



Murray Smelter Site

LOCATION: Murray City, Utah

SIZE: 142 acres

FEATURES: rail service, central location, medical facility

OWNER: Intermountain Health Care (IHC) is majority owner

CURRENT USE: Mixed-use

PAST USE: Lead smelter site

CONTAMINANTS: Lead, arsenic

TOTAL ACTUAL COST: American Smelting and Refining Company financed majority of remediation (no specific dollar amount)

TIMELINE

- 1872 Germania Smelter begins operations
- 1899 American Smelting and Refining Company purchases Germania Smelter
- 1902 Murray Smelter begins operations
- 1949 Murray Smelter closes
- 1994 EPA proposal to place Murray Smelter Site on National Priorities List
- 2000 Intermountain Health Care purchases majority of property

HISTORY

The City of Murray began as an agricultural community. Livestock and grains were grown for the population of the western territories. But due to the plentiful water and its location in a central valley, Murray city was able to change into an industrial community. The construction of the first smelter in 1869 signified the city's entry into the industrial market. Murray City, as well as the smelter industry, continued to prosper until the close of the Murray Smelter in 1949.

There were two smelters, Germania Smelter and Murray Smelter that used to be present on the site itself. In 1994, the EPA made a proposal to place the property on the National Priorities List, but the listing was never finalized.

TOPOGRAPHY

The property is located 6 miles south off Salt Lake City, Utah. The southern portion of the site is flat while the northern part is relatively steep. There are railroad tracks to the west of the site, and Little Cottonwood Creek is to the north. Interstate 15 and State Street, a main North-South arterial, are also nearby.



Photo courtesy of Utah State Historical Society



Picture courtesy of Google Maps

MARKET CONDITIONS

The redevelopment plans for the site include the construction of a medical facility that measures 1.2 million in square feet. Aside from the direct health benefits that this proposed medical facility will bring, the hospital will also provide new jobs and additional tax revenues.

Before remediation was conducted, the surrounding area produced \$50,000 in sales tax revenue per year. City officials are now projecting tax revenues of \$1.4 million annually. Property tax revenue for Salt Lake City has also risen since clean-up was performed. There has also been a significant increase in property values for land not only on the site, but also within a half mile

distance of the former Murray Smelter site.

The membership warehouse club currently on the site has provided 237 new jobs. The jobs have contributed \$3.8 million in income since 2003. The presence of the light-rail facility has improved access to Salt Lake City and it has also reduced congestion in the surrounding community.

SITE ASSEMBLY AND CONTROL

The American Smelting and Refining Company (ASARCO) was the original owner of the smelter facilities. Intermountain Health Care (IHC) purchased approximately 100 acres of the site in 2000. The Utah Transit Authority owns a park-and-ride facility that is located on the western portion of the site. Currently, a major retail membership warehouse club has leased a portion of the property from IHC and is in operation. There is also a distribution facility operating on the site.

Institutional Controls were also established. The Institutional Controls prevent the use of any existing wells and the construction of new wells on the site. Residential use and contact intensive industrial use are also prohibited within the former smelter operating areas.

ENVIRONMENTAL PROBLEMS

ASARCO, which was the owner of the smelter facilities, assumed responsibility for the clean-up of the site. The property was heavily contaminated with lead, arsenic and other heavy metals. The clean-up involved excavating and disposing of soils that contained significant amounts of contaminants. Less contaminated soil was encapsulated under newly constructed roadway. Monitoring wells were installed to ensure that the contaminants present in the ground and surface water would decrease with time. Two smoke stacks also had to be demolished. Majority of the clean-up was completed in 2001.

SOCIAL/COMMUNITY INFRASTRUCTURE

The Murray Smelter Working Group was formed in 1996. It was composed of the Utah Department of Environmental Quality, EPA Region 8, ASARCO, Murray City and property and business owners on the site. The group was responsible for developing a remediation and redevelopment plan that would be supported by all of the stakeholders. Although community meetings and information sessions were not heavily attended by the public, City representatives were very involved in the project.

PHYSICAL INFRASTRUCTURE

There was already existing infrastructure at the site since after the smelting facilities ceased operations, the site eventually became home to an asphalt plant, a pipe distributor, a concrete manufacturer and two trailer parks. This pre-existing infrastructure sped up development and reduced the need for public investment.

The city also constructed a new north-south connector road within the property not only to improve access to the on-site park-and-ride facility, but also to ease traffic congestion in the city.

COSTS & ECONOMIC INFRASTRUCTURE

The EPA provided a \$176,000 brownfield grant to the City of Murray. ASARCO paid for the majority of the remediation costs. ASARCO also agreed to compensate Murray City for maintenance and operation costs at the site for five years.

CURRENT STATUS AND LESSONS LEARNED

The property is currently home to a retail membership warehouse club that occupies 148,000 square feet; the Utah Transit Authority is also operating a Transit Express, a two-line light rail system, that provides easier access to Salt Lake City; also present at the property is the Intermountain Medical Center, which opened in 2007. This hospital serves as the main referral center for several surrounding states and health care institutions.

One of the factors that contributed to this successful project was the active and willing participation of ASARCO, the potentially responsible party. ASARCO did more than what it was required to do, and this greatly helped in the redevelopment of the property.



Completed by Ronald Papa, Summer '08

SOURCES

Lavelle, Bonita and Louise Smart. "Murray Smelter Site: An Example of Proactive, Creative Problem Solving at a Superfund Site." June 1998.

Environmental Protection Agency. "Redevelopment of the Murray Smelter Superfund Site." February 4, 2004.

Environmental Protection Agency. "Murray Smelter Superfund Site." December 2006.

Utah Department of Environmental Quality and United States Environmental Protection Agency. "First Five-Year Review Report for Former Murray Smelter Superfund Site." September 2003.

Environmental Protection Agency. "EPA Superfund Record of Decision: Murray Smelter." 1998.

Environmental Protection Agency. "Murray City, Utah: Responding to Site Remediation and Reuse Challenges, Finding New Answers."