

# A PRIMER FOR PETROLEUM BROWNFIELDS

## WHAT CAN YOUR COMMUNITY DO TO REVITALIZE UST SITES?

Northeast-Midwest Institute  
National Association of Local Government Environmental Professionals



### INSIDE YOU'LL FIND:

A NEW LOOK AT OLD GAS STATIONS  
KEYS TO SUCCESS FOR COMMUNITY REVITALIZATION OF  
PETROLEUM BROWNFIELDS  
SUCCESS STORY EXAMPLES  
RESOURCES FOR FURTHER INFORMATION



## I. INTRODUCTION - A NEW LOOK AT OLD GAS STATIONS

In September 2001, the U.S. Environmental Protection Agency (EPA) launched its USTfields pilot initiative, to address "*abandoned or idle property where redevelopment is hindered by petroleum contamination from abandoned, federally regulated underground storage tanks*" or "*USTs*". The USTfields effort, now 50 pilots strong, is beginning to tally some important results. As the pilots have seen, sites polluted with petroleum - such as abandoned gas stations, auto body shops, industrial facilities, and other petroleum brownfields - must overcome significant barriers to reuse, notably, fear of liability, lengthy regulatory procedures, and up-front cleanup expenses. As many as 200,000 abandoned gas stations and other petroleum brownfields blight communities across America.

Until recently, USTfield programs have focused solely on the cleanup of environmental problems at "high priority petroleum release" sites, but now a new approach is emerging that considers petroleum brownfields from more of a real estate vantage point - as opportunities for economic and community revitalization, but with an environmental twist. UST-related efforts will become even more prominent given the new federal Brownfields Revitalization Act, which now makes petroleum contaminated sites eligible for federal brownfields funding and incentives - earmarking 25 percent of the annual federal brownfield appropriation for assessment, cleanup and revolving loan funds for petroleum-contaminated sites. These petroleum brownfields funds can also be combined with state-based UST cleanup funds to promote the revitalization of these blighted sites. With these petroleum brownfields tools, local communities can focus their resources on relatively low risk petroleum sites where there are no viable responsible parties, which are often the sites that sit abandoned on the corner lots and main streets of many American communities.

The opportunities for petroleum brownfields revitalization were highlighted by the Northeast-Midwest Institute (NE-MW) and the National Association of Local Government Environmental Professionals (NALGEP) in a 2002 report, *Recycling America's Gas Stations*. NE-MW and NALGEP have also worked with U.S. EPA to identify petroleum brownfields success stories and strategies as we have coordinated the network of 50 USTfield pilot communities.

Although the new national brownfields statute marks the end of USTfields as a "pilot" effort, it formalizes these petroleum sites - and these opportunities - as a recognized component of EPA's brownfield revitalization program. Accordingly, the goal of this primer is to help existing USTfield pilot communities, and others exploring petroleum brownfield site reuse, to better understand the opportunities that these sites bring.

*For more information on petroleum brownfields, download the "Recycling America's Gas Stations" report at [www.nemw.org](http://www.nemw.org) or [www.nalgep.org](http://www.nalgep.org).*

## **II. BEYOND CLEANUP TO REUSE OF PETROLEUM BROWNFIELDS**

Petroleum brownfield revitalization will have the greatest local impact when it is approached as a community development issue with an environmental twist, rather than only a pollution problem. This perspective on petroleum brownfields redevelopment also reflects the emerging agenda of EPA, which is focusing its waste cleanup efforts on a “Land Revitalization” approach.

This revitalization-based approach means several things for petroleum brownfield stakeholders. **First, reuse of petroleum contaminated sites, like any brownfield property, should “begin with the end in mind,”** by identifying the prospective uses of the site, whether it be commercial/retail development, housing, a community park, mixed-use development, or even a new, modernized gas station. This end-use approach can help ensure cost-effective remedial decisions, attract investors and supporters, and provide incentives for overcoming difficult obstacles posed by contamination. This approach can also help petroleum brownfields initiatives connect with broader community revitalization strategies that have been embraced by the community.

**Second, the revitalization approach requires government officials to understand that regulatory processes need to meet development time frames, if prospective redevelopers and investors are to be attracted to these sites.**

**Third, this approach suggests the need to enhance a “risk-based corrective action” or “RBCA” strategy for site cleanup.** RBCA and comparable methods identify cleanup standards that ensure protection of public health and the environment, without necessarily requiring that every bit of contamination be removed - an extremely expensive disincentive to reuse. For example, if it can be shown that the construction of a retail parking lot on top of a “hot spot” of petroleum contamination can contain the pollution and prevent it from reaching pathways to exposure to humans or nature, this remedy can replace an expensive “dig and haul” cleanup. RBCA, along with cleanup pegged to future land use and incorporation of institutional land controls as part of the cleanup remedy, are becoming common approaches in many states and localities. Petroleum brownfields revitalization requires a continuation of these strategies.

**Fourth, the revitalization approach means that localities should seek to measure and assess the impacts of the cleanup of petroleum brownfields not only in environmental terms (such as number of tanks removed), but also in socio-economic terms.** By measuring and tracking the new businesses, new jobs, improved property values , increased local tax base, new housing, and expanded park and recreational amenities that result from the revitalization of petroleum brownfields., communities can make the case for continuing these important efforts.

Overall, petroleum brownfield success will be strengthened by the creation of strong redevelopment partnerships among localities, state agencies, and the private sector. It will be further enhanced if these efforts are primed with state and federal resources and technical assistance, aided by new regulatory and legal incentives, and promoted through the opportunities created by EPA’s companion initiatives that focus on revitalization as a goal (such as the brownfields and smart growth programs) and new federal brownfields legislation (which links petroleum contamination to EPA brownfield reuse efforts).

### **III. BUILDING A LOCAL PETROLEUM BROWNFIELD REVITALIZATION PROGRAM**

Based on the experience of the initial EPA USTfield pilot communities, NE-MW and NALGEP have found four keys to success for revitalization of petroleum brownfields:

- \* Establishing a Strong Local Petroleum Brownfield Program**
- \* Leveraging New Resources**
- \* Overcoming Regulatory Challenges**
- \* Engaging the Private Sector and the Community**

#### **Establishing a Strong Local Petroleum Brownfield Program**

Projects successfully undertaken in USTfield pilot communities and other localities have shown that UST-related partnerships really come to fruition “on the ground” at the local level. Therefore, local entities need to have the capacity, will, and wherewithal to carry out an effective initiative.

Local governments are ideally situated to foster creative and positive activities at sites contaminated with petroleum, as well as promote private sector investment that meets overall community revitalization goals. Locals are also in the best position to prioritize sites for cleanup and reuse. With the support of state and federal resources and partnership, localities can build the capacity necessary to sustain petroleum brownfields efforts beyond this pilot stage and for the long term. Overall, localities should:

1. Prioritize sites for local attention and resources, by creating inventories of local petroleum brownfields and then prioritizing their revitalization with locally-based criteria;
2. Integrate petroleum brownfields into broader community revitalization initiatives and partnerships, such as local commercial development, infill housing, or parks and recreation plans;
3. Identify visible local leadership - political leadership from the top as well as a day-to-day champion who can carry the water for the program;
4. Create a standing inter-disciplinary “Tank Team” that includes local brownfield, environmental, economic development, legal, public works and other officials as well as state economic development, UST and brownfields officials, regional planning and economic development organizations, and technical service providers;
5. Develop strategies to deal with “mom and pop” sites and orphan sites, that include both financial resources for “upside down” properties and regulatory clarification/relief for prospective new site users;
6. Consider petroleum brownfield sites as locations for public facilities such as post offices, police and fire stations, public buildings, and community parks.

## Leveraging New Resources

Typically, localities must help draw funding resources and incentives into efforts to redevelop petroleum brownfield properties. The costs of site testing, remediation planning, and actual cleanup (plus increased project transaction costs related to contamination) can tip development choices towards properties that do not have to bear such costs.

Local governments can play a key role in attracting development incentives such as grants, loans or loan guarantees, or technical assistance services that can offset such expenses. Communities must be able to offer and package various types of resources from various sources, to meet the specific financing needs of individual projects. The most recent federal incentive, up to \$50 million annually for petroleum site cleanup earmarked in the Brownfields Revitalization Act of 2001, can be leveraged with state LUST (leaking underground storage tank) cleanup funds and a range of other creative private and public financing strategies. Important actions for local communities who seek to help the private sector obtain funding incentives for USTfield revitalization include:

1. Applying for federal grant and loan resources from the EPA Brownfields program, the federal LUST Trust fund, HUD's Community Development Block Grant program, Economic Development Administration public works grants, and other federal sources, in cooperation with the private sector;
2. Leveraging state LUST cleanup funding, and encouraging states to target their traditional economic and community development programs for petroleum brownfield projects;
3. Exploring creative new uses of traditional local redevelopment tools, like tax forgiveness and community development financing, in petroleum brownfield situations;
4. Targeting existing state, local and federal tax credits, abatements, and other tax incentives to abandoned gas stations and other petroleum brownfields, as an offset to private cleanup costs;
5. Promoting the use of environmental insurance as an petroleum brownfield tool, to cope with unexpected cleanup costs as well as bring lenders more comfort that contamination will not undermine the ability of site users to pay their notes;
6. Creating “portfolios” of multiple UST-contaminated sites in order to leverage public resources, private sector participation, and environmental insurance products in more effective ways;
7. Creating a “Resource Roundtable” of local, state, and federal representatives, as well as officials from banking, real estate, and other private sector redevelopment interests who can convene periodically to help with project packaging and funding.

## Overcoming Regulatory Challenges

Petroleum brownfields revitalization requires using an economic development approach on an environmental problem. In these situations, regulatory barriers can hinder reuse. Therefore, EPA and the states need to explore how to tailor regulatory tools and incentives toward site revitalization and reuse goals while maintaining adequate safeguards of human health and the environment. Local governments can partner with their state and federal agencies to help petroleum troubled projects overcome regulatory hurdles by:

1. Working with state UST officials to create local flexibility to determine when there is no “viable responsible party” at a petroleum brownfield, because the former owner or operator is unknown, unreachable, or unresponsive to cleanup efforts. Federal petroleum brownfield funding can only be used at these “no viable responsible party” sites, but in practice it is often difficult to determine when this standard is met - which often hinders UST-site revitalization;
2. Encouraging state UST officials to integrate UST cleanups with brownfields voluntary cleanup programs that focus on remediation and reuse;
3. Preparing user-friendly outreach and marketing information for prospective site reusers, on the tools for overcoming regulatory barriers at petroleum brownfields (such as fact sheets on liability protections, state funding programs, etc);
4. Coordinating with the “Regional Reuse Teams” and “Reuse Coordinators” who have been established in each U.S. EPA regional office, to help overcome the hurdles associated with the hodge-podge of regulatory requirements at mixed-waste sites that may involve petroleum, RCRA, brownfield, or even CERCLA/Superfund issues.

## Promoting Private Sector and Community Involvement

Partnerships with the private sector and community groups are vital for successful petroleum brownfields efforts because they foster communications and the building of cooperation and trust between relevant stakeholders. Depending on the specific project and its location and situation, key allies may include bankers, investors, developers, private business owners, lawyers, citizen and neighborhood groups, non-profits, private practitioners in several areas (such as economic development, engineering, or technology services), insurance providers, and even the major oil companies. In addition, groups of these stakeholders - such as community development organizations, chambers of commerce, or business councils - can contribute to the process. Local governments can foster these partnerships by:

1. Contacting targeted business associations to discuss the development opportunities on petroleum brownfields, such as state chambers of commerce, associations of retailers, associations of convenience stores, local real estate and business organizations, and other groups;
2. Forming working partnerships with, and providing outreach to, financers and insurers of petroleum brownfields projects;
3. Building working relationships with oil companies and service station dealers to foster information sharing and participation, through contacts with state chapters of the Service Station Dealers of America ([www.ssda-at.org](http://www.ssda-at.org)), state chapters of the Petroleum Marketers Association of America ([www.pmaa.org](http://www.pmaa.org)), or direct contact with major oil companies;
4. Working with national organizations promoting creating reuse of petroleum brownfields, such as the Wildlife Habitat Council ([www.wildlifehc.org](http://www.wildlifehc.org)), which is partnering with communities and corporations to increase the use of ecological enhancements in the redevelopment plans for UST sites; or Habitat for Humanity ([www.habitat.org](http://www.habitat.org)), which is partnering with communities to establish affordable housing on brownfield sites;
5. Promoting pro-active community and citizen involvement in petroleum brownfields revitalization program, through understandable, credible community information, public meetings, and outreach efforts.

**WOULD YOU LIKE TO SEE WHAT SUCCESS LOOKS LIKE?  
TURN THE PAGE!**

## IV. SUCCESS STORY EXAMPLES

### Milwaukee, Wisconsin — Sherman Perk

Sherman Perk, a successful independent coffee shop developed on an oddly sized, triangular shaped petroleum brownfield site, is located in the Sherman Park area, one of Milwaukee's most diverse neighborhoods. The building, which was renovated into the coffee shop, was built in 1939 and operated as a gas station by two generations of the same family for 50 years until the last family member retired and sold the property in 1989. Unfortunately, subsequent owners let the site sit vacant for the following ten years, and it slipped into tax delinquency and was boarded up.

In the mid-1990s, a local community group, Grasslyn Manor, launched the process to register the gas station with the City of Milwaukee's list of Historic Properties. The building was one of the few remaining unaltered examples of a Streamlined Moderne architectural-style gas station in the Midwest, a feature which the group felt could give it a unique commercial advantage. Grasslyn Manor tried to acquire the property with the intent of converting it into a coffee shop - and even came up with the name "Sherman Perk" that would survive their efforts - but the group was unsuccessful. But it had laid the foundation, and identified a market, for this type of revitalization.

In spring of 2000, Bob Olin, current owner of the site, developed an interest in the property primarily because of its historic value. But the site had serious problems. The City of Milwaukee had ordered the gas station building demolished because of the hazard it posed, the structure was seriously deteriorated, and the site was contaminated due to fuel leakage over the years. In addition, the site also bore a significant financial burden which had discouraged any developer from coming forward - the property was nine years tax delinquent.

But Olin persevered, and in mid-May, 2000, he attended a meeting of the Sherman Park Historic Preservation Council to express his interest in reviving the idea of developing a coffee shop at the site. Olin was aided in his effort by a new Wisconsin state law, in fact promoted by Milwaukee officials, designed to encourage reuse of tax delinquent, contaminated properties by linking cleanup and reuse to tax foreclosures, assigned tax liens, and a tax forgiveness process. This statute became the tool that facilitated the saving of the gas station, and the coffee shop project was the pilot case under this new law.

In the case of Sherman Perk, the parties to the tax foreclosure included the City of Milwaukee and the Wisconsin Department of Natural Resources. The City's role was to commence with the tax foreclosure and then place the property in the hands of a developer (in this case, Mr. Olin) who would do what was needed to get the property back into tax-paying status. DNR's role was to oversee the environmental remediation of the property, which it did through the state voluntary cleanup program. After five months of effort, the statute was applied and the petroleum contaminated Sherman Perk site was transferred to Mr. Olin for cleanup and redevelopment.

As a small, community-based developer, Olin faced critical financial hurdles in getting his project underway. He worked with a variety of public agency partners to structure a package of financial incentives that made Sherman Perk a reality. The City and County of Milwaukee provided \$30,000 in grants to help cover the costs of site cleanup, including removal of underground storage tanks, and the Wisconsin Department of Commerce awarded \$100,000 through its brownfield revitalization program to help finance redevelopment. A key component of the "financing" proved to be the hundreds of hours

of sweat equity provided by friends and neighborhood groups, who clearly wanted this project to succeed in their community.

The grand opening of Sherman Perk took place on August 20, 2001, and the coffee shop has become a thriving neighborhood anchor. Olin recently received confirmation from the National Park Service that the restoration met standards for historic preservation, and soon the property will be listed in the National Register of Historic Landmarks. Sherman Perk has also received a Mayor's Design Award in 2002.

In 2003, Sherman Perk's owner paid the greatest tribute possible to the opportunities and process of converting an abandoned petroleum brownfield site - he did it again! Bob Olin recently opened a second coffee shop at an old gas station site in the historic Kletzsch Park neighborhood in Glendale, Wisconsin (not surprisingly called Kletzsch Perk), and is looking for two more similar sites for additional outlets.



*For more information, contact Bob Olin at 414-875-7375 or [www.shermanperk.com](http://www.shermanperk.com), or Michael Prager, Land Recycling Team Leader at the Wisconsin Department of Natural Resources, at 608-261-4927 or [michael.prager@dnr.state.wi.us](mailto:michael.prager@dnr.state.wi.us).*

## Rochester, New York — Chevy Place

The 2.2 acre former Hallman Chevrolet automobile dealership and service garage, located in downtown Rochester, turned an abandoned and contaminated site into a mixed use redevelopment that has revitalized the entire area. Some \$10.6 million was invested in what is now known as Chevy Place, for site preparation and construction of 77 new residential townhouses and apartments. Chevy Place also included the construction of a below-grade parking garage, and the renovation of the historically significant Hallman Chevrolet showroom as a 24-hour Art Deco-style coffee house and restaurant.

From 1930 until 1990, the site was one of the largest new car dealerships in Rochester. The dealership included a large, multi-bay service and repair garage, as well as a gasoline station. The site was vacant from 1990 until the City purchased the property in 1996. The project, which ultimately would take five years from start to finish, presented several challenges to the City and the developer, Home Properties of New York. Changes in New York State Department of Environmental Conservation (NYSDEC) cleanup programs, shifting redevelopment plans, historic preservation restrictions, street reconstruction, and funding constraints posed major challenges to the project - and these were in addition to the environmental concerns at the site, which included several abandoned USTs.

Contaminants found during investigations by the City included asbestos and gasoline, lube oils, used motor oil, and hydraulic oil. Investigators also found petroleum-contaminated soils beneath the former gasoline station and repair garage. Other soil contaminants included heavy metals and semi-volatile organic compounds. In groundwater, free petroleum product was present and dissolved compounds were detected at concentrations that exceeded NYSDEC standards.

During 1997, the City completed asbestos abatement, the closure of five petroleum storage tanks, the removal of 19 in-ground hydraulic lifts, the closure of floor drains and sumps, the removal of contaminated soil associated with storage tanks, and the installation of a blasted bedrock free product/groundwater recovery and treatment system. Home Properties' plans for expanded residential use of the property required a second cleanup phase and the demolition of the service garage. The second phase of remediation was performed from 1998 to 2000 under a joint agreement between Rochester and Home Properties. During that phase, 7,000 tons of contaminated soil and bedrock and 12 more underground storage tanks were removed under a NYSDEC stipulation agreement. In addition, engineering controls including a soil vapor extraction and passive soil venting system were installed as required by the local health department.

Total cleanup project costs, including both phases of remediation, were approximately \$750,000. Rochester financed the initial phase of the cleanup with part of its HUD Community Development Block Grant allocation. The developer funded the second phase of the cleanup. In addition, the City assisted Home Properties with environmental costs via direct reimbursement for certain disposal costs, by providing the company with a \$2.35 million dollar loan for the redevelopment project, and reducing the purchase price of the property due to the environmental cleanup costs.

The investment by the community has proven well worth the effort. Rochester's first new downtown apartment complex in 20 years was finished in spring 2000. The project resulted in the construction of 77 new residential units - 97 percent of which were rented by July 2000. Chevy Place's most distinguishing architectural feature is its Art Deco showroom, which remains standing due to its historic site designation. The former showroom has been renovated as a 24-hour coffee shop. The apartment complex is located on Rochester's

east end cultural and theater district, near the Little Theatre, the Eastman School of Music and the Eastman Theatre, and several restaurants and museums. This project has added to the vibrancy of Rochester's east side, and has been a catalyst for additional private development in the area. Prior to redevelopment, the abandoned dealership property and buildings sat vacant for several years. Rochester Mayor William A. Johnson Jr. stated at the grand opening of Chevy Place that brownfield redevelopment projects such as this are " . . . resurrecting and reinventing our existing infrastructure."



*For more information, contact Mark Gregor, Environmental Manager for the City of Rochester, at 585-428-5978 or [mgregor@cityofrochester.gov](mailto:mgregor@cityofrochester.gov).*

## East Palo Alto, California — Latte Dah Cafe + Subway

The City of East Palo Alto, California is a small, vibrant community of approximately 30,000 that is overcoming significant obstacles to revitalization. While not enjoying the economic prosperity of its neighboring communities in Silicon Valley, the City has a proven track record of revitalization success and a solid vision for expanding upon that success.

Formerly known as the “Murder Capital of the U.S.” East Palo Alto has the highest levels of unemployment and poverty and lowest median income in San Mateo County. A major stumbling block to overcoming these problems is the brownfields contamination that impacts a substantial portion of the City’s land, left behind from decades of industrial waste, illegal dumping, and pesticide pollution. Because of this contamination, East Palo Alto has suffered from a lack of investment in the transportation, utility, and economic infrastructure necessary to revitalize abandoned and unproductive areas in the community.

Named a Brownfields Showcase Community in 1998, East Palo Alto has targeted its brownfield sites for revitalization. One major success has been the cleanup of a petroleum brownfield for the “Latte Dah” coffeehouse restaurant. Latte Dah Café is located in the new Town Center, which includes retail, affordable housing, municipal services, and a transit hub at the gateway to the Ravenswood Business District. Formerly a fuel service station, the site was hindered by three underground storage tanks and two dispenser islands that were in use when the station was operated by Signal Oil and Humble Oil Companies (now owned by Exxon/Mobil & Chevron/Texaco). In 1974, the station operations ceased and the USTs and dispenser islands were believed to have been removed from the site. Unfortunately, no records were available regarding these tanks, potential releases of petroleum, or soil and ground water conditions. This uncertainty thwarted redevelopment, and this abandoned gas station site became a blight in the center of the area considered by local officials and citizens at “the Heart of the City.”

East Palo Alto sought and obtained the help of EPA Region 9 and the California Regional Water Quality Control Board. In particular, major assistance was provided by EPA Region 9 in the form on a dedicated EPA staffer, Sherry Nikzat, who was “loaned” to East Palo Alto for three years to work on community brownfields revitalization.

This team of partners joined together to address this abandoned gas station. Working with a prospective purchaser and former site owner, the City followed a trail that led to Exxon and Chevron, who claimed they had no records on the site or any involvement. City personnel were persistent with Exxon and Chevron and finally learned from company archives that the suspected tanks had been removed.

These oil companies provided local authorities with this essential documentation, and agreed to become substantially involved in investigation and monitoring of environmental conditions at the site. Between 1991 and 1999, the companies performed four rounds of soil and groundwater investigations. They installed five monitoring wells, and established that only low to moderate concentrations of gasoline constituents remained in the soil and ground water in the vicinity of one of the pump islands. Indeed, levels of petroleum hydrocarbons were low enough to obtain site closure from the San Mateo County Division of Public Health and Environmental Protection in June 2001. Moreover, this testing determined that hydrocarbons had not migrated off-site or across Bay Road, a main corridor in the community.

Soon after, on August 9, 2001, local entrepreneur Laverne Bryant held the grand opening for the Latte Dah Café, a drive-thru coffee house in the heart of the community. Her business was started with lending assistance from a local organization called Community Development and Startup, and with in-kind contributions of computers and technical support from the Hewlett-Packard Company. In spite of many construction and capital challenges the new site operators made Latte Dah a success, serving up to 300 drive-through and walk-up customers a day, supporting a catering business, and employing five local residents. Unfortunately, a declining high-tech economy and lack of retail business in the area led to the closing of the Latte Dah Café. However, the site is now being redeveloped in to a Subway Restaurant, which will continue to serve the community in this emerging section of the City.



*For more information, contact Lily Lee at the City of East Palo Alto at 650-853-3122 or lee.lily@epa.gov.*

## **APPENDIX 1 - ABOUT THE EPA UNDERGROUND STORAGE TANK PROGRAM**

The U.S. Environmental Protection Agency (EPA) administers the Underground Storage Tank (UST) program through its Office of Underground Storage Tanks. OUST was created in 1985 in response to a Congressional mandate to regulate UST activities nationally. The vast majority of USTs store petroleum products at retail establishments, such as gas stations, and at petroleum refining facilities.

**Definitions and Scope of the UST Challenge** — An UST system is a tank and any underground piping connected to the tank that has at least 10% of its combined volume underground. The Federal UST regulations apply to UST and associated piping storing either petroleum or certain hazardous, “regulated” substances, as defined under CERCLA § 101(14). EPA estimates there are about 716,000 Federally regulated USTs buried at over 269,000 sites. Nearly all of these USTs contain petroleum. Approximately 30,000 releases are reported each year. Until the mid -1980s, most tanks were made of bare steel, which is likely to corrode over time and allow its contents to leak into the environment. Faulty installation or inadequate operating and maintenance procedures can also cause leaks. The greatest potential hazard is leakage into soil and groundwater — the source of drinking water to nearly half of residents of the United States today.

**Regulatory Requirements** — Congress decided to regulate about 33% of the universe of USTs in existence; consequently, for instance, many farm and residential tanks used for noncommercial purposes are exempt. Yet, some states and localities may regulate these and other tanks. States play a central role in program administration and work with local governments to oversee UST activities. EPA can approve state programs if they meet certain requirements regarding performance, enforcement, and scope of tanks covered. Once approved, states take a lead role in program enforcement; thus, owners and operators need only comply with their state regulations to be in full compliance. For states without approved programs, EPA works with state officials to enforce federal requirements. A summary of major requirements for USTs is set forth below:

**Notification** — Owners and operators of tanks that were in the ground on or after May 8, 1986 were required to notify the state or local officials of the tank’s existence within 30 days of operation, unless the tank was taken out of operation on or before January 1, 1974.

**Technical** — A list of UST technical requirements (set forth in 40 CFR Part 280) include rules for: design and installation; operation; release detection; release reporting investigation and confirmation; corrective action; closure; and financial responsibility. There are different requirements for new versus existing USTs.

**New USTs** — New USTs are those that were installed or that had commenced installation after December 22, 1988. These tanks are expected to comply with all technical standards when installed.

**Existing USTs** — Existing USTs are those that were in service or for which installation had begun on or before December 22, 1988. The deadline to upgrade these existing USTs was December 22, 1998. Currently, tanks must either meet the technical upgrade requirements or be properly closed.

**Financial Responsibility**- Owners and operators must demonstrate they have the financial resources to pay for potential corrective action, as well as compensate third-parties for bodily injury and property damages arising out of LUSTs. This requirement can be followed by obtaining insurance and surety bonds. In addition, many States have financial assurance funds to cover potential cleanup and liability costs.

**LUST Trust Fund** – This trust fund, funded through various fuel taxes, has many important functions including:

Providing funding for corrective action cleanup actions not undertaken by responsible parties;

Providing cleanup funding where the owner and operator is unknown, unwilling, or unable to respond, or which requires emergency action;

Funding administrative activities for EPA, States, and Tribal program implementation.

**New OUST Initiatives** – In addition to these UST regulatory requirements, EPA is now emphasizing efforts to promote the revitalization of petroleum brownfield sites. These efforts include:

1. Assisting local governments, states, tribes and other local organizations in using EPA brownfields grants and loans for assessment and cleanup of petroleum contaminated sites;
2. Fostering the success of the “Land Revitalization Agenda” now being implemented by the EPA Office of Solid Waste and Emergency Response;
3. Participating on “Regional Reuse Teams” at each EPA regional office;
4. Fostering the dissemination of success story examples of petroleum brownfield revitalization; and
5. Building partnerships with private sector, non-profit and community organizations for the creative reuse of abandoned gas stations and other petroleum brownfields.

## **APPENDIX 2 - FURTHER RESOURCES**

### **Federal Resources**

**U.S. Environmental Protection Agency (EPA) Office of Underground Storage Tanks (OUST)** - The OUST website is a comprehensive site on underground storage tanks that includes many resources and links to all EPA regional and state UST/USTfield websites. Contact Information: 703-603-7164; [www.epa.gov/oust](http://www.epa.gov/oust)

**U.S. Environmental Protection Agency (EPA) Office of Brownfields Cleanup and Redevelopment** - The EPA Brownfields Office provides funding, technical assistance, regulatory guidance and other resources to communities on the redevelopment of brownfields, including petroleum brownfields. Contact Information: 202-566-2777; [www.epa.gov/brownfields](http://www.epa.gov/brownfields)

**U.S. EPA Land Revitalization Agenda & Regional Reuse Teams** – The EPA Office of Solid Waste and Emergency Response has launched a “Land Revitalization Initiative” to promote the productive reuse of contaminated lands. Contact Information: 703-603-0048; [homepage.revitalization@epa.gov](mailto:homepage.revitalization@epa.gov); [www.epa.gov/swerrims/landrevitaization](http://www.epa.gov/swerrims/landrevitaization).

**Occupational Safety and Health Administration (OSHA)** - OSHA provides several guidance letters concerning USTs on its website: [www.osha.gov](http://www.osha.gov)

### **Organizations Working on Petroleum Brownfields Issues**

**Association of State and Territorial Solid Waste Management Officials (ASTSWMO)** - ASTSWMO has a tanks subcommittee and publishes a quarterly MTBE newsletter and other UST-related publications. Contact information: 202-624-5828 or [www.astswmo.org](http://www.astswmo.org)

**National Association of Local Government Environmental Professionals (NALGEP)** - NALGEP is partnering with the Northeast-Midwest Institute to convene representatives of the 50 EPA USTfields pilots to identify critical barriers and develop strategies to overcome shared obstacles. Contact Information: 202-638-6254 or [www.nalgep.org](http://www.nalgep.org).

**New England Interstate Water Pollution Control Commission (NEIWPCC)** - NEIWPCC has an underground storage tank/leaking underground storage tank (UST/LUST) working group and publishes the LUSTLine newsletter that focuses on LUST/UST issues. Contact information: 978-323-7929; general email is [mail@neiwpcc.org](mailto:mail@neiwpcc.org). To receive a complimentary copy of LUSTLine, send your mailing address to [lustline@neiwpcc.org](mailto:lustline@neiwpcc.org).

**Northeast-Midwest Institute** — NE-MW is partnering with NALGEP to coordinate the 50 EPA USTfields pilots. Contact Information: 202-544-5200 or [www.nemw.org](http://www.nemw.org)

**Petroleum Marketers Association of America (PMAA)** - 703-351-8000 or [www.pmaa.org](http://www.pmaa.org).

**Service Station Dealers of America (SSDA)** – 301-577-4956 or [www.ssda-at.org/](http://www.ssda-at.org/).

**Underground Tank Technology Update (UTTU)** - The UTTU bi-monthly newsletter is published by the University of Wisconsin and provides information on the latest UST and remediation information and technologies. To receive this free electronic newsletter, send an e-mail to Debbie Benell at the University of Wisconsin-Madison at [benell@epd.engr.wisc.edu](mailto:benell@epd.engr.wisc.edu) or call 800-462-0876.

**Wildlife Habitat Council (WHC)** - WHC has reached a cooperative agreement with the Environmental Protection Agency Office of Solid Waste and Emergency Response (OSWER). The goal of this cooperative agreement is to research, test, develop and demonstrate the ways and means that state, local governments, industry and community groups can use ecological enhancements to increase the rate at which contaminated lands, including petroleum brownfields, can be restored for a variety of reuses including wildlife habitat enhancement as part of restoration designs. Contact information: 301-588-8994 or [www.wildlifehc.org](http://www.wildlifehc.org).



## ABOUT NALGEP

N A L G E P

Founded in 1993 by a group of local officials, the National Association of Local Government Environmental Professionals (NALGEP) is a not-for-profit national organization representing local government professionals responsible for environmental compliance and the development and implementation of local environmental policy. NALGEP's membership includes local government entities located throughout the United States, ranging in size from the largest cities to much smaller communities.

NALGEP brings together local environmental officials to network and share information on innovative environmental practices, conduct environmental policy projects, promote environmental training and education, and communicate the view of local environmental officials on national environmental issues. NALGEP has created an effective forum for local officials to work together to develop new approaches to issues and communicate the needs and views of local governments to key federal policymakers.

During the past decade, NALGEP has played a major role in shaping brownfields programs and policies at the local, state, and federal levels. NALGEP has led numerous national brownfields research and technical assistance projects, including the Brownfield Showcase Communities Network, and the "Recycling America's Gas Stations" project.

Recently, NALGEP, and the Northeast-Midwest Institute launched the Brownfield Communities Network, a national network of local communities working to demonstrate how the cleanup and redevelopment of contaminated property can be an effective tool for community revitalization. The mission of the network is to empower localities to revitalize their communities through the exchange of strategies, tools, and best practices for brownfields reuse.

NALGEP is managed by Spiegel & McDiarmid, a national law firm based in Washington, D.C. For more information, visit [www.nalgep.org](http://www.nalgep.org).



## ABOUT NE-MW

The Northeast-Midwest Institute (NE-MW) is a Washington-based, private, non-profit, and non-partisan research organization dedicated to economic vitality, environmental quality, and regional equity for Northeast and Midwest states. Formed in the mid-1970's, it fulfills its mission by conducting research and analysis, developing and advancing innovative policy, providing evaluation of key federal programs, disseminating information, and highlighting sound economic and environmental technologies and practices.

The Institute is unique among policy centers because of its ties to Congress through the Northeast-Midwest Congressional and Senate Coalitions. Co-chaired by Senators Susan Collins (R-ME) and Jack Reed (D-RI), and Reps. Marty Meehan (D-MA) and Jack Quinn (R-NY), the bipartisan coalitions advance federal policies that enhance the region's economy and environment.

For more information, visit [www.nemw.org](http://www.nemw.org).