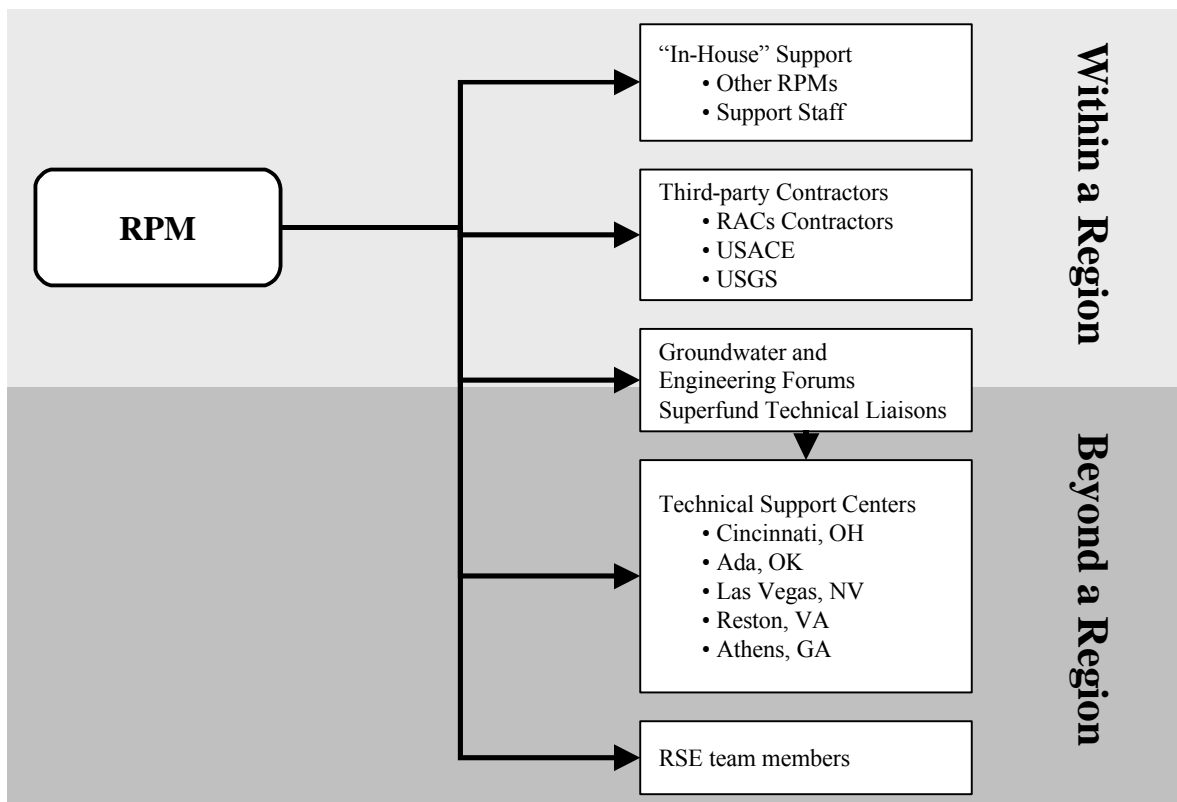




Implementation of RSE Recommendations: Technical Assistance Resources Available to RPMs

Optimization of 20 Fund-lead P&T systems via Remediation System Evaluations (RSEs) has identified a number of opportunities for system enhancement, and in many cases, reductions in annual operation and maintenance costs. Implementing these recommendations, however, will require expertise in a variety of fields, and the Remedial Project Managers (RPMs) of these systems may need technical assistance. This pamphlet introduces the technical assistance resources available to RPMs both within and beyond their Region.

The graphic below presents a summary of the resources available to RPMs as they implement RSE recommendations.



Note: The various technical resources outlined and abbreviated in this figure are summarized in the following pages. Explanations include contact information where appropriate.

Support within a Region

“In-House” Support

Internal or “in house” support structures for RPMs vary by Region. Some Regions, including Region 2, Region 3, and Region 10, have hydrogeologists assigned to each site. Other Regions, such as Region 6, rely on third-party contractors or outside avenues for technical support. Regardless of the technical support structure, it is recommended that RPMs exchange information with each other because each RPM has gained expertise based on previous experience.

Third-Party Contractors

Although site contractors are capable of handling most of the technical issues that arise at a site, there may be situations where technical assistance from another source is more appropriate. For example, a site contractor may have expertise on O&M of a treatment facility, but may not have the expertise necessary for groundwater modeling. Also, an RPM may need to make a decision based on a technical evaluation, and an outside party may be needed to provide unbiased support. In such cases, RPMs can seek support from other contractors:

- Response Action Contractors (RACs)
- U.S. Army Corps of Engineers (USACE) and associated subcontractors
- United States Geological Survey (USGS) (especially for hydrogeological support)

Support Beyond the Regions

Engineering Forum, Groundwater Forum, and Superfund Technical Liaisons

The Engineering and Groundwater Forums are two independent groups of scientists, engineers, and support staff that support the Superfund and RCRA programs in each of the ten EPA Regional Offices. Additional participants come from the EPA Laboratories, EPA Headquarters, and the states. The groups were organized to exchange up-to-date information related to engineering remediation and hydrogeological issues at Superfund and RCRA sites. A Superfund Technical Liaison (STL) in each Region is assigned as a link between their Region and the EPA Office of Research and Development. Together these STLs and the Forums promote communication between the Regions and the Laboratories and have three primary purposes:

- to bring the current state-of-the-science to each regional office as it is developed through the research efforts at the labs;
- to focus laboratory resources on research areas important to the ground-water scientists working in each EPA Region; and
- to maintain consistency in the interpretation of guidance and application of policy throughout the country.

The members in each of the two Forums are listed by Region or EPA office online at <http://www.epa.gov/tio/tsp>.

ORD Technical Support Centers and Contacts

There are eight technical support centers throughout the nation capable of offering technical assistance through the Technical Support Program. Mechanisms for contacting these centers vary by Region. In some Regions, such as Region 6, RPMs contact the centers directly. In other Regions, such as Region 10, the common avenue of communication is through a Engineering or Groundwater Forum member. Those Forum members have contacts at the support centers and can facilitate interactions. The cost of the technical assistance may not exceed \$25,000, and formal requests for assistance must be made in writing. Summaries of the eight centers are provided below and more information can be found at <http://www.epa.gov/tio/tsp>.

Engineering & Treatment (Cincinnati, OH)

National Risk Management Research Laboratory

Assistance Requests: David Reisman (513)487-2588 (Fax: 513-487-2588)

Branch Chief: Trish Erickson (513)569-7406 (Fax: 7676)

This center provides site-specific assistance on engineering and treatment issues during any phase of a site cleanup. Focus areas include containment, thermal treatments, soil vapor extraction, bioremediation, and solidification/stabilization. The center publishes Engineering Bulletins on technologies and site types. The center supports Superfund, Brownfields, and RCRA Corrective Action sites.

Monitoring & Site Characterization (Las Vegas, NV)

National Exposure Research Laboratory

Assistance Requests: Ken Brown (702)798-2270 (Fax: 3146)

Branch Chief: Christian Daughton (702)798-2207

This center provides scientific and technical assistance in the characterization of hazardous waste sites and associated site contaminants. State-of-the-science methods and technologies are identified and applied to identify contaminants, determine their levels and concentrations, and identify their geographic extent and distribution for site characterization and remediation.

Ground Water Fate & Transport (Ada, OK)

National Risk Management Research Lab

Assistance Requests: Dave Burden (580)436-8606 (Fax: 8614)

Branch Chief: Jerry Jones (580)436-8593 (Fax: 8614)

This center provides site-specific assistance on ground water and subsurface contamination problems in site remediation. Focus areas include in-situ water treatment, in-situ thermal treatment, monitored natural attenuation, soil vapor extraction, hydrologic/fate and transport

modeling, and permeable reactive barriers. The center also publishes issue papers on subsurface remediation and groundwater topics and provides project manager training upon request by the regions. The center supports Superfund, Brownfields, and RCRA Corrective Action sites.

Combustion Technical Assistance Center (Cincinnati, OH)

National Center for Environmental Assessment
Assistance Requests: Femi Adeshina (513) 569-7147

This center provides technical assistance to regional, state, and headquarter risk assessors who must evaluate the risks from over 200 RCRA combustion facilities. Major issues addressed include evaluating the fate, transport and toxicity of combustor contaminants; and developing procedures to better quantify the risks from these facilities.

Ecological Risk Assessment Support Center (Cincinnati, OH)

National Center for Environmental Assessment
Assistance Requests: Mike Kravitz (513) 569-7740 (Fax: 7916)

This center provides technical information and arranges for scientific review and consistency on topics relevant to ecological risk assessment and ecological concerns. ERASC can access all ORD labs and centers to develop assistance responses that reflect the state-of-the-science for ecological risk assessment, and also provides a communication point for the distribution of the responses to other interested parties.

Environmental Photographic Interpretation Center (Reston, VA)

National Exposure Research Laboratory
Assistance Requests: Terry Slonecker (703)648-4284 (Fax: 4290)
Center Director: Don Garofalo (703)648-4284 (Fax: 4290)

This center provides site-specific information on the condition and activities occurring at hazardous waste disposal sites and provides support in the form of reports, maps, and photographs; assists in emergency response and enforcement efforts. Focus includes site characterization and mapping; annotated aerial photo interpretation reports; and acquisition of aerial photographs.

Exposure Assessment Modeling (Athens, GA)

National Exposure Research Laboratory
Assistance Requests: Frank Stancil (706)355-8100 (Fax: 8104)

This center provides proven predictive exposure assessment techniques for aquatic, terrestrial, and multimedia pathways for organic chemicals and metals. A wide range of analysis techniques is provided, ranging from simple desk-top techniques suitable for screening analysis, to sophisticated, state-of-the-art continuous simulation models. CEAM distributes environmental simulation models and data bases for urban and rural nonpoint sources, conventional and toxic pollution of streams, lakes and estuaries, tidal hydrodynamics, geochemical equilibrium, and aquatic food chain bioaccumulation.

Health Risk (Cincinnati, OH)

National Center for Environmental Assessment

Assistance Requests: Harlal Choudhury (513)569-7536 (Fax: 7916)

Team Leader: Patricia Daunt (513)569-7596 (Fax: 7916)

This center provides human health toxicity information to Superfund and other sites. Focus areas include development of new provisional risk assessment issue papers, revision/update of provisional risk assessment issue papers, external peer review of these provisional risk assessment issue papers, development of chemical surrogates by QSAR analysis and review of Superfund guidances and methodologies. The center also provides support for Risk Assessment Guidance for Superfund (RAGS) and the Health Effects Assessment Summary Tables (HEAST).

RSE Team

Doug Sutton, GeoTrans, Inc. — 732-409-0344

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To clarify or provide more information on RSE recommendations or avenues for implementing those recommendations, the team members from GeoTrans, Inc. and USACE that conducted each of the RSEs are also available for technical assistance. RSE team members include both hydrogeologists and engineers with expertise in pump and treat systems and other remedies. The RSE team members are familiar with site data and conditions through reading site documents, visiting the sites, and interviewing the site managers.