



## ***FY 2008 Annual Report On The Underground Storage Tank Program***

For nearly a quarter of a century, EPA, states, tribes, and other partners have made significant progress in preventing, detecting, and cleaning up leaks from underground storage tanks (USTs). In Fiscal Year (FY) 2008, EPA's UST program continued these efforts by increasing prevention activities, reducing the number of new releases, and furthering the cleanup of existing releases. The program made good progress toward meeting its established goals for the fiscal year and began to review existing tank regulations, with a goal of updating them to ensure Energy Policy Act requirements apply to all tanks. EPA also developed new Web resources, such as our state fuel delivery prohibition site and a biofuels compendium to provide assistance to states, tribes, and other tank stakeholders.

This report provides a snapshot of program activities conducted in FY 2008 (October 1, 2007 - September 30, 2008) and the advances made in preventing releases, conducting cleanups, and enhancing communication and information sharing efforts. The success and progress of the program during the past year are due to the support and dedication of EPA's partners to prevent groundwater contamination and further protect human health and the environment from UST releases.

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### **FY 2008 UST Program Highlights**

At the end of FY 2008, there were approximately 623,000 federally-regulated, active USTs at approximately 235,000 sites across the country. Collectively, the UST program has accomplished a great deal.

#### **Prevention**

- ✓ Two-thirds of active USTs are fully complying with requirements to prevent and detect leaks.
- ✓ UST partners have increased inspection efforts in order to meet the first three-year inspection mandate by 2010, which is mandated in the Energy Policy Act.
- ✓ The number of new UST releases identified each year continues to decline, with just over 7,300 new leaks found in FY 2008 (meeting EPA's goal to reduce releases to fewer than 10,000).
- ✓ EPA began regulation development to incorporate Energy Policy Act requirements and review existing regulations.

#### **Cleanup**

- ✓ Since the inception of the program, UST partners have completed more than 377,000 cleanups.
- ✓ Of the 479,000 leaks reported since the beginning of the program, about 80 percent have been addressed, leaving a backlog of almost 103,000 old leaks remaining to be cleaned up.
- ✓ In FY 2008, UST partners cleaned up 12,768 sites, meeting 98 percent of EPA's annual goal to clean up 13,000 leaking UST (LUST) sites.
- ✓ EPA developed a new plan of action to promote cleaning up and reusing petroleum brownfields, of which there are approximately 200,000.
- ✓ EPA continued our study to characterize the LUST cleanup backlog and improve the pace of cleanups.



*Underground storage tanks are located at gas stations and other non-retail locations*

### **FY 2008 GPRA\* National UST Program Goals And Accomplishments**

	<b>Goal</b>	<b>Actual</b>
<b>Cleanups — Total</b>	<b>13,000</b>	<b>12,768</b>
<b>Cleanups — Indian Country</b>	<b>30</b>	<b>40</b>
<b>Significant Operational Compliance Rate</b>	<b>68%</b>	<b>66%</b>
<b>New Reported Releases</b>	<b>&lt;10,000</b>	<b>7,364</b>

\*Government Performance Results Act of 1993

Annually, the UST prevention and cleanup programs receive about \$100 million to prevent, detect, and clean up leaks from federally-regulated USTs. The vast majority of that funding is provided directly to states and tribes to implement their prevention and cleanup programs.

# Advances In Preventing Releases

Since the beginning of the UST program, preventing petroleum releases into the environment has been one of the primary goals of the program. EPA and our partners have made major progress in reducing the number of new releases, but thousands of new leaks are still discovered each year. The lack of proper operation and maintenance of UST systems is a main cause of these new releases. EPA is working with states, tribes, and other partners to advance prevention efforts and quickly detect releases when they occur.

In recent years, these efforts have been enhanced by the release prevention requirements mandated in the Energy Policy Act of 2005. To address these mandates, EPA produced several grant guidelines to help states carry out the requirements. Some of the states already have requirements in place that meet the requirements, and other states are working to implement the provisions in the upcoming years. EPA continues to work with states and tribes to prevent UST releases and meet the mandates initiated with the Energy Policy Act.

## UST Universe End Of FY 2008

<b>States</b>	Active Tanks:	620,663
	Closed Tanks:	1,689,935
<b>Indian Country</b>	Active Tanks:	2,656
	Closed Tanks:	5,623

## Reducing Confirmed Releases

In FY 2008, EPA, states, and tribes focused on bringing UST systems into compliance and keeping them in compliance with release detection and prevention requirements. One way the program assesses the relative success of these prevention efforts is to measure the number of confirmed releases each year. EPA's goal for FY 2008 was to reduce confirmed tank releases to fewer than 10,000.

There's been a steady reduction in underground storage tank confirmed releases, from almost 67,000 in FY 1990 to 7,364 in FY 2008.



*Inspecting under the dispenser*

## Working To Increase UST Facility Compliance

One of the key elements in preventing releases is to increase a facility's operational compliance with UST regulations. Significant operational compliance (SOC) means that a facility has the necessary equipment required by current UST regulations to prevent and detect releases and performs the necessary UST system operation and maintenance. In FY 2008:

- ✓ The **national SOC rate** was **66 percent**; although below our target, it is a three percent increase over last year's rate.
- ✓ The **SOC rate in Indian country** was **57 percent**, an 11 percent increase over last year's rate.

**In FY 2008, EPA provided \$1.5 million for the UST prevention program in Indian country; EPA also provided \$29 million to states for UST prevention activities.**

## Preventing Releases In Indian Country

Tribes and EPA worked to improve UST compliance in Indian country in FY 2008 by enhancing inspection efforts, developing additional compliance-focused assistance agreements with tribes, and providing training to tribal environmental professionals and facility owners and operators.

In addition, the second annual national Tribal/EPA meeting, held in October 2008, helped identify tribal issues, build collaboration, and work toward continued partnerships and improvements in the UST program in Indian country.

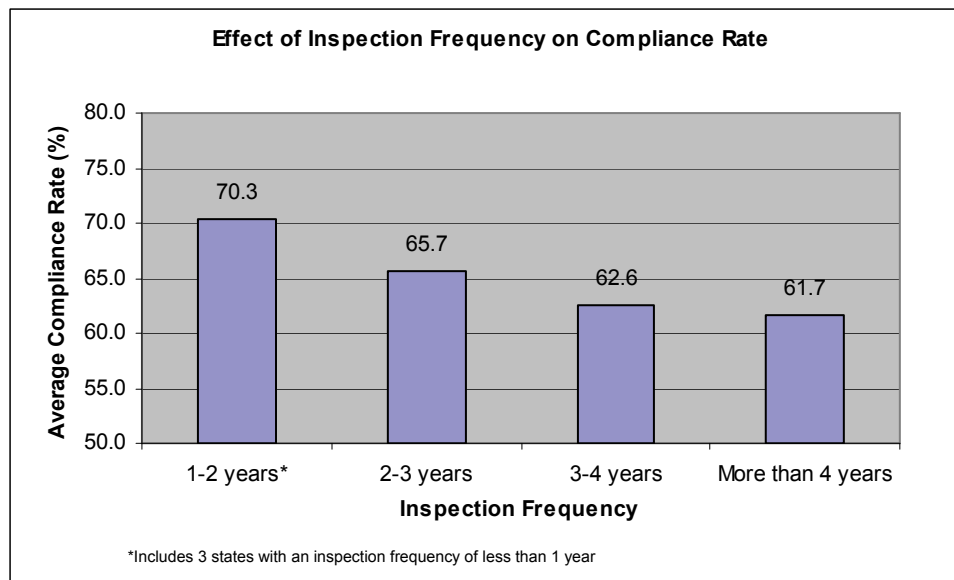
## Steady Progress Implementing Energy Policy Act Provisions

The Energy Policy Act of 2005 mandated numerous changes that focus on reducing underground storage tank releases and significantly affect federal and state underground storage tank programs. Over the past few years, EPA and states have made significant progress toward meeting the Act's requirements. For example, all states except one have grant agreements in place to implement Energy Policy Act provisions. More than 30 states have delivery prohibition and secondary containment programs up and running, with the remaining states finalizing regulations to implement these requirements.

The Energy Policy Act also included on-site inspection requirements. EPA and states have long recognized the importance of inspections in preventing releases, and inspecting USTs has always been a priority in the tanks program. But the inspection requirements of the Energy Policy Act brought greater program oversight to this effort by mandating that all USTs not inspected since 1998 be inspected by August 8, 2007. EPA and all states successfully completed this requirement.

Additionally, the Energy Policy Act requires that tanks are to be inspected every three years after the initial requirement — and EPA, states, and tribes are now working to meet the next inspection requirement. There are about 235,000 active facilities that need to be inspected for this three-year cycle, and in FY 2008 approximately 100,000 facilities were inspected. With the first three-year cycle ending in August 2010, the majority of states are on track to meet this requirement, and EPA is working with remaining states to identify collaborative ways to meet the deadline.

EPA will continue to work with states to ensure continued progress implementing all Energy Policy Act requirements. Additionally, because more frequent inspections result in increased compliance rates, we will continue to focus on enhancing UST inspection efforts.



*Inspecting a spill bucket*

## Developing Federal Credentials For Tribal Inspectors

Designating tribal inspectors as authorized representatives of EPA to inspect USTs can help increase the geographic coverage and frequency of inspections in Indian country. It also helps enhance relationships and increase the capabilities of tribal inspectors. There are currently four tribes which have federally-credentialed inspectors who can conduct federal UST inspections at their tribal facilities and potentially other facilities. The tribes are:

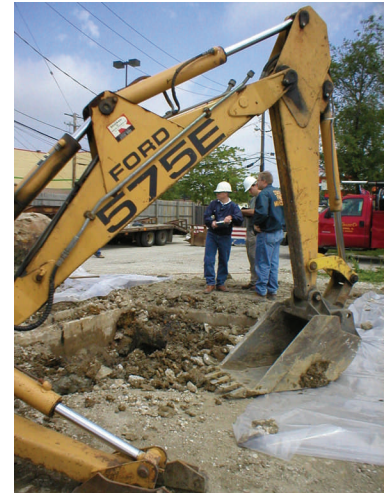
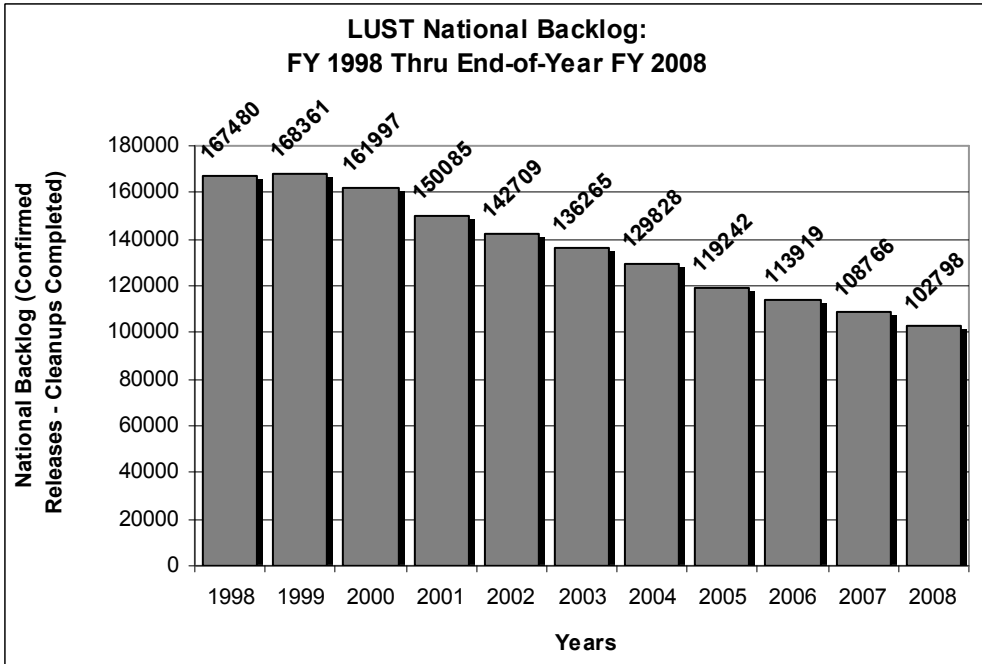
- ✓ Eastern Band of the Cherokee Indians
- ✓ Navajo Nation
- ✓ Nez Perce Tribe
- ✓ Shoshone-Bannock Tribes

EPA will continue to work with tribes to train other tribal inspectors and issue additional credentials.

# Advances In Cleaning Up Releases

Over the past quarter century, the UST program has made great progress in cleaning up leaking underground storage tanks. EPA works with states and tribes to clean up LUST sites, promote innovative approaches to streamline the remediation process, and address the hurdles in reducing the backlog of cleanups.

In FY 2008, EPA and its state and tribal partners continued to make progress in cleaning up petroleum leaks by initiating 8,156 cleanups and completing 12,768 cleanups, of which 40 cleanups were completed in Indian country. The cleanup backlog, which is the difference between the cumulative number of confirmed releases and cleanups completed, also continued to decline from 167,480 sites a decade ago to 102,798 sites as reported at the end of FY 2008.



*Cleaning up a release at an underground storage tank site*

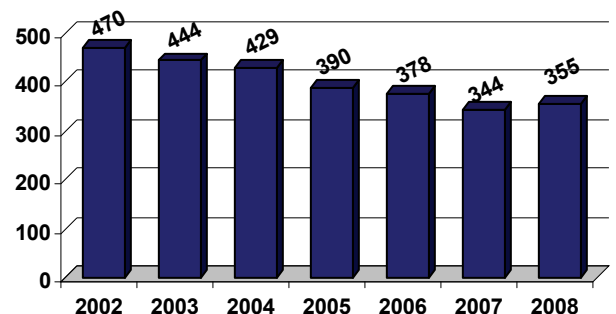
## Continuing Cleanup Progress In Indian Country

EPA has primary responsibility for implementing the LUST program in Indian country and actively works with tribes to identify, assess, and clean up UST releases. In FY 2008, EPA exceeded its annual goal by completing 40 cleanups in Indian country. Over the past seven years, the LUST cleanup backlog in Indian country has declined by 25 percent. This success is due partly to focused efforts by EPA and tribes to complete the remaining cleanups necessary at older sites and to the increased use of the Indian country cleanup contracts. For nearly a decade, these contracts have been supported by the LUST Trust Fund and maintained by EPA for cleanup activities in Indian country.

Additionally, in FY 2008 EPA provided LUST funds directly to the Navajo Nation and the Nez Perce Tribe to conduct cleanups. This direct funding furthered their capability to develop and manage their cleanup programs and reduce the number of remaining cleanups in Indian country.

**In FY 2008, EPA provided \$2.6 million for LUST cleanups in Indian country; EPA also provided \$61.2 million to states for LUST cleanups.**

## LUST Cleanup Backlog in Indian Country



## Backlog Study Update

Historically, we've made great progress in cleaning up LUST sites. But the rate of progress has slowed and the number of cleanups completed each year has declined — from a high of 20,834 in FY 2000 to 12,768 in FY 2008. To learn more about this, EPA in 2006 began collecting and analyzing data associated with the cleanup backlog to more accurately characterize the cleanup backlog; help us better understand the reasons for the decline; and develop strategies for slowing, if not reversing, the trend.

In phase 1 of the backlog study, EPA discovered that two-thirds of the national cleanup backlog is located in ten states. In 2008, EPA began phase 2 of the study, working with those ten states plus four additional states to ensure representation from each EPA region.

EPA has worked closely with the 14 participant states, gained better understandings of how each individual program functions, and identified available state data. Participating states have provided a great deal of support and information. EPA is organizing the data to analyze both state cleanup program attributes and site attributes. EPA plans to use the phase 2 results to better understand challenges to the cleanup program nationally, focus future efforts, and identify national and state-specific strategies for completing cleanups.

### States Participating In The Backlog Study

California  
Florida  
Illinois  
Michigan  
Montana  
Nebraska  
New Hampshire  
New Jersey  
New York  
North Carolina  
Pennsylvania  
South Carolina  
Texas  
Washington

## Update On Hurricane Funding To Impacted States

In 2006, Congress appropriated approximately \$15 million for hurricane-related leaking UST expenses in states impacted by hurricanes Katrina and Rita. EPA provided grant funds to Alabama, Louisiana, and Mississippi to assess and remediate petroleum releases from hurricane-impacted UST facilities. So far, these three states have done a great deal to address issues resulting from the hurricanes.

- ✓ Of the 280 sites impacted, assessments have been performed at about 98 percent — or 274 — of the sites
- ✓ 236 releases were confirmed
- ✓ 142 cleanups have been completed

In 2009, states will continue to monitor and assess sites, develop corrective action plans, and continue cleaning up the remaining release sites.

## Revitalizing Abandoned Gas Stations

There are more than 450,000 brownfields across the U.S., of which about 200,000 are estimated to be impacted by petroleum. Many of these sites are old abandoned gas stations that blight the environmental and economic health of surrounding neighborhoods. EPA awards grants to local areas, states, tribes, and organizations to assess and clean up these petroleum brownfields.

In FY 2008, EPA issued a new Petroleum Brownfields Action Plan, available at [www.epa.gov/oust/rags/petrobactionplan.pdf](http://www.epa.gov/oust/rags/petrobactionplan.pdf), which promotes cleaning up and reusing petroleum brownfields. In the plan, EPA identifies four strategic initiatives, with specific actions and activities to achieve the Agency's goal. The plan demonstrates EPA's commitment to cleaning up petroleum-contaminated brownfields sites and fostering their reuse.

Also in 2008, EPA through its Brownfields grant program continued to support petroleum brownfields efforts by providing approximately \$22.2 million in grants to 99 local communities to clean up and assess petroleum brownfields sites. Part of those grant dollars were revolving loans to enable states, local communities, and tribes to make low interest payments to carry out cleanup activities at brownfields properties. The list of the communities receiving these grants is grouped by EPA Region and is available at [www.epa.gov/oust/rags/pbgrants.htm](http://www.epa.gov/oust/rags/pbgrants.htm).



Abandoned gas stations are scattered along highways and in neighborhoods

# Enhancing Communication And Information Sharing

Through communication and information sharing, EPA and its partners have made great improvements in the UST program. To enhance these collaborative efforts, EPA actively reviews and revises UST program communication methods to ensure the Agency is effectively sharing vital program information.

In FY 2008, EPA's UST program expanded its current Web areas to include new information and an up-to-date UST Indian country program directory. In addition, EPA and its partners held the 20th National Tanks Conference in Atlanta, GA in March 2008. The conference provided the UST community a wealth of learning and networking opportunities that will help us better work together to protect human health and the environment from UST releases.

## New Resources On OUST's Web Site

### State Delivery Prohibition Web Area [www.epa.gov/oust/dp/index.htm](http://www.epa.gov/oust/dp/index.htm)

This Web area helps petroleum and hazardous substance delivery companies determine the applicable requirements in each state and territory. The area provides links to applicable state and territory laws, regulations, and policies related to delivery prohibition.

### Biofuels Compendium Web Area [www.epa.gov/oust/altfuels/bfcompend.htm](http://www.epa.gov/oust/altfuels/bfcompend.htm)

This Web-based compendium provides UST stakeholders with information regarding storing ethanol and biodiesel fuels. Because of the increased production and use of biofuels, UST stakeholders need to be aware of the technical and policy issues related to storing alternative fuels.

### UST Indian Country Program Directory [www.epa.gov/oust/pubs/usinctrdir.htm](http://www.epa.gov/oust/pubs/usinctrdir.htm)

This directory, available on EPA's Web site, provides at-a-glance contact information for tribal and EPA UST program contacts and is a helpful tool to improve communication and information sharing between tribes and EPA on UST issues.

To keep the public informed, EPA posts mid- and end-of-year activity reports that provide information on compliance, releases, and cleanups across the country. The FY 2008 end-of-year activity report is available at:  
[www.epa.gov/oust/cat/camarchv.htm](http://www.epa.gov/oust/cat/camarchv.htm) .

## Developing A National Tribal Grant

In FY 2008, EPA began developing a new national assistance agreement that will provide tribal governments and UST facilities in Indian country with compliance assistance, training, and collaborative opportunities to support UST release prevention. This new five-year agreement, which will be awarded in 2009, will support efforts to improve UST facility compliance throughout Indian country.



## Celebrating 25 Years Of Tank Progress

November 2009 marks 25 years since the underground storage tank program was established. EPA is commemorating this milestone by issuing a 25th anniversary booklet, which is available on EPA's Web site at [www.epa.gov/oust/pubs/25annrpt.htm](http://www.epa.gov/oust/pubs/25annrpt.htm) .



Installing a new underground storage tank at a facility

# Looking Ahead

FY 2008 was a year of advancement and achievement. UST partners made good progress toward meeting our goals and made significant progress in advancing prevention and cleanup efforts, while also expanding communication and information sharing.

Challenges remain, though, as there is still much work to be done to prevent releases and to clean up contaminated sites. In 2009 and upcoming years, EPA will focus on the traditional goals of the program — preventing and cleaning up releases — and will also:

- ✓ Continue to work with states to meet the mandates and deadlines of the Energy Policy Act of 2005;
- ✓ Work with tribes to continue implementing the tribal strategy;
- ✓ Ensure that each UST facility in the country is inspected once every three years;
- ✓ Explore better ways to identify compliance and cleanup challenges and to pinpoint solutions;
- ✓ Develop strategies to help revitalize communities and clean up abandoned gas station sites;
- ✓ Ensure adequate funding is available for cleanups;
- ✓ Address technical and regulatory issues involved with alternative fuels; and
- ✓ Continue the process to update our regulations.

EPA looks forward to increasing collaboration and working with state, tribal, and other UST partners to achieve further progress in the tanks program in order to better protect human health and the environment from petroleum releases.

## Developing Regulations

EPA is revising the 1988 federal underground storage tank regulations to require that the 2005 Energy Policy Act provisions apply to USTs in Indian country and in states that do not have state program approval. The Agency is also considering revisions to the existing requirements, as appropriate.

EPA is working closely with states, tribes, industry, and other stakeholders regarding our rulemaking plans and efforts. We plan to issue a proposed rule in spring 2010, followed by a final regulation that will carry the underground tank program into the future.



Most of the fuel supply in the U.S. contains ethanol

## \$200 Million Recovery Act Money For Cleaning Up Tank Leaks

See [www.epa.gov/oust/eparecovery](http://www.epa.gov/oust/eparecovery) for information about the LUST funds appropriated in the American Reinvestment and Recovery Act of 2009



[www.recovery.gov](http://www.recovery.gov)

## Addressing Alternative Fuels

Alternative fuels continue to pervade the nation's fuel supply. As more distributors blend biofuels into their product to meet state and national mandates, many USTs throughout the country currently store some level of ethanol or biodiesel. While tank equipment manufacturers strongly recommend specific equipment for the use of high-level blends of biofuels (such as E-85), less is documented about the integrity and compatibility of older systems with mid- or high-level biofuel blends.

To address this data gap, EPA's tank program is working with the Agency's Office of Research and Development (ORD) to identify unknowns and develop a plan for laboratory and field testing of UST components. This testing will assess the compatibility of older UST system components with a range of biofuel blends, as well as the functionality of various leak detection systems to be used with these fuels.

Additionally, ORD is continuing its work to evaluate the transport and degradation of biofuels in the subsurface and the investigation of tools, models, and technologies used in remediation.

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U.S. Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
Office of Underground Storage Tanks**

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