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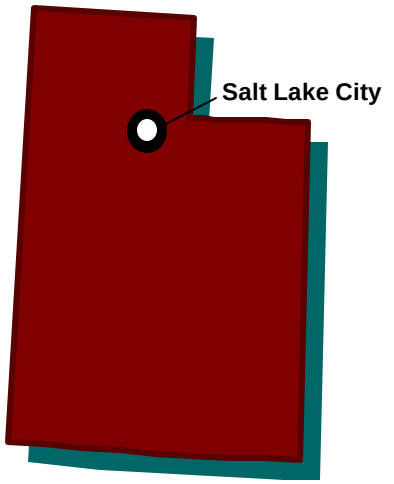
UST*FIELDS* PILOTS [redacted]



UTAH

In November 2000, EPA's Office of Underground Storage Tanks (OUST) launched the USTfields Pilot program, which is helping states address contamination from federally-regulated underground storage tanks (USTs) at idle or abandoned commercial properties known as "brownfields." Cleanup of petroleum contamination is generally excluded from coverage under EPA's Brownfields program, so EPA provided 10 pilot states with up to $100,000 of LUST Trust funds each to cover the costs of petroleum cleanups at Brownfields sites. Using the pilot funds, each state is working with Brownfields communities to assess, clean up, and monitor petroleum-impacted UST sites. The cleanup of these sites is removing barriers to their reuse and allowing communities to return them to productive use.

Background

Prior to the formal USTfields Initiative in 2000, EPA provided assistance to the State of Utah to begin to work on the problem of abandoned service stations in the state. Utah was the first state to raise concerns to EPA about the number of stations abandoned due to the 1998 compliance deadline. Many of the owners who could not meet these requirements walked away from their stations. In 1998 Utah received a small grant to work on such sites in Aurora and Ogden.

Because of this early work on USTfields, EPA selected the State of Utah as an official USTfields Pilot in 2000. With this pilot grant, the state began work with Salt Lake City, which has been successful as a Brownfields Assessment and Showcase Community. Funding through the Brownfields program generally cannot be applied to petroleum-impacted sites, which has created a gap in the city=s ability to address underground storage tanks in its neighborhoods. Economic forces have moved the sale of gasoline out of local neighborhoods and into more urban retail outlets. This trend has left many abandoned gas stations and their associated health and environmental risks located in or on the edge of low income neighborhoods. Overgrown weeds and graffiti cover abandoned gas stations that are often on highly visible corner lots and have a negative impact on surrounding neighborhoods. The Salt Lake City Corporation is interested in assessing and cleaning up such underutilized properties and returning them to productive use for the local community. The goal of the USTfields pilot program is to develop a process to foster redevelopment and to restore abandoned and underutilized underground storage tank sites back to productive use. The Utah pilot will help the state forge working relationships with local governments and organizations in order to accomplish this goal.

Aurora (1999 pilot)

Partners

- **Utah Department of Environmental Quality**
- **Utah Department of Health**
- **Sevier County Commissioners**
- **Aurora City**
- **U.S. EPA**

The site is located in central Utah in Sevier County on South Main Street in Aurora. This was an abandoned service station with known environmental contamination present based on underground storage tank closure samples taken in 1991. The owner did not attempt to address the contamination and would not grant the Utah Department of Environmental Quality (UDEQ) access to the site. Finally the state gained access in 1999 under a court order and began work on the site in July of that year. The state was able to utilize the LUST trust fund for this site because the owner was uncooperative. Also in 1999 Sevier County acquired the property because of delinquent property taxes.

The local community wanted the station demolished and the site reused for an access roadway to a new subdivision. However, Sevier County and Aurora City were concerned about environmental liability issues and cleanup costs and lacked the environmental resources to properly address their concerns. The county and city approached UDEQ and requested help with a targeted site assessment to determine the extent and degree of subsurface contamination and to establish cleanup levels based upon intended land use.

Accomplishments

In July 1999 UDEQ conducted a site assessment with the assistance of Aurora City, which donated equipment for the digging of "test pits." UDEQ personnel collected soil and groundwater samples and completed the subsurface investigation report. The Utah Department of Health provided analytical results at no cost under a service agreement established by the Utah Legislature. All fieldwork, sampling, reporting, and risk-based cleanup/closure evaluations were done with no contractual costs incurred and with no involvement of an independent contractor. This unique partnership resulted in significant cost savings. Based on the study by UDEQ, the city demolished the existing building and constructed the desired access roadway for the local community. Because some contamination remained in-situ, Sevier County and Aurora City entered into a long-term lease agreement for fixing the land use as a roadway. The underutilized property, which had become an eyesore for the community and an environmental liability for Sevier County, has now been successfully redeveloped as a result of a unique partnership among local, state, and federal agencies.

Challenges

A major challenge for this project was that it was the first time the Utah tank program partnered with the federal government and rural local governmental agencies in using LUST trust fund money to facilitate cleanup and reuse of an abandoned site. The unique partnership formed among local and state agencies prevented the need for contractors in the process and resulted in a more timely approach as well as a better understanding of the challenges associated with reuse of a small site in a rural area.

Ogden (2000 pilot)

The property is located in east Ogden on Polk Avenue. The site was the location of an abandoned service station that Ogden City demolished in 1993-1994, leaving a vacant lot. Three underground storage tanks of unknown capacity containing gasoline and/or diesel products were abandoned by the responsible party and were presumed to still be present at the site. In order to determine if these tanks were still on the site, it was necessary to do a subsurface investigation. Another goal of the investigation was to test the property at several locations to determine the extent and degree of any soil or groundwater contamination that may still be present.

Partners

- **Utah Department of Environmental Quality**
- **Utah Department of Health**
- **Weber County Commissioners**
- **U.S. EPA**

Accomplishments

In February 2000, UDEQ conducted a site assessment with the assistance of Weber County, which donated equipment for the digging of Atest pits@. Three abandoned tanks were found with petroleum product still in them. Weber County removed approximately 3,500 gallons of product from the tanks and eventually closed all three tanks by removal at a later date. A partnership was formed here similar to that formed in Aurora. UDEQ and the Utah Department of Health performed work at the site, so there was no need to hire an environmental contractor, resulting in significant cost savings for all parties involved. Based on the study by UDEQ, the site was issued a "no further action" letter in May 2000, and the site was closed by UDEQ. Weber County intends to either sell or develop the property into two single-family residential lots.

Challenges

One challenge at this site was working through the liability issues with Weber County, who had foreclosed on the property because of delinquent property taxes with abandoned underground storage tanks. The county was hesitant to begin work due to concerns about its overall liability as a responsible party, unknown cleanup costs should the city begin the project, and unknown third-party impacts. This challenge was overcome by a cooperative effort between the county and the State of Utah in the same manner as the Aurora project utilizing governmental agencies to perform the work, making the cleanup cheaper than if performed by a consultant.

Until the mid-1980s, most underground storage tanks (USTs) were made of bare steel, which is likely to corrode over time and allow a tank's contents to leak. Faulty installation or inadequate operation and maintenance can also cause tanks to leak. The greatest potential hazard from a leaking underground storage tank is that the petroleum or other hazardous substance can seep into the soil and groundwater, the source of drinking water for nearly half of all Americans. Leaking tanks can present other health and environmental risks, including the potential for fire and explosion.

Salt Lake City (2001 pilot)

Partners

- **Utah Department of Environmental Quality**
- **Salt Lake Neighborhood Housing Services**
- **Redevelopment Agency of Salt Lake City**
- **Salt Lake City Department of Public Works**
- **U.S. EPA**

The Utah Department of Environmental Quality (UDEQ) and the City of Salt Lake formed a strong partnership to accomplish this pilot. While the state was more involved in the "nuts and bolts" of the remediation work, the City Agencies worked with the community, local government, and property owners to help UDEQ select appropriate sites. The Redevelopment Agency of Salt Lake City evaluated the sites in terms of redevelopment potential while UDEQ looked at them from an environmental perspective. The local agency helped initiate contact with the sites once selected, and then the state brought their expertise to the table to really move the sites towards reuse.

The site that was chosen in partnership by the city and the state is located in West Salt Lake City adjacent to the Brownfields Gateway project. This property was an abandoned service station with two underground storage tanks still in place. The UDEQ conducted a subsurface investigation at the site to determine if the tanks had leaked and to determine the extent of any soil or groundwater contamination. Initial concerns prior to cleanup activities included the potential for asbestos and lead contamination in addition to other unforeseen site conditions.

Accomplishments

Based on UDEQ=s targeted site assessment in April 2001, Salt Lake Neighborhood Housing Services (NHS) purchased the land as a site with potential for affordable housing. NHS conducted asbestos removal and demolished the abandoned buildings on-site to allow access to the underground storage tanks and overexcavation of impacted soils adjacent to the building. As a cooperative partner, Salt Lake City donated the construction equipment and operators needed for the removal of the tanks and the soil overexcavation activities that resulted in significant construction cost savings. In November 2001, UDEQ and the Salt Lake City Department of Public Works removed the tanks and conducted cleanup at the site. Based on confirmation sampling, DEQ is installing groundwater-monitoring wells to determine the degree of natural attenuation occurring at the site. Once a "no further action" letter for the site is issued, NHS hopes to develop the cleaned up property into affordable housing as six or seven residential townhouses.

Challenges

Because of the complex scope of work involved in the West Salt Lake project, a major challenge at this site for the state-assigned project manager was coordination of two different environmental consulting firms, each with multiple subcontractors, combined with the coordination of city equipment and personnel. Another major challenge was the time constraint of the investigation and construction project that went from March through December of 2001. During this time, the project went through: development of two different construction bid specifications; the bid evaluation and award process; data review and interpretation; construction oversight; report writing for both phases of work; asbestos removal and building demolition; closure of two tanks; preparation of work assignments for oil-sump disposal; geoprobe drilling; temporary vapor barrier through engineering controls; analytical services for hazardous waste characterization; title search; lead testing for soil disposal; project invoicing; final payments to contractors; and, finalizing a settlement agreement with NHS for cost recovery efforts related to UST closure costs.

Utah Lessons Learned

While there have been a number of challenges with the USTfields pilots, the state has learned important lessons that can be applied to other sites. Through the pilots, UDEQ gained a better understanding of how to coordinate with multiple stakeholders and use resource leveraging to the project's advantage to minimize costs. There are many challenges with these sites, and it is essential that those involved with USTfields are prepared to champion the process and to provide overall coordination among the key stakeholders. A coordinator is important in helping to find appropriate sites that meet the selection criteria and overall pilot project goals and objectives and to keep everyone focused on these goals.

Utah learned that before looking at specific sites, a prioritization scheme needs to be in-place. While there needs to be a prioritization scheme, it must be flexible to accommodate the diverse needs of many different entities and the unexpected situations that may arise. A clear project goal that everyone involved can agree with is essential because of the diversity of entities involved in such a project. Each entity's goal may be a little different, but as long as everyone works toward a common final goal, the project can be successful. During site demolition and general construction activities, unexpected situations may arise. The procurement and construction process needs to be flexible and able to respond in a timely fashion. USTfields projects can be a great deal of work, but there can also be substantial benefits to all involved.

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For more information about USTfields Pilots, visit EPA's Web site at www.epa.gov/oust/ustfield