

# Petroleum Brownfields 2013 Opportunities For Action



Formerly a gas station, now a coffee shop, Milwaukee, WI

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**U.S. Environmental Protection Agency**

Office of Underground Storage Tanks [www.epa.gov/oust/](http://www.epa.gov/oust/)

Office of Brownfields and Land Revitalization [www.epa.gov/brownfields/](http://www.epa.gov/brownfields/)

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## Purpose

EPA developed *Petroleum Brownfields 2013: Opportunities For Action* for petroleum brownfields stakeholders. This 2013 action plan proposes petroleum brownfields actions EPA intends to achieve over the next three years. It also identifies challenges associated with cleaning up and reusing petroleum brownfields.

EPA is soliciting your ideas and suggestions regarding the plan. Please provide comments or questions to Robin Parker ([parker.rob@epa.gov](mailto:parker.rob@epa.gov) or 703-603-7149) of EPA's Office of Underground Storage Tanks.

## Background

The U.S. Environmental Protection Agency's (EPA) Office of Brownfields and Land Revitalization (OBLR) and Office of Underground Storage Tanks (OUST) jointly manage EPA's petroleum brownfields program, which promotes cleaning up and safely reusing contaminated sites, including low-risk abandoned gas stations. OBLR manages the national Brownfields and Land Revitalization programs; OUST oversees cleaning up leaking underground storage tank (LUST) sites. The Small Business Liability Relief and Brownfields Revitalization Act (Brownfields Law), enacted in 2002, included petroleum-contaminated properties in the brownfields universe. This made petroleum-contaminated properties eligible for brownfield grant funding to assess and clean properties. It also required that 25 percent of the money appropriated to EPA for activities authorized under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 104(k) be used to characterize, assess, and remediate petroleum brownfields.

In 2008, OUST and OBLR jointly developed a petroleum brownfields action plan, which identified objectives and resources that specifically targeted petroleum-contaminated properties. See the 2008 plan at [www.epa.gov/oust/pubs/petrobfactionplan.pdf](http://www.epa.gov/oust/pubs/petrobfactionplan.pdf).

We implemented our 2008 plan by collaborating with communities and our state and tribal regulatory partners. In doing so, we recognized that petroleum brownfields are unique properties. Many petroleum brownfields are part of the larger regulated tank universe in state cleanup backlogs. Petroleum brownfields may also be the same properties communities are struggling to clean up for safe reuse.

Abandoned gas stations, which are one type of petroleum brownfield, are commonplace and differ from other brownfields in these important ways:

- Their property ownership history can pose challenges when determining eligibility for brownfields grant funds because they might be low-risk properties with no viable responsible parties.
- State environmental regulatory programs control and oversee compliance, tank removal, site closure, and cleanup process governing abandoned tank sites. However, cleaning up low risk sites may not be a priority for state programs working to address cleanup backlogs at higher risk sites.

- The average petroleum brownfields site with simple contamination might be quickly assessed and cleaned using a streamlined process, such as removing the tank, piping, and small amounts of soil in the tank area. However, these sites may not be recognized or factored into economic or community development planning and considerations.
- Brownfields assessment and cleanup can be driven by communities or public or private sectors, but may not include all the stakeholders critical to successfully reusing petroleum brownfields.

Brownfields that have been cleaned up and reused are positively impacting their surrounding communities by enhancing local economies; increasing property values; generating new jobs; and creating new commercial, residential, and recreational space on sites once viewed as liabilities. In addition to environmental and economic development benefits, cleaning up and reusing brownfields minimizes and removes threats to public health by reducing potential exposure to petroleum hydrocarbons and constituent chemicals in surface soils and groundwater, as well as limiting the potential for vapor intrusion.

## **What We Accomplished So Far**

In 2008, EPA issued its first public petroleum brownfields action plan, which described OBLR and OUST's collaborative petroleum brownfields work. The 2008 plan established a framework within which to operate our partnership and guided EPA's headquarters and regional work. The 2008 plan helped us achieve many successes, summarized below.

### **Communicate And Reach Out To Stakeholders**

- ✓ Significantly expanded the petroleum brownfields website by adding links to topical information, tools, resources, case studies, and cross-references to OBLR's brownfields website.
- ✓ Developed and published new resources for those interested in cleaning up and revitalizing petroleum brownfields.

### **Support State, Tribal, And Local Governments**

- ✓ Provided technical assistance to many communities and other stakeholders via workshops, meetings, and community-based planning sessions.
- ✓ Promoted targeted geographic support, also known as the corridor approach, for redeveloping several petroleum brownfields sites in defined areas.

### **Explore And Evaluate Policies**

- ✓ Participated in national, state, and tribal conferences; workshops; and meetings to promote cleaning up and reusing petroleum brownfields.
- ✓ Evaluated public policies related to petroleum brownfields revitalization.

## Forge Partnerships

- ✓ Participated in EPA's RE-Powering America's Land effort to promote using petroleum-contaminated land for renewable energy projects.
- ✓ Collaborated with other federal agencies, including the U.S. Departments of Housing and Urban Development, Transportation, Agriculture, Health and Human Services, and the National Park Service, to identify and coordinate cross-agency redevelopment projects.
- ✓ Pooled resources with EPA's Office of Sustainable Communities and provided grants for the Environmental Law Institute and Smart Growth America to evaluate state policies on petroleum brownfields and communicate with new audiences.

## Challenges Ahead

Despite the successes, evolution, and experience of the petroleum brownfields program thus far, the barriers below may potentially remain as impediments to cleaning up and redeveloping sites. We will focus on overcoming these barriers for future program planning and coordination efforts.

- Small site size may impact a site's marketability; many petroleum brownfields are located in places where private investment and independent redevelopment is unlikely.
- Petroleum brownfields are commonplace and frequently discovered during revitalization or construction projects. When this is the case, complex liability concerns may prevent the site from being cleaned up expeditiously.
- Some communities, which might benefit from petroleum brownfields revitalization, may not know about available program and resource opportunities. Communication among communities undertaking petroleum brownfields work could help improve successful practices.
- Compared to other brownfields, petroleum brownfields assessment, cleanup, and revitalization may require knowledge of varied regulations and coordination with numerous regulators. For example, in some locations, local fire marshals regulate petroleum sites.
- Improved federal, state, and local government; tribal; and private sector partnerships are needed. Enhanced relationships could provide valuable assistance and additional resources.

Much has changed with petroleum brownfields since EPA developed the 2008 petroleum brownfields action plan. Communities' involvement with petroleum brownfields revitalization continues to grow. Federal agencies, local governments, and private sector investors are beginning to incorporate sustainability principles into core programs. More petroleum brownfields are being assessed, cleaned up, and reused in sustainable ways, resulting in significant benefits to surrounding communities.

*Petroleum Brownfields 2013: Opportunities For Action* updates the 2008 plan. The 2013 plan draws on the perspectives of many stakeholders, including EPA offices; state and local governments; local community development organizations; and non-profit organizations. However, the 2013 plan is flexible; EPA will adapt it to reflect communities' needs as well as EPA's and stakeholders' priorities. This plan will help us continue our open dialogue with stakeholders

regarding our future petroleum brownfields work. With *Petroleum Brownfields 2013: Opportunities For Action*, we recommit to our partnership and work on petroleum brownfields.

## Ongoing And Potential New Actions

This section presents ongoing actions and potential new actions in four categories.

- Outreach -- increase communication with petroleum brownfields stakeholders.
- Targeted Projects -- provide targeted support to state, tribal, and local governments.
- Grants -- facilitate increased petroleum brownfields site revitalization through existing grant programs.
- Partnerships -- forge partnerships to achieve sustainable reuse of petroleum brownfields.

## Ongoing EPA Actions

Even though EPA is working on these actions, we welcome ideas and suggestions for improvement.

### Outreach

#### **Action 1: Improve and maintain a petroleum brownfields website and other materials**

Our goal is to raise awareness about the petroleum brownfields program. Via our website, EPA will share information, which promotes assessing, cleaning up, and sustainably reusing petroleum brownfields. We will improve our existing petroleum brownfields website and make it easier to use. The website will include updated information from EPA programs; other federal partners; local, tribal, and state governments; and non-profit and private sectors. In addition, we will consider developing materials such as brochures, fact sheets, reports, success stories, and newsletters. We will tailor materials and target specific audiences, such as those without Internet access.

#### **Action 2: Develop and test reuse planning worksheets for communities**

EPA developed petroleum brownfields reuse planning worksheets, which will help community groups plan their cleanup and reuse of petroleum brownfields. We will test the worksheets in urban and rural settings with brownfield grantees, solicit feedback, and use them in area wide planning and petroleum cleanup activities. The worksheets will provide community groups with information to help them navigate the reuse process, such as identifying stakeholders, understanding environmental cleanup and planning decision-making processes, and considering needs and resources. The worksheets will help communities organize and target their efforts to secure resources for successful petroleum brownfields revitalization projects.

### Targeted Projects

#### **Action 3: Support corridor or area-wide planning projects in places potentially contaminated with petroleum**

EPA will support petroleum-related geographic initiatives, area wide planning, or corridor projects that accelerate cleanup and redevelopment. These projects will target specific places such as economic development areas, enterprise zones, environmental justice, and other areas which provide opportunities to reuse petroleum brownfields. EPA will provide technical assistance based on needs of specific communities. Assistance may include existing technical assistance

mechanisms such as Technical Assistance for Brownfield Communities (TAB) or Targeted Brownfield Assessments (TBA) and cross-program coordination, as well as support mechanisms available through existing partnerships within these geographic areas.

## Grants

### **Action 4: Evaluate and minimize challenges faced by brownfields grant applicants**

The petroleum grants eligibility criteria, based on language in CERCLA 101(39) (D), require applicants to work with their state and EPA regional staff to verify that sites are relatively low risk and there are no viable responsible parties. These criteria sometimes present challenges for applicants. EPA will work with applicants to identify application process challenges, which may create barriers to obtaining brownfield grant funds. EPA will share information on how to minimize barriers and explain requirements in plain language.

### **Action 5: Explore ways to increase the number and quality of LUST proposals which help revitalize petroleum brownfields sites**

EPA will strive to increase the number of high quality brownfields grant proposals addressing petroleum brownfields sites, especially sites with UST releases remaining to be cleaned up. LUST sites are good candidates for redevelopment because of their locations near existing infrastructure and their low environmental risk. EPA will also explore working with other federal programs, such as the Department of Health and Human Services' Health Resources Services Administration (HRSA), to ensure communities with LUST sites and other petroleum brownfields are taking advantage of the diverse array of available grants.

### **Action 6: Implement a pilot brownfields multi-purpose grant for petroleum brownfields**

EPA is implementing a pilot brownfields multi-purpose grant that allows for assessment and cleanup under one grant award. A multi-purpose grant may be a good solution for a LUST site; if contamination is found during assessment, this grant could eliminate the time lag between discovering contamination and applying for a separate cleanup grant. The total money available for assessment and cleanup activities could be up to \$550,000; this could pay for cleanup costs at a small to average petroleum site. EPA will track lessons learned from petroleum funded sites and make use of the information for future grants.

## Potential EPA Actions

EPA is beginning work on these actions, and we welcome ideas and suggestions in developing them.

## Outreach

### **Action 7: Gather and use external input to focus, adapt, and refine EPA's petroleum brownfields actions**

Through this 2013 action plan, EPA is asking individuals and organizations involved in petroleum brownfields work for input about how to improve our products and actions. We will use this input to understand what is most useful for people involved in petroleum brownfields projects and help prioritize our work.

### **Action 8: Incorporate petroleum brownfields training in staff development**

In 2012, EPA's OBLR developed training modules about the brownfields program basics, which highlight program evolution and progress; capture institutional memory; and document key elements of the brownfields program, partnerships, and best practices. EPA's OUST and OBLR plan to develop an additional module, which will include additional information about petroleum brownfields. We will address eligibility considerations; roles and responsibilities of EPA, states, tribes, and communities; and the process for assessment and cleanup. We will also include examples of petroleum brownfields revitalization.

### **Action 9: Help stakeholders articulate the return on investment for cleaning up and reusing petroleum brownfields**

For many years, EPA's attention to cleaning up underground storage tank sites ended at completion of a cleanup. However, some state underground storage tank programs and other stakeholders are successfully showing investment returns on their petroleum brownfields by tracking: money they leveraged; increases in property values as a result of cleanups; and other indicators of economic improvement related to reusing underground storage tank sites. EPA plans to work with the Association of State and Territorial Solid Waste Management Officials to gather examples of how return on investment information has been tracked and presented successfully. These examples will help us understand how establishing an inventory and collecting specific information helps document improvements in the economic, environmental and public health of local communities. We will provide examples that will allow EPA, states, tribes, and other stakeholders to build on others' success and make a better case for petroleum brownfield revitalization.

### **Targeted Projects**

#### **Action 10: Develop and implement UST release cleanup strategies that focus on using petroleum brownfields funding**

As of September 2012, there are approximately 83,000 UST releases remaining to be cleaned up; some of those releases may be eligible for petroleum brownfields grants. Even though all of our petroleum brownfields work supports the goal of reducing the UST releases remaining to be cleaned up, EPA and states are also developing specific reduction strategies, which identify ways to reduce the UST releases remaining. Some of the strategies will focus specifically on the connection between brownfields grant programs and cleaning up UST releases.

#### **Action 11: Assist area-wide planning grantees in developing voluntary inventories of petroleum brownfields**

EPA developed [Petroleum Brownfields: Developing Inventories](#) to assist communities in developing petroleum brownfields inventories. There are also several privately-developed inventory resources available for communities, such as one developed by [Kansas State University](#) and another developed by the [Agency for Toxic Substance and Disease Registry](#). EPA plans to work with brownfields area-wide planning grantees and identify petroleum brownfield sites. We will help interested area-wide planning grantees choose the best inventories for their projects and enhance coordination between brownfields initiatives and ongoing community redevelopment efforts.

#### **Action 12: Explore how petroleum brownfields reuse can address community needs for access to health care**

EPA will explore projects that illustrate how petroleum brownfields reuse can increase access to health care. Often citizens in communities near petroleum brownfields have health care needs that could benefit from petroleum brownfields being developed into medical clinics, open spaces for

exercise, farmers markets selling fresh produce, or bike and pedestrian pathways. EPA plans to identify reuse examples that can be replicated across the country.

## Partnerships

### **Action 13: Support and share successes of the Environmental Workforce Development and Job Training Grant Program**

EPA's Environmental Workforce Development and Job Training (EWDJT) grant program provides training opportunities, including for UST leak prevention. EWDJT grantees work to place graduates of their programs in full-time, sustainable employment in the environmental field. EPA plans to continue facilitating placement of these graduates by sharing information, such as expected projects in communities and improved involvement of state and local brownfields and tank staff in training programs. As a new effort for future years, EPA will consider educating those less familiar with the UST universe by gathering and sharing curricula among grantees. EPA will also consider highlighting successes of EWDJT grantees who have integrated advanced UST training or successfully placed graduates in petroleum related jobs.

### **Action 14: Promote sustainable cleanup and reuse of petroleum brownfields by using partnerships and new streams of funding for communities**

EPA has many partners who administer grant and funding programs. We plan to highlight select federal programs that can help communities leverage additional funding and accelerate the return of petroleum brownfield sites to productive use. We intend to develop outreach materials for grantees or field personnel of other agencies which work with communities. Specifically, outreach materials would discuss benefits to other federal agencies of developing a former gas station or LUST site into new uses, such as housing or health care. This may include tracking partner agencies' performance measures during petroleum brownfields cleanup and reuse. Examples include the Department of Health and Human Services' designations of medically underserved areas; the Department of Housing and Urban Development's number of affordable housing units that are LEED, Energy Star certified, or Americans with Disability Act compliant; and the Economic Development Administration's job creation targets.

## Conclusion

Implementing the 2008 petroleum brownfields action plan and developing *Petroleum Brownfields 2013: Opportunities For Action* guided EPA in identifying challenges for reusing petroleum brownfields. It also helped EPA recognize many opportunities for improvements we intend to achieve in the next three years. The 2013 plan builds on activities from the 2008 plan. In the 2013 plan, we identify potential actions and new opportunities where EPA might be able to provide support and leadership. Some actions will be implemented in the short term; others will require longer-term plans for staffing, funding, and project management. In order to address additional opportunities, we will continue coordinating and communicating with petroleum brownfields stakeholders to achieve greater success in assessing, cleaning up, and sustainably reusing petroleum brownfield properties.

To ensure the 2013 plan includes petroleum brownfields stakeholders' needs, EPA wants to hear from you. Please provide comments or questions to Robin Parker ([parker.rob@epa.gov](mailto:parker.rob@epa.gov) or 703-603-7149) of EPA's Office of Underground Storage Tanks.