



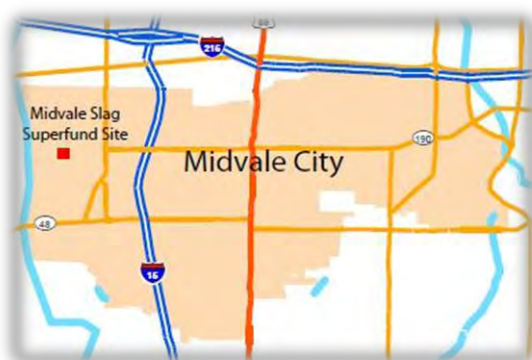
FROM MIDVALE SLAG TO BINGHAM JUNCTION: A SUPERFUND SUCCESS STORY

Office of Site Remediation Enforcement

Successful projects to cleanup and reuse contaminated sites often require innovative and dynamic technical solutions in conjunction with creative uses of enforcement mechanisms. This case study explores how an EPA Region 8 project team adjusted their usual emphasis on enforcement and cleanup to include consideration of future redevelopment at the Midvale Slag Superfund site in Midvale City, Utah. The team developed innovative enforcement mechanisms, in partnership with Midvale City, the site's owner, and other stakeholders, to foster cleanup and reuse of the site.

These collaborative efforts included the development of a consent decree which provided the site's owner with special account money to clean up the site, and the implementation of Institutional Control Process Plans, which clarified long-term stewardship roles and helped ensure future site protectiveness. These enforcement mechanisms were instrumental in transforming a site with mountains of slag into Bingham Junction, an emerging redevelopment project that has transformed Midvale City. Bingham Junction is now an environmentally protective and thriving retail, commercial, and transportation center with new residential units and recreational space. For more detailed information on the cleanup and mixed-use revitalization at Midvale Slag, see Region 8's case study, linked at the end of this document.

MIDVALE SLAG: A POTENTIAL FOR REDEVELOPMENT



The Midvale Slag site is adjacent to the Jordan River and directly west of downtown Midvale City.

The Midvale Slag site is located in Midvale City, Utah, adjacent to the City's downtown and just twelve miles south of Salt Lake City. The 446-acre site sits directly north of another Superfund site, the Sharon Steel site. The Midvale Slag site operated as a smelting facility from 1871 through 1958, during which time five smelters on the property processed lead and copper ore. Smelting operations and on-site disposal of untreated hazardous substances resulted in the contamination of soil and groundwater. As a result of this contamination, EPA listed the site on the National Priorities List (NPL) in 1991. The site includes two operable units (OUs) representing discrete areas of cleanup. The first operating unit is partially located in a residential area. In the 1990s, Midvale City experienced rapid population growth and economic expansion. The Midvale Slag site was one of the only significant pieces of undeveloped land in the community. The

potential redevelopment of the site presented an opportunity for Midvale City, local citizens, and Littleton, Inc., the site's owner, to clean up the site and return it to productive use.

BUILDING RELATIONSHIPS WITH MIDVALE CITY AND LITTLETON, INC.

Tensions between EPA Region 8, the Utah Department of Environmental Quality (DEQ), and Midvale City regarding the cleanup at the nearby Sharon Steel Superfund site posed an obstacle to redevelopment at the Midvale Slag site's second operable unit. Midvale City and Littleton were concerned that EPA would take the same cleanup approach at the Midvale Slag site as was taken at the Sharon Steel site. The Utah DEQ and EPA addressed the Sharon Steel site cleanup by placing an impermeable cap over hazardous tailings, which limited the site's reuse potential. The site was deleted from the NPL in 2004, but no redevelopment has taken place. "There was a lot of resentment and anger over the fact that the Sharon Steel site had been capped, and at that point, there wasn't any vision for how [the site] could be reused," said EPA Project Manager Fran Costanzi. Cleanup activities at the Sharon Steel site took place between 1989 and 1999, before reuse and redevelopment became an important part of the Agency's remedial action objectives for a site. Also, the community's priorities and redevelopment interests were not incorporated into the Sharon Steel site's Records of Decision (RODs), and Midvale City and Littleton were wary that EPA would similarly not make these concerns a high priority during the Midvale Slag site cleanup process.



Smelter facilities processed ore on the site for over 80 years.

In light of the issues raised by the Sharon Steel site cleanup and the fact that frequent staff turnover prevented a cohesive direction from being formed on site reuse goals and responsibilities, EPA tried a new approach. First, EPA focused on building stronger relationships with Midvale City and Littleton. The situation improved significantly when Fran Costanzi became the Remedial Project Manager (RPM) for the site. "Fran was here at least one to two days a week," said Midvale City Mayor JoAnn Seghini, explaining that the "stability of a very good project director was critical." Moreover, EPA Region 8 attorneys Karen Kellen and Joni Teter joined the project with open minds and a willingness to collaborate with the City. "Karen can write as an attorney and write so that we can understand it," remarked Development Site Coordinator Ray Limb.

The parties also collaboratively searched for innovative ways to address a difficult funding issue. EPA's enforcement efforts at both the Midvale Slag and Sharon Steel sites had led to a series of settlements with most of

Anticipating Reuse: Birth of Bingham Junction

In late 1999, EPA awarded a Superfund redevelopment pilot project to Midvale City. The project required extensive community engagement and a detailed assessment of community priorities, local economic conditions, regional market trends, and an environmental review of the site. The project allowed Midvale City to identify future land use and create the Bingham Junction Master Plan in 2000, which outlined opportunities for many types of land uses at the site.

the responsible parties. The money from these settlements funded special accounts, which could only be used for cleanup at these two sites. Littleton had not settled with EPA and was potentially liable for the significant expenses associated with cleaning up the Midvale slag site. The money in the special accounts had been reduced after the Sharon Steel cleanup, and could not cover the estimated \$30-40 million cleanup cost at Midvale Slag. Through the dedication and hard work of EPA Region 8 and a willingness on the part of Littleton to take responsibility for the cleanup, the parties developed a solution that incorporated the Agency's enforcement priorities and set the groundwork for future site reuse and revitalization.

REDEVELOPMENT THROUGH INNOVATIVE ENFORCEMENT: THE 2004 CONSENT DECREE

EPA field investigations showed that the cleanup decision could address much of the on-site waste with specific redevelopment interests in mind, so Midvale City rezoned the site to allow for a variety of future uses. The 2002 ROD outlined the remedy for the site's second operable unit and included redevelopment as an "additional" remedial objective. EPA entered into critical negotiations with Littleton and Midvale City in 2003 to develop a consent decree for the second operable unit.

EPA was initially concerned with the draft consent decree provision which would provide Littleton with special account money containing settlement funds from other PRPs to clean up the site. The consent decree, however, included several provisions mutually agreed upon by EPA and Littleton, which alleviated the Agency's concerns. The requirements imposed on the company included the following:

- Spending controls that placed an emphasis on site cleanup by ensuring that no settlement money could be used for development enhancements.
- Project milestones which provided EPA the ability to recognize whether Littleton was meeting its cleanup obligations in a timely manner.
- Incremental reimbursement with settlement money from the site's special account for cleanup activity paid by the company.

Littleton could, at its own expense, implement redevelopment-oriented improvements simultaneously with the remediation to minimize the cost of future work. The company greatly appreciated this approach and recognized it as a way to take responsibility for the cleanup while moving redevelopment forward.

Under the terms of the consent decree, Littleton designed the remedy and cleaned up the site's smelter waste. By conducting the cleanup, Littleton was able to perform the required work at a substantially lower cost than EPA could, and integrated the groundwork for redevelopment as



Midvale City rezoned the site with specific redevelopment interests in mind, including commercial retail.

described under the Bingham Junction Master Plan. “Littleton could combine steps,” explained EPA Region 8 attorney Karen Kellen. By designing a long-term cleanup with the site’s anticipated reuse in mind, Littleton was able to lay the groundwork for the site’s future expansion by:

- Coordinating installation of utility corridors to minimize disturbances to the site’s soils and smelter wastes;
- Grading and capping smelter wastes in place as roadbed material;
- Reusing uncontaminated site materials as cover fill for the site’s remedy; and
- Funding ground compaction enhancements to reduce the financial burden of future development.

EPA also waived its property lien rights on the site for unrecovered response costs and provided a covenant not to sue to all signatories to the consent decree, which included Littleton and Midvale City. A covenant not to sue is a provision promising that EPA will not bring any future legal actions against parties to the agreement regarding the site and the specific matters named. Moreover, the covenant extended to future site owners, and provided that parties would not be liable under the Superfund law for future activities as long as they exercised due care (such as complying with the site’s institutional controls).

The consent decree also included a section addressing future owners of the site who meet the requirements of the bona fide prospective purchaser (BFPP) liability protection under Superfund. “The BFPP section in the consent decree made it easier for future site owners to comply with the

“To work best, institutional controls need to be part of a remedy. In Midvale City, we were fortunate enough to have a very engaged locality as our partner.”

- EPA Project Manager Fran Costanzi

BFPP requirements,” said Karen Kellen. “Subsequent site owners need not request any assurances because they know they are protected from liability.” By simply including a section that addressed the concerns of future owners, the consent decree facilitated sale and redevelopment by eliminating concerns of unknown liability that often accompanies the perceived stigma of Superfund sites.

LONG-TERM THINKING: CREATING EFFECTIVE INSTITUTIONAL CONTROLS

The cleanup plan for the site’s second operable unit, completed in 2002, emphasized the importance of institutional controls at the Midvale Slag Superfund site. Often known as land use restrictions, institutional controls are non-engineered instruments, such as administrative and legal controls, that help to minimize the potential for exposure to contamination and/or protect the integrity of a cleanup. Institutional controls are vital to ensuring the protectiveness of the site’s cleanup over the long term. Midvale City assumed responsibility for the implementation and enforcement of the site’s institutional controls, helping to ensure long-term stewardship and protectiveness of the site. EPA worked closely with the City to resolve institutional control issues at the site.

EPA and Midvale City collaborated to develop two Institutional Control Process Plans, which include local zoning, building, road and excavation permits, engineering design guidelines, residential requirements, vapor mitigation controls for portions of the site, and controls on water management and groundwater use.

To implement and oversee these institutional control plans and establish long-term stewardship principles, Midvale City's Department of Community and Economic Development created a full-time position to assist current and prospective property owners at the site by providing informative materials, answering questions, and ensuring that all development activities meet city ordinances. According to Mayor JoAnn Seghini, this position is "absolutely necessary" because "builders are cognizant of what they can and can't do. Builders have someone they can go to." Midvale City's role in implementing the institutional controls is critical to the long-term redevelopment taking place at Bingham Junction. The city's willingness to step in early and take responsibility for long-term stewardship has made it very easy to market the project. New developers now immediately know that institutional controls are a necessary part of any building permits, and this eliminates uncertainty in the development process.

CLARIFYING LONG-TERM STEWARDSHIP ROLES

The Institutional Control Process Plans identified the following roles and responsibilities:

MIDVALE CITY

- Updating and managing local land use tools and ordinances
- Reviewing site plans
- Conducting site development inspections
- Verifying private covenants and deed restrictions for residences

EPA AND UDEQ

- Groundwater monitoring
- Oversight of some residential development

LANDOWNERS

- Compliance with the Institutional Control Process Plans
- Disposing of any excavated contaminated site soils in appropriate facilities
- Ensuring that covenants and deed restrictions are conveyed and communicated during property transactions

To facilitate coordination, Midvale City, EPA, and Utah's DEQ hold weekly coordination calls to discuss the progress of the Bingham Junction redevelopment and cleanup. Moreover, Midvale City has authority to make on-the-spot decisions to accept alternative redevelopment designs that comport with the remedy. This allows the city to be flexible as to redevelopment while still incorporating effective institutional controls.

With continued productive coordination, the surface area of the Midvale Slag site is poised to be deleted from the NPL. Construction of the final riverbank stabilization remedy along 7,000 feet of the adjacent Jordan River and installation of the post-cleanup groundwater monitoring network was completed in 2011. Groundwater and surface monitoring, as well as five-year reviews, will ensure that human health and the environment are protected for current and future site users.

REVITALIZATION AT BINGHAM JUNCTION



The Bingham Junction development at Midvale City is an example of how collaborative relationships result in new economic opportunities and community-wide benefits. According to Mayor JoAnn Seghini, the site's redevelopment has had a ripple effect on the community, since

BINGHAM JUNCTION TODAY: BENEFITS OF REUSE

What was once a site with mountains of slag is now an emerging redevelopment project that has transformed Midvale City. While only about 20 percent of the site is redeveloped, it has infused Midvale's economy with:

- Approximately 600 new jobs
- \$1.5 million in annual property tax revenues
- A \$131 million increase in the value of the site property

Specifically, this mixed-use redevelopment has so far taken the form of:

- A 95,000-square-foot grocery store
- 175,000 square feet of Gold and Silver LEED-certified office space (regional headquarters of FLSmidth, an international mineral and cement industry service provider)
- Over 1,000 completed residential units, including condominiums, apartments, and townhomes
- A Utah Transit Authority (UTA) light rail station, which serves the rapidly growing southwest region of the Salt Lake Valley
- Riverwalk Park, an 18-acre park with local and regional trails
- 20 acres of open space with a wetland mitigation area

it has provided “an advantage to everyone in the county, not just the people nearby.” EPA strongly supports this collaborative approach to redevelopment, and also places a high priority on supporting the cleanup and return of formerly contaminated sites to productive and beneficial reuse.

EPA was able to satisfy its enforcement priorities while coordinating with the goals and interests of the community, site owners, and other stakeholders so as not to serve as an impediment to the reuse of the site. Enforcement tools such as the 2004 consent decree with Littleton and the Superfund program’s remedial process provided detailed site information to inform redevelopment. By learning lessons from the failure to anticipate long-term stewardship and site redevelopment at the Sharon Steel site, the Midvale Slag site was able to succeed and now serves as a shining example of how EPA’s enforcement tools can play an important role in revitalizing contaminated properties.



A Utah Transit Authority light rail station opened in 2011 and is another example of mixed-use redevelopment at the site.

EPA WEBSITE RESOURCES

EPA has a number of website resources with more information on the Midvale Slag site and redevelopment, and on its cleanup enforcement program, more generally. The EPA Region 8 case study on Midvale Slag, entitled “Cleanup and Mixed-Use Revitalization on the Wasatch Front,” can be found at <http://epa.gov/superfund/programs/recycle/pdf/midvale-2011-case-study.pdf>. The Region 8 site progress profile, which includes site decision documents, is at <http://www.epa.gov/region8/superfund/ut/midvale>. EPA’s cleanup enforcement website, which includes links to information on the landowner liability protections (including BFPP), is found at <http://www.epa.gov/compliance/cleanup/revitalization/index.html>. Finally, the EPA Superfund Redevelopment Initiative website is at <http://epa.gov/superfund/programs/recycle/>. This site includes profiles of other site reuse success stories.