



# ITRC PROJECT PROPOSAL

## Groundwater Statistics and Monitoring Compliance

### Proposal Contacts:

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### Call for Proposals Topical Areas

- CHAR Site characterization, sampling, and monitoring**  
*Technologies and approaches for site characterization, soil and groundwater sampling and contaminant monitoring.*
- CONT Soil and groundwater contamination**  
*Technologies and approaches for modeling, treatment, and remediation of contaminated soil and groundwater. Proposals are sought in the specific area of groundwater flow and/or contaminant fate and transport modeling (may cross over with CLIM (1) above).*
- LONG Long term stewardship, land use controls, institutional controls**  
*Systems and approaches for implementing, monitoring, tracking, and managing long term stewardship of contaminated sites, including, but not limited to, land use, engineered, and institutional controls.*

### Problem Statement (why is this project necessary and relevant to ITRC's purpose & mission?)

To explain, educate and train state regulators and other practitioners in understanding and implementing the Unified Guidance for Groundwater Statistics and Monitoring Compliance, related monitoring evaluation and optimization software (i.e., GTS, Summit, etc.) , as well as new groundwater measurement technology to demonstrate compliance (i.e., groundwater flux and discharge measurement).

### Proposed Scope to Address Problem (what is the approach for this project?)

US EPA recently (March 2009) issued an 800-page Resource Conservation and Recovery Act (RCRA) Unified Guidance document for Groundwater Statistics and Monitoring Compliance. The challenge for practitioners is to understand, interpret and use the new guidance, which contains significant updates to compliance statistics, in the daily management of their projects. In order to successfully manage groundwater cleanup, resource protection, and demonstrate ongoing compliance, state regulators and project manager require education, training, and practical application of the new RCRA Unified Guidance.

In order to accomplish this, the following step-wise process is proposed:

- Conduct a survey on what elements the states would like to concentrate on the RCRA Unified Guidance specific to their state needs and requirements.
- Develop a summary guidance document on the Unified Guidance for Groundwater Statistics and Monitoring Compliance
- Compile basic statistical techniques, methods and tools to manage monitoring programs
- Develop an internet based training along with tools and metrics for effective monitoring, reporting, analysis and review
- Include modules to navigate through data management software and analytical tools to make better project management decisions.

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

Primary targeted users are the state regulators.

Secondary users are the federal regulators, federal agencies, regulated public, consultants and contractors.

States: CA, NJ, SC, SD, VA, MO

Lastly, include information on how many and which states have this problem as an environmental priority. Information on ITRC gathered State Priorities and Emerging Issues is located on the ITRC website at <http://www.itrcweb.org/planning.asp> for you to utilize as needed.

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

State Survey of Interests  
TechReg document, including case study demonstrations  
Internet-based training

### Impact (how will this project result in more effective environmental decision making?)

This will help project managers to make effective decisions based on real field data and how to interpret, use and get most of the monitoring data that is gathered at contaminated sites.  
This will benefit the project managers to follow what is required and help train them in matching their ability to make better management decisions.  
This will certainly help manage, optimize and even close sites with effective tools of proven techniques.

### Project Schedule

Team Formation - January 2011  
State Survey – June-October 2011  
Tech Reg Development - April '11 thru April '12  
Draft for review - April '12  
IBT development – April - October '12  
TechReg release October '12  
First IBT public offering November-December '12.

### Proposed Personnel

Team Leader: Ning-Wu Chang, Cal/EPA DTSC

Federal Agencies:

Beth Moore, US DOE, Washington DC, 202-586-6334, [beth.moore@em.doe.gov](mailto:beth.moore@em.doe.gov)  
Phil Hunter, AFCEE, San Antonio, TX, 210-536-7237, [Philip.Hunter@brooks.af.mil](mailto:Philip.Hunter@brooks.af.mil)  
Dave Becker, USACE, Omaha, NE, 402-697-2613, [dave.j.becker@usace.army.mil](mailto:dave.j.becker@usace.army.mil)  
Kirby Biggs, USEPA, Alexandria, VA, 703-299-3438, [biggs.kirby@epa.gov](mailto:biggs.kirby@epa.gov)  
David Burden, US EPA R.S. Kerr Laboratory, 580-436-8606, [david.burden@epa.gov](mailto:david.burden@epa.gov)

IAP Companies:

Kirk Cameron, MacStat Consulting, Colorado Springs, CO, [kcmacstat@qwest.net](mailto:kcmacstat@qwest.net)  
Charles Davis, EnviroStat, Las Vegas, NV, 702-456-8994, [charles.davis@envirostat-nv.com](mailto:charles.davis@envirostat-nv.com)

### Potential Team Membership/Needs

- State and federal regulators with the responsibility of managing projects to fulfill the groundwater statistics and monitoring requirements
- CA, NJ, SC, OH, etc. do have an interest in implementing the guidance document
- DOE, DoD, US EPA, consulting companies, IAP members, etc.
- Skill mix of Team Members required: Geologists, engineers, statisticians, risk assessors, etc.
- Sectors of Team Members required: State, federal, regulated community, public, etc..

### Proposed In-Kind/Direct Project Funding

In-kind support for the Program Advisor by DOE, DoD, and EPA partners for two years.

### Related Work:

Not applicable