

Superfund Sites Work for Communities:

How Superfund Redevelopment in EPA Region 7 Is Making a Difference in Communities



Figure 1. Strother Field Industrial Park site (Kansas)

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Cover page photos, clockwise from top left: Chemical Commodities, Inc. site (Kansas), Strother Field Industrial Park site (Kansas), Chemical Commodities, Inc. site (Kansas), Kansas City Structural Steel site (Kansas)

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Preface

Every day, EPA's Superfund program makes a visible difference in communities nationwide. The revitalization of communities affected by contaminated lands is a key part of Superfund's mission, delivering significant benefits one community at a time, all across the country. Through EPA's Superfund Redevelopment Initiative (SRI), the Agency contributes to the economic vitality of these communities by supporting the return of sites to productive use. These regional profiles highlight these community-led efforts in action, as EPA launches a new era of partnerships and works toward a sustainable future.

Introduction

EPA Region 7 includes four states – Iowa, Kansas, Missouri, Nebraska – and nine tribal nations. This area is widely known for its wide-open spaces, deep ties to farming and agricultural industry, ecological and recreational resources, and large military installations. This part of the country includes established urban areas, small towns, farmland, ranches and public lands. Urban and rural communities across Region 7 are focusing on the cleanup and revitalization of old industrial sites, recognizing that these areas offer substantial opportunities for new development and innovation. Today, states and communities are working diligently to find new uses for these areas, including Superfund sites. The Superfund program in EPA Region 7 is proud to play a role in these efforts.

The cleanup and reuse of Superfund sites often restores value to site properties and surrounding communities that have been negatively affected by contamination. Site reuse can revitalize a local economy with jobs, new businesses, tax revenues and local spending.

Through programs like the Superfund Redevelopment Initiative (SRI), EPA Region 7 helps communities reclaim cleaned up Superfund sites. Factoring in future use of Superfund sites into the cleanup process promotes their safe reuse. In addition, EPA Region 7 works closely with state and local officials to remove barriers that have kept many Superfund sites underused. EPA Region 7 works to ensure that businesses on properties being cleaned up under Superfund can continue operating in a manner that protects both human health and the environment while site investigations and cleanup work continue. This continuity enables these businesses to remain as a source of jobs for communities.

Superfund sites across Region 7 are now the locations of industrial parks, shopping centers and neighborhoods. Many sites continue to support industrial, commercial and agricultural operations such as manufacturing facilities, grain storage facilities and crop cultivation. Others are now home to nature preserves, parks and recreation facilities. The on-site businesses and organizations at current and former Region 7 Superfund sites provide an estimated 6,425 jobs and contribute an estimated \$334 million in annual employment income for Region 7 residents. Cleaned-up sites in use in Region 7 generate over \$1 million in annual property tax revenues for local governments.¹

This profile looks at how reuse activities at Superfund sites make a difference in communities in Region 7. It updates the information presented in the 2014 profile. In particular, it describes some of the beneficial effects of reuse and continued use of current and former Superfund sites. The profile also describes the land values and property taxes associated with Superfund sites returned to use following cleanup and sites that have remained in use throughout the cleanup process. EPA updates these profiles approximately every two years. The beneficial effects may increase or decrease from previous profiles due to changes in the number of sites in reuse or continued use, changes in the number of on-site businesses, changes in data availability, and changes in individual-level business or property value data. Figures presented represent only a subset of all Superfund sites in reuse or continued use in Region 7.

Region 7 Sites in Reuse and in Continued Use: Business and Job Highlights

Businesses Identified

121

Estimated Annual Sales

\$1.6 billion

Number of People Employed

6,425

Total Annual Employee Income

\$334 million



Figure 2. Ark Distributing (Budweiser) at Strother Field Industrial Park site (Kansas)

¹ Business and property value tax figures represent only a subset of the beneficial effects of sites in reuse or continued use in Region 7. There are 21 Superfund sites in reuse or continued use in Region 7 for which EPA does not have business data, including six federal facilities on the Superfund National Priorities List (NPL). Not all sites in reuse involve an on-site business or other land use that would employ people. Several sites without businesses have beneficial effects that are not easily quantified, such as properties providing ecological or recreational benefits (parks, wetlands, ecological habitat, open space, etc.). There are 31 sites in reuse or continued use in Region 7 for which EPA does not have property value or tax data, including six NPL federal facilities.

Support for Superfund Reuse

EPA Region 7 is committed to making a visible difference in communities through the cleanup and reuse of Superfund sites. In addition to protecting human health and the environment through the Superfund program, Region 7 partners with stakeholders to encourage reuse opportunities at Superfund sites. Region 7 helps communities and cleanup managers consider reuse during cleanup planning and evaluate remedies already in place to ensure appropriate reuse at cleaned-up sites. In addition, EPA participates in partnerships with communities and encourages opportunities to support Superfund redevelopment projects that emphasize environmental and economic sustainability.

Specific reuse support efforts in EPA Region 7 include:

- Identifying and evaluating local land use priorities to align with site cleanup plans through the reuse planning process.
- Facilitating cleanup and reuse discussions to help resolve key issues between parties interested in site redevelopment.
- Supporting targeted projects intended to help Region 7 communities and EPA find the right tools to move site reuse forward.
- Making efforts to help address communities' and developers' liability, safety and reuse concerns through development of educational materials, comfort letters, developer agreements and environmental status reports that provide information about the appropriate use of sites.
- Supporting partnerships with groups committed to putting Superfund sites back into use such as Monarch Watch, Pollinator Partnership and Monarch Joint Venture.

All of these efforts have helped build expertise across the Region, making it easier to consider future use of Superfund sites prior to cleanup and easier to identify opportunities for removing reuse barriers. These efforts also help other communities, state agencies, potentially responsible parties and developers better understand potential future uses for Superfund sites. This helps stakeholders engage early in the cleanup process, ensuring that Superfund sites are restored as productive assets for communities. Most importantly, these efforts lead to significant returns for communities, including jobs, annual income and tax revenues.

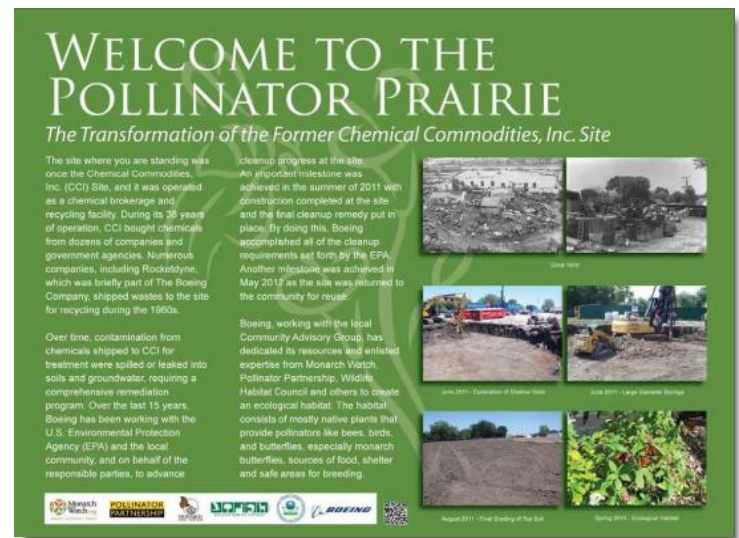


Figure 3. Partnerships helped create the Pollinator Prairie at the Chemical Commodities, Inc. site (Kansas)
Source: http://pollinator.org/pollinator_prairie.htm



Figure 4. EPA Ready for Reuse (RfR) Determination for the White Farm Equipment Co. Dump site (Iowa)

Superfund Reuse: The Big Picture

EPA takes immediate action at contaminated sites when warranted through short-term cleanup actions, also called removal actions. Then EPA refers sites warranting long-term cleanup to its remedial program or to state programs. The National Priorities List (NPL) is a list of the most serious sites EPA targets for further investigation and possible remediation through the Superfund program. Once EPA places a site on the NPL, the Agency studies the type and amount of contamination at the site, identifies technologies that could address the contamination, and evaluates the alternative cleanup approaches. EPA then proposes a cleanup plan, and after collecting public input, it issues a final cleanup plan. EPA then cleans up the site or oversees the cleanup activities.² EPA has placed over 90 sites in Region 7 on the NPL.

Whenever possible, EPA seeks to integrate reuse priorities into site cleanup plans. In Region 7, 40 NPL sites and three non-NPL Superfund sites are in use. These sites have either new uses in place or uses that remain in place from before cleanup.³ Many of these sites have been redeveloped for commercial, industrial and public service purposes. Others have been redeveloped for residential, recreational, ecological or agricultural purposes. Businesses and other organizations also use all or parts of other sites for storage or vehicle parking. In addition, redevelopment of some Superfund sites in Region 7 has helped spark revitalization of nearby underutilized industrial land. The following sections take a closer look at the beneficial effects of businesses operating on current and former Superfund sites.

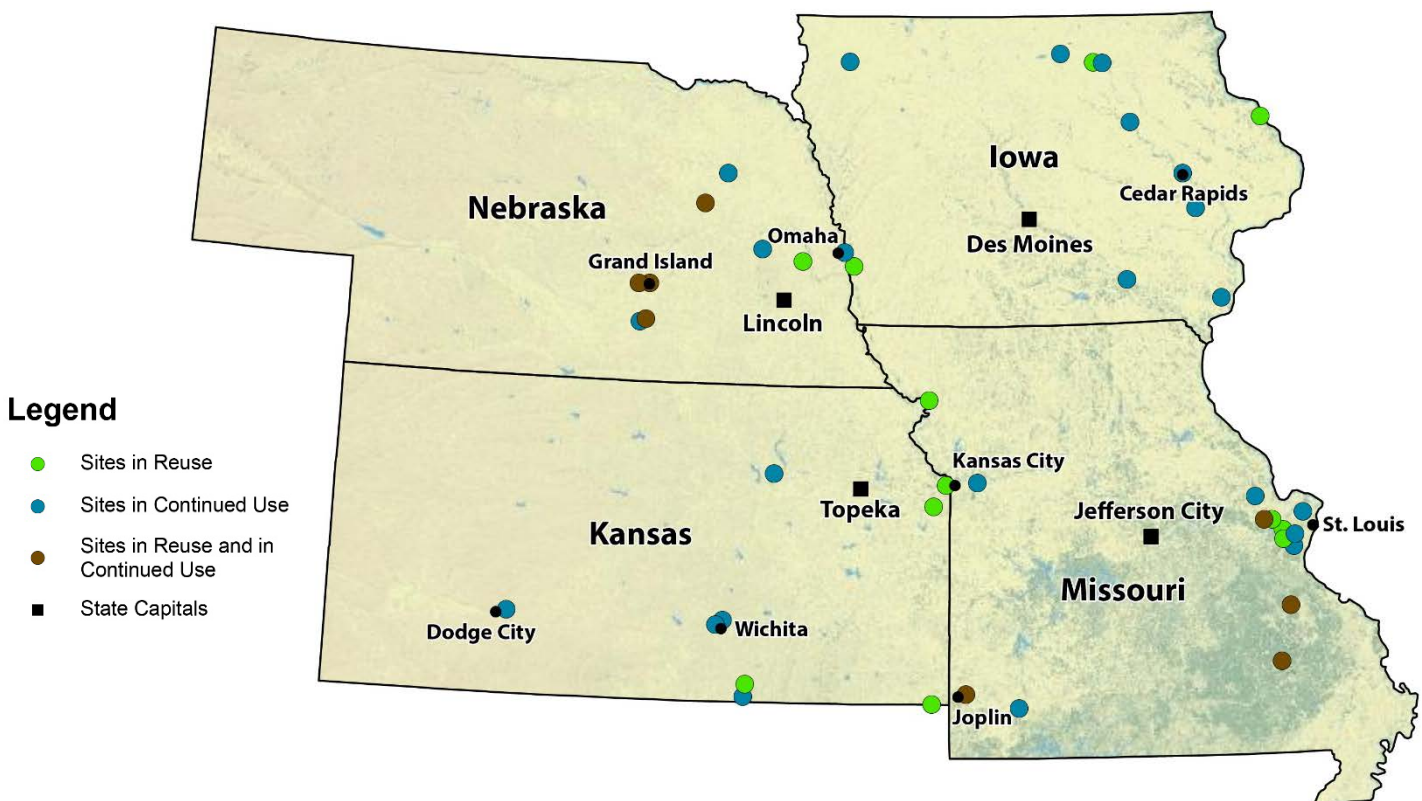


Figure 5. Map of sites in reuse and in continued use in Region 7

² Removal actions may be taken at sites on and not on the NPL.

³ One of these non-NPL Superfund sites is a proposed NPL site. EPA proposed the site for the NPL in 1992. EPA provides oversight of the site's cleanup.

Beneficial Effects of Superfund Site Reuse in Region 7

Businesses and Jobs

EPA has collected economic data for over 120 businesses, government agencies and civic organizations operating on 21 NPL sites and one non-NPL Superfund site in reuse and in continued use in Region 7.⁴ See the State Reuse Profiles (pages 12-15) for each Region 7 state's reuse details. Businesses and organizations located on these sites fall within several different sectors, including wholesale and retail trade, construction, roofing, heating and cooling and landscape contracting, manufacturing, restaurants, automotive repair, warehousing, educational services and national security.



Figure 6. Farm machinery

Businesses, facilities and organizations at these sites include the well-known farm machinery manufacturer, John Deere; aircraft parts manufacturer, F.M.I., Inc.; commercial and industrial equipment manufacturer, GE Engine Services, Inc.; irrigation equipment manufacturer, Lindsay Corporation; and medical instrument manufacturer, Covidian LP.

The businesses and organizations located on these sites earn about \$1.6 billion in estimated annual sales and employ an estimated 6,425 people, earning an estimated \$334 million in annual employment income. This income injects money into local economies and generates revenue through personal state income taxes. These businesses also help local economies through direct purchases of local supplies and services. On-site businesses that produce retail sales and services also generate tax revenues through the collection of sales taxes, which support state and local governments. In addition, most businesses operating on sites in Region 7 generate tax revenues through payment of state corporate or related taxes. More detailed information is presented in Table 1.⁵

Table 1. Site and business information for Region 7 sites in reuse and continued use (2015)

	Sites	Sites with Businesses ^a	Businesses ^b	Total Annual Sales ^c	Total Employees	Total Annual Employee Income
In Reuse	12	5	37	\$150 million	1,573	\$63 million
In Continued Use	23	12	40	\$1.3 billion	2,341	\$146 million
In Reuse and in Continued Use	8	5	44	\$199 million	2,511	\$125 million
Total	43	22^d	121	\$1.6 billion	6,425	\$334 million

^a Also includes other organizations such as government agencies, nonprofit organizations and civic institutions.
^b Business information is not available for all businesses on all Superfund sites in reuse or continued use.
^c For information on the collection of businesses, jobs and sales data, see the "Sources" section of this profile.
^d See footnote 1, page 3.

⁴ See footnote 1, page 3.

⁵ For additional information on the collection of businesses, jobs and sales data, see the "Sources" section of this profile.

Sites in Reuse and Continued Use: A Closer Look

In Reuse: There is a new land use or uses on all or part of a site. This is because either the land use has changed (e.g., from industrial use to commercial use) or the site is now in use after being vacant.

In Continued Use: Historical uses at a site remain active; these uses were in place when the Superfund process started at the site.

In Reuse and in Continued Use: Part of a site is in reuse and part of the site is in continued use.

Region 7 Site Examples

- ***In Reuse:*** Strother Field Industrial Park (Kansas) – the site of a military facility now supports several commercial and industrial businesses.
- ***In Continued Use:*** Valley Park TCE (Missouri) – the carefully planned cleanup allowed the continued residential, commercial and industrial use of the site. Today, over 50 businesses operate on site.
- ***In Reuse and in Continued Use:*** Oronogo-Duenweg Mining Belt (Missouri) – community members continue to use the site property for agricultural and residential purposes; following cleanup, the site is home to a new scrap metal recycling facility and a highway bypass.

Property Values and Property Tax Revenues

Properties cleaned up under the Superfund program and returned to use may increase in value. This increased value can boost property tax revenues, which help pay for local government operations, public schools, transit systems and other public services.

Identifying increases in property values and property taxes following cleanup and reuse is challenging due to insufficient data on historical property values and the different timing of events at sites as well as the frequency and timing of property value assessments by local agencies. Likewise, there are many factors that affect property values, including external economic and neighborhood factors not related to a site's contamination or Superfund site status. It is also difficult to isolate the effects of Superfund cleanup and reuse using current property values.

However, these values give insight to the current value of Superfund properties and the potential loss in economic value if these properties were not cleaned up and available for reuse or continued use.

EPA has collected property value tax data for 12 Superfund sites in reuse and continued use in Region 7.⁶ These sites span 100 property parcels and 226 acres, and have a total property value of nearly \$48 million. In total, 11 of the 12 sites have both land and improvement property value details; the properties at these sites have a total land value of more than \$7 million and a total improvement value of more than \$32 million. All 12 of the Superfund sites have property tax details.⁷ Properties at these sites generate a combined \$1 million in property taxes annually.

Region 7 Sites in Reuse: Property Value and Tax Highlights

Total Property Value
\$48 million

Total Annual Property Taxes
\$1 million

⁶ There are 31 additional sites in reuse or continued use in Region 7 for which EPA does not have property value or tax data, including six NPL federal facilities.

⁷ Property values consist of land value and the value of any improvements (buildings and infrastructure) placed on a property. When sites are reused, some or all of these improvements may be new or already in place. In some cases, the breakdown showing both the land value and improvement value is not always available; instead, only the total property value may be available.

Table 2. Property value and tax information for sites in reuse and continued use in Region 7^a

Total Land Value (11 sites) ^b	Total Improvement Value (11 sites) ^c	Total Property Value (12 sites)	Total Annual Property Taxes (12 sites)
\$7 million	\$32 million	\$48 million	\$1 million

^a Results are based on an EPA SRI effort in 2015 and 2016 that collected on-site property values and property taxes for a subset of Superfund sites. The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2013 to 2015. For additional information, see the “Sources” section of this profile.

^b Detailed (land and improvement) property value data as well as tax data was not available for every site in Region 7.

^c Land and improvement value for two of the sites is listed as \$0.00.

Recreational and Ecological Effects

In addition to serving as locations for commercial developments, retail centers and industrial facilities, some Region 7 sites in reuse provide recreational and ecological benefits. Recreational and ecological reuses help attract visitors and residents, and indirectly contribute to local economies. While benefits from some of these reuses, such as new hiking trails or a park, are highly visible, others – such as improved wetland health or increased biodiversity – may become more evident over the long term. Site cleanups also create, restore and protect ecosystems, both on site and off site, across Region 7.

The large, wide-open spaces at many Region 7 Superfund sites are well suited for a wide variety of recreational and ecological reuses following cleanup. For example, the Weldon Spring Quarry/Plant/Pits site in St. Charles County, Missouri, is home to the 150-acre Howell Prairie/Native Plant Education Garden. The area has been planted with over 80 species of native prairie grasses and wildflowers. At the Chemical Commodities site in Olathe, Kansas, the potentially responsible parties worked with EPA and other organizations to develop a walk-through educational natural habitat for Monarch butterflies and other pollinators on the site.



Figure 7. Chemical Commodities site (Kansas)

Why Are Wetlands Economically Important?

Wetlands provide a wide variety of benefits. The combination of shallow water, high levels of nutrients and primary productivity is ideal for the development of organisms that form the base of the food web and feed many species of fish, amphibians, shellfish and insects. Wetlands are extremely effective in removing pollutants from water and act as filters for future drinking water. Wetlands play a role in reducing the frequency and intensity of floods. They can store large amounts of carbon. They also provide recreational amenities.

These benefits also have economic value. Replacing wetlands' water treatment services with manmade facilities, for example, would be expensive. Worldwide, wetlands provide an estimated \$14.9 trillion in ecosystem services. To learn more, see EPA's [Economic Benefits of Wetlands fact sheet](#).

See also: [EPA's web page on the importance of wetlands](#).

See also: National Oceanic and Atmospheric Administration. [Carbon Sequestration 101](#).

At the Hastings Ground Water Contamination site in Hastings, Nebraska, the Rainwater Basin Wetland Management District maintains about 1,000 acres of the site as the McMurtry Waterfowl Production Area. The area provides protected habitat for various species of migrating birds, whitetail deer, burrowing owls and prairie dogs. In addition, the City of Hastings uses treated groundwater to irrigate the city park. In 1999, the restored Times Beach site near St. Louis, Missouri, opened as a state park. EPA deleted the site from the NPL in 2001. The park provides more than 7 miles of trails for hiking, biking and equestrian use. Visitors can see wildlife, including turkey, geese, deer and more than 40 species of birds. Picnic sites abound and a boat ramp provides easy access to the Meramec River.



Figure 8. Waterfowl

Benefits of Green Space at Superfund Sites

Open green spaces at Superfund sites can be used to support a wide range of reuse activities, including recreational, ecological and agricultural use. Careful planning can enable the integration of green spaces into site cleanup plans, resulting in the transformation of contaminated properties into valuable community assets. Green spaces are integral components of sustainable communities – they can help protect the environment and human health while providing other social and economic benefits. Parks, community gardens and other public green spaces create opportunities for people to gather, exercise and connect with nature.

The creation of green spaces at once-contaminated properties can serve to re-introduce ecosystems and biodiversity into urban and suburban landscapes by providing corridors for migrating species and preserving habitat. They can also help mitigate stormwater runoff problems by slowly absorbing and naturally filtering stormwater, resulting in improved water quality due to decreased runoff and erosion. Parks, natural areas and scenic landscapes also have great economic value – supporting regional economies through tourism, agriculture and other activities. Economic impacts of recreational activities can include outdoor recreation spending and reduced public costs related to healthcare and infrastructure. Protected green space can also increase the property values of nearby homes by providing amenities that draw people to live and work in the community.

Beneficial Effects from Alternative Energy Projects

Alternative energy projects can also produce a range of beneficial effects. They support construction and operations jobs; spur local investment for manufacturing and materials; create benefits for landowners in the form of land lease or right-of-way payments and lower energy costs; and reduce greenhouse gas emissions. They can also provide power for remediation projects at Superfund sites, which can lower cleanup costs and eliminate cleanup-related environmental impacts. For example, a 10-kilowatt wind turbine powers the groundwater treatment process at the Former Nebraska Ordnance Plant in Mead, Nebraska. The system generates enough electricity to power the system and provide surplus electricity, which is returned to the grid for consumer use. A renewable energy demonstration project at the Weldon Spring Quarry/Plant/Pits site in Missouri educates the public about the importance of renewable energy and shows alternative energy technology in action. A wind turbine supplements the power for the new renewable energy display inside the on-site interpretive center.



Figure 9. Installation of a wind turbine (Nebraska)

Reuse in Action

Chemical Commodities, Inc. – Pollinator Prairie

The Chemical Commodities, Inc. (CCI) Superfund site is located in Olathe, Kansas. Between 1951 and 1989, CCI operated as a chemical brokerage facility, receiving, storing and recycling chemicals on the site. Decades of chemical spills and leaks, facility fires and explosions resulted in the contamination of soil and groundwater. EPA added the site to the NPL in 1994 and selected a cleanup plan in 2005. Cleanup activities included removing and disposing of contaminated soil, putting land use controls in place, treating groundwater contamination, installing ventilation systems in 45 homes and demolishing contaminated structures. Residents and other community members formed the CCI Citizens Advisory Group, Inc. (the Group) in order to voice their concerns and opinions throughout the cleanup process.



Figure 10. Ribbon-cutting ceremony at the Chemical Commodities, Inc. site (Kansas)

Following completion of the cleanup in 2012, Kansas State University worked with the Group on a consensus-based reuse plan. With the reuse plan in place, the Group began working with Monarch Watch and the Pollinator Partnership. In September 2012, EPA, the Group, Monarch Watch, the Pollinator Partnership and other site stakeholders planted a garden habitat at the site. An October 2012 ribbon-cutting ceremony formally opened the site as the new Pollinator Prairie. Today, the site includes habitat for birds, bees and butterflies; a tagging station for migrating butterflies; and informational kiosks along a walking trail. The site provides a beautified landscape for the surrounding neighborhood and offers the local community an educational opportunity to learn the importance of pollination. In recognition of the Group's outstanding efforts to breathe new life into the once-contaminated site, EPA presented the group with the 2012 National Notable Achievement Award for Citizen Excellence in Community Involvement. Later that year, EPA also presented Boeing, one of the site's potentially responsible parties, with the Leading Environmentalism and Forwarding Sustainability Award (LEAFS), the first award of its kind in Region 7.

Strother Field Industrial Park – Thriving Commercial and Industrial Area

The 2-square-mile Strother Field Industrial Park Superfund site is located near Winfield and Arkansas City, Kansas. Until 1946, the site operated as a U.S. Army Air Corps basic training field, and later, for fighter training and as an aircraft construction and maintenance facility. Site activities, including the disposal of industrial wastes in two on-site landfills, resulted in soil and groundwater contamination. EPA added the site to the NPL in 1986. Cleanup activities included covering area soils with a concrete cap and groundwater treatment and monitoring.



Figure 11. Strother Field Industrial Park site (Kansas)

Following the completion of cleanup in 2008, EPA, the cities of Winfield and Arkansas City, and other site stakeholders came together to redevelop the site into a thriving industrial park. Today, over 25 industrial, commercial and service businesses operate on the site, contributing significantly to the local economy by providing employment opportunities, public services and tax revenue for the local community. The Strother Field Commission operates the on-site airfield as the local airport. Employing over 650 people, GE Engine Services is the largest employer on the site. The business provides overhaul, repair and support services for aircraft engines, components and accessories. Other businesses at the site include a Budweiser distribution facility, a plastics manufacturer, a flight instruction and charter flight business, and an automotive accessory manufacturer. Together, these on-site businesses employ nearly 1,300 people, contributing over \$53 million in estimated annual employment income to the local community. According to a 2010 Kansas Aviation Economic Impact Study, completed for the Kansas Department of Transportation Division of Aviation, the Strother Field Industrial Park has an indirect beneficial effect on the economy of \$1.5 billion.

Big River Mine Tailings/St. Joe Minerals Corp. – Flat River Industrial Park

The Big River Mine Tailings/St. Joe Minerals Corp. site is located in a former mining region known as the “Old Lead Belt,” about 70 miles south of St. Louis, Missouri. The site includes seven large areas of mine waste and covers about 110 square miles. In 1977, heavy rains caused about 50,000 cubic yards of mine tailings to slump into the Big River, contaminating surface water and soil over a large area. EPA added the site to the NPL in 1992.

In 2011, the site’s potentially responsible party, The Doe Run Resources Corporation, agreed to conduct a removal action to address lead contamination at the site. The removal action included regrading and covering the area with 12 inches of clean rock. Cooperation between EPA, The Doe Run Resources Corporation and property owners enabled the continued operation of site businesses at the Flat River Industrial Park throughout cleanup activities. Today, the Park Hills Industrial Park supports several industrial businesses. Piramal Glass manufactures glass containers used in the pharmaceutical and perfume industries. This business contributes over \$31 million in estimated annual employment income to the local community. Lee Mechanical Contractors, a mechanical construction contracting business, contributes over \$13 million in estimated annual employment income. Mocap, LLC, a plastics manufacturer, operates its headquarters on site, contributing an estimated \$4.4 million in annual income locally.



Figure 12. Workers at a glass manufacturing facility

Cherokee County/Baxter Springs – Ecological Protection and Restoration

Native grasses, streams and wildlife have replaced barren rock and gravel at the 115-square-mile Cherokee County Superfund site in Cherokee County, Kansas. One hundred years of lead and zinc mining in the area contaminated soil, surface water and groundwater. As a result, EPA added the site to the NPL in 1983. In 1993, after ensuring that area residents with private wells had safe drinking water, EPA consolidated surface mine wastes and buried them on site in abandoned shafts and mine pits. Remedial workers covered land with clean soil, diverted streams to avoid the stored wastes and planted the entire site with native vegetation. EPA has divided this mega-site into seven sub-sites that correspond to seven general mining locations, one of which is called the Baxter Springs sub-site.

Early in the cleanup process, stakeholders began to explore sustainable reuse options for the site through a reuse assessment and an alternative energy suitability study. The results of these studies indicated that activities such as cutting hay, grazing and wildlife habitat are compatible with the site’s remedy and have the potential to bring financial returns from otherwise unused lands. The alternative energy suitability study found that the site was best suited for utility-scale biomass production and also noted that, in the long term, restored site lands could play a role in carbon sequestration and conservation programs. To date, EPA cleanup has restored a 25-square-mile portion of the 115-square-mile site to its natural state as wildlife habitat and restoration efforts continue. Bermuda grass was planted in May 2010, enabling harvest of the first grass stand in September 2010. The Baxter Springs sub-site is drained by Willow Creek, Spring Branch and other small unnamed creeks. The State of Kansas has designated the lower portion of Spring Branch as a critical habitat for nine threatened or endangered species. Cleanup of this site is helping to preserve this delicate natural environment and its wildlife, and is reducing human health risks from contamination.



Figure 13. The cave salamander is an endangered species at the Cherokee County site (Kansas)

Image Source: [Cave Salamander \(Eurycea lucifuga\)](#)
by Greg Schechter/[CC BY 2.0](#)

State Reuse Profile: Iowa

EPA partners with the Iowa Department of Natural Resources to oversee the investigation and cleanup of Superfund sites in Iowa. Iowa has 11 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. EPA has collected economic data for seven businesses and organizations operating on four sites in reuse and continued use in Iowa. The businesses and organizations employ over 1,100 people and contribute an estimated \$72 million in annual employment income.

Table 3. Detailed site and business information for Superfund sites in reuse and continued use in Iowa (2015)

	Sites ^a	Sites with Businesses	Businesses ^b	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	3	1	3	\$16 million	95	\$4 million
In Continued Use	8	3	4	\$1 billion	1,019	\$68 million
In Reuse and in Continued Use	0	0	0	\$0	0	\$0
Total	11	4	7	\$1 billion	1,114	\$72 million

^a One site is a federal facility. Data for federal facilities are not included in calculations of total sites with businesses, businesses, sales, employees or income.

^b Business information is not available for all businesses on all Superfund sites in reuse or continued use.

Property Values and Property Tax Revenues

EPA has collected property value data for five Superfund sites in reuse and in continued use in Iowa. These sites span 37 property parcels and 25 acres and have a total property value of \$10.5 million. Together, the properties at these sites have a total land value of nearly \$2 million and a total improvement value of nearly \$9 million. All five sites have property tax details. Properties at these sites generate a combined \$341,000 in property taxes.

Table 4. Property value and tax information for sites in reuse and continued use in Iowa^a

Total Land Value (5 sites)	Total Improvement Value (5 sites)	Total Property Value (5 sites)	Total Annual Property Taxes (5 sites)
\$1.7 million	\$8.8 million	\$10.5 million	\$341,000

^a The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2013 to 2015.

Did You Know?

A pesticide manufacturing plant operated on the Aidex Corporation Superfund site in rural Mills County, Iowa, until 1980. Following successful cleanup efforts by EPA, businesses at the site currently generate \$3.8 million in annual employment income.



Figure 14. Aidex Corporation site (Iowa)

State Reuse Profile: Kansas

EPA partners with the Kansas Department of Health and Environment to oversee the investigation and cleanup of Superfund sites in Kansas. Kansas has nine Superfund sites with either new uses in place or uses that have remained in place since before cleanup. EPA has collected economic data for 40 businesses and organizations operating on five sites in reuse and continued use in Kansas. The businesses and organizations employ over 1,600 people and contribute an estimated \$73 million in annual employment income.

Table 5. Detailed site and business information for Superfund sites in reuse and continued use in Kansas (2015)

	Sites ^a	Sites with Businesses	Businesses ^b	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	4	2	28	\$127 million	1,368	\$55 million
In Continued Use	5	3	12	\$63 million	254	\$18 million
In Reuse and in Continued Use	0	0	0	\$0	0	\$0
Total	9	5	40	\$190 million	1,622	\$73 million

^a One site is a federal facility. Data for federal facilities are not included in calculations of total sites with businesses, businesses, sales, employees or income.

^b Business information is not available for all businesses on all Superfund sites in reuse or continued use.

Property Values and Property Tax Revenues

EPA has collected property value data for five Superfund sites in reuse and continued use in Kansas. These sites span 59 property parcels and 138 acres and have a total property value of nearly \$30 million. Four of the five sites have property value details. Together, properties at these sites have a total land value of \$5.5 million and a total improvement value of more than \$16 million. All five sites have property tax details. Properties at these sites generate a combined \$593,000 in property taxes.

Table 6. Property value and tax information for sites in reuse and continued use in Kansas^a

Total Land Value (4 sites)	Total Improvement Value (4 sites)	Total Property Value (5 sites)	Total Annual Property Taxes (5 sites)
\$5.5 million	\$16 million	\$30 million	\$593,000

^a The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2014 to 2015.

Did You Know?

The 32-acre 57th and North Broadway Streets site is located in the northern part of Wichita, Kansas. Today, an aerospace engineering and manufacturing company, motor sport part manufacturing company, and a race car parts store operate on the site. On-site businesses employ 206 people and generate over \$15 million in estimated annual income.



Figure 15. FMI manufactures aerospace materials at the site (Kansas)

State Reuse Profile: Missouri

EPA partners with the Missouri Department of Natural Resources to oversee the investigation and cleanup of Superfund sites in Missouri. Missouri has 14 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. EPA has collected economic data for 38 businesses and organizations operating on six sites in reuse and continued use in Missouri. The businesses and organizations employ over 1,700 people and contribute an estimated \$94 million in annual employment income.

Table 7. Detailed site and business information for Superfund sites in reuse and continued use in Missouri (2015)

	Sites ^a	Sites with Businesses	Businesses ^b	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	4	1	1	\$0	4	\$142,000 ^c
In Continued Use	6	3	20	\$197 million	666	\$39 million
In Reuse and in Continued Use	4	2	17	\$57 million	1,058	\$55 million
Total	14	6	38	\$254 million	1,728	\$94 million

^a Three sites are federal facilities. Data for federal facilities are not included in calculations of total sites with businesses, businesses, sales, employees or income.

^b Business information is not available for all businesses on all Superfund sites in reuse or continued use.

^c While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This could be attributed to a number of business conditions and/or data reporting. In addition, annual sales figures are not available (or applicable) for every organization that makes jobs data available.

Property Values and Property Tax Revenues

Property value and tax data were not available for sites in reuse or continued use in Missouri.

Did You Know?

The St. Louis Airport/Hazelwood Interim Storage/Futura Coatings Co. site covers parts of downtown St. Louis and areas near Lambert International Airport. Today, a wide variety of businesses operate on site, including manufacturing companies producing surgical materials, textiles and recyclable materials. Together, on-site businesses employ 563 people and generate over \$33 million in estimated annual income.



Figure 16. Textile Manufacturing

State Reuse Profile: Nebraska

EPA partners with the Nebraska Department of Environmental Quality to oversee the investigation and cleanup of Superfund sites in Nebraska. Nebraska has nine Superfund sites with either new uses in place or uses that have remained in place since before cleanup. EPA has collected economic data for 36 businesses and organizations operating on seven sites in reuse and continued use in Nebraska. The businesses and organizations employ nearly 2,000 people and contribute an estimated \$96 million in annual employment income.

Table 8. Detailed site and business information for Superfund sites in reuse and continued use in Nebraska (2015)

	Sites ^a	Sites with Businesses	Businesses ^b	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	1	1	5	\$7 million	106	\$5 million
In Continued Use	4	3	4	\$2 million	402	\$21 million ^c
In Reuse and in Continued Use	4	3	27	\$142 million	1,453	\$70 million
Total	9	7	36	\$151 million	1,961	\$96 million

^a One site is a federal facility. Data for federal facilities are not included in calculations of total sites with businesses, businesses, sales, employees or income.

^b Business information is not available for all businesses on all Superfund sites in reuse or continued use.

^c While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This could be attributed to a number of business conditions and/or data reporting. In addition, annual sales figures are not available (or applicable) for every organization that makes jobs data available.

Property Values and Property Tax Revenues

EPA has collected property value data for two Superfund sites in reuse and continued use in Nebraska. These sites span four property parcels and 62 acres and have a total property value of nearly \$8 million. Together, properties at these sites have a total land value of \$328,000 and a total improvement value of \$7.4 million. Both sites have property tax details. Properties at these sites generate a combined \$115,000 in property taxes.

Table 9. Property value and tax information for sites in reuse and continued use in Nebraska^a

Total Land Value (2 sites)	Total Improvement Value (2 sites)	Total Property Value (2 sites)	Total Annual Property Taxes (2 sites)
\$328,000	\$7.4 million	\$7.7 million	\$115,000

^a The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which was 2015.

Did You Know?

Since 1961, companies have manufactured medical supplies on a portion of the Sherwood Medical Co. Superfund site in Norfolk, Nebraska. Today, an on-site surgical and medical instrument manufacturing business generates nearly \$20 million in estimated annual employment income.



Figure 17. Medical equipment manufacturing

Reuse on the Horizon in Region 7

Transformation Underway: From Former Steel Plant to Commercial Center

In Wyandotte County, Kansas, companies refined and manufactured steel at the 22-acre Kansas City Structural Steel site for more than a century. Steel fabrication produced byproducts that contaminated soil and groundwater with heavy metals, including lead. Under EPA oversight, the site's potentially responsible party implemented cleanup activities between 1990 and 1995. Cleanup activities included the excavation and removal of contaminated soil; the decontamination, demolition and removal of contaminated structures; and the placement of land use restrictions. The site remained vacant.

The site's location close to roads and railways in an industrial, commercial and residential area makes it ideal for a number of potential reuse opportunities. El Centro, a local nonprofit, acquired the site property in 1995, after signing an agreement with EPA to ensure the long-term protectiveness of the remedy. Since then, the organization has remained committed to supporting local economic development efforts.



Figure 18. The new Walmart store at the Kansas City Structural Steel site (Kansas)

However, complex land use restrictions limit the types of redevelopment allowed at the site. Crawl spaces, but not basements, are permitted, and a four-foot layer of clean fill must remain below the finished grade of any improvements. In addition, part of the site is fenced off and special guidelines apply to foundations and support structures extending below areas of clean fill. In 2013, despite these potential barriers to site reuse, the Lane4 Property Group expressed interest in developing a shopping center at the site.

EPA proposed a preliminary reuse assessment to identify feasible and protective future uses, helping El Centro and potential developers understand site conditions and limitations. EPA's site team facilitated a series of discussions with community stakeholders, including local officials, the property realtor and El Centro. With a common understanding, reuse planning was able to move forward smoothly when the Lane4 Property Group approached El Centro. EPA and state officials also helped the developer enroll in the Kansas Environmental Use Controls Program. The program helps parties maintain site remedies and ensure the remedies remain protective during construction and reuse.

The Lane4 Property Group broke ground on La Plaza Argentine shopping center in March 2014. The 61,000-square-foot development is anchored by a new Walmart Neighborhood Market, which opened in September 2014. During the grand opening celebration, EPA honored project stakeholders for their outstanding efforts to redevelop the Superfund site. Negotiations to bring two restaurants to two of the commercial lots on site and construction of a new police station on site are in the planning stages. New retail construction is also underway east of the site and community efforts are supporting recreation improvements at nearby Vega Park. Looking forward, EPA will continue to work with site stakeholders to address their concerns and support the site's productive reuse. Separate reuse possibilities are being considered on the eastern side of the property by the local government.

Conclusion

EPA works closely with its partners at Superfund sites across Region 7 to make sure that sites can safely be reused or remain in continued use following cleanup. EPA also works with businesses and organizations operating on Superfund sites prior to and during Superfund investigations and cleanup to enable these businesses to remain open during the cleanup process. The businesses and organizations operating on these sites provide substantial jobs and income for communities. They help generate local and state taxes. Cleanup and redevelopment also helps stabilize and boost property values.

There are 40 NPL sites and three non-NPL Superfund sites in Region 7 that have either new uses in place or uses that have remained in place since before cleanup. Future uses are planned for many more Superfund sites in Region 7. EPA is committed to working with stakeholders at all sites to foster outcomes that protect public health and the environment and make redevelopment possible.



Figure 19. Residential apartment building at the Omaha Lead site (Nebraska)

The reuse of Superfund sites takes time and is often a learning process for project partners. Ongoing coordination among EPA, state agencies, local governments, potentially responsible parties, site owners, developers, and nearby residents and business owners is essential. EPA tools, including reuse assessments or plans, comfort letters or partial deletions of sites from the NPL, often serve as the foundation for moving forward. At some sites, parties may need to take additional actions to ensure reuses are compatible with site remedies.

Across EPA's Midwest region, Superfund sites are now home to large commercial and residential developments, mid-sized developments providing services to surrounding communities, and small businesses. EPA is committed to working with all stakeholders to support the restoration and renewal of these sites as long-term assets.

EPA Superfund Site Reuse Resources

Superfund Sites in Reuse: find more information about Superfund sites in reuse
www.epa.gov/superfund-redevelopment-initiative/find-sites-reuse

EPA Region 7 Superfund Redevelopment Initiative Coordinator
Tonya Howell | 913-551-7589 | howell.tonya@epa.gov

SRI Website: tools, resources and more information about Superfund site reuse
www.epa.gov/superfund-redevelopment-initiative

EPA Office Enforcement and Compliance Assurance (OECA): tools that address landowner liability concerns
www.epa.gov/aboutepa/about-office-enforcement-and-compliance-assurance-oeca

Sources

Business, Job and Sales Information

Information on the number of employees and sales volume for on-site businesses comes from the Hoovers/Dun & Bradstreet ([D&B](#)) database. EPA also gathers information on businesses and corporations from D&B. D&B maintains a database of more than 225 million active and inactive businesses worldwide. Database data include public records, financials, private company insights, extensive global information, telephone numbers and physical addresses. When D&B database research cannot identify employment and sales volume for on-site businesses, EPA uses the [Manta](#) database. Both databases include data reported by businesses. Accordingly, some reported values might be underestimates or overestimates. In some instances, business and employment information also comes from local newspaper articles and discussions with local officials and business representatives. While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This can be attributed to a number of business conditions and/or data reporting. Data are obtained directly from the aforementioned sources, and reported as presented by those sources.

EPA obtains wage and income information from the U.S. Bureau of Labor Statistics (BLS). EPA uses the BLS Quarterly Census of Employment and Wages database to obtain average weekly wage data for the identified businesses. Average weekly wage data are identified by matching the North American Industry Classification System (NAICS) codes corresponding with each type of business with weekly wage data for corresponding businesses. If weekly wage data is not available at the county level, EPA uses wage data by state or national level, respectively. In cases where wage data is not available for the six-digit NAICS code, EPA uses higher-level (less-detailed) NAICS codes to obtain the wage data. To determine the annual wages (mean annual) earned from jobs generated by each of the identified businesses, EPA multiplies the average weekly wage figure by the number of weeks in a year (52) and by the number of jobs (employees) for each business.

Business and employment data used for this profile were collected in 2015. Annual employment income is based on job data estimated in 2015 using BLS average weekly wage data for those jobs from 2014 (the latest available wage data at the time of this profile). All income and sales figures presented have been rounded for the convenience of the reader. Federal facility sites are not included in calculations of total sites with businesses, businesses, jobs, income or annual sales.

Property Value and Tax Information

EPA collected on-site property values and property taxes included in this profile for a subset of Superfund sites by comparing available site boundary information with available parcel boundary information and gathering information for selected parcels from county assessor datasets. The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2013 to 2015. All figures presented have been rounded for the convenience of the reader.

Reuse in Action

Write-ups of sites in reuse or continued use included in this study are based on available EPA resources, including SRI case studies. Links to the case studies are included below.

SRI Case Studies

Aidex Corporation site. 2015. [Reuse and the Benefit to Community: Aidex Corporation Superfund Site.](#)

Chemical Commodities, Inc. site. 2015. [Buzzing with Life: Environmental Education and Stewardship. The Chemical Commodities, Inc. Superfund Site in Olathe, Kansas.](#)

Kansas City Structural Steel site. 2015. [Reuse and the Benefit to Community: Kansas City Structural Steel.](#)

Strother Field Industrial Park site. 2015. [Reuse and the Benefit to Community: Strother Field Industrial Park Superfund Site.](#)

Other Sources

EPA. 2010. [Exploring New Possibilities: Working and Natural Lands at the Cherokee County Superfund Site.](#)

EPA. [SRI: Returning Some of the Nation's Worst Hazardous Waste Sites to Safe and Productive Uses.](#)

[Missouri State Parks, Route 66 State Park](#) website.

[Missouri State Parks, St. Joe State Park](#) website.

[Pollinator Partnership](#) website.

[U.S. Department of Energy Office of Legacy Management, Weldon Spring, Missouri Site](#) website.

[U.S. Fish & Wildlife Service, Baxter Springs Subsite, Cherokee County – Kansas](#) website.

Wilber Smith Associates, Inc. [Kansas Aviation Economic Impact Case Study](#). Prepared for the Kansas Department of Transportation Division of Aviation. May 2010.



United States Environmental Protection Agency
Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219

June 2016 | www.epa.gov/aboutepa/epa-region-7-midwest



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with minimum 25% post-consumer fiber.