

RTDF NAPL Cleanup Alliance Meeting Dallas, TX May 22, 2003

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What Is Groundwater Central[©]?

More than a Website: A multi-component PORTAL to groundwater science and technology information at URL www.groundwatercentral.info

- Resource Database: a "smart" search engine reaching out to existing groundwater subjects on the web
- Communications Center: Topical Forum, Public Events Calendar, Email Services, Chat Room, "Ask an Expert" Service

Groundwater Central[©] Home Page



Calendar for posting group events.

Resource "Links" Database

- "Smart" search engine that provides descriptive links to existing web sites
- Search engine uses links database populated with wide range of information types (e.g., publications, databases, vendor info, events, case studies)
- Search engine "looks" through multiple layers at source web sites to provide direct links to appropriate information



- Search by keyword, author (point of contact) or category
- "Search within a search" now available to aid in narrowing down the topic
- Emphasis on on-line, innovative technology publications from diverse web-site sources
- Crosscuts the many excellent online publication caches for groundwater technology information
- Detailed point of contact information "database within database"
- Dead link reporting available to help ID changing URLs and enhance maintainability

LNAPL, Dissolved HC, or Oxygenate Information Population

- Portal contains hundreds of records related to LNAPL, NAPL, dissolved or vadose zone HCs, POLs, or oxygenate contaminants or technologies
- Record links include
 - publications from various trusted sources (federal, state, partnerships, professional orgs) (~ 500+ conservatively estimated)
 - organizations, institutions, companies (petroleum companies, academic, research, or professional orgs, consulting companies) (~ 100+)
 - software downloads and related info (~ 25+)
 - links to case studies or RODs related to refineries or LNAPL remediation (~ 25+)
 Ground-Water Remediation Technologies

Analysis Center

LNAPL, Dissolved HC, or Oxygenate Information Population, Cont'd.

- Publications and publication or research abstracts (online or offline via catalog such as API) contain info related to:
 - Scientific R&D efforts
 - Mobility, fate and transport, modeling, software
 - Characterization (including analytical methods)
 - Remediation (including LNAPL recovery and applicable technologies such as AS/SVE, bioslurping, DPE, MPE, bioremediation, MNA, surfactant flooding)
 - Case studies (Refinery RODs, RCRA CA Showcase, NAPL Cleanup Alliance highlights)
 - Other (site management, safety, USTs)

LNAPL, Dissolved HC, or Oxygenate Information Population, Cont'd.

- Main info sources tapped to date
 - American Petroleum Institute (API) (both online pubs and pubs from API catalog)
 - Other professional orgs (AAPG, Soc. Petro. Engrs., GSA, Canadian orgs)
 - EPA (RCRA Corrective Action Showcase and Success Stories, CERCLIS RODs, Clu-In, ORD, SITE, Tech Support Papers, Issue Papers and Engr. Bulletins, NCER/STAR, OUST)
 - RTDF NAPL Cleanup Alliance
 - USGS

LNAPL, Dissolved HC, or Oxygenate Information Population, Cont'd.

- Main info sources tapped to date cont'd.
 - DOD related Federal agencies or organizations (Primarily AFCEE, SERDP, ESTCP)
 - DOE related sites or databases (Info Bridge, Energy Citations Dbase, ERDIS, OST, ANL, ORNL)
 - National Science Foundation
 - Various state web sites (esp. TX, CA, OK)
 - CSIRO (Australia)
 - Various academic institutions
- We would be happy to take suggestions for any information source or specific link at any time

Groundwater Central[©] Mid-Level Search Options

GROUND WATER CENTRAL	
Basic Advance (more options) Advance (checkboxes)	
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author C All Names C Contains All	
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SEARCH	

Groundwater Central[©] Advanced (Category) Search Options - Partial View

ROUND WATER CENTRAL	
Basic Advance (more options) Advance	(checkboxes)
<u>Location</u>	Information Type
Information Topic	Information Source
Characterization Technology Type	Remediation Technology Type
Contaminant Class	Vadose Zone Science
Vendor Services	<u>Geologic/Hydrogeologic Regim</u>
Organization Team (Collaborators or Involved Organizations)	
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Groundwater Central[©] Search Results - The Summary Report

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title	subtitle	abstract
2001 International Containment & Remediation Technology Conference and Is Exhibition	U.S., Department of Energy Subsurface Contaminants Focus Area	This conference will address issues related to state-of-the-art and innovative technologies for cont
rlink: <u>http://www.containment.fsu.edu/</u> ription: For more information from Florida S	itate University web site	
AATDF Technology Practices Manual for Surfactants and Cosolvents	U.S. DoD Advanced Applied Technology Demonstration Facility Program	This manual, produced by the DoD Advanced Applied Technology Demonstration Facility Program at Rice
rlink: <u>http://du-in.org/PRODUCTS/AATDF/T</u>	oc.htm	
rlink: <u>http://du-in.org/PRODUCTS/AATDF/T</u>	<u>oc.htm</u>	
erlink: <u>http://du-in.org/PRODUCTS/AATDF/T</u> ription: View Document Abstracts of Remediation Case Studies, Volume 1	Federal Remediation Technologies Roundtable (FRTR)	This report is a collection of abstracts summarizing 37 case studies of site remediation projects pr
rlink: http://clu-in.org/PRODUCTS/AATDF/T ription: View Document Abstracts of Remediation Case Studies, Volume 1 ils rlink: http://clu-in.org/download/frtr/abstra	Federal Remediation Technologies Roundtable (FRTR) <u>ctsvol1.pdf</u>	summarizing 37 case studies of site
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erlink: <u>http://du-in.org/PRODUCTS/AATDF/T</u> cription: View Document	Federal Remediation Technologies Roundtable (FRTR) ctsvol1.pdf In web site er.pl?	summarizing 37 case studies of site

Groundwater Central[©] Search Results - The Detailed Report

Title: 2001 International Containment & Remediation Technology Conference and Exhibition

ID# 149

Subtitle : U.S., Department of Energy Subsurface Contaminants Focus Area

Abstract : This conference will address issues related to state-of-the-art and innovative technologies for containment, remediation, and long-term monitoring of contaminated sites. These issues are of importance to the U.S. Department of Energy and other federal agencies which are conducting defensible assessments of the present and post-closure cumulative effects of radioactive and chemical contamination at hazardous waste sites. The conference will be a highly visible event focusing on worldwide application of these technologies to ensure that hazardous waste site decisions are defensible and protective of the environment. This event features: Internationally recognized keynote speakers; Concurrent technical sessions; Interactive poster sessions; Exhibition of technologies and services; Student scholarships; Workshops and training seminars; Case studies of site characterization/remediation efforts; and, Published proceedings.

Categories:

- Case Study (Government Owned or Sponsored Site)
- Case Study (Private Site)
- Workshop Announcement
- Conference, Seminar or Symposium Announcement
- Site Remediation
- U.S. Academia
- U.S. Federal Government
- Sampling or Sampler Emplacement Technology
- Multiple Remediation Technologies
- Multiple Contaminant Classes
- Containment

Date	Description
6/11/01	Start Date of Conference
6/13/01	End Date of Conference

POC:

Name	Address	Phone	Fax	Email	Organization	
			None			

Hyperlink : http://www.containment.fsu.edu/

Description : For more information from Florida State University web site

Communication Center

- Events Calendar (short-term notices such as conferences, field trips, RFPs; registered customers can post events)
- Topical Forums (bulletin board for message posting and replies; optional listserv integration)
- "Ask an Expert" Service (anonymous questions routed to specialist panel; trial basis to start)
- Email Services (customized receipt of information for registrants)
- Chat Room (real-time discussions, directed at worldwide discussions)

Groundwater Central[©] Events Calendar

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			Environmental Technology	Environmental Technology	Environmental Technology	Environmental Technology	Environmental Technology		
			Symposium & Workshop						
		30	31	1	2	3	4	5	



- Any visitor can view forum; registered customers can post or reply to messages
- Seven categories currently available ("Access", "Characterization and Monitoring", "Contaminants", "NAPL Cleanup", "Physical Setting", "Policy", and "Remediation Technologies"
- Several detailed topics are included within each of the seven main categories
- Customers can elect to have postings emailed directly, eliminating necessity to continually check for activity in area of interest
- Postings will be archived and organized at <u>www.groundwatercentral.info</u>.

Groundwater Central[©] Forums - Partial View

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		Forum	Topics	Posts	Last Post	Moderator(s)	
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		Directional Drilling	0	0	01/31/2003 10:32:46		
		Direct-Push Technology	0	0	01/31/2003 10:33:16		
		Drilling Technology	0	0	01/31/2003 10:32:23		
		Hydraulic, Pneumatic, or Blast-Enhanced Fracturing	0	0	01/31/2003 10:33:42		
		Sampler Emplacement Technology	0	0	01/31/2003 10:34:03		
	= <u>c</u>	haracterization and Monitoring Technologies					
		Analytical Laboratory Technology	0	0	01/31/2003 10:36:38		
		Field Technology	0	0	01/31/2003 10:37:03		
		General	0	0	06/06/2001 09:26:08		
		Geophysics (Borehole)	0	0	06/06/2001 11:04:12		
		Geophysics (Surface)	0	0	06/06/2001 11:04:43		
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		Explosives	0	0	01/31/2003 10:41:20		
		Metals	0	0	01/31/2003 10:40:47		
		Radionuclides	0	0	01/31/2003 10:41:05	z . 34	
		Semivolatile Organic Compounds	0	0	01/31/2003 10:49:13		
		Volatile Organic Compounds	0	0	01/31/2003 10:48:51		
		APL Cleanup					



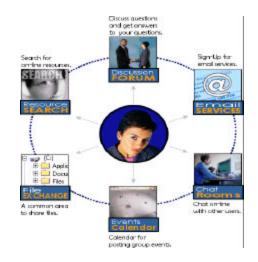
- Registered customers can send anonymous question
- Beginning on trial basis with four recognized specialists that will strive to reply to questions within two weeks
- Current topics covered include "Bioremediation", "Permeable Reactive Barriers," and "Thermal-Enhanced Remediation"
- Questions and answers of general interest will be periodically posted on forum (questioner will remain anonymous)
- Initial service provided through generous contributions of Drs. Terry Hazen and Kent Sorenson (Bioremediation), Dr. Robert Puls (PRBs), and Dr. Eva Davis (Thermal Remediation)

Groundwater Central[©] Benefits

- Saves time and money through"smart" www navigation to targeted sub-page links
- Enhances communication and information sharing using web-based tools
- Facilitates access to experts in select specialty areas
- Links together available web resources and other electronic information in searchable framework

Groundwater Central[©] Status

- Launched January 31, 2003 96 customers registered to date
- Links database currently populated with >3,000 records; post-launch expansion planned
- Forum contains seven main categories



- Four specialists available for "ask an expert" service on topics of bioremediation, PRBs, and thermal-enhanced remediation
- Link from <u>www.gwrtac.org</u> or proceed to <u>www.groundwatercentral.info</u>