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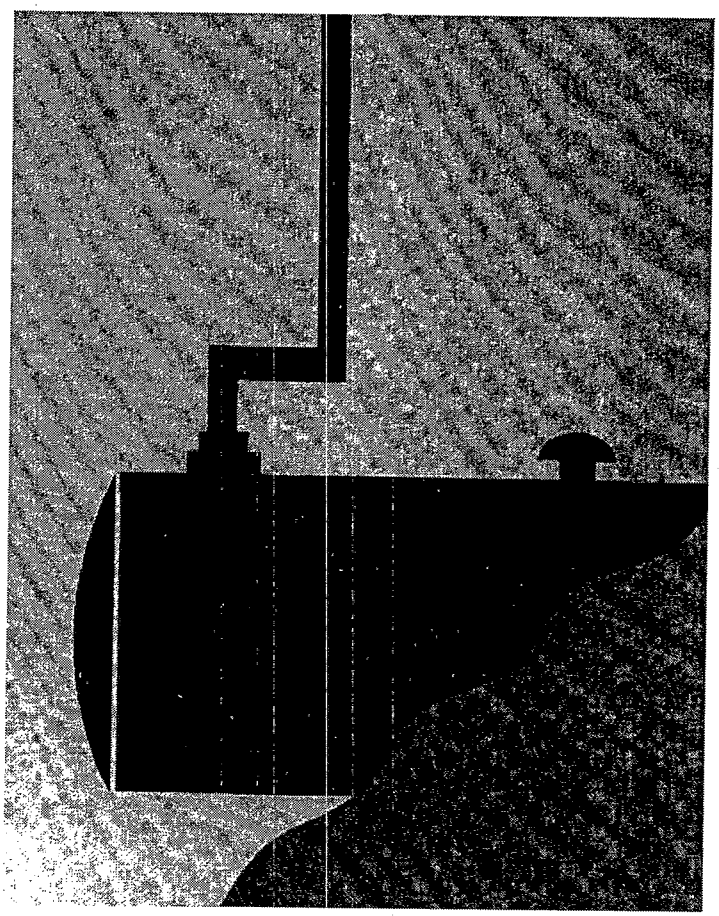
EPA

Catalog Of EPA Materials On Underground Storage Tanks



Publications, Videos, Software, and Internet Availability

Printed on Recycled Paper

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Some Basic Definitions Of UST Terms . . . . . inside back cover

Useful Web Sites Provide Information On USTs

- You will find the most current version of many EPA publications about USTs, including this *Catalog,* by going to EPA's Web site at **www.epa.gov/OUST/pubs/index.htm**

- For information on a wide range of UST-related topics, go to **www.epa.gov/OUST/**

Finding Materials

The ***Catalog Of EPA Materials on Underground Storage Tanks*** lists publications, videos, software packages, and Internet resources that focus on underground storage tanks (USTs).

The ***Catalog*** briefly describes the items it contains and tells you how you can access them. Titles are arranged by topic, such as "leak detection" or "corrective action." The *Contents* on the previous page displays a list of topics.

Each entry contains the following information:

- Title of the catalog item;
- Ordering reference number;
- Date issued;
- A brief description of the catalog item;
- **Audience:** People who may find the material of interest (for example, UST owners and operators; UST program officials; or the general public).
- **Access:** Information on how to obtain the materials. Most are available at no cost from the U.S. Environmental Protection Agency (EPA). Read the following information on "Ordering Free Materials" and "Ordering Materials For A Fee." These sources may provide the item itself or access to it as a file to be downloaded or read online at a Web site.
- **Price:** Noted if applicable.

You will also find the alphabetical title index at the end of the ***Catalog*** useful in locating the materials listed in this booklet.

Ordering Free Materials

Materials identified as **EPA Standard** are free and can be ordered through either of the following two sources:

- U.S. EPA/National Service Center for Environmental Publications
  P.O. Box 42419
  Cincinnati, OH 45242-2419
  Toll-free: 800-490-9198; (FAX) 513-489-8695
  To order, provide title and EPA ordering number. You can also access the Service Center's Web site to search its complete publications catalog, as well as order or link to documents at **www.epa.gov/ncepihom/**

- Documents are also available through the toll-free EPA RCRA/ Superfund Hotline: 800-424-9346 (TDD for the hearing-impaired: 800-553-7672), Monday through Friday (9:00 a.m. to 6:00 p.m. EST). To order, provide title and EPA ordering number.

Materials identified as **OUST Web** are also available free from EPA's Web site at **www.epa.gov/OUST/pubs/index.htm**

Some catalog items will note additional Web addresses, all of which provide free information.

Ordering Materials For A Fee

Some ***Catalog*** materials are available for a fee:

- Materials marked **NTIS** can be ordered through:
  National Technical Information Service
  5285 Port Royal Road
  Springfield, VA 22161
  800-553-6847; or 703-605-6000
  (FAX) 703-605-6900
  Web site: **www.ntis.gov/**
  To order, provide NTIS document number. The price varies widely depending on format (such as paper or microfiche), size, and when you order (prices are usually revised at the beginning of the year). Generally prices range from about $15 to $60. Entries remind you of the general cost by using a **$$** icon in the entry.

- Materials identified as available from **GPO** (Government Printing Office) can be ordered through:
  Superintendent of Documents
  P.O. Box 371954
  Pittsburgh, PA 15250-7954
  202-512-1800; (FAX) 202-512-2250
  To order, provide title and GPO order number. Check or money order must be submitted with written request. You can also use the GPO Web site at **www.access.gpo.gov/su_docs/sale.html**

Some catalog materials will note other providers who distribute their material for a fee.

Use Web Sites To Search For UST-Related Materials

This ***Catalog*** does not attempt to present all the many UST-related documents that exist. Instead, it usually focuses on current, readily available materials.

A quick search of any of the following Web sites will reveal additional materials that you may find useful.

- National Technical Information Service Web site at **www.ntis.gov/**
- Government Printing Office Web site at **www.access.gpo.gov/su-docs/sale.html**
- EPA's National Service Center For Environmental Publications Web site at **www.epa.gov/ncepihom/**
- EPA's Technology Innovation Office Web site at **www.clu-in.org/**
- EPA's Office Of Underground Storage Tanks Web site at **www.epa.gov/OUST**

Dollars And Sense: Financial Responsibility Requirements For USTs
EPA 510-K-95-004 (July 1995)
Booklet clearly summarizes the "financial responsibility" required of UST owners and operators by federal UST regulations. Explores in plain language various aspects of financial responsibility—who needs it, how much they need, and how they can demonstrate compliance. [16 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

List Of Known Insurance Providers For USTs
EPA 510-B-99-003 (July 1999)
Revised, updated booklet provides names, addresses, and phone numbers of known insurance providers for USTs. *Note: This listing does not constitute an EPA endorsement of any of the listed insurance companies.* [12 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Financing UST Work: Federal And State Assistance Programs
EPA 510-B-99-002 (March 1999)
Revised, updated booklet briefly summarizes the types of financial assistance (such as direct loans, loan guarantees, and grants) that UST owners or operators may be able to obtain from federal and state UST programs. Also includes information (such as eligibility criteria and restrictions) on financial assistance programs provided by five federal agencies. Especially focused on assistance for owners and operators of USTs on tribal lands. [23 pages]
Audience: UST owners and operators (especially those on tribal lands)
Access: EPA Standard; OUST Web

LUSTLine Bulletin
(multiple issues and dates)
Published by the New England Interstate Water Pollution Control Commission (NEIWPCC) under a cooperative agreement with EPA, this periodical reports on UST issues facing federal and state programs. Regularly includes news on the latest technologies, health and safety notes, program developments, and technical issues. [About 20 pages an issue]
Audience: General public; UST program officials; UST owners and operators; contractors and consultants
Access: New England Interstate Environmental Training Center
Boott Mills South
100 Foot of John Street
Lowell, MA 01852-1124
978-323-7929
Order by title. Check, money order, Visa, and MasterCard accepted.
Price: $18 yearly subscription; $3 for one back order issue; $50 for all previous issues prepaid.

The LUST Story: Leaking Underground Storage Tanks (Video)
EPA 510-V-92-202 (February 1990)
Video provides a concise introduction to leaking UST problems and solutions. [10 minutes]
Audience: General public; UST program officials; UST owners and operators
Access: University of Wisconsin Extension Publications
630 W. Mifflin St./ Room 170
Madison, WI 53703
877-947-7827 (toll-free)
Order number VG0059. Check, Visa, MasterCard, or American Express accepted.
Price: $31 (includes shipping and handling)

Musts For USTs: A Summary Of Federal Regulations For UST Systems
EPA 510-K-95-002 (July 1995)
Plain language booklet clearly summarizes federal UST requirements for installation; release detection; spill, overfill, and corrosion protection; corrective action; closure; and reporting and recordkeeping. Extensively updated and revised in 1995, this edition replaces earlier editions. [36 pages]
Audience: UST owners and operators
Access: EPA Standard; OUST Web

Normas Y Procedimientos Para TSA
EPA 530-UST-90-001 (March 1990)
Spanish version of the 1988 edition of *Musts for USTs* (see above). [41 pages]
Audience: General public; UST program officials; UST owners and operators
Access: EPA Standard (free); or NTIS (order PB90-220476) $$

Ordering Information On USTs
EPA 510-F-99-004 (October 1999)
Two-sided sheet briefly describes a variety of materials on USTs, including UST requirements, leak detection, and corrective action. Includes information on how to order. Updated and revised periodically.
Audience: UST owners and operators; general public; UST program officials
Access: EPA Standard

Underground Storage Tank Program: Regional And State Contacts
EPA 510-F-99-005 (November 1999)
Lists EPA regional and state UST/LUST contacts, including names, addresses, and phone and fax numbers. Includes map of EPA regions. Updated and revised periodically. [6 pages]
Audience: General public; UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Underground Storage Tanks: Requirements And Options
EPA 510-F-97-005 (June 1997)
UST owners and operators who do not sell petroleum products and rely upon their own supplies of gasoline or diesel ("nonmarketers") must still comply with UST requirements. This leaflet briefly summarizes the UST requirements, lists sources for additional information, and discusses alternatives to maintaining USTs.
Audience: UST owners and operators who do not sell petroleum
Access: EPA Standard; OUST Web

Underground Tank Technology Update
(multiple issues and dates)
Bimonthly newsletter published by the University of Wisconsin at Madison's College of Engineering (partially funded by EPA under a cooperative agreement). Provides up-to-date technical information on advances in groundwater and UST technology.
Audience: Technical UST specialists; UST owners and operators and others interested in groundwater technology; UST program officials
Access: Debbie Benell
432 North Lake Street
Madison, WI 53706
Web site: **epdwww.engr.wisc.edu/uttu/uttu.html**
Order by title. Payment by check.
Price: $30 yearly subscription

The UST National Poster
EPA 530-UST-90-002 (March 1990)
Four-color, 30x20-inch poster designed to raise public awareness of UST problems. Warns of the danger of leaking USTs, identifies the obvious signs of a leak, and urges the reader to notify state environmental officials or the local fire department. Includes EPA's Hotline telephone number.
Audience: General public; UST program officials
Access: EPA Standard

UST Program Facts: Implementing Federal Requirements For USTs
EPA 510-B-96-007 (December 1996)
Concise, comprehensive review of the federal UST regulatory program. Contains an overview of the UST program and sections on preventing releases, detecting releases, cleaning up releases, financial responsibility, state UST programs, the LUST Trust Fund, and the brownfields initiative. [16 pages]
Audience: UST program officials
Access: EPA Standard; OUST Web

Causes Of Release From UST Systems
EPA 510-R-92-702 (Report);
EPA 510-R-92-703 (Attachments)
(September 1987)
Technical report and attachments summarize causes of releases occurring before 1987. [Report, 34 pages; Attachments, 42 pages]
Audience: UST program officials; UST owners and operators; contractors and consultants
Access: NTIS (order PB97-1268666 for Report; PB97-126874 for Attachments) **$$**

Chemicals Stored In USTs: Characteristics And Leak Detection
EPA 600-2-91-037 (August 1991)
This report describes the regulatory standards for leak detection in tanks containing hazardous substances, the types of substances stored in the tanks, the effectiveness of tightness tests and gauging systems for leak detection in non-petroleum USTs, and approaches to leak detection. [62 pages]
Audience: UST program officials; contractors and consultants; leak detection system manufacturers
Access: NTIS (order PB91-219592/LL) **$$**

Doing Inventory Control Right: For USTs
EPA 510-B-93-004 (November 1993)
Booklet clearly describes a simple, step-by-step process that UST owners and operators can follow to conduct inventory control properly as part of their release detection compliance. Includes standard recordkeeping forms. [16 pages]
Audience: UST owners and operators
Access: EPA Standard; OUST Web

Evaluation Of Volumetric Leak Detection Methods For USTs
EPA 600-2-88-068a (November 1988)
EPA evaluated several volumetric test methods for the detection of leaks. Volume 1 summarizes EPA's research and recommendations. Volume 2 contains evaluations of the performance of 25 leak detection systems. [119 pages]
Audience: UST program officials; contractors and consultants
Access: NTIS (order PB89-124333, Volume 1; PB89-124341, Volume 2) **$$**

Free-Product Release Detection For USTs
EPA 510-K-92-813, Volume 1
EPA 510-K-92-814, Volume 2
(February 1988)
Two-volume set reviews the use of groundwater monitoring wells. Volume 1 identifies limitations and potential problems associated with using groundwater monitoring wells [33 pages], and Volume 2 profiles the Florida UST program, which uses wells to detect and monitor releases. [43 pages]
Audience: UST program officials; contractors and consultants
Access: Volume 1 from EPA Standard (free); Volume 2 from NTIS (order PB97-126908) **$$**

Getting The Most Out Of Your Automatic Tank Gauging System
EPA 510-F-98-011 (March 1998)
Trifold leaflet provides UST owners and operators with a basic checklist they can use to make sure their automatic tank gauging systems work effectively and provide compliance with federal leak detection requirements.
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Introduction To Statistical Inventory Reconciliation For USTs
EPA 510-B-95-009 (September 1995)
Booklet describes the use of statistical inventory reconciliation (SIR) to meet federal leak detection requirements. Provides basic information on the method—what it is, how it works, and what factors can affect data quality—to assist UST owners and operators in determining if SIR is appropriate to their site needs. [12 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Leak Detection Fact Sheet #1: For Some USTs, Inventory Control "Expires" December 22, 1998
EPA 510-F-98-012 (March 1998)
Two-page fact sheet identifies USTs that cannot use inventory control after December 22, 1998.
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

List Of Leak Detection Evaluations For UST Systems: Sixth Edition
EPA 510-B-99-004 (August 1999)
Comprehensive, detailed technical report compiles third-party evaluations of more than 250 systems used to detect leaks from USTs and piping. Includes such criteria as certification, leak threshold, test period, and calibration for each method reviewed. Revised and updated periodically. *Note: the list does not endorse or approve methods, nor does it recommend one method over another.* [370+ pages]
Audience: UST program officials; vendors of UST leak detection systems; UST owners and operators
Access: EPA Standard; OUST Web

Manual Tank Gauging: For Small USTs
EPA 510-B-93-005 (November 1993)
Booklet clearly describes a simple, step-by-step process that UST owners and operators can follow to conduct manual tank gauging properly as part of their release detection compliance. Includes standard recordkeeping forms. *Note: Information in this booklet applies only to tanks with capacities under 2,001 gallons.* [12 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Standard Test Procedures For Evaluating Leak Detection Methods
EPA 530-UST-90-004 through 010 (March 1990)
Technical procedures for testing methods of leak detection for their ability to meet performance requirements. Titles listed below.
Audience: Leak detection equipment manufacturers; UST program officials; UST owners and operators
Access: EPA Standard; OUST Web
EPA 530-UST-90-006 Automatic Tank Gauging Systems
EPA 530-UST-90-009 Liquid-Phase Out-Of-Tank Product Detectors
EPA 530-UST-90-005 Non-Volumetric Tank Tightness Test Method
EPA 530-UST-90-010 Pipeline Leak Detection Systems
EPA 530-UST-90-007 Statistical Inventory Reconciliation Methods
EPA 530-UST-90-008 Vapor-Phase Out-Of-Tank Detectors
EPA 530-UST-90-004 Volumetric Tank Tightness Test Methods

Straight Talk On Leak Detection With Joe Thursday, Leak Detective (Video)
EPA 510-V-92-001 (October 1990)
Video provides an overview of most leak detection technologies. [29 minutes]
Audience: UST program officials; UST owners and operators
Access: Environmental Media Center
402 Hamilton Road
Silver Spring, MD 20901
800-522-0362
Order by title. Payment by check only.
Price: $78 (includes shipping and handling)

Straight Talk On Tanks: Leak Detection Methods For Petroleum USTs And Piping
EPA 510-B-97-007 (September 1997)
Easy-to-read booklet describes the basic requirements for all federally allowed release detection methods: secondary containment with interstitial monitoring, automatic tank gauging systems, vapor monitoring, groundwater monitoring, statistical inventory reconciliation, tank tightness testing with inventory control, manual tank gauging, and leak detection for underground piping. [28 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Tank Issues: Design And Placement Of Floating Liquid Monitoring Wells
EPA 600-9-90-045 (March 1993)
Brief presentation of issues involved in the proper siting, design, and installation of groundwater monitoring wells. [3 pages]
Audience: UST program officials; UST owners and operators; contractors and consultants
Access: EPA Standard

Tank Issues: Design And Placement Of Vapor Monitoring Wells
EPA 600-9-90-044 (October 1990)
Brief presentation of issues involved in the proper siting, design, and installation of vapor monitoring wells. [3 pages]
Audience: UST owners and operators; UST program officials; contractors and consultants
Access: EPA Standard

Tank Issues: Site Characterization For External Leak Monitoring
EPA 600-9-90-046 (February 1993)
Brief presentation of issues involved in the proper siting, design, and installation of external monitoring wells. [7 pages]
Audience: UST program officials; UST owners and operators; contractors and consultants
Access: EPA Standard

Volumetric Leak Detection In Large USTs
EPA 600-2-91-044a (August 1991)
Report addresses the performance of volumetric leak detection systems for USTs having capacities up to 50,000 gallons. [79 pages]
Audience: UST owners and operators; contractors and consultants
Access: NTIS (order PB92-114966/LL) $$

Volumetric Tank Testing: An Overview
EPA 625-9-89-009 (April 1989)
This technical report evaluates volumetric tank tests for detecting leaks in USTs; explains requirements in EPA regulations about testing; and presents information on volumetric tank methods. [37 pages]
Audience: UST program officials; UST owners and operators
Access: EPA Standard

Closing USTs: Brief Facts
EPA 510-F-96-004 (August 1996)
Leaflet describes in plain language what UST owners and operators must do to meet the federal requirements for temporary and permanent closure.
Audience: UST owners and operators
Access: EPA Standard; OUST Web

Tank Closure Without Tears (Video and Companion Booklet)
EPA 510-V-92-817 (video)
EPA 510-K-92-817 (booklet)
(May 1988)
Developed to train inspectors, video provides a general outline of safety and site assessment procedures at tank closures. Includes an easy-to-read booklet that highlights the video's key messages.
[Video, 30 minutes; booklet, 20 pages]
Audience: UST inspectors; UST owners and operators
Access: New England Interstate Environmental Training Center
Boott Mills South
100 Foot of John Street
Lowell, MA 01852-1124
978-323-7929
Order by title. Check, money order, Visa, and MasterCard accepted.
Price: $35 prepaid for set; $15 prepaid for loan of set for one week; $30 prepaid for video; $5 prepaid for booklet (all prices include shipping and handling)

What Do We Have Here? An Inspector's Guide To Site Assessment At Tank Closure (Video and Companion Booklet)
EPA 510-V-92-006 (video)
EPA 510-K-92-006 (booklet)
(March 1990)
An overview of the tank closure process developed as a training guide for inspectors. It also provides useful information for tank owners and contractors and consultants. The video includes a 30-minute presentation on site assessment at tank closure, a 14-minute overview of field testing instruments, and a 7-minute presentation on soil and water sampling.
[Video, 51 minutes; booklet, 33 pages]
Audience: UST inspectors; UST owners and operators; contractors and consultants
Access: New England Interstate Environmental Training Center
Boott Mills South
100 Foot of John Street
Lowell, MA 01852-1124
978-323-7929
Order by title. Check, money order, Visa, and MasterCard accepted.
Price: $45 for set; $15 prepaid for loan of set for one week; $40 prepaid for video, $5 prepaid for booklet (all prices include shipping and handling)

Doing It Right: Proper Installation Of USTs And Piping (Video)
EPA 510-V-92-801 (1988)
Video demonstrates UST installation procedures for tanks and for both steel and fiberglass piping. *Note: specific installation activities are subject to state and local regulations.* [39 minutes]
Audience: UST program officials; UST installers; UST owners and operators
Access: One of the following:

Petroleum Equipment Institute
P.O. Box 2380
Tulsa, OK 74101-2380
Phone 918-494-9696 or Fax 918-491-9895
Check, Visa, and MasterCard accepted.
Price: $16 (includes shipping and handling)

Environmental Media Center
402 Hamilton Road
Silver Spring, MD 20901
800-522-0362
Order by title. Payment by check only.
Price: $78 (includes shipping and handling)

Doing It Right II: Installing Required UST Equipment (Video)
(May 1994)
Video, prepared as a companion to *Doing It Right: Proper Installation of USTs and Piping* (see above), focuses on the installation of overfill prevention equipment, spill containment devices, observation wells, and piping leak detection systems. *Note: specific installation activities are subject to state and local regulations.* [23 minutes]
Audience: UST program officials; UST installers; UST owners and operators
Access: Environmental Media Center
402 Hamilton Road
Silver Spring, MD 20901
800-522-0362
Order by title. Payment by check only.
Price: $78 (includes shipping and handling)

A Question Of When (Video)
EPA 510-V-92-802 (February 1988)
Video focuses on general practices to follow when installing USTs. *Note: specific installation activities are subject to state and local regulations.* [37 minutes]
Audience: UST program officials; UST installers; fire department personnel
Access: Jim Smalley
7 Jackson Road
Scituate, MA 02066
Order by title. Check or money order must accompany written request.
Price: $33.55 prepaid (includes shipping and handling)

Survey Of Flexible Piping Systems
EPA 510-R-97-002 (April 1997)
Survey provides information on manufacturers of flexible piping, number of installations, piping construction, compatibility, and the applicability of national codes and standards. [16 pages]
Audience: UST program officials; UST installers
Access: EPA Standard; OUST Web

Underground Storage Tanks: Rest In Peace (Video)
EPA 510-V-92-601 (March 1986)
Explains the overall installation process to help tank owners choose competent installation contractors and monitor installation. *Note: specific installation activities are subject to state and local regulations.* [37 minutes]
Audience: General public; UST owners and operators
Access: Jim Smalley
7 Jackson Road
Scituate, MA 02066
Order by title. Check or money order must accompany written request.
Price: $33.55 prepaid (includes shipping and handling)

Are You Upgrading An UST System?
EPA 510-F-97-009 (August 1997)
Leaflet discusses federal requirements for upgrading UST systems storing petroleum that were installed before December 22, 1988. Briefly describes what UST owners and operators must do if their UST systems do not have spill, overfill, and corrosion protection.
Audience: UST owners and operators
Access: EPA Standard; OUST Web

Don't Wait Until 1998: Spill, Overfill, And Corrosion Protection For USTs
EPA 510-B-94-002 (April 1994)
Booklet explains how UST owners and operators can take action to upgrade, replace, or close USTs that were installed before December 22, 1988. Describes spill, overfill, and corrosion protection equipment and methods, as well as replacement and closure options. Also provides a brief compliance checklist. [16 pages]
Audience: UST owners and operators
Access: EPA Standard; OUST Web

No Espere Hasta El 1998
EPA 510-B-95-008 (June 1995)
Spanish translation of the booklet *Don't Wait Until 1998: Spill, Overflow, And Corrosion Protection For USTs* (see above). [16 pages]
Audience: UST owners and operators; UST program officials; contractors and consultants
Access: EPA Standard

State-Of-The-Art Procedures And Equipment For Internal Inspection Of USTs
EPA 600-2-90-061 (January 1991)
Study focuses on inspection methods that evaluate the structural integrity of USTs. [121 pages]
Audience: UST program officials; contractors and consultants; UST owners and operators
Access: NTIS (order PB91-149609) $$

State-Of-The-Art Procedures And Equipment For Internal Inspection And Upgrading Of USTs
EPA 600-R-97-085 (September 1997)
Technical report describes tank inspection technologies, including noninvasive statistical modeling, remote video inspections, robotic ultrasonic inspections, and thermal waving. [53 pages]
Audience: Contractors and consultants; UST program officials; UST owners and operators
Access: EPA Standard

Tank Time (Video)
Developed by the Tennessee Department of Environmental Conservation in May 1997, with EPA funding, this video humorously presents the federal 1998 requirements for spill, overfill, and corrosion protection and discusses compliance options available to UST owners and operators. [18 minutes]
Audience: UST owners and operators
Access: Scene Three, Inc.
Attention: "Tank Time"
1813 Eighth Ave., South
Nashville, TN 37203
615-385-2820
Order by title; payment by check only.
Price: $24 (includes shipping and handling)

Citizen's Guides
The Citizen's Guides, a series of four-page fact sheets, explain in layman's language innovative treatment technologies may be used in cleaning up leaking UST sites. (Available in Spanish.)
EPA 542-F-96-001 (Spanish: EPA 542-F-96-017)
Innovative Treatment Technologies
EPA 542-F-96-002 (Spanish: EPA 542-F-96-019)
Soil Washing
EPA 542-F-96-003 (Spanish: EPA 542-F-96-018)
Chemical Dehalogenation
EPA 542-F-96-004 (Spanish: EPA 542-F-96-020)
Solvent Extraction
EPA 542-F-96-015 (Spanish: EPA 542-F-96-026)
Natural Attenuation
EPA 542-F-96-006 (Spanish: EPA 542-F-96-022)
In Situ Flushing
EPA 542-F-96-007 (Spanish: EPA 542-F-96-023)
Bioremediation
EPA 542-F-96-008 (Spanish: EPA 542-F-96-024)
Soil Vapor Extraction and Air Sparging
EPA 542-F-96-014 (Spanish: EPA 542-F-96-025)
Phytoremediation
EPA 542-F-96-016 (Spanish: EPA 542-F-96-027)
Treatment Walls
Audience: UST owners and operators; general public
Access: EPA Standard; EPA Web at
www.clu-in.org/pub1/htm

EPA Web Site Provides More Corrective Action Information

You can find many resources on corrective action at **www.epa.gov/OUST/cat**—like the following:

- Explore documents about Risk-Based Corrective Action processes—go to **www.epa.gov/swerust1/rbdm/outreach.htm**
- Investigate "pay-for-performance" approaches—go to **www.epa.gov/swerust1/pfp**
- Learn about "Tank RACER" software, which provides cost estimates for cleanup actions—go to **www.epa.gov/swerust1/tnkracr1.htm**

Completed North America Innovative Technology Demonstration Projects
EPA 542-B-96-002 (August 1996)
Report summarizes more than 250 innovative technology field demonstration projects sponsored by government agencies. [64 pages]
Audience: UST program officials; contractors and consultants; UST owners and operators
Access: Available free from EPA Web at **www.clu-in.org/pub1.htm**; for a fee from NTIS (order PB96-153127) **$$**

Controlling UST Cleanup Costs: Fact Sheets
EPA 510-F-98-008 (January 1998)
Fact sheets can help petroleum UST operators work more effectively and economically with contractors. Topics include hiring a contractor, negotiating the contract, interpreting the bill, managing the process, and understanding contractor code words. [10 pages]
Audience: UST owners and operators
Access: EPA Standard

Enhanced Bioremediation Of BTEX Using Immobilized Nutrients: Field Demonstration And Monitoring
EPA 600-R-96-145 (December 1996)
Technical report describes research to design and monitor field performance of a permeable barrier treatment system. [57 pages]
Audience: UST program officials; UST owners and operators; contractors and consultants
Access: (no cost)
Librarian
EPA National Exposure Research Laboratory/Technical Resource Center
944 E. Harmon Ave. (MSL-19)
Las Vegas, NV 89119
702-798-2648 (fax 702-798-2622)
e-mail: isaacson.sandra@epa.gov
Order by title and number

Estimating Air Emissions From Petroleum UST Cleanups (Technical Report And Field Cards)
(Technical Report) EPA 510-K-92-901 (June 1989)
(Field Cards) EPA 510-K-92-902 (June 1989)
Technical report explains how to estimate air emission rates of volatile organic compounds for corrective action plans [33 pages] and technical graphs (field cards) illustrate data from the report. [10 pages]
Audience: UST program officials; contractors and consultants
Access: EPA Standard

An Evaluation Of Four Field Screening Techniques For Measurement Of BTEX
EPA 600-R-94-181 (1994)
Evaluations of the Antox Immunoassay Test Kit, Draeger Detector Tubes, In-Situ Lab-In-A-Bag, and the Microsensor Systems, Inc., Portable Gas Chromatograph. [76 pages]
Audience: UST program officials; remediation contractors and consultants
Access: (no cost)
Librarian/EPA National Exposure Research Laboratory/Technical Resource Center
944 E. Harmon Ave. (MSL-19)
Las Vegas, NV 89119
702-798-2648 (fax 702-798-2622)
e-mail: isaacson.sandra@epa.gov
Order by title and number

Evaluation Of Peat-Based And Nutrient Media For Remediation Of Hydrocarbon Contaminated Ground Water In Permeable Barrier Applications
EPA 600-X-96-001 (February 1996)
Describes research on the potential of permeable barrier systems composed of peat or peat/nutrient briquettes to effectively remediate dissolved hydrocarbon plumes containing BTEX. [53 pages]
Audience: UST program officials; UST owners and operators; contractors and consultants
Access: (no cost)
Librarian
EPA National Exposure Research Laboratory Technical Resource Center
944 E. Harmon Ave. (MSL-19)
Las Vegas, NV 89119
702-798-2648 (fax 702-798-2622)
e-mail: isaacson.sandra@epa.gov
Order by title and number

Expedited Site Assessment Tools For UST Sites: A Guide For Regulators
EPA 510-B-97-001 (March 1997)
Comprehensive technical manual provides information on the use of expedited site assessment methods and tools at leaking UST sites. Provides guidance to state and local regulators who oversee cleanups and review corrective action plans. [310 pages]
Audience: UST program officials; UST owners and operators; remediation contractors and consultants
Access: EPA Standard (free); OUST Web (free); costs about $26 from GPO (order 055-000-00564-8)

How To Effectively Recover Free Product At Leaking UST Sites: A Guide For State Regulators
EPA 510-R-96-001 (September 1996)
Technical report helps state regulators review those parts of an UST corrective action plan that propose free-product-recovery technologies. Focuses on site-specific considerations. [148 pages]
Audience: UST program officials; contractors and consultants
Access: EPA Standard (free); OUST Web (free); GPO (order 055-000-00553-2) **$$**

How To Evaluate Alternative Cleanup Technologies For UST Sites: A Guide For Corrective Action Plan Reviewers
EPA 510-B-95-007 (May 1995)
Technical manual evaluates alternative cleanup technologies that can be used as part of a corrective action plan for UST releases. Provides technical guidance to state regulators who oversee cleanups. Discusses the effectiveness of each technology and includes a checklist to determine if the technology can be used at a particular site. [400+pages]
Audience: UST program officials; contractors and consultants
Access: OUST Web (free); GPO number 055-000-00499-4 for $28; NTIS (order PB98-113525) **$$**

The Hydrocarbon Spill Screening Model (HSSM): Volume 1, User's Guide; Volume 2, Theoretical Background And Source Codes
EPA 600-R-94-039a, Volume 1 (April 1994)
EPA 600-R-94-039b, Volume 2 (April 1995)
Volume 1 explains how to use the Hydrocarbon Spill Screening Mode, a software program that simulates subsurface releases of light nonaqueous phase liquids. Volume 2 describes modules for the vadose zone, lateral spreading, and aquifer transport.
Audience: UST program officials; contractors and consultants
Access: (no cost)
EPA National Risk Management Research Laboratory
Attn: Jason Kinsey
P.O. Box 1198
Ada, OK 74820
Order by title and number.
Also accessible at EPA Web site:
www.epa.gov/ada/hssm.html

HyperVentilate: Decision-Support Software For Soil Vapor Extraction Technology Application
EPA 600-R-93-028 (February 1993)
HyperVentilate (a software program) helps users determine if soil vapor extraction (SVE) is appropriate at a specific site and how to monitor SVE. [159 pages]
Audience: UST program officials; contractors and consultants
Access: To access the software, go to **www.epa.gov/swerust1/cat/hyperven.htm**; for report only, from NTIS (order PB93-134880) **$$**

Measurement And Analysis Of Vapor Sensors Used At UST Sites
EPA 600-R-96 (July 1995)
Booklet looks at subsurface movement and distribution of selected volatile organic compounds through controlled laboratory experiments. [58 pages]
Audience: UST program officials; remediation contractors and consultants
Access: (no cost)
Librarian
EPA National Exposure Research Laboratory
Technical Resource Center
944 E. Harmon Ave. (MSL-19)
Las Vegas, NV 89119
702-798-2648 (fax 702-798-2622)
e-mail: isaacson.sandra@epa.gov
Order by title and number

MTBE Fact Sheet #1: Overview
EPA 510-F-98-001 (January 1998)
Fact sheet presents an overview of methyl tertiary-butyl ether (MTBE), a fuel additive, and its potential affect on UST concerns. [5 pages]
Audience: UST program officials
Access: EPA Standard; OUST Web

MTBE Fact Sheet #2: Remediation Of MTBE Contaminated Soil And Groundwater
EPA 510-F-98-002 (January 1998)
Fact sheet explores remediation aspects of MTBE contamination. [5 pages]
Audience: UST program officials
Access: EPA Standard; OUST Web

MTBE Fact Sheet #3: Use And Distribution Of MTBE And Ethanol
EPA 510-F-98-003 (January 1998)
Fact sheet explores the use and distribution of MTBE and ethanol. [3 pages]
Audience: UST program officials
Access: EPA Standard; OUST Web

OSWER Directive 9200.4-17: Use Of Monitored Natural Attenuation At Superfund, RCRA Corrective Action, and UST Sites
OSWER 9200.4-17 (April 21, 1999)
Directive notes restrictions regarding the use of monitored natural attenuation (MNA) and promotes consistency in how MNA remedies are proposed, evaluated, and approved. [41 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9610.17: Use Of Risk-Based Decision-Making In UST Corrective Action Programs
OSWER 9610.17 (March 1, 1996)
Directive provides guidelines to help agencies that implement UST cleanup programs develop and use risk-based decision-making consistent with federal laws and regulations. [16 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9650.13: Streamlined Implementation Of UST Corrective Action Requirements
OSWER 9650.13 (November 23, 1992)
Directive provides guidance that agencies (especially state UST programs) can use to streamline corrective action processes. [16 pages]
Audience: UST program officials
Access: OUST Web

An Overview Of UST Remediation Options
EPA 510-F-93-029 (October 1993)
Booklet identifies advantages and limitations of several remediation technologies, system components, monitoring parameters, and costs of achievable cleanup levels. [15 pages]
Audience: UST owners and operators; UST program officials; general public
Access: EPA Standard

Pay-For-Performance Cleanups: Effectively Managing UST Cleanups
EPA 510-B-96-002 (June 1996)
Booklet explores the potential advantages of using pay-for-performance cleanup agreements to reduce the cost and time of cleanups and more effectively manage cleanup resources. Provides information state officials, cleanup contractors, and UST owners can use to develop pay-for-performance approaches tailored to their own circumstances. [32 pages]
Audience: UST owners and operators; UST program officials; consultants and contractors
Access: EPA Standard; OUST Web

Petroleum Leaks Underground (Video)
EPA 510-V-92-201 (April 1992)
Video shows how liquids and vapors move through soil and why early response is important. [30 minutes]
Audience: UST inspectors; contractors and consultants
Access: Environmental Media Center
402 Hamilton Road
Silver Spring, MD 20901
800-522-0362
Order by title. Payment by check only.
Price: $78 (includes shipping and handling)

RBCA Fate And Transport Models: Compendium And Selection Guidance
EPA 510-B-99-001 (1999)
Booklet describes non-proprietary fate and transport models available for risk-based corrective action. [about 120 pages]
Audience: UST program officials
Access: EPA Standard; OUST Web (at **www.epa.gov/swerust1/rbdm/rbdmfnt.htm**); or contact:
ASTM/Attn:Scott Murphy
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
610-832-9685 (fax 610-832-9668)

Remediation Technologies Screening Matrix
EPA 542-B-93-005 (July 1993)
Booklet includes matrix summarizing the strengths and limitations of remediation technologies. [142 pages]
Audience: UST program officials; contractors and consultants
Access: NTIS (order PB95-104782) $$

Risk-Based Corrective Action Process (Video) (1995)
Video provides an overview of the benefits of using risk-based corrective action (RBCA). [26 minutes]
Audience: UST owners and operators; UST program officials; general public
Access: NTIS (order AVA20080VNBI) $$

Road Map To Understanding Technology Options For Brownfields Investigation And Cleanup
EPA 542-B-97-002 (January 1997)
Identifies basic phases involved in the characterization and cleanup of brownfields sites. [31 pages]
Audience: UST owners and operators; UST program officials; remediation contractors and consultants
Access: EPA Standard; EPA Web at **www.clu-in.org/pub1.htm**

A Tool Kit Of Information Resources For Brownfields Investigation And Cleanup
EPA 542-B-97-001 (January 1997)
Describes resources identified in "Road Map To Understanding Technology Options" (see above).
Audience: UST program officials; contractors and consultants; UST owners and operators
Access: EPA Standard; EPA Web at **www.clu-in.org/pub1.htm**

Use These Web Sites Devoted To Corrective Action Technologies

- EPA's Technology Innovation Office maintains a Web site that identifies current information on corrective action technologies. Go to **www.clu-in.org/**
- Go to **www.epareachit.org/** to find a searchable Internet-based system that requires no downloading to provide information on the availability, performance, and application of remediation and characterization technologies—including the deployment of technologies and the identification of firms that provide assessment and remediation services.
- TechDirect, a free email service, can notify you of new technical documents, upcoming conferences, and training opportunities related to site assessment and corrective action—go to **www.clu-in.org/techdrct**

Field Citations Program Series: How To Develop Your Own UST Field Citation Program
EPA 530-UST-91-014 (February 1991)
Handbook helps UST program officials develop resource-efficient enforcement programs. A field citation addresses a clear-cut violation, requires the violator to correct the violation, often carries a penalty, and provides for appeal. [77 pages]
Audience: UST program officials
Access: EPA Standard

Field Citations Program Series: Field Citations Training, Instructor's Manual
EPA 530-UST-91-015 (February 1991)
A companion to *How To Develop Your Own UST Field Citation Program* (see above), training manual contains basic materials to be covered in the course and specific instructions for class activities that will reinforce training concepts and encourage class participation. [140 pages]
Audience: UST program officials
Access: EPA Standard

Field Citations Program Series: Field Citations Training, Student's Manual
EPA 530-UST-91-016 (February 1991)
The Student's Manual was designed as a workbook. It contains key notes on primary topics. [44 pages]
Audience: UST inspectors
Access: EPA Standard

OSWER Directive 9610.11: UST/LUST Enforcement Procedures Guidance Manual
OSWER 9610.11 (July 7, 1990)
Provides guidance for regional enforcement personnel on undertaking actions in response to violations of UST technical regulations and corrective action requirements. Provides a detailed overview of the UST/LUST enforcement program, describes situations appropriate to enforcement actions, and discusses development of enforcement cases, procedures for issuing compliance and corrective action orders, and judicial actions that may be used. [54 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9610.12: U.S. EPA Penalty Guidance For Violations Of UST Regulations
OSWER 9610.12 (November 14, 1990)
Provides guidance on calculating civil penalties against owners or operators of USTs who are in violation of the UST technical standards and financial responsibility regulations. [77 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9610.16: Guidance For Federal Field Citation Enforcement
OSWER 9610.16 (October 6, 1993)
A field citation is a "traffic-ticket" type of citation issued to an owner or operator who is not in compliance with UST requirements. Directive provides guidance on field citations to federal officials. [28 pages]
Audience: UST program officials
Access: OUST Web

Searching For The Honest Tank: A Guide To UST Facility Compliance Inspections (Video and Booklet)
EPA 510-V-92-101 (video)
EPA 510-K-92-101 (booklet)
(May 1991)
Video covers major elements of facility compliance inspection. Companion booklet with checklists and references also available. [Video, 33 minutes; booklet, 41 pages]
Audience: UST inspectors
Access: New England Interstate Environmental Training Center
Boott Mills South
100 Foot of John Street
Lowell, MA 01852-1124
978-323-7929
Order by title. Check, money order, Visa, and MasterCard accepted.
Price: $40 prepaid for set; $15 prepaid for loan of set for 1 week; $35 prepaid for video; $5 prepaid for booklet (all prices include shipping and handling)

Health And Safety Training For UST Inspectors: Instructor's Guide
EPA 910-B-92-001 (June 1992)
Guide is designed for instructors who are presenting health and safety training for UST inspectors. The Instructor's Guide includes a general discussion of the course, suggested activities, and suggested visuals. It should be used in conjunction with the Student's Guide (see below). [21 pages]
Audience: UST program officials; trainers; contractors and consultants
Access: GPO (order 055-000-00421-8) $$

Health And Safety Training For UST Inspectors: Student's Guide
EPA 910-B-92-001 (June 1992)
Training manual provides information to educate inspectors and others who work around USTs about potential health and safety hazards associated with USTs. The manual also explains how to recognize, evaluate, and control these hazards. Topics covered include fires and explosions, oxygen depletion, confined spaces, excavations, toxicity, and personal protective equipment. Use alone or in conjunction with the Instructor's Guide (see above). [274 pages]
Audience: UST program officials; contractors and consultants
Access: NTIS (order PB97-780027INT) $$

Keeping It Clean: Making Safe And Spill-Free Motor Fuel Deliveries (Video)
EPA 510-V-92-002 (December 1992)
While delivering fuel to USTs, motor fuel delivery truck drivers find many types of equipment used to prevent air, soil, and groundwater contamination. This video describes the various Stage I vapor recovery, overfill protection, and spill containment equipment that motor fuel delivery truck drivers may encounter and illustrates the key steps for a safe and clean delivery. [25 minutes]
Audience: Fuel delivery drivers; UST program officials; UST owners and operators
Access: This video may be purchased from any of the following:

Petroleum Equipment Institute
Publications Department
Box 2380
Tulsa, OK 74101-2380
Phone 918-494-9696; Fax 918-491-9895
Order by title. Cost $60 (includes shipping and handling). Visa and MasterCard accepted.

American Petroleum Institute
Publications Department
1220 L St. NW
Washington, DC 20005
Phone 202-682-8375; Fax 202-962-4776
Pub. No. A16590; Cost $65-75 depending on location (includes shipping, handling, and tax where applicable); check, money order, Visa, MasterCard, and American Express accepted.

Environmental Media Center
402 Hamilton Road
Silver Spring, MD 20901
800-522-0362
Order by title. Cost $78 (includes shipping and handling). Payment by check only.

Leaking USTs And Health: Understanding Health Risks From Petroleum Contamination
EPA 530-UST-91-018 (January 1992)
An overview of health risks posed by exposure to gasoline and benzene contamination. [19 pages]
Audience: UST program officials
Access: EPA Standard

Cost Recovery Procedures For State UST Programs To Recover LUST Trust Expenditures
EPA 510-K-95-001 (January 1995)
Report, prepared by EPA Region 4, covers the procedures involved in cost-recovery actions by the states in Region 4 under RCRA Subtitle I. Includes sections on determining the cases appropriate for cost recovery, cost recovery procedures, and sample memoranda. *Not an EPA rulemaking, this report is guidance applicable only to EPA Region 4 states.*
Audience: UST program officials; attorneys
Access: EPA Standard

OSWER Directive 9200.4-17: Use Of Monitored Natural Attenuation At Superfund, RCRA Corrective Action, and UST Sites
OSWER 9200.4-17 (April 21, 1999)
Directive notes restrictions regarding the use of monitored natural attenuation (MNA) and promotes consistency in how MNA remedies are proposed, evaluated, and approved. [41 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9610.10A: Cost Recovery Policy For The Leaking UST Trust Fund
OSWER 9610.10A (May 24, 1994)
The primary purpose of cost recovery under the Leaking Underground Storage Tank Trust Fund is to provide incentives for owners and operators to comply with technical and financial responsibility requirements of federal UST regulations. This directive has been revised to incorporate policy changes made since issuance of the 1988 cost recovery policy. Note: This publication is also included as Appendix A of the LUST Trust Fund Cooperative Agreement Guidelines (OSWER 9650.10A, see below). [19 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9650.10A: LUST Trust Fund Cooperative Agreement Guidelines
OSWER 9650.10A (May 24, 1994)
Provides information to assist states and EPA regional offices in negotiating, awarding, and overseeing LUST Trust Fund Cooperative Agreements. The guidelines have been revised to incorporate policy decisions made since issuance of the 1989 Trust Fund guidelines. Revised LUST Trust Fund Cost Recovery Policy (OSWER Directive 9610.10A) included. [57 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9610.17: Use Of Risk-Based Decision-Making In UST Corrective Action Programs
OSWER 9610.17 (March 1, 1996)
Provides guidelines to help agencies that implement UST cleanup programs develop and use risk-based decision-making consistent with federal laws and regulations. Defines risk-based decision-making as it applies to UST corrective action; explains when and how a risk-based approach can be used; and provides summaries of implementing risk-based corrective action (RBCA). Includes six case studies highlighting how states have implemented RBCA. [16 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9650.13: Streamlined Implementation Of UST Corrective Action Requirements
OSWER 9650.13 (November 23, 1992)
Directive provides guidance that agencies (especially state UST programs) can use to streamline corrective action processes. [16 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9650.14: Monitoring The Financial Soundness Of Approved State Assurance Funds
OSWER 9650.14 (August 12, 1993)
State assurance funds provide UST owners and operators with an affordable financial responsibility compliance mechanism as well as money for UST cleanups. This guidance, which focuses on funds for corrective action and third-party claims, outlines tools that can be used to monitor the soundness of state UST program funds and provides solvency measures that can be tailored to each state fund. [24 pages]
Audience: UST program officials
Access: OUST Web

OSWER Directive 9650.15: Procedures And Requirements For Codification Of Approved State UST Programs
OSWER 9650.15 (September 22, 1994)
Directive outlines procedures in codification—the process that identifies the elements of approved state UST programs by placing them in the Code of Federal Regulations. [149 pages]
Audience: UST program officials; general public
Access: OUST Web

State Funds In Transition: Models For Underground Storage Tank Assurance Funds
EPA 510-B-97-002 (January 1997)
Case studies describe how states are making the transition from their state fund programs to other financial assurance mechanisms, such as private insurance. Case studies also present potential "model" programs for states that have decided to change the structure of their funds. Also presents a general overview of the UST program and state assurance funds. [40 pages]
Audience: UST program officials
Access: EPA Standard

State Program Approval Handbook
EPA 500-B-92-004 (May 1992)
Handbook developed for state and EPA officials who are building and evaluating state UST programs for approval to operate in lieu of the federal UST program. Helps states understand how to apply for state program approval. [114 pages]
Audience: UST program officials
Access: EPA Standard

State Third-Party Service Provider Programs: Augmenting State UST Programs
EPA 510-B-97-003 (March 1997)
Booklet explains how states can use privately employed specialists to conduct activities such as facility inspections or oversee leaking UST cleanups at low-risk sites. Includes basic concepts; guidance on designing and running a third-party UST inspector program; guidance on designing and running a third-party cleanup oversight program; and challenges. [40 pages]
Audience: UST program officials; contractors and consultants
Access: EPA Standard

Suggested Procedures For Review Of State UST Applications
EPA 500-B-92-005 (May 1992)
Booklet helps officials develop and evaluate state UST programs for approval; streamline the review and approval of state programs; achieve optimal interaction between state governments and EPA regional offices; and overcome obstacles to approval. [77 pages]
Audience: UST program officials
Access: EPA Standard

Using Bonds To Close The Gap: A Guide To Revenue Options For State Fund Administrators
EPA 510-B-93-010 (December 1993)
State financial assurance funds for USTs help pay for cleanups and third-party liability costs associated with petroleum leaks. For some states, borrowing money through the issuance of bonds may help to remove short-term reimbursement backlogs. Booklet provides fund administrators with information about borrowing money through bonds secured primarily with fees collected by the state's UST program. [51 pages]
Audience: UST program officials
Access: EPA Standard

Federal Register—Hazardous Waste: Interim Prohibition Against Installation Of Unprotected Underground Storage Tanks (Interpretive Rule), Part IV, 40 CFR Part 280
EPA 510-Z-92-601 (June 4, 1986)
Interpretive rule summarizes interim requirements of RCRA Subtitle I and states that USTs installed between May 7, 1985 and the effective date of new standards must be declared to EPA. Reviews performance standards and clarifies compliance obligations of UST owners and operators. Also alerts owners and operators to the circumstances that prompt EPA to proceed with enforcement for noncompliance. [3 pages]
Audience: UST program officials; UST owners and operators
Access: EPA Standard; OUST Web

The **Federal Register** is the document in which federal agencies publish for public record any regulatory action that may affect the regulated communities, including proposed, amended, and final rules. Proposed and final federal regulations are published in the Federal Register as **Federal Register Notices**. Unlike the **Code of Federal Regulations (CFR)**, Federal Register notices contain additional text that explains the rationale behind a proposed or final regulation. This additional text, referred to as the "Preamble," may be helpful in understanding the regulation.

Federal Register—Underground Storage Tanks: Technical Requirements And State Program Approval (Final Rules), Part II, 40 CFR Parts 280 And 281
EPA 510-Z-92-801 (September 23, 1988)
Notice presents final rules on UST technical requirements and state program approval. The technical requirements address federal standards for leak detection and prevention and corrective action for USTs that fall under RCRA Section 9003. These rules also establish final requirements for approval of state UST programs to operate in place of the federal UST program. [165 pages]
Audience: UST program officials; UST owners and operators
Access: EPA Standard; OUST Web

Federal Register—Underground Storage Tanks Containing Petroleum: Financial Responsibility Requirements And State Program Approval Objective (Final Rule), Part II, 40 CFR Part 280
EPA 510-Z-92-802 (October 26, 1988)
Rule establishes requirements for demonstrating financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of USTs containing petroleum. EPA also published in this document, for purposes of state program approval, a federal technical objective for financial responsibility of owners and operators of petroleum UST systems. [61 pages]
Audience: UST program officials; UST owners and operators
Access: EPA Standard; OUST Web

Federal Register—Approval And Promulgation Of Implementation Plans (Interim Final Rule), 40 CFR Part 280
EPA 510-Z-92-901 (November 9, 1989)
Rule interprets required language of endorsements to existing insurance policies under 40 CFR 280.97(b)(1) and certificates of insurance under 40 CFR 280.97(b)(2). The amendments bring the financial responsibility requirements into greater conformity with insurance industry practices concerning cancellation and extended reporting and thus avoids possible impacts on the availability and affordability of such insurance. [6 pages]
Audience: UST program officials; UST owners and operators
Access: EPA Standard; OUST Web

Federal Register Underground Storage Tanks Containing Petroleum: Financial Responsibility Requirements (Interim Final Rule), Part VIII, 40 CFR Part 280
EPA 510-Z-90-100 (May 2, 1990)
Rule modifies the deadline for financial responsibility requirements for petroleum marketing firms that own between 13 and 99 USTs at more than one facility. The deadline is extended from April 26, 1990, to April 26, 1991, to provide additional time for the development of financial assurance mechanisms to enable this group to comply. [2 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Federal Register—Underground Storage Tanks: Technical Requirements (Interim Final Rule), 40 CFR Part 280
EPA 510-Z-91-002 (January 2, 1991)
Rule extends the December 22, 1990 deadline for UST owners and operators to install automatic line leak detectors on new or existing underground pressurized piping systems with minimum requirements for a probability of detection of 0.95 and a probability of false alarm of 0.05. The deadline for meeting the minimum probability requirements is extended to September 22, 1991. The December 22, 1990 deadline for installation of pipeline leak detection, tightness testing, and monthly monitoring is not changed. [2 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Federal Register—Issuance Of And Administrative Hearings On RCRA Section 9003(h), Corrective Action Orders For Underground Storage Tanks (Final Rule), Part VII, 40 CFR Part 24
EPA 510-Z-91-001 (September 27, 1991)
Final rule establishes administrative procedures for issuing corrective action orders and conducting administrative hearings pursuant to RCRA Section 9003(h). This document outlines the background of the rule, addresses public comments and concerns about the rule, and describes procedures for the hearing process. [10 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Federal Register—Underground Storage Tanks Containing Petroleum: Financial Responsibility Requirements (Final Rule), 40 CFR Part 280
EPA 510-Z-92-102 (December 23, 1991)
Rule modifies the compliance dates under 40 CFR 280.91(d). Under the modification, all petroleum marketing firms owning 1 to 12 USTs at more than one facility, or fewer than 100 USTs at a single facility, or nonmarketers with a net worth of less than $20 million are required to comply with the requirements of 40 CFR Part 280, subpart H (Financial Responsibility) by December 31, 1993. Extends the deadline from the previous date of October 26, 1991. [4 pages]
Audience: UST program officials; UST owners and operators
Access: EPA Standard; OUST Web

Federal Register—Exemption of Petroleum-Contaminated Media And Debris From Underground Storage Tanks From RCRA Hazardous Waste Requirements (Proposed Rule), Part VIII, 40 CFR Part 261
EPA 510-Z-93-005 (February 12, 1993)
Notice presents EPA's proposal to exempt from certain portions of the Toxicity Characteristics (TC) Rule contaminated media and debris generated from petroleum UST corrective actions that are subject to RCRA Subtitle I. This document describes the TC Rule and the Agency's reasons for the UST deferral; explains the kinds of media and debris that would be exempt; announces the results of two studies on this issue; outlines regulatory alternatives that EPA examined; and provides results of an economic impact analysis of the proposed exemption. [10 pages]
Audience: UST, solid waste, and hazardous waste program officials; UST owners and operators; contractors and consultants
Access: EPA Standard; OUST Web

Federal Register—Underground Storage Tanks Containing Petroleum: Financial Responsibility Requirements (Final Rule), Part II, 40 CFR Part 280
EPA 510-Z-93-001 (February 18, 1993)
Rule establishes four additional mechanisms—bond rating test, worksheet test, governmental guarantee, or fund balance test—that local governments can use to demonstrate financial responsibility for corrective action and third-party liability for USTs. Includes background on the rule, descriptions and analyses of the four alternative mechanisms, and an economic impact analysis of the rule. [34 pages]
Audience: Local governments; UST program officials
Access: EPA Standard; OUST Web

Federal Register—Underground Storage Tank Program: Approved Program For New Hampshire (Final Rule), Part III, 40 CFR Part 282
EPA 510-Z-93-004 (November 2, 1993)
The Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), authorizes EPA to grant approval to states to operate their UST programs in lieu of the federal program. This rule provides the regulatory framework under which state programs may be codified, and it specifically codifies the prior approval of New Hampshire's UST program and incorporates by reference appropriate provisions of State statutes and regulations. [4 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Federal Register—Underground Storage Tanks Containing Petroleum: Financial Responsibility Requirements (Final Rule), Part IV, 40 CFR Part 280
EPA 510-Z-94-001 (February 28, 1994)
Rule extends the financial responsibility compliance deadline from February 18, 1994, to December 31, 1998, for federally recognized Indian tribes that own USTs on Indian lands. [4 pages]
Audience: UST owners and operators; UST program officials
Access: EPA Standard; OUST Web

Federal Register—Underground Storage Tanks: Lender Liability (Final Rule), Part II, 40 CFR Parts 280 And 281
EPA 510-Z-95-002 (September 7, 1995)
Rule limits the regulatory obligations of lending institutions and other persons who hold a security interest in a petroleum UST or in real estate containing a petroleum UST, or that acquire title or deed to a petroleum UST or facility or property on which an UST is located. Specifies conditions under which these "security interest holders" may be exempted from corrective action. [23 pages]
Audience: UST owners and operators; UST program officials; lending institutions; persons with real estate holdings
Access: EPA Standard; OUST Web

Report To House Committee On Appropriations On The Leaking Underground Storage Tanks Program
EPA 510-R-93-006 (January 1993)
Report provides information on the overall UST program, on the scope of leaking USTs, and EPA's efforts to meet the challenges presented by leaking USTs. [18 pages]
Audience: U.S. Congress
Access: EPA Standard

Report To Senate Committee On Appropriations Regarding Underground Storage Tanks Financial Responsibility And Related Issues
EPA 510-R-92-201 (April 1992)
In September 1990, the Senate Committee on Appropriations directed EPA to report on UST owners and operators' progress toward meeting financial responsibility requirements. This report presents EPA's findings as well as legislative and regulatory recommendations concerning federal regulations for UST systems. Appendices document the economic analyses and other supporting material used in preparing this report. [132 pages]
Audience: U.S. Congress
Access: EPA Standard

Underground Heating Oil And Motor Fuel Tanks Exempt From Regulation Under Subtitle I Of The Resource Conservation And Recovery Act: Executive Summary
EPA 510-R-92-002 (May 1990)
USTs that store heating oil for on-site consumption and those that store motor fuel for noncommercial farm or residential use were exempted from RCRA Subtitle I. The 1984 Amendments to RCRA required EPA to report on whether these systems should fall under RCRA Subtitle I provisions. This executive summary explains why these USTs should remain exempt from federal regulation. [21 pages]
Audience: U.S. Congress; UST program officials; UST owners and operators
Access: EPA Standard

Underground Heating Oil And Motor Fuel Tanks Exempt From Regulation Under Subtitle I Of The Resource Conservation And Recovery Act—A Study For Report To Congress
EPA 510-R-92-003 (May 1990)
Extensive technical documentation for the executive summary of the same name (see above). [192 pages]
Audience: U.S. Congress; UST program officials; UST owners and operators
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UST: Underground Storage Tank. For regulatory purposes, EPA defines an underground storage tank (UST) as a tank and any underground piping connected to the tank that has 10 percent or more of its volume (of tank and piping) beneath the surface of the ground. USTs are used to store petroleum or certain hazardous substances. Generally, requirements for petroleum and hazardous substance USTs are similar.

Statute: A federal statute is a law passed by the U.S. Congress. The statute which covers underground storage tanks is Subtitle I of the Resource Conservation and Recovery Act (RCRA). RCRA has been amended several times since it was first enacted.

RCRA Subtitle I: The section of the Resource Conservation and Recovery Act (RCRA) that required EPA to develop a comprehensive regulatory program for USTs storing petroleum or hazardous substances. Congress responded to the increasing threat to groundwater posed by leaking USTs by adding Subtitle I, which was passed as part of the Hazardous and Solid Waste Amendments of 1984. The law directed EPA to publish regulations that would require owners and operators of USTs to prevent and detect leaks, and clean up leaks and spills. Subtitle I was amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA). SARA created the Leaking Underground Storage Tank Trust Fund and directed EPA to promulgate regulations requiring owners and operators to show financial responsibility for cleaning up releases and spills and compensating third parties for damages resulting from UST releases.

Use EPA's Web Site To Find And Access Information On USTs

Many of the materials listed in this *Catalog* are available on EPA's Office of Underground Storage Tanks' Web site at **www.epa.gov/OUST/**

You can read many documents online, download them, or order printed copies at this Web site.

In addition, this Web site is a vast resource for other UST-related material as well.

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