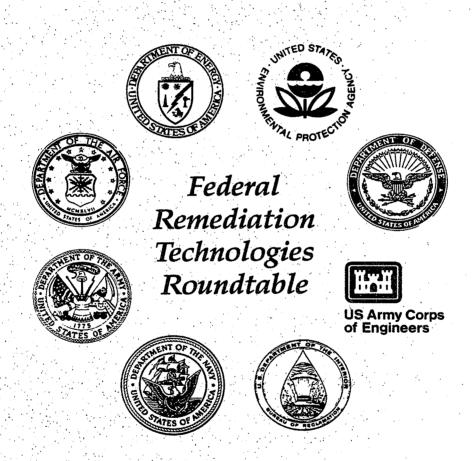
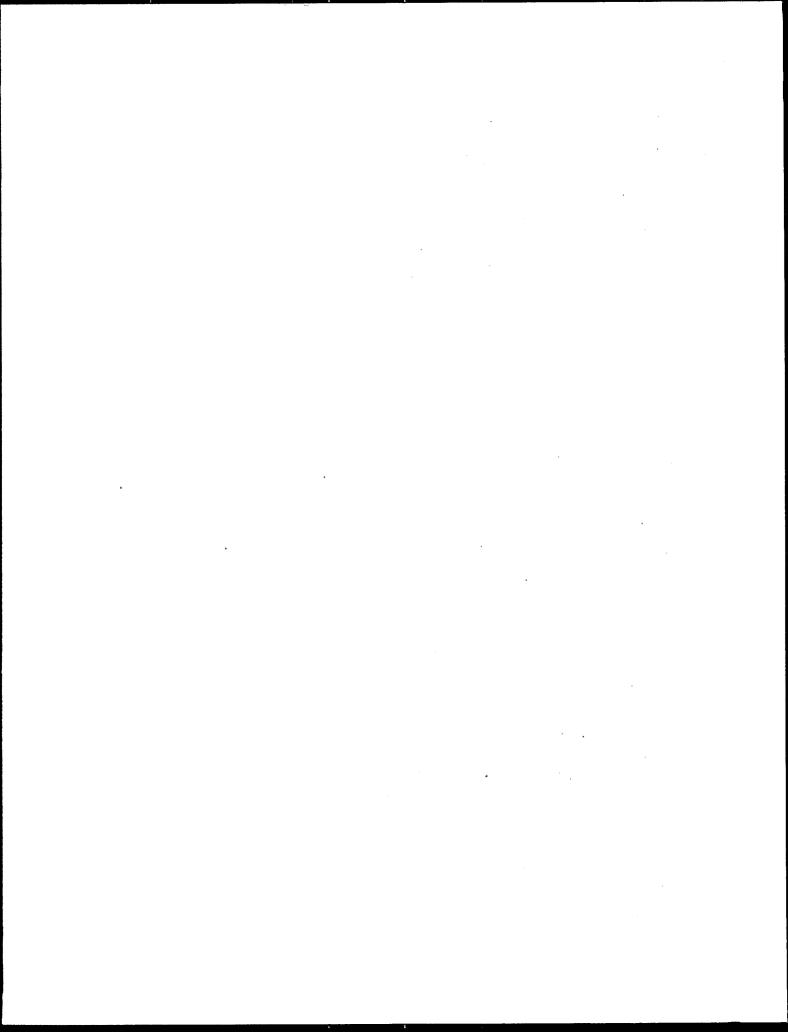
EPA/540/8-91/008 May 1991

Accessing Federal Data Bases for Contaminated Site Clean-Up Technologies



Prepared by the

Member Agencies of the Federal Remediation Technologies Roundtable



Accessing Federal Data Bases for Contaminated Site **Clean-up Technologies**

Prepared by the Member Agencies of the Federal Remediation Technologies Roundtable:

> U.S. Environmental Protection Agency Department of Defense

> > U.S. Army

U.S. Army Corps of Engineers

U.S. Navy

U.S. Air Force

Department of Energy

Department of Interior

Bureau of Reclamation



NOTICE

The information in this document has been funded wholly by the United States Environmental Protection Agency under Contracts 68-CO-0083 and 68-01-7481 to ICF Incorporated. It has been subject to administrative review by all agencies participating in the Federal Remediation Technologies Roundtable, and has been approved for publication. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

Table of Contents

Data	Bases		٠,
٠.	Alternative Treatment Technology Information Center Case Study Data System		1
	Computerized On-Line Information System		3
*	Data Base on Innovative Treatment Technology Vendors		1
	Defense RTD & E On-Line System		5
٠	DOE Energy		ຸຣ
	Hazardous Waste Collection Data Base System		7
	National Technical Information Service		Ω
	Records of Decision System		. 0
**	Rocky Mountain Arsenal Technology Data Base		11
	Technology Data Base		4
	Underground Storage Tanks Case History Data Base System		41
	WERL Treatability Data Base System	*	15
Exper	t Systems	1.0	
	Cost of Remedial Action Model	•	-i.
	Remedial Technology Information System		14
	Tremedian Footmology Information Cystem		15
Rulleti	in Boards		
Da.101	Defense Environmental Electronic Bulletin Board		
	OSWER Bulletin Board System		16
	OOWER Builetti Board System		· 17
Tables			٠
iables	·		
	System Characteristics of Federal Data Bases	•	٧
	Summary Table of Federal Data Bases		Vii

Preface

The Federal Remediation Technologies Roundtable (Roundtable) developed this publication to provide information on accessing Federal data bases that contain data on innovative remediation technologies. The Roundtable includes representatives from the Department of Defense (DoD), Environmental Protection Agency (EPA), Department of Energy (DOE), Department of Interior (DOI), and the National Aeronautics Space Administration (NASA). The data base profiles contained herein were identified through a review of Agency reports, articles, and publications; and telephone interviews with data base experts.

This document is a reference tool that provides information on those systems maintaining data on remedial technologies. It may be used by Project Managers as a pointer to repositories of technical information, or as a source of contacts that may be useful to future system design. Each data base profile contains information on specific data elements, system uses, hardware and software requirements, and access. The profiles also include Agency contacts for each system should you require more detailed information.

This publication contains profiles for three types of data systems: technology data bases, expert systems, and bulletin boards. The technology data bases provide bibliographical and technical information on the uses of various remedial action technologies, including innovative technologies. The expert systems aid decision-makers in selecting remedial action alternatives. Those listed in this document incorporate modules which provide descriptions for various remedial technologies. The electronic bulletin boards provide the user with information on how to access Agency technology transfer systems, relevant conferences, seminars; they also have the capability to provide or display information on remedial technologies.

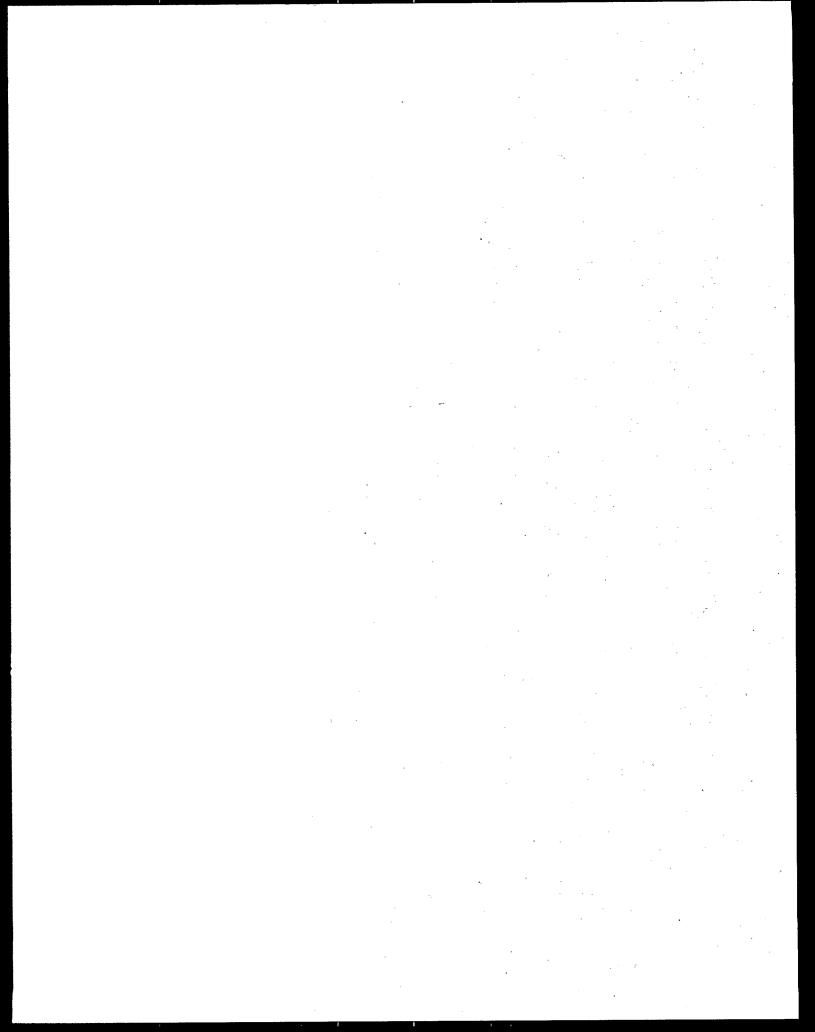
This publication will be updated periodically. If you have any suggestions or if you would like to offer additional data bases for inclusion in future revisions, please complete the suggestion sheet located on page 18 of this publication to the Technology Innovation Office:

Daniel Powell
Environmental Protection Specialist
Technology Innovation Office
U.S. Environmental Protection Agency
401 M. St., S.W., OS-110
Washington, D.C. 20460



--System Characteristics of Federal Data Bases--

System Name	Technology Description	Performance Data	Cost Data	Case Studies	Updated Periodically	User Fees	Public Access	System Operator	On-Line Capability	Page Number
Data Bases										
Alternative Treatment Technology Information Center	χ	χ	X		Х		Х	Х	χ	1
Case Study Data System	x	X		X	х					2
Computerized On-Line Information System	х	x		Х	х		X		х	3
Data Base on Innovative Treatment Technology Vendors	x	х	X		X		x	X	x	4
Defense RDT & E On-Line System	Х				Χ		χ	Х	Х	5
DOE Energy	X	X	X		X	X.			X	6
Hazardous Waste Collection Data Base System					Х	Х	Х		Х	7
National Technical Information Service					X	x	Х	х	x	8
Records of Decision System	Х	Х	Х	Х	Х		Х	Х	X	9
Rocky Mountain Arsenal Technology Data Base	X	x	X		X				X	10
Technology Data Base	Х	х	х	Х	X				Х	11
Underground Storage Tanks Case History Data Base System	x	X	X.	x	X		X	X	X	12
WERL Treatability Data Base System	Х	Х			Х		X			13
Expert Systems										
Cost of Remedial Action Model	X	Х	Х		X	Х	X			14
Remedial Technology Information System	x	X	Х	net.	X	X ,	X		х	15
Bulletin Boards							in a second			
Defense Environmental Electronic Bulletin Board	X						Х		Х	16
OSWER Bulletin Board System	777	કર્યું કું જ			X		Х		Х	17



—Summary Table of Federal Data Bases—

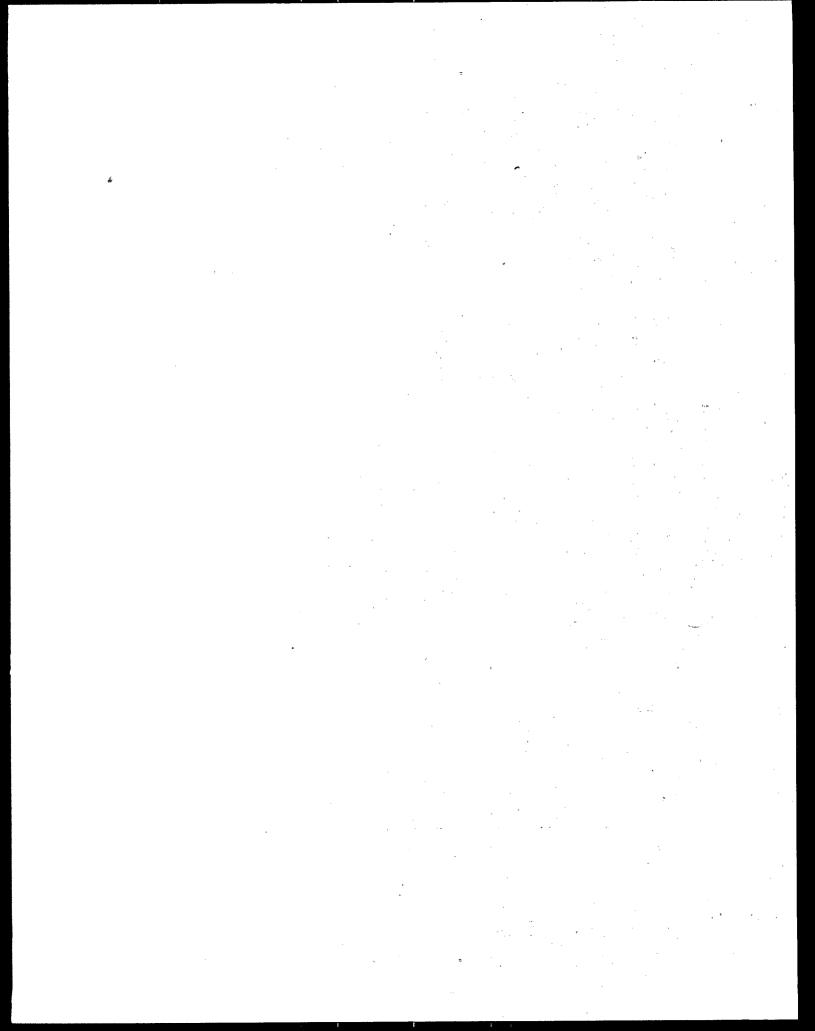
Name	Objective	Data/Technology Information	Hardware/Software	Contacts
Alternative Treatment Technology Information Center (ATTIC)	ATTIC is an information retrieval network that provides site remediation managers with up-to-date technical information on innovative treatment methods for hazardous waste.	The data base contains abstracts from over 1,500 technical references, including books, EPA publications, and treatability studies.	ATTIC contains two access mechanisms: Hotline/System Operator, and an On–Line System.	ATTIC System Operator 301/816–9153 RCRA/Superfund Hotline 800/424–9346 Miles E. Morse, ATTIC Project Officer 202/475–7161 James Pennington, ATTIC Project Manager 301/230–4885
Case Study Data System	This data system stores and retrieves case-specific information to support rule and guidance development activities affecting facility siting, corrective action, and closure.	The data system contains over 200 case studies that address topics such as floodplains, disposal technology, treatment, and environmental effects.	The data base system is written in dBase III or Lotus and is formatted on an IBM PC.	Felicia Wright U.S. Environmental Protection Agency Office of Solid Waste 202/475–7370
Computerized On-Line Information System (COLIS) Data Base on Innovative Treatment Technology	waste sites, and spill responses. This data base is a communication system	The subsystems that comprise COLIS include: Case History File, SITE Program-Applications Analysis Reports, Countermeasure Selection System, Environmental Technology and Engineering Facility Data Base, and Library Search System. The data base includes a variety of information ranging from summary	COLIS can be accessed with a microcomputer, modern (1200 or 2400 baud) and CrossTalk tele-communications software package. This system's hardware and software requirements have not been specified	Robert Hillger & Hugh Masters U.S. Environmental Protection Agency Edison, NJ 201/321-6639 Ms. Linda Fiedler U.S. Environmental Protection
Vendors (Currently being developed) Defense RDT & E On-Line	and private clean-up personnel. This bibliographic data base provides	performance data to waste limitations. Defense RDT & E On-Line System provides	to date.	Agency Technology Innovation Office 202/382–4363
System	information on DoD's ongoing research and technology efforts.	access to three separate data bases: Research Work Unit Information System, Technical Report Data Base, and Independent Research and Development Data Base.	available through DTIC's central computer system.	Defense Technical Information Center 703/274-7791 Alexandria, VA

—Summary Table of Federal Data Bases—

Name	Objective	Data/Technology Information	Hardware/Software	Contacts
DOE Energy	DOE Energy is a multi-disciplinary bibliographic file containing worldwide references to basic and applied scientific and technical research literature.	DOE Energy includes references to journal literature, conferences, patents, books, monographs, theses, and engineering and software materials.	DOE Energy is written in PCBT software and is formatted on an IBM PC or compatible computer.	Connie Elliot Office of Science and Technical Information 615/576–1222
Hazardous Waste Collection Data Base System	This personal computer-based bibliographic data base corresponds to a special collection of hazardous waste documents located throughout the EPA library network.	The data base system includes bibliographic references and abstracts on EPA reports, OSWER policy and guidance directives, legislation, regulations, and commercial books.	This system is available through the EPA On-Line Library System and ATTIC. The data base can be accessed with an IBM PC, modem, and a telecommunications package.	National Technical Information Service (NTIS) 703/487-4807
National Technical Information Service (NTIS)	The NTIS on–line system is a bibliographic retrieval system that represents the reports of major U.S. Federal government agencies.	NTIS consists of unclassified government-sponsored research, development, and engineering reports, as well as other analyses prepared by government agencies, and their contractors.	NTIS is accessible with an IBM PC or MacIntosh, a modem, a communications software, and the signing of a lease agreement.	National Technical Information Service, U.S. Dept. of Commerce, Springfield, VA 703/487-4600
Records of Decision System (RODS)	RODS contains the full text of Superfund Records of Decision for hazardous waste clean-up sites nationwide.	RODS contains all of the Records of Decision for Superfund cleanup sites.	RODS can be accessed through a personal computer with a modem and a communications package (may not be directly accessible to all Federal employees).	U.S. Environmental Protection Agency RODS Staff 202/245-3770 CERCLIS Hotline 202/252-0056
Rocky Mountain Arsenal Technology Data Base	This bibliographic data base is used to research hazardous waste remediation alternatives for feasibility study work.	The RMA Technology Data Base merges information from public and commercial engineering and environmental data bases.	Runs on a DOS system and Clipper software. Can be accessed with a modem and a communications package.	Mark Besmer Program Manager's Office RMA 303/289–0201
Technology Data Base	The system provides an accurate and complete resource for the explanation and selection of appropriate technologies for handling hazardous, mixed, radioactive, or remedial action waste.	The data model classifies the requirements into three major areas: T/S/D capabilities, waste profiles, and waste generation/process data.	The data base is an on-line system which can be accessed through a modem and a communications software package (e.g., Smart Term, Reflections).	Cathy S. Fore HAZWRAP Oak Ridge, TN 615/435-3263

-Summary Table of Federal Data Bases-

Name	Objective	Data/Technology Information	Hardware/Software	Contacts
Underground Storage Tanks Case History File	The data base system is a compilation of factual data from site coordinators,	The data base will include information on technologies, selection of	When operational, the system will be accessible via a personal computer,	Robert Hillger U.S. Environmental Protection
Data Base System	detailing corrective action methods to guide leaking underground storage tank corrective actions.	appropriate technology, cost, and effectiveness.	modem, and a telecommunications software package.	Agency Edison, NJ 201/321-6639
WERL Treatability	The data base will contain treatability	The data has will agree 900 and a second		
Data Base System	data for organic and inorganic compounds.	The data base will contain 389 compounds with 1,500 sets of treatability data	The data base will be PC based.	Ken Dostel
(Currently being	data for organic and morganic compounds.	for half of the compounds.		U.S. Environmental Protection
developed)		for than of the compounds.		Agency Cincinnati OH
	•			Cincinnati, OH 513/569-7503
1	A computerized expert model designed to	The model is comprised of two	CORA can be accessed with an	Jaya Zieman
Model (CORA)	recommend remedial actions for Superfund	independent subsystems: an expert	IBM or compatible PC, MS-DOS	CH2M Hill
	hazardous waste sites and estimate their	system that uses site information to	environment, 640K RAM, and 3MB of	703/478-3566
	costs.	recommend a range of remedial response	hard disk space.	
		actions, and a cost system that		
		develops cost estimates for the technologies selected.		
Remedial Technology	RTIS stores information about potential	RTIS provides advice on screening	RTIS was developed in ORACLE and	Claire Ross
Information System	waste clean-up technologies and provides	remedial options based upon site	resides on a VAX/DEC 5800 ethernet	Idaho National Engineering
(RTIS)	technical experts with access to this	specific input information.	server. It can be accessed by a PC,	Laboratory
	information.		mini, or mainframe computer.	Idaho Falls, Idaho
				208/526-6800
Defense Environmental	The bulletin board serves as a centralized	The bulletin provides user mail service,	The bulletin board can be accessed	Anthony Kelly
1		multi-user access, and upload/download	with a dumb terminal such as the	Office of the Deputy Assistant
		features; and permits access to	Espit III, IBM 1301, VT100, TI Silent	Secretary of Defense (Environment)
		800 number dial-in and to other	700's or a PC and a modem (300, 1200,	703/325-2211
	and technologies.	environmental data networks.	or 2400 baud).	
OSWER Bulletin Board	The system serves as a communications	The OSWER BBS offers messages,	To access the BBS, you need a computer,	Daniel Powell
			modem, and a communications package.	U.S. Environmental Protection
			puolingo.	Agency
				Technology Innovation Office
				202/382-4506



Alternative Treatment Technology Information Center (ATTIC) U.S. Environmental Protection Agency Office of Environmental Engineering and Technology Demonstration Washington, D.C.

System Use and Description

The Alternative Treatment Technology Information Center (ATTIC) is an information retrieval network that provides site remediation managers with up-to-date technical information on innovative treatment methods for hazardous wastes. The system offers several uses:

- Provides access to innovative technology demonstration studies;
- Connects to a variety of treatability, cost analysis, migration and sampling data bases;
- Shares remediation ideas and experiences:
- Locates expert assistance;
- Locates and orders documents;
- Identifies upcoming events, conferences, training, seminars, workshops and courses; and
- Identifies technology vendors.

Data

ATTIC provides the most up-to-date information available on alternative technologies for hazardous waste treatment. The bibliographic data base contains abstracts from over 1,500 technical references, including books, EPA publications, and treatability studies.

Access

ATTIC provides two access mechanisms:

- Hotline/System Operator Provides a telephone link to the ATTIC system for all users without access to a PC.
- 2. On-Line System Provides an electronic link to the ATTIC system data bases and document ordering.

Hardware and Software

ATTIC is accessible by any IBM or compatible personal computer (PC) or MacIntosh equipped with communications software and a modern.

Contacts

ATTIC System Operator 1-301/816-9153

Miles E. Morse ATTIC Project Officer U.S. Environmental Protection Agency 401 M. St., S.W. Washington, D.C. 20460 202/475-7161 RCRA/Superfund Hotline 800/424-9346

James Pennington ATTIC Project Manager Technical Resources, Inc. 3202 Tower Oaks Blvd. Rockville, MD 20852 301/230-4885

Case Study Data System U.S. Environmental Protection Agency Office of Solid Waste Washington, D.C.

System Use and Description

The Case Study Data System stores and retrieves case-specific information to support RCRA rule and guidance development activities affecting facility location, RCRA Corrective Action, and closure. The system was completed in April 1990 and will be updated again in the future. The system can be used to obtain information on treatment technologies used at various specific hazardous waste sites.

Data

Over 220 case studies were collected when the system was originally developed. They are organized into a library, which can be searched through the data base system by using data fields and keywords. The case studies contain formatted information about the geology, general problems, processes associated with waste handling, and treatment technologies (including innovative, standard, and regular procedures) for specific sites. The case studies address a variety of topics such as floodplains, disposal technology, treatment, and environmental effects.

Access

To obtain a disk copy or printout of the system, notify the contact listed below. The data system is available free of charge for EPA-related activities (e.g., EPA employees working in the Land Disposal Branch, Risk Assessment Office, and Superfund Office).

Hardware and Software

The Case Study Data System is written in both dBase III and Lotus and is formatted for use on an IBM PC or compatible computer.

Contact

Felicia Wright
U.S. Environmental Protection Agency
Office of Solid Waste
401 M. St., S.W.
Washington, D.C. 20460
202/475-7370

Computerized On-Line Information System (COLIS) U.S. Environmental Protection Agency Risk Reduction Laboratory Edison, NJ

System Description and Use

The Computerized On-Line Information System (COLIS) is a consolidated system housing several computerized data bases. It contains technical information and bibliographic references concerning corrective actions taken at leaking underground storage tanks, hazardous waste sites, and spill responses. The system was completed in 1989 and is continuously updated.

Data

COLIS is comprised of several subsystems:

- Case History File The Case History File contains documentation of hazardous materials spills, remedial and removal actions for Superfund sites, and corrective actions for underground storage tank problems.
- SITE Program-Applications Analysis Reports This component contains technical information from the SITE Program which will assist researchers and Superfund site remediation teams in selecting appropriate techniques for clean up of hazardous waste sites.
- Library Search System This generalized data retrieval system provides descriptive records and abstracts for documents on Risk Reduction Engineering Laboratory research topics in computerized on-line files.
- The WERL Treatability Data Base (WTDB) This data base provides access to published peer-reviewed data regarding treatability studies analyzing the use of alternative treatment technologies for the removal of contaminants from liquid and solid wastes. This data base was originally developed by the Water Engineering Research Laboratory.

Access:

The system is available free of charge to anyone that requests it. To obtain a copy of the system, notify the contact listed below. To access COLIS directly, please contact the system operator below.

Hardware and Software

The system can be accessed with a microcomputer, a modem (1200 or 2400 baud), and the CrossTalk Telecommunications Program.

Contact

Robert Hillger and Hugh Masters U.S. Environmental Protection Agency Releases Control Branch, RREL Woodbridge Ave. Raritan Depot Building 10 Edison, NJ 08837 201/321-6639 or 201/321-6678

Pacita Tibay COLIS System Operator 201/906-6871

Data Base on Innovative Treatment Technology Vendors U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response Technology Innovation Office Washington, D.C.

System Description and Use

The Data Base on Innovative Treatment Technology Vendors (Vendor Data Base) is currently under development. The data base will facilitate communication between technology vendors, and government and private clean-up personnel by providing abstracts of the capabilities of firms with experience in innovative technologies. It is scheduled for completion in the summer of 1991. The data base, which will be continually updated, will be used to identify innovative technologies for soils, sludges, sediments, and in-situ treatment of ground water. If successful, the system could be expanded to include conventional technologies and treatment media. The data base will be useful in conducting engineering and design feasibility studies.

Data

The data base will include several types of information:

- Vendor and technology name;
- Media/wastes treated;
- Summary performance data;
- Range of unit costs;
- Available hardware/capacity;
- Permits obtained;
- References:
- Concentration ranges treated;
- Waste limitations;
- Factors impacting costs;
- Treatability study capabilities;
- Vendor contacts; and
- Project names and contacts.

Cross references to information contained in ATTIC abstracts will also be included in the data base.

Access

The data base will be available through the ATTIC System (see profile on ATTIC System). EPA plans to distribute the data base on diskettes and hardcopy printouts.

Hardware/Software

Hardware and software requirements have not been specified to date.

Contact

Linda Fiedler
U.S. Environmental Protection Agency
Technology Innovation Office
401 M. St., S.W. OS-110
Washington, D.C. 20460
202/382-4363

Defense RDT & E On-Line System U.S. Department of Defense Defense Technical Information Center Alexandria, VA

System Description and Use

Defense RDT & E On-Line System (DROLS) was developed by Defense Technical Information Center (DTIC) to provide on-line access to its data collection of ongoing DoD research and technology efforts. The system consists of citations to classified and unclassified reports and unlimited distribution reports which are available to qualified users. DROLS is used for interactive retrieval, input, and ordering documents. DROLS contains a Shared Bibliographic Input Network (SBIN), which is used as a shared cataloging program related to DROLS. Participants can add bibliographic information about technical reports to DTIC's files by using DTIC's on-line terminals. Most of the standard bibliographic items, such as author, source (organizations), report date, title, and subjects can be searched in the system. Non-bibliographical data is also searchable in the system (e.g., projects, contracts, report numbers, and funding sources).

Data

DROLS provides access to three separate data bases:

- Research and Technology Work Unit Information System (WUIS) Data Base: A data base of on-going DoD research and technology efforts at the work unit level.
- Technical Report (TR) Data Base: A data base consisting of bibliographic records of technical reports submitted to DTIC.
- Independent Research and Development (IR & D) Data Base: A data base of contractor's independent R & D efforts shared with DoD. This data base is proprietary and made accessible only to classified Department of Defense terminals.

Access

DROLS is an on-line system which can be accessed through DTIC. To subscribe to the on-line system, please notify the On-Line Support Office listed below.

Hardware and Software

DROLS is available through DTIC. These terminal stations are linked to DTIC's central computer system. Classified users are required to use hard-wired terminal access (dedicated phone lines) which requires special encryption equipment and installation. Various printers and a tape cassette subsystem are available to help access the system. Diverse dial-up or hard-wired terminal access to DROLS is available for unclassified users.

Contacts

Defense Technical Information Center, Attn: On-Line Support Office (DTIC-BLD) Bldg. 5, Cameron Station Alexandria, VA 22304-6145 703/274-7791

DOE Energy U.S. Department of Energy Office of Science and Technical Information Oak Ridge, TN

System Description and Use

DOE Energy is a multi-disciplinary bibliographic file containing worldwide references to basic and applied scientific and technical research literature. The information is collected for use by government managers and researchers at the National Laboratories, other DOE researchers, and the public. Abstracts are included for records from 1976 to the present.

Data

DOE Energy includes references to journal literature, conferences, patents, books, monographs, theses, and engineering and software materials. Approximately 50 percent of these references are from foreign sources. DOE Energy covers many areas of research:

- Engineering;
- Environmental science;
- Geosciences;
- Hazardous waste management; and
- Materials handling.

The data base is updated at DOE Oak Ridge as new information becomes available. The system can be searched by author, title, and subject and contains some information on innovative treatment technologies.

Access

DOE Energy is an on-line system which can be directly accessed by DOE staff and their contractors through TYMNET, a commercial data communications software. To use the system, notify the contact listed below to set up account in advance. The cost to obtain the system requires a \$300 deposit and charges \$30 for each central processing hour.

Hardware/Software

DOE Energy is written in PCBT software and is formatted on an IBM PC or compatible computer.

Contacts

U.S. Department of Energy Office of Science and Technical Information P.O. Box 62 Oak Ridge, TN 37831 615/576-1155

Connie Elliot 615/576-1222

Hazardous Waste Collection Data Base System U.S. Environmental Protection Agency Washington, D.C.

System Description and Use

The Hazardous Waste Data Base System maintains bibliographic references and abstracts for documents included in a special EPA Headquarters Library collection on the subject of hazardous waste. It is designed to better meet the information needs of EPA staff by making key documents and services more readily available through the EPA Library Network. The data base is a bibliographic data base with each item in the collection corresponding to a record in the data base. The system offers several uses:

- Provides a unified resource of major hazardous waste reports, books and journals available through the EPA Library Network.
- Provides current information to assist EPA staff in finding documents necessary to make timely and effective policy and regulatory policy decisions.
- Assists in the transfer of hazardous waste information from the EPA to the states as part of the Agency's technology transfer effort.
- Serves as a component of the Alternative Technology Information Center (ATTIC).

Data

The data base contains information on hazardous waste collection facilities owners/operators. It describes whether the facility generates, treats, stores, or disposes of hazardous waste and provides a listing of the wastes handled by the facility. It does not contain enforcement sensitive data. The EPA Headquarters Library Collection contains books and journals, legislation and regulations, reports from Federal agencies, OSWER policy and guidance directives, and EPA reports from selected program offices. Documents produced by the ATTIC program are also included in the Collection.

Access

The data base is available through the EPA On-Line Library System (OLS) through EPA's Headquarters Library or Regional Offices libraries. The system may also be accessed through the ATTIC System. To obtain a copy of the system, contact NTIS at the number listed below. NTIS will provide you with an account and a user ID. The cost to use the system is approximately \$630 for each central processing unit hour.

Hardware/Software

The data base can be accessed with an IBM or compatible PC, modem, and a telecommunications package.

Contact

Audree Zapka National Technical Information Service (NTIS) 5825 Port Royal Road Springfield, VA 22161 703/487-4807

National Technical Information Service (NTIS) U.S. Department of Commerce Springfield, VA

System Description and Use

The NTIS is a bibliographic retrieval system that represents the reports of major U.S. Federal government agencies. The NTIS data base includes material from both the "hard and soft" sciences, including a broad variety of topics of immediate interest, such as environmental pollution and control, energy conservation, technology transfer, health planning, societal problems, and urban and regional development and planning.

Data

The NTIS data base consists of unclassified U.S. and foreign government-sponsored research, development, and engineering program reports, as well as other analyses prepared by government agencies, their contractors, or grantees. Included in this coverage are federally-generated machine-readable data files and software, U.S. government inventions available for licensing, reports on new technologies developed by Federal agencies, federally generated translations, and reports prepared by non-U.S. government agencies and exchanged with Federal agencies. An increasing proportion of the data base consists of unpublished material originating outside the U.S. Most NTIS records include an indicative or informative abstract.

Access

NTIS can be accessed by telephone, mail or electronically through QuikSERVICE, DIALOG'S DIALORDER, or FAX or Telex orders. For more information and an application for using NTIS electronically, please notify the contact listed below.

Hardware/Software

A lease agreement must be signed to access the system, which requires an IBM or compatible PC or MacIntosh, a modem, and communications software package.

Contact

National Technical Information Service U.S. Department of Commerce 5825 Port Royal Road Springfield, VA 22161 703/487-4600

Records of Decision System (RODS) U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response Washington, D.C.

System Description and Use

RODS is the Superfund Records of Decision System, a full-text on-line data base which contains the Records of Decision for Superfund clean-up sites nationwide. RODS provides information to the EPA regions, remediation contractors, and the general public. If an innovative remediation technology was used at a particular site, then the ROD for that site will contain information on the technology including the justification for why the technology was chosen. The system is continuously updated. The RODs System may be used to:

- Search for a Record of Decision for any particular Superfund site;
- Search for Records of Decision for sites with similar conditions and wastes; and
- Identify remedial technologies used at previous sites with similar conditions and wastes.

Data

RODS contains all of the Records of Decision for Superfund clean-up sites nationwide. A Record of Decision describes EPA's selection of the clean-up alternative at a Superfund National Priorities List (NPL) site. The Record of Decision usually includes a history of the site, a listing of the possible alternatives for action, rationale for the chosen clean-up method, cost estimates, and a responsiveness summary of the public comments received.

Access

Direct access to the system is available only to EPA staff members and those firms which have relevant contracts with EPA. EPA staff members and contractors can contact the National Computer Center in Research Triangle Park, North Carolina to obtain a user ID and password. RODS is also available to the general public. Information on how to access the system can be obtained by contacting the RODS Staff at the phone number listed below.

Hardware/Software

RODS is located on EPA's mainframe computer in Research Triangle Park, N.C. and is accessible through a personal computer with a modem and a communications package. Individuals interested in using RODS must first register to a designated account established by the Office of Emergency and Remedial Response (OERR). Information from RODS may also be obtained by contacting the information specialist listed below who will conduct specific searches.

Contacts

RODS Staff 202/245-3770
CERCLIS Hotline 202/252-0056
401 M. St., S.W.
Room L-101
Washington, D.C. 20460

Rocky Mountain Arsenal Technology Data Base U.S. Army Program Managers Office, Rocky Mountain Arsenal Commerce City, CO

System Description and Use

The Rocky Mountain Arsenal Data Base is a bibliographic data base used to research hazardous waste remediation alternatives for feasibility study work at the Rocky Mountain Arsenal. Two complimentary data base designs have been developed to assist Rocky Mountain Arsenal project managers. The RMA Technology Data Base merges information from public and commercial engineering and environmental electronic data bases. The Remedial Technology Information Management System (RTIMS) contains data regarding specific remediation processes that has been gathered from RMA contractors, experts, and industry literature. Although it contains a very thorough list of innovative, emerging technologies, the information can not be broken down specifically by innovative technologies. The Rocky Mountain Arsenal Technology Data Base is periodically updated to maintain current information. The data base serves several uses:

- Provides up to date information on existing remediation technologies;
- Records generated using this system can be used to assure the public that all possible remediation alternatives have been reviewed;
- Provides a cost savings on technical development and litigation support by reducing research time per project;
- Acts as a repository of information considered during the RMA Feasibility Study; and
- Provides documentation for the Administrative Record.

Data

- RMA Technology Data Base
 - Bibliographic Data
 - Engineering Data
- Remedial Technology Information Management System (RTIMS)
 - Discrete Engineering Data
 - Four Main Data Elements for Searching

Technology

Process

Contaminant

Vendor

Access

For use by RMA project managers.

Hardware/Software

The system runs on DOS system with clipper software and can be accessed with a modem and a communication package.

Contact

Program Manager's Office RMA Attention: AMXRM-ERP (Mark Besmer) Commerce City, CO 80022-2180 303/289-0201

Technology Data Base Department of Energy Research and Waste Management Division Oak Ridge, TN

System Description and Use

The Waste Management Information System (WMIS) is currently being developed as a management and engineering decision support tool. The system provides an accurate and complete resource for the explanation and selection of appropriate treatment technologies for handling hazardous, mixed, radioactive, or remedial action waste for Department of Energy (DOE) and other Federal agencies. The system has two uses:

- Selecting plausible and innovative technologies for a select waste stream. The user can find engineering data on process efficiency, cost, and other data; and can select a technology by comparing regulatory criteria with other possible options.
- Retrieving technologies and waste stream profiles for use in defining a waste management plan. This is especially beneficial for long range planning.

Data

The data model consists of three major areas: Treatment, Storage, and Disposal (T/S/D) capabilities, waste profiles, and waste generation/process data. These areas offer several capabilities.

- T/S/D capabilities a compilation of technical descriptions on available technologies
 for processing wastes. Storage capabilities, capacities, and engineering data on the
 various treatment options are presented. This area also includes information about
 new innovative technologies which provide a novel approach to waste management
 activities.
- Waste profiles data on the various waste streams that have been identified for waste management activities. Data includes generation rate, classification, composition, and applicable waste management options.
- Waste generation/process data a direct correlation between waste generation and the applicable waste management options. A search can be directed through a series of options to arrive at a feasible treatment technology for managing the waste of interest. These options may be currently utilized technologies or new innovative technologies.

Access

Direct access to system is available only to DOE personnel and those firms which have relevant contracts with DOE.

Hardware/Software

The data base is an on-line system which can be accessed by a modern and communication software package with VT200 emulation (e.g., Smart Term, Reflections).

Contact

Cathy S. Fore, U.S. Department of Energy Research and Waste Management Division P.O. Box 62 Oak Ridge, TN 37831 615/435-3263

Underground Storage Tanks Case History File Data Base System U.S. Environmental Protection Agency Risk Reduction Engineering Laboratory Edison, NJ

System Description and Use

The Underground Storage Tanks Case History File Data Base System is one of the four data bases that comprises COLIS. It is a compilation of factual data from site coordinators, detailing corrective action methods as guidance for LUST corrective actions. The system includes documentation of hazardous materials spills, remedial and removal actions for Superfund sites, and corrective actions for underground storage tank problems. The case studies provide technical information to Federal, State, and local officials in responding to UST releases. The data base offers several uses:

- Provides a nationwide overview of UST corrective actions;
- Facilitates technology transfer;
- Identifies alternative approaches to respond to leaking underground storage tanks;
- Provides cost information on various aspects of corrective actions;
- Provides insight on the successes/failures of alternative approaches; and
- Provides a rationale for the selection of site characterization techniques, various corrective action technologies, and termination of individual corrective actions.

Data

The system, which is continuously updated, is comprised of two components: a narrative section and a data base. The data base allows the user to conduct file searches by 27 criteria to select incidents of interest. The narrative section is comprised of ten subsections in text format which contain detailed information on various UST incidents: general information, chemical information, effects, site characterization, immediate corrective actions, long-term corrective actions, free product removal, effectiveness of corrective actions, operational considerations/cost data, and termination of response activities.

<u>Access</u>

The system is available free of charge to anyone that requests it. To obtain a copy of the system notify the contact listed below.

Hardware/Software

The on-line system is easily accessible with a personal computer, modem, and a telecommunications software package. The system is available free of charge by contacting the system operator at the Technical Information Exchange (TIX) at 201/321-6675.

Contact

Robert Hillger
Releases Control Branch (RREL)
U.S. Environmental Protection Agency
Woodbridge Ave.
Raritan Depot
Building 10
Edison, NJ 08837
201/321-6639

WERL Treatability Data Base System U.S. Environmental Protection Agency Risk Reduction Engineering Laboratory Cincinnati,OH

System Description and Use

The WERL Treatability Data Base System provides EPA, States, and the U.S. Army Corps of Engineers with accurate information on the capabilities of various technologies to remove or destroy specific compounds from all types of waters and waste waters. The data base also includes a separate section on the capabilities of various treatment technologies to remove specific components from sludges, soils, and sediments. The WERL Data Base can be used as a guide in identifying the effectiveness of treatment technologies for specific wastes. The data base includes only those innovative technologies that are commercially available. It is organized so that physical/chemical data can be analyzed along with treatment processes to evaluate contaminant movement and treatment alternatives. The information provided is generally treatment oriented. Physical/chemical data from the treatability studies can be used when reviewing potential treatment alternatives.

Data

The data base currently contains 389 compounds with treatability data for half of the compounds. It was last updated in October 1990. The data base is organized by specific compound. For every compound the data base lists several properties:

- Technologies capable of removing or destroying the compound;
- A matrix;
- A scale;
- Average concentration of contaminants in effluent and the number of data pairs which go into the average;
- Average percentage of removal; and
- Bibliographic citations.

Access

The data base is available free of charge to anyone who requests it. To request a copy of the system send a written request or fax to the contact listed below. The system is also accessible through COLIS, described on page 3.

Hardware/Software

The Treatability Data Base System is a stand-alone system which runs on an IBM PC or compatible with DOS 2.0 - 3.3. The system requires 8 megabytes of memory to load and 7 megabytes of memory to run.

Contact

Ken Dostel U.S. Environmental Protection Agency Risk Reduction Engineering LAB 26 W. Martin Luther King Dr. Cincinnati, OH 45268 513/569-7503

Cost of Remedial Action (CORA) Model U.S. Environmental Protection Agency Office of Emergency and Remedial Response Washington, D.C.

System Description and Use

The Cost of Remedial Action (CORA) Model is a computerized expert advisor used to recommend remedial actions for Superfund hazardous waste sites and estimate their costs. The stand-alone PC-based system may also be used for RCRA corrective actions. The model is designed for both current site-specific estimates and for program budgeting and planning. The system provides recommendations for remedial action technologies on a site specific basis, and provides a method to estimate remedial action costs on a site-specific basis in the pre-feasibility stage of analysis.

Data

The CORA Model is comprised of two independent subsystems:

- Expert System Allows user to enter site information generally accessible at the remedial investigation stage and recommends a range of remedial response actions from among 42 different technology descriptions contained on the system. It includes descriptions of innovative treatment technologies:
 - Soil Vapor Extraction;
- Soil Flushing;

- Solidification;

- In-Situ Biodegradation;
- Soil Slurry Bioreactor;
- In-Situ Stabilization; and

- Pressure Filtration.
- Cost System develops cost estimates for the technologies selected and may be used to independently assess remedy recommendations from other sources.

Access

All EPA Federal, State, and regional offices can obtain a copy of the model free of charge. Others interested in obtaining a copy of the model can contact Jaya Zieman of CH2M Hill. The cost of the model is \$280, which includes a run-time version of the system and one hour of technical assistance.

Hardware/Software

The CORA Model is a stand-alone application, not designed for LAN use. The CORA Model requires the following computer hardware specifications:

- IBM compatible PC
- MS-DOS environment
- 640K RAM
- 3 MB of hard disk space.

Contact

Jaya Zieman CH2M Hill 703/478-3566

Remedial Technology Information System (RTIS) Department of Energy Idaho National Engineering Laboratory Idaho Falls, ID

System Description and Use

The Remedial Technology Information System (RTIS), a component of the Remedial Technology Alternative Development Project, contains information on the implementability, effectiveness, and cost of technologies to support CERCLA feasibility studies. The system contains information on innovative technologies, as well as emerging and available technologies. The data base allows experts to identify technologies with the most potential for application and allows them to further evaluate and test those alternatives. The data base will be released within DOE in March of 1991. The system offers several uses:

- Provides on-line access to information regarding remediation technologies throughout the RI/FS process;
- Provides a standardized method for collecting and storing data;
- Captures experts' knowledge and makes the knowledge easily accessible to nonexperts;
- Assists Alternative Development Teams in feasibility studies and remediation planning;
 and
- Acts as a training tool to conduct RI/FS studies.

Data

The RTIS provides advice on screening remedial options based upon site specific input information. RTIS contains descriptive information on researched technology options and prompts the user for specific input data:

- Type of contaminated media;
- Waste location;
- Contaminant:
- General response actions; and
- Technologies.

<u>Access</u>

Direct access to the system is available only to DOE field offices. DOE contractors will have access to the system by March 1992. There are plans to make RTIS accessible to the public by March 1993 through on-line capabilities and user fees.

Hardware/Software

RTIS was developed in ORACLE and resides on a VAX/DEC 5800 ethernet server. It can be accessed by a PC, miniframe, or mainframe computer.

Contact

Claire Ross U.S. Department of Energy Idaho National Engineering Laboratory P.O. Box 1625 Idaho Falls, ID 83415-1143 208/526-6800

Defense Environmental Electronic Bulletin Board U.S. Department of Defense Washington, D.C.

System Description and Use

The Defense Environmental Electronic Bulletin Board (DEEBB) serves as a centralized communication platform for disseminating Defense Environmental Restoration Program (DERP) information pertaining to DoD's clean-up sites, technologies, program policy and guidance, scheduled meetings, and training. It promulgates on-line communications and technology transfer among DoD component and Department levels. It fosters horizontal information sharing feedback, verification, direct data links and continuous process improvement.

Data

- Fielded on a PYRAMID 98x Super Mini Computer
- Permits 800 number dial-in access
- Consists of an integrated set of menus and bulletin boards
- Permits access to other environmental data networks
- Provides a user mail service
- Provides multi-user access
- Contains a file upload/download feature

Access

The bulletin board is an on-line system available to DoD personnel and environmental specialists, as well as the general public. Please notify the contact listed below for more information on accessing the system.

Hardware and Software

- Dumb terminal such as the Esprit III, IBM 1301, VT100, TI Silent 700's or a PC
- A modem (300, 1200 or 2400 baud)
 - * Note must be Bell 212 standard or compatible.
- If a PC is being used, you will need the following additional equipment:
 - 1. Serial board (port)
 - 2. RS 232 Cable (round or ribbon type)
 - 3. A synchronous communication package

Contact

Patricia Jensen
Office of the Deputy Assistant Secretary of Defense (Environment)
Pentagon, Room 3D833
Washington, D.C. 20301-8000
703/325-2215

Suggestions

If you know of additional data bases, expert systems, or bulletin boards that should be included in this document, please make a note on this page. This is a self-addressed mailer, please add postage and drop it in the mail.

fold here

Daniel Powell
Environmental Protection Specialist
Technology Innovation Office
U.S. Environmental Protection Agency
401 M Street, SW, OS-110
Washington, D.C. 20460

fold here

5/11/93

.

United States Environmental Protection Agency Center for Environmental Research Information Cincinnati OH 45268-1072

BULK RATE
POSTAGE & FEES PAID
EPA
PERMIT No. G-35

Official Business
Penalty for Private Use, \$300

Please make all necessary changes on the above label, detach or copy, and return to the address in the upper left-hand corner.

If you do not wish to receive these reports CHECK HERE D; detach, or copy this cover, and return to the address in the upper left-hand corner.

EPA/540/8-91/008