Stakeholders – Due August 14, 2018

ITRC's Industry Affiliates Program (IAP), Academics, Emeritus and public/tribal stakeholders will be queried about their interest in each proposal by the appropriate representative on the ITRC Board of Advisors. The ITRC Board representative will consolidate the information and provide it by August 14th to the ITRC Director.

August 16, 2018 (Board Call)

ITRC Board Considers Proposals

Based upon the input collected from the detailed evaluation, ITRC Board of Advisors voting members will consider the proposals at the August 16, 2018 Board Call. The Board will consider the following factors:

- What is the level of interest in the proposal from States?
- What is the level of interest in the proposal from the federal agencies?





- What is the level of interest in the proposal from the Industry Affiliates Program (IAP)?
- What is the level of interest in the proposal from Academics, Emeritus, and Public and Tribal stakeholders?
- Would the proposed project accelerate smart environmental decision-making and increase the effectiveness of the regulatory process?
- Would the proposed project increase ITRC's status as the "go-to" provider of guidance & training on innovative solutions to protect human health & the environment?
- Are there other State organizations that are better suited to take on the project?
- Are we meeting the Strategic Plan's intent to support Air and Water (Non-Remediation) and Remediation teams?

August 31, 2018

Team Leader Selection

ITRC releases request for Statements of Interest from prospective team leaders and a committee interviews and selects the Co-team Leaders to assist with selection of the Contractor.

August 20 - September 21, 2018

Contractor RFP

ITRC releases Request for Proposals (RFP) for contractor support. The results are compiled and sent to a committee of Board members, ITRC Director, and the new Team Leaders for review and selection.

September 24, 2018 - October 31, 2018

Contractor Interviews/Selection & Negotiation

The selection committee reviews, interviews, and selects a contractor for program advisor support. Final negotiation and issue of contract is complete by October 31.





2018 ITRC State Environmental Priorities

In 2018, the states were surveyed to determine the top environmental issues they are facing and to identify the technical constraints associated with those issues. Approximately 86% of ITRC's State Engagement Program participated, representing 45 states. ITRC will use these survey results to evaluate the new 2019 team proposals.

Remediation Issues (Soil and Groundwater)

1. Emerging Contaminants (1,4-Dioxane, etc.)

- Best management practices (BMPs) for assessing and determining the contaminant nature and extent of emerging contaminants (specifically 1,4-Dioxane)
- Development of a national clearing house of applicable and acceptable detection limits and health-based standards
- Research and guidance development on remediation approaches

2. Contaminated Sites / Brownfields (Assessment and Cleanup Technologies)

- Specific guidance development on technologies for remediation:
 - Cost effective discovery and removal options for chlorinated solvent plumes
 - Urban background contamination co-mingled with industrial releases
 - Chloride-assessing anthropogenic inputs vs. natural occurring inputs

3. Vapor Intrusion / Petroleum Vapor Intrusion

(ITRC products currently exist for this priority; proposals should focus on ITRC product updates or enhancements)

- Science and guidance updates (including chlorinated vapor intrusion)
- Evaluation and guidance on sub-slab depressurization systems vs. passive systems
- Guidance on VI effects from sub-grade structures (including parking garages, etc.)
- BMPs on mitigation system variations for industrial vs. commercial vs. residential structures

4. Risk Assessment

(ITRC products currently exist for this priority; proposals should focus on ITRC product updates or enhancements)

- Guidance on new methods for evaluating risk (especially from cross-program perspectives)
- Guidance on evaluating ecological risk (including compilation of data from eco-receptors and bioaccumulation)





5. Cleanup Regulations, Standards and Measures

- BMPs on cross-program/state application consistency, constricted by:
 - Statistically low broadly accepted laboratory detection limits
 - Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) inconsistent cleanup goals
 - Trichloroethylene (TCE) guidance
 - Municipal treatment byproduct Chloroform management
 - State-specific vs. regional screening levels (RSLs)
 - Resiliency considerations for at-risk remedy projects
 - Development of sediment quality standards
 - Orphaned solvent cleanup goals

6. Groundwater Contamination

(ITRC products currently exist for this priority; proposals should focus on ITRC product updates or enhancements)

- Guidance on plume delineation and new cleanup technologies
- BMPs and evaluation on addressing groundwater commingled plumes and the use of forensics and fingerprinting
- BMPs and guidance on the development/improvement of remote sensing technology to identify and cleanup chlorinated solvent plumes

7. Management of Metal Contamination

- Evaluation of technologies and approaches to the management of exposure to toxic and carcinogenic metals
- Evaluation and guidance on the risk associated with certain contaminants related to the form of the contaminant. Examples include:
 - Mercury in elemental form vs. mercuric chloride or methyl mercury
 - Chromium in hexavalent vs. trivalent forms
 - Elemental arsenic vs. arsenite
- BMPs and guidance for the management and addressing of lead issues and cleanup
- BMPs and guidance for addressing and cleaning up arsenic in drinking water
- BMPs and guidance for addressing mercury contaminated sites (i.e., new housing developments and urban sprawl affected by existing mercury contaminated sites)
- BMPs and guidance for addressing increased concentrations of manganese

8. Legacy Mine Issues

(ITRC products currently exist for this priority; proposals should focus on ITRC product updates or enhancements)

- Guidance to address the impact of acid mine drainage on water
- BMPs and guidance for addressing abandoned mines (including uranium mines)





Remediation Plus Issues (Air and Water)

1. Public Water Supplies / Infrastructure / Aquifers

- BMPs and guidance for measurable drinking water improvement models (including cost)
- Guidance to address emerging contaminants in public water supplies
- Guidance to address pharmaceutical and personal care products in public water supplies
- BMPs for sustainable groundwater use
- Guidance on lead monitoring/control in drinking water
- BMPs for disinfection methods for rural water, especially targeting trihalomethanes
- BMPs for regional planning of well head/aquifer protection and sewage disposal
- BMPs and guidance for GIS modeling to demonstrate regional contaminant contributions

2. Air Quality (Pollution Reduction, Ozone Transport)

- Guidance on improved analytical methods for air quality sampling (including detection equipment overviews and training modules)
- BMPs and assessment of field tools to verify combustor efficiency compliance with regulations
- © Guidance on QA/QC requirements for continuous emissions monitoring systems (CEMS) and continuous opacity monitoring systems (COMS) data
- BMPs and guidance on greenhouse gas reporting, monitoring, and reducing

3. Surface Water Quality / Harmful Algal Blooms

- Quidance on control of nutrients and characterization/treatment of harmful algal blooms (HABs)
- Guidance on addressing environmental impacts from de-icing/road salt runoff including non-chemical additives/alternatives
- Guidance on addressing non-point source pollution from municipal storm water, agriculture, etc.
- © Guidance on resolving economic, cultural, and regulatory impediments to the use of sustainable agriculture and forestry practices to lower risk for water pollution

4. Wastewater Treatment Plants Effluent / Septic

- BMPs and guidance on effectively reducing nutrient levels in wastewater effluent
- Guidance on addressing aging infrastructure and facility upgrade costs
- Guidance on managing residual combined sewer and storm water discharges to meet water quality standards
- Guidance on the treatment of high strength wastes (i.e. septic waste, landfill leachate, food processing wash water, etc.)
- BMPs and performance strategies for gravity fed, enhanced septic treatment systems
- Guidance on Advanced Integrated Pond Systems (including anaerobic treatment cells) for municipal wastewater treatment plants
- BMPs and evaluation of technical considerations and cost effectiveness of non-discharge evaporative waste pond systems for rural communities
- BMPs and guidance on nutrient training programs (also applicable to CAFOs and agriculture)





5. Resiliency and Vulnerability Assessment and Planning / Disaster Planning

- Guidance and procedures to address resiliency planning for flooding and coastal flooding (and extreme weather events)
- Guidance and procedures to address resiliency planning for wildfires
- BMPs and adaptation strategies for resilient cleanup infrastructure and disaster planning for hazardous waste
- Guidance on sustainable infrastructure, including international summaries of existing decision frameworks for municipal and state regulators
- BMPs on incorporating disaster preparedness into long-term institution and engineering controls to maintain remedy resiliency
- Guidance on mitigation efforts of greenhouse gases
- BMPs and guidance on establishing and maintaining vegetative CAP coverage in high drought areas

6. Concentrated Animal Feeding Operations (CAFOs)

- BMPs and guidance on appropriate mechanisms to manage pollution and associated contamination from CAFOs
- BMPs on options to remediate nitrates and other contaminants in groundwater from CAFOs

7. Risk Communication

- Community engagement guidance for technical issues
- Guidance on communicating information, risk, and issues to the public
- BMPs and guidance on how to use social media to communicate environmental issues

8. Fracking

- BMPs and guidance for addressing fracking fluid-impacted water
- Evaluation of fracking at shallow depths (less than 300 ft.), in contrast to fracturing in deep formations (over 1 mile), and the impacts each have on drinking water sources



