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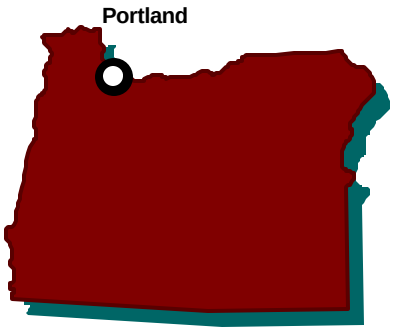
UST*FIELDS* PILOTS [redacted]

OREGON



Last year 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 each of 10 pilot states with up to $100,000 of LUST Trust funds 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

EPA has selected the State of Oregon as one of the ten initial USTfields Pilots. As part of the pilot program, the Oregon Department of Environmental Quality (DEQ) will work with the cities of Portland, Eagle Point, and Baker City and local community members to assess petroleum contamination at a number of underground storage tank sites.

Portland is a Brownfields Showcase community, a Brownfields Assessment Pilot, and a federal Enterprise Community. The $100,000 USTfields grant will supplement other federal funds and will allow the state to leverage state and local funds to bring otherwise abandoned or underused properties into productive use.

What follows is the story of how EPA, the State of Oregon, and the cities of Portland, Eagle Point, and Baker City are working together to characterize, assess risk, and clean up underground storage tank sites in an effort to remove barriers to redevelopment.

Portland

Partners

- **Oregon Department of Environmental Quality**
- **City of Portland**
- **REACH Community Development, Inc.**
- **Multnomah County**
- **U.S. EPA**

In 1998, Multnomah County acquired the 1949 SE Division Street property through foreclosure procedures after the owner abandoned it. This former Portland retail service station and grocery market has been vacant for the last five years. Once the site is cleaned up, the county plans to build low-income housing on this property through its Affordable Housing Development Program.

The site had several underground storage tanks that were removed in 1994. Environmental sampling conducted during tank decommissioning demonstrated that petroleum-contaminated soil was present at the site. During the decommissioning process, approximately 250 tons of petroleum-contaminated soil were removed from the site. Following these removal activities, soil sampling confirmed the presence of petroleum-contaminated soil beyond the excavation. Although the tanks were removed and some contamination was eliminated, more cleanup is necessary to prepare this property for reuse.

The property was offered to non-profit housing developers though a competitive process, and REACH Community Development, Inc. was selected to develop the site. REACH proposed building a two- to three-story apartment building, with 10-15 units that would accommodate individuals with physical disabilities. Before beginning redevelopment, REACH performed additional soil and groundwater sampling in April 2000 and found levels of contamination that could impact human health. Additional investigation was needed to determine the extent of this contamination. Because funds were not available for this assessment or for any additional cleanup work that might be necessary, the project could not move forward.

Accomplishments

With the additional funds provided by the USTfields Pilot, DEQ was able to start this project. DEQ contracted with an environmental services firm to perform a site investigation and to prepare a corrective action plan for the property. This work, which began in the fall of 2001, will determine the extent of contamination on the site. The corrective action plan will consider risk and will make recommendations for addressing possible exposure associated with any contamination remaining at the site.

Challenges

There were three major challenges to this particular project. The first was that due to the limited amount of funding available for this project and the close proximity of the neighboring residential property, it was difficult to fully delineate and characterize the area of contamination. In order to deal with this challenge, the decision was made to limit the investigation by further characterizing on-site impacts only, with permanent monitoring wells placed along the property boundary. The next challenge concerned how to effectively spend the funds. DEQ did not have a funding mechanism in place to utilize the grant, and Multnomah County was not interested in entering into an intergovernmental agreement with the Department. DEQ was able to work through this problem by selecting a contractor from a list that is currently used to implement work on the State's Orphan projects, sites where a responsible party cannot be identified.

The third challenge comes with DEQ's intention to provide an assessment of the contamination on site and to evaluate the associated exposure risks. If complete exposure pathways for one or more constituents are exceeded, the risk can be addressed through reduction of the concentration(s) or through the use of engineered or institutional controls. (If contamination remains at levels that pose a risk from exposure, then more cleanup work can be done to reduce those levels. Alternatively, engineered controls, such as building design or construction methods, can be used to provide a physical barrier, or institutional controls, such as a deed restriction, can be imposed to limit the use and provide protection.) Since this particular project will require funding through the Housing and Urban Development (HUD), DEQ's risk-based approach to clean up may not fully satisfy the more stringent requirements and concerns associated with that funding source.

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.

Baker City

Partners

- **Oregon Department of Environmental Quality**
- **Baker City**
- **Baker County**
- **U.S. EPA**

In the late 1990s, Baker County gained ownership of the site at 879 Elm Street through tax foreclosure processes. This site was once a farm supply and retail gas station but has been vacant for over five years. The county encouraged developers to reuse this property, but developers were unwilling to take ownership of the site due to unknown environmental conditions.

Under the USTfields Pilot project, the county hopes to remove three underground storage tanks, assess petroleum contamination, and prepare the property for reuse. While the USTfields funds will not be enough to clean up this site completely, the funds do provide a way to begin to investigate the extent of contamination. This initial assessment should reduce the uncertainty surrounding the contamination and will give developers a better idea of how much work will be needed to ready this property for reuse, as well as determine if a Prospective Purchaser Agreement is needed.

Accomplishments

This site was on DEQ's Abandoned Tanks Sites list. However, before the USTfields Pilot, the state was unable to address the site. Since Baker County acquired the property through tax foreclosure, DEQ could not require the county to decommission the tanks. With USTfields Pilot funds, DEQ was able to begin work on this site, as it was a high priority site due to proximity to a river and residential area. The state established a contract with a local firm to do an initial investigation of the site. The contractor removed the underground storage tanks from this site as a part of the site assessment. While this was a limited assessment, it did begin to quantify the extent of contamination at the site and the need for cleanup. The contractor also considered the current and likely future uses of this land in order to determine the level of cleanup required at this site.

Challenges

There were a number of challenges associated with this project. Unlike the other two pilot sites where previous investigations provided a base of information, there was a lack of knowledge about the site before starting work. The only previous site investigation consisted of a couple of test pits dug by a man who subsequently withdrew his bid to purchase the property. In addition, the remote location of the community and the "one-time mobilization" to the site made it difficult to manage the wastes produced by the investigation. There was not enough time to both characterize and then dispose of the contaminated soils at the local landfill in the single trip to the site, but there was also not enough money to return for more work on the site.

Eagle Point

Partners

- **Oregon Department of Environmental Quality**
- **City of Eagle Point**
- **Facility Owner/Operator**
- **Local Developer**
- **Governor's Solutions Team**
- **U.S. EPA**

Eagle Point is a picturesque rural community with a small "downtown" area in southwestern Oregon. The Eagle Point Garage has been a local landmark, service station, and auto repair since the 1930s. The final group of underground storage tanks on the property was decommissioned by removal in 1999. Shortly after the decommissioning, the owner of the property passed away, leaving the property to his wife. The property had fallen into disrepair, and the building was soon to be condemned.

The dilapidated appearance of this property and the unknown extent of contamination had become an impediment to the revitalization efforts in the community. In fact, a proposed development on an adjacent property was put on hold by the lender and investors until the Eagle Point Garage structure could be removed and the extent and magnitude of the environmental impacts could be determined. DEQ held several meetings with city officials and the property owner in an attempt to find a solution to this community-wide problem. A member of the regional Governor's Solutions Team also expressed an interest in seeing this site cleaned up and reused as a component of the Comprehensive Land Use Plan for the city.

With the decline of the logging industry, the economic vitality of the city decreased significantly. As the city struggled to find ways to improve its economic plight and revitalize the community, it became clear that addressing the Eagle Point Garage site was essential to the success of its comprehensive land use plans.

Accomplishments

DEQ was able to document the fact that the owner was unable to pay for the investigation and the cleanup of this site. Once the "no ability to pay" determination was made, DEQ was able to utilize USTfields grant funds to assess the nature and extent of contamination on the property and to develop a risk-based corrective action plan for redevelopment of the site. The property owner leveraged private funds to demolish the building. Plans for reuse of the site are now being discussed. One possible reuse scenario is as a parking lot for the 6,000-square-foot commercial business project across the street. The city's recent approval of the adjacent property development is contingent on finding off-street parking. Another benefit gained by the removal of the Eagle Point Garage is that now a neighboring building can be accessed for upgrading. This project turned an unmarketable piece of property into a piece of commercial land that is now on the market for over $150,000.

Challenges

While much has been accomplished in Eagle Point, there were a number of challenges associated with this project. The remote location made it difficult to conduct site inspections, coordinate site activity, and meet with all the involved parties. Uncertainty associated with the owner's ability to pay for the investigation and cleanup was a key issue that had to be resolved before expending grant funds on the project. The last challenge was to find a way to remove the existing building. DEQ was fortunate to find a local contractor who would do the building removal work for the salvageable materials.

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For more information about Oregon's USTfields pilot, visit www.deq.state.or.us

For more information about other EPA USTfields pilots, visit EPA's Website at www.epa.gov/oust/ustfield

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