PUTTING SITES TO WORK

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

2020 DATA
Cover page photos:
Chemical Commodities, Inc. (Kansas), Strother Field Industrial Park site (Kansas),
Cherokee County (Kansas), Carter Carburetor (Missouri), Madison County Mines (Missouri).

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PREFACE

EPA’s Superfund program is a cornerstone of the work that the Agency performs for citizens and communities across the country. The revitalization of places affected by contaminated lands is a key part of Superfund’s mission, meeting community needs for thriving economies and improved environmental and public health outcomes. Through EPA’s Superfund Redevelopment Program, the Agency contributes to these communities’ economic vitality by supporting the return of sites to productive use.

EPA has made historic investments to tackle the climate crisis and to ensure all communities have safe places to live and work. Working closely with communities, developers and property owners, EPA is leading the way to return these once-contaminated sites back to safe and beneficial use.

These regional profiles highlight community-led efforts as EPA expedites cleanup and remediation and engages with partners and stakeholders to support redevelopment and community revitalization.
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EPA Region 7 (Midwest) includes four states – Iowa, Kansas, Missouri and Nebraska – and nine tribal nations. This area is well known for its wide-open spaces, agricultural strength, diverse ecological and recreational resources, and large military installations. This part of the country includes established urban areas, small towns, farmland, ranches and public lands. 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 amenities to surrounding communities that have been negatively affected by contamination. Site redevelopment can revitalize a local economy with jobs, new businesses, tax revenues and local spending.

Through programs such as EPA’s Superfund Redevelopment Program, EPA Region 7 helps communities reclaim cleaned-up Superfund sites. Factoring the reasonably anticipated future use of Superfund sites into the cleanup process promotes their safe redevelopment. In addition, EPA Region 7 works closely with state and local officials to remove barriers that have kept many Superfund sites vacant or underutilized. EPA Region 7 works to ensure that businesses on properties being cleaned up under Superfund can continue operating in a way that protects human health and the environment during site investigations and cleanup work. This continuity enables these businesses to remain open and serve as a source of jobs and income for local communities.

Superfund sites across Region 7 support industrial parks, shopping centers and agricultural operations such as manufacturing facilities, grain storage facilities and crop cultivation. Others are now home to natural areas, parks and recreation facilities. One site now hosts an upscale apartment complex. On-site businesses and organizations at current and former Region 7 Superfund sites provide an estimated 35,690 jobs and contribute an estimated $1.9 billion in annual employment income. Sites in reuse and continued use in Region 7 generate $53.3 million in annual property tax revenues for local governments.1

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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 38 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 (e.g., parks, wetlands, ecological habitat and open space). In addition, there are 65 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.
This profile looks at how redevelopment activities at Superfund sites make a difference in communities across Region 7. In particular, it describes some of the beneficial effects of redevelopment 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 and sites that have remained in use throughout the cleanup process. EPA updates these profiles periodically. The beneficial effects may increase or decrease over time due to changes in:

- The number of sites in reuse or continued use.
- The number of on-site businesses.
- Data availability.
- Changes in business and property value data.

Figures presented represent only a subset of all Superfund sites in reuse or continued use in Region 7.

Figure 3. Left: A church at the Cherokee County Superfund site (Kansas). Right: Visitors tour inside the John Deere factory at the John Deere (Dubuque Works) Superfund site (Iowa).
EPA Region 7 is committed to improving the health and livelihood of Americans by cleaning up and returning land to productive use. In addition to protecting human health and the environment through the Superfund program, Region 7 partners with stakeholders to encourage redevelopment opportunities at Superfund sites. Region 7 helps communities and cleanup managers consider redevelopment during cleanup planning and evaluate remedies already in place to ensure appropriate redevelopment. In addition, EPA participates in partnerships with communities and encourages opportunities to support Superfund Redevelopment projects that emphasize environmental and economic sustainability.

Redevelopment support efforts in EPA Region 7 include:

- Identifying and evaluating local land use priorities to align with site cleanup plans through the redevelopment planning process.
- Facilitating cleanup and redevelopment 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 redevelopment 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 – known as Ready for Reuse Determinations – that provide information about the appropriate use of sites.
- Supporting partnerships with groups committed to putting Superfund sites back into use, such as the U.S. Fish and Wildlife Service.
- Supporting partnerships with groups committed to returning Superfund sites to productive use such as Monarch Watch, the Pollinator Partnership and Monarch Joint Venture.
- Developing reuse fact sheets, websites, webinars and reuse case studies to share opportunities and lessons associated with Superfund Redevelopment.

These efforts have helped build expertise across Region 7, making it easier to both consider future use of Superfund sites prior to cleanup and to identify opportunities for removing reuse barriers. These efforts also help tribes, state agencies, local governments, communities, potentially responsible parties, site owners, developers, and other partners and stakeholders to 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.
EPA can take and oversee immediate action at contaminated sites through short-term cleanup actions, also called removal actions. EPA refers sites warranting long-term cleanup to its remedial program or to state programs. EPA’s National Priorities List (NPL) is a list of sites the Agency is targeting for further investigation and possible remediation through the Superfund program. Once EPA places a site on the NPL, the Agency studies the contamination, identifies technologies that could address the contaminants and evaluates alternative cleanup approaches. EPA then proposes a cleanup plan and, after collecting public input, issues a final cleanup decision. The Agency then cleans up the site or oversees cleanup activities. EPA has placed 97 sites in Region 7 on the NPL.

Whenever possible, EPA seeks to integrate redevelopment priorities into site cleanup. In Region 7, 67 NPL sites and 22 non-NPL Superfund sites are in use. These sites have either new uses in place or uses that remain in place from before cleanup. Many of these sites have been redeveloped for commercial, industrial and residential purposes. Others have been redeveloped for recreational, ecological and agricultural uses. Businesses and other organizations also support culturally and historically significant uses on site areas. Many redeveloped sites support multiple uses and have the capacity to support additional uses and further redevelopment. The following sections take a closer look at the beneficial effects of businesses operating at current and former Superfund sites in Region 7.

Figure 5. Sites in reuse and continued use in Region 7.

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2 Removal actions may be taken at sites on the NPL and sites not on the NPL.
Sites in Reuse and Continued Use: A Closer Look

<table>
<thead>
<tr>
<th>Reuse Type</th>
<th>Description</th>
<th>Region 7 Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In Reuse</strong></td>
<td>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.</td>
<td>PCB Inc. - Missouri (Missouri) – formerly a PCB treatment and disposal facility, the site is now home to a 12-story luxury apartment building with first-floor retail.</td>
</tr>
<tr>
<td><strong>In Continued Use</strong></td>
<td>Historical uses at a site remain active; these uses were in place when the Superfund process started at the site.</td>
<td>Omaha Lead (Nebraska) – Operations at a former lead-refining plant resulted in wind transport of lead and other heavy metals to a large area, EPA cleanup has allowed residential properties to remain in use.</td>
</tr>
<tr>
<td><strong>In Reuse and Continued Use</strong></td>
<td>Part of a site is in continued use and part of the site is in reuse.</td>
<td>Cleburn Street Well (Nebraska) – commercial dry-cleaning operations, a tire shop and office spaces remain active on site; the Grand Island Public Works Department’s Street Division now leases part of the site for a sign shop and for truck and equipment storage and maintenance.</td>
</tr>
</tbody>
</table>

Figure 6. Left: mural along the new mixed-use development on the PCB Inc. – Missouri site (Missouri). Right: EPA cleaned up lead contamination from the Omaha Lead site at over 13,000 residential properties in 2015 (Nebraska).

Figure 7. This tire shop at the Cleburn Street Well site has remained open throughout cleanup (Nebraska).
Businesses and Jobs

EPA has collected economic data for 1,855 businesses, government agencies and civic organizations operating on 38 NPL sites and 13 non-NPL sites in reuse and continued use in Region 7. Businesses and organizations at these sites are part of several different sectors, including wholesale trade, construction, roofing, plumbing, heating and cooling contracting, manufacturing, restaurants, automotive repair, warehousing, educational services and national security.

Businesses, facilities and organizations at these sites include farm machinery manufacturer John Deere, aircraft parts manufacturer F.M.I., commercial and industrial equipment manufacturer, GE Engine Services, irrigation equipment manufacturer Lindsay Corporation, and medical instrument manufacturer Medtronic.

The businesses and organizations at these sites generate about $9.1 billion in estimated annual sales and employ about 35,690 people, earning an estimated $1.9 billion 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. Table 1 provides more detailed information.

Table 1. Site and Business Information for Region 7 Sites in Reuse and Continued Use (2020)

<table>
<thead>
<tr>
<th></th>
<th>Sites</th>
<th>Sites with Businesses</th>
<th>Businesses</th>
<th>Total Annual Sales</th>
<th>Total Employees</th>
<th>Total Annual Employee Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Reuse</td>
<td>33</td>
<td>16</td>
<td>23</td>
<td>$34 million</td>
<td>399</td>
<td>$19 million</td>
</tr>
<tr>
<td>In Continued Use</td>
<td>41</td>
<td>24</td>
<td>170</td>
<td>$3.9 billion</td>
<td>12,143</td>
<td>$909 million</td>
</tr>
<tr>
<td>In Reuse and in Continued Use</td>
<td>15</td>
<td>11</td>
<td>1,662</td>
<td>$5.2 billion</td>
<td>23,148</td>
<td>$1.0 billion</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>51c</td>
<td>1,855</td>
<td>$9.1 billion</td>
<td>35,690</td>
<td>$1.9 billion</td>
</tr>
</tbody>
</table>

a Six sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

b Also includes other organizations such as government agencies, nonprofit organizations and civic institutions.

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

d For information on the collection of business, jobs and sales data, see the Sources section.

e See footnote 1, page 1.

f Throughout this report, sales and annual employee income may not sum exactly to the totals presented due to rounding.

3 See footnote 1, page 1.
4 For more information on the collection of business, jobs and sales data, see the Sources section.
Property Values and Property Tax Revenues

Properties cleaned up under the Superfund program and returned to use have the potential to increase in value significantly. This increased value can boost property tax revenues, which help pay for local government operations, schools, transit systems and other public services. Site properties at the Strother Field Industrial Park site in Winfield, Kansas are now valued at nearly $21 million.

Identifying increases in property values and property taxes following cleanup and reuse is challenging. This is due to several factors, including limited data on past property values and the frequency and timing of local property value assessments. Likewise, many factors affect property values, including external economic and neighborhood factors not related to a site’s contamination or Superfund status. It is also difficult to isolate the effects of Superfund cleanup and redevelopment using current property values. However, these values do provide insight into the current value of Superfund properties and the potential loss in economic value if the properties were not cleaned up and made available for reuse or continued use.

EPA has collected property value and tax data for 24 Superfund sites in reuse and continued use in Region 7. These sites span 59,180 property parcels and 654,584 acres. They have a total property value of $4.2 billion. The average total property value per acre is $6,000.

Land and improvement property value information is available for 21 sites. These properties have a total land value of $657 million and a total improvement value of $2.9 billion.

Property tax information is available for 24 sites. The properties generate a combined $53.3 million in local property taxes annually.

<table>
<thead>
<tr>
<th>Table 2. Property Value and Tax Information for Sites in Reuse and Continued Use in Region 7a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Land Value (21 sites)b</td>
</tr>
<tr>
<td>$657 million</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region 7 Sites in Reuse and Continued Use: Property Value and Tax Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Property Value:</td>
</tr>
<tr>
<td>Total Annual Property Taxes:</td>
</tr>
</tbody>
</table>

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5 There are 65 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. See footnote 1, page 1.

6 Property values consist of land value and the value of any improvements (buildings and infrastructure) placed on a property. When sites are redeveloped, some or all of these improvements may be new or already in place. In some cases, the breakdown showing the land value and improvement value is not always available; only the total property value may be available.
Beneficial Effects from Enhanced Recreational and Ecological Amenities

In addition to hosting commercial developments, retail centers and industrial facilities, many Region 7 sites in reuse and continued use provide recreational and ecological benefits. Greenspace and habitat reuses help attract visitors and residents and indirectly contribute to local economies.

Careful planning enables the integration of green spaces and habitat into site cleanup, resulting in the transformation of contaminated properties into valuable community and wildlife assets. Green spaces are integral components of sustainable communities – they 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 and habitat at once-contaminated properties serves to re-introduce ecosystems and biodiversity into urban and suburban landscapes by providing corridors for migrating species and preserving habitat. They can also 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 recreation activities can include outdoor recreation spending and reduced public costs related to healthcare and infrastructure. In 2017, outdoor recreation contributed $887 billion to the U.S. economy, supporting 7.6 million jobs and generating $63.5 billion in national tax revenue and $59.2 billion in state and local tax revenue. 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. Many sites in Region 7 provide recreational and ecological benefits.

NEWTON COUNTY MINE TAILINGS
Cleanup and Restoration of a Community Park

The Newton County Mine Tailings Superfund site encompasses 300 square miles of Newton County, Missouri, including the entire town of Granby, Missouri. From 1850 to 1950, mining operations resulted in the area’s contamination with lead and other heavy metals. In 2003, EPA added the site to the NPL. Cleanup included removal and disposal of contaminated soils and sediments, capping of disposal areas, revegetation of excavated and capped areas, institutional controls, and monitoring.

EPA worked with state and local agencies to address contamination across different areas of the site, including Dick Smith Park. After EPA assessed the property for the presence of contaminants of concern, conducted cleanup and established land use controls, the property was ready for redevelopment. The city then restored the park for beneficial use. The city put in new sand courts for volleyball and horseshoes. The park also has a playground, picnic pavilions, open space and a walking trail. Its cleanup and restoration restored a vital recreation space in the community, providing children and other residents with access to spaces for sports and other outdoor activities.

Figure 9. Dick Smith Park in Granby, Missouri.

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The Fulbright Landfill Superfund Site is in Springfield, Missouri. It includes two closed landfills. From 1962 to 1974, the landfills accepted industrial and domestic waste, resulting in the contamination of soil and groundwater in the area. EPA added the site to the NPL in 1983. Cleanup included removal and disposal of contaminants, monitoring, and land use restrictions.

The site’s proximity to the Sac River makes it ideal for ecological and recreational reuse. The city of Springfield expressed interest in expanding the South Dry Sac Greenway Trail across cleaned-up areas of the site. EPA’s Superfund Redevelopment Program and EPA Region 7 supported a reuse planning process for the site. EPA and the city revised the site’s institutional controls, changing access restrictions and allowing for recreational use in areas where reuse was compatible with the remedy.

The city, EPA, Missouri Department of Natural Resources and the Ozark Greenways organization collaborated to envision an appropriate and beneficial reuse of the site. The Fulbright Spring Greenway Trail, the expansion of the South Dry Sac Greenway Trail, opened in July 2020 and runs across one of the landfills. The entire trail is nearly 7 miles long; the segment on site extends for about a mile and a half. People use the paved trail for walking, biking and running. More trail work is planned across the second landfill, as well as adding benches and informational kiosks along the current trail. The trail connects the area with other local parks, neighborhoods, streams and an elementary school in Green County. Today, this once-contaminated site provides essential outdoor recreation space to the community and connects residents and visitors with the area’s remarkable natural resources.

“COVID-19 has really highlighted how folks, especially in this area, need their outdoor spaces and places. This public land is a community resource, so now we can help connect people to it. They’ll learn about Superfund sites and the role that EPA has played in cleaning that up.”

– Mary Kromrey, Director of Ozark Greenways, September 2020 interview in 417 Magazine
Beneficial Effects from Alternative Energy Projects

Alternative energy projects provide 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 and right-of-way payments, lower energy costs, and reduce greenhouse gas emissions. They also help hedge against energy price and supply volatility, support local business competitiveness and technology supply chain development, provide outreach and public relations opportunities for site owners and communities, and contribute to broader economic development planning.

Several efforts in EPA Region 7 have encouraged opportunities for alternative energy projects at Superfund sites and other contaminated lands:

- In early 2021, a developer began operating a 12-acre pilot solar array at the Oronogo-Duenweg Mining Belt site in Joplin, Missouri. When fully built out, the 60-acre, 2.25-megawatt solar array project is expected to provide enough energy for about 400 homes.

- Cleanup of the Nebraska Ordnance Plant (Former) site in Mead, Nebraska, relies on three 25-kilowatt solar panels to power the site’s groundwater treatment plants. The solar energy production will provide an estimated $90,000 in energy savings during the panels’ first 10 years of operation.

- A business at the Strother Field Industrial Park site in Winfield, Kansas, took advantage of the area’s solar resources and solar tax incentives and installed solar panels on the roof of its facility. Ark Valley Distributing’s 51.8-kilowatt solar array generates about 80 megawatt hours of energy per year, reducing the company’s carbon footprint by about 56 metric tons a year.

Figure 11. A solar installation.

Figure 12. Top: Ark Valley Distributing’s facility at the Strother Field Industrial Park (Kansas) site has a rooftop solar array. Bottom: Solar panels on the roof of an industrial storage building.
Opportunity Zone Tax Incentives as a Superfund Redevelopment Tool

Opportunity Zones are a powerful tool to encourage economic revitalization in distressed communities by incentivizing long-term, sustainable investment in redevelopment and stimulating economic growth. State governors have designated 8,756 Opportunity Zones across the country in geographic areas that suffer double the national poverty rate. Socio-economic metrics show that Opportunity Zones are among the highest-need communities in the nation. The U.S. Department of Treasury estimates that Opportunity Zones may attract up to $100 billion in investments, which strengthens the financial viability of redevelopment projects at Superfund sites located in Opportunity Zones.

Redevelopment of current or former Superfund sites may qualify for Opportunity Zone tax benefits. Nationally, there are 343 NPL sites located entirely or partially in Opportunity Zones. Estimates indicate there are thousands of Superfund removal sites in Opportunity Zones across the nation. In Region 7, there are 18 NPL sites located entirely or partially in an Opportunity Zone. Redevelopment investments that meet appropriate qualifying criteria may be eligible for Opportunity Zone tax benefits. EPA and the U.S. Department of Housing and Urban Development have tools and resources to help local leaders achieve equitable outcomes in Opportunity Zone development projects.

Learn more about Superfund Redevelopment and Opportunity Zones: https://www.epa.gov/superfund-redevelopment/superfund-redevelopment-using-opportunity-zone-tax-incentives

Environmental Justice and Economic Revitalization

Communities with environmental justice concerns are disproportionately affected by environmental pollution and hazards and typically include marginalized low-income groups and people of color, including tribal and indigenous people. Superfund cleanups and redevelopment are opportunities to evaluate how to reduce impacts on these communities and, through meaningful community involvement efforts, engage communities in productive dialogue to increase local benefits through reuse opportunities that meet community needs.

Figure 13. Map of Opportunity Zones in the United States. (Source: Department of Housing and Urban Development, Map of Opportunity Zones)
REDEVELOPMENT IN ACTION

MADISON COUNTY MINES
Revitalization of a Historic Lead Mining Area

The 520-square-mile Madison County Mines Superfund site includes all of Madison County, Missouri, and part of the historical “Mine LaMotte Tract” that extends into St. Francois County. The site is located at the southern end of the Old Lead Belt in Missouri, a historic lead mining area. Mining operations in the area date back to the early 1700s. They left waste materials behind in many areas. Contaminated soil, tailings and chat were used in residential areas for fill, foundation bases, driveway aggregate and topsoil. Contaminated materials were also used as aggregate for road construction and as traction on public roadways during winter weather. EPA added the site to the NPL in 2003.

Cleanup includes removing contaminated soil from residential properties and other areas of public use and replacing it with clean fill, grading to prevent erosion, and installing caps over consolidated waste areas. The Missouri Department of Health and Senior Services and the Madison County Health Department offer a Health Education Program and run a Voluntary Institutional Controls Program (VICP) to raise public awareness of the effects of lead on human health and the environment. The VICP monitors ground disturbance activities county wide, and provides sampling, training and assistance to community members, public utilities and contractors. In 2017, EPA Region 7 and the Madison County Health Department launched the Madison County Mines Superfund Job Training Initiative (SuperJTI). Nearly 100 people participated in "tryouts" day for this SuperJTI program. After preliminary testing and screening, 24 people went on to graduate from the training program. Graduates qualified for a range of jobs in environmental fields, including working on the site’s cleanup.

Today, this megasite continues to support a wide range of land uses, including homes, schools, churches, campgrounds, commercial businesses, industrial facilities, parks, a farm and federal land uses. The U.S. Forest Service manages part of the site as the Silver Mines Recreation Area in Mark Twain National Forest. The recreation area supports hiking, camping and water access for fishing and kayaking. In 2018, Missouri Mining Investments LLC (MMI) acquired 1,800 acres of the site, including a former lead mine that the company says contains the largest recoverable cobalt reserve in North America. As a condition of the purchase, Environmental Operations, Inc. is completing Superfund interim removal action and site stabilization cleanup activities at the property. When fully operational, the Missouri Cobalt Mine LLC, which is operating the mine under a lease from MMI, is expected to bring hundreds of temporary and permanent jobs to the area. EPA continues to work on remediation activities at this site while working with the state, county and local governments to study and support sustainable long-term reuses and continued uses at the site.

Figure 14. Left: Demonstration project sharing cobalt mining approach with local and regulatory authorities. Center: Missouri Cobalt Mine LLC estimates that the largest reserve of cobalt in North America is located on site. Right: Graduation ceremony for the Madison County Mines SuperJTI.
ARMOURED ROAD
A Medical Center, Restaurant and Sustainable Plans for the Future

The 1.8-acre Armour Road Superfund Site is in North Kansas City, Missouri. From the 1920s to 1986, several different parties ran an herbicide mixing and packaging facility on site. A 1989 environmental assessment found high levels of arsenic and other herbicide-related contaminants in soil and groundwater on site. In 1996, EPA began addressing immediate health risks by fencing the property to restrict access and covering soil with a geofabric and crushed rock to prevent contaminated dust and dirt from moving off site. EPA added the site to the NPL in 1999. The site’s responsible parties continued cleanup activities. They decontaminated and demolished remaining site buildings, relocated utilities, removed and treated arsenic-contaminated soils, and backfilled site areas with clean soil. Soil cleanup at the site is complete. A proposed plan for groundwater cleanup is underway.

Collaboration among EPA, the Missouri Department of Natural Resources, the city of North Kansas City, the site’s responsible parties, and other stakeholders throughout the cleanup process helped to ensure the compatibility of the remedy with future redevelopment of the site. In 2016, Northern Kansas City released its Northern Kansas City Master Plan. It included the site as part of a large redevelopment project called the One North Redevelopment Area.

To date, redevelopment at and surrounding the site includes a medical center with a solar array on its covered parking lot and a fast-food restaurant. Road realignments and extensions across the site facilitate access to the larger One North Redevelopment Area, improving traffic flow and establishing a gateway to North Kansas City’s downtown. In September 2019, EPA Region 7 presented its Leading Environmentalism and Forwarding Sustainability (L.E.A.F.S.) Award to Northern Kansas City and to site PRP, Rio Tinto Mining Company. Today, EPA continues to work with the responsible parties on the final groundwater remedy. EPA also continues to work with the local government to facilitate property transactions and construction planning, ensuring the long-term protectiveness of the site’s remedy and supporting the site’s successful redevelopment.

Figure 15. Top Left: The former Armour Road facility prior to cleanup. Top Right: The medical center and fast-food restaurant on site. Bottom Left: EPA Region 7 presented the L.E.A.F.S. Award for the site in the site road that helped facilitate the One North Redevelopment Project.
CHEROKEE COUNTY
Revitalizing the Local Economy with Diverse Continued Uses and Reuses

The Cherokee County Superfund site covers over 115 square miles in Cherokee County, Kansas. For more than 100 years, lead and zinc mining took place on the site. When mining ended in 1970, piles of mine waste and tailings remained. They covered more than 4,000 acres. EPA added the site to the Superfund program’s NPL in 1983. Long-term cleanup began in 1989. EPA worked with the Kansas Department of Health and Environment, the Quapaw Nation, and the responsible parties to clean up the site and make sure the remedy fit well with continued uses at the site as well as new reuse opportunities. EPA divided the site into seven subsites: Galena, Baxter Springs, Treece, Badger, Lawton, Waco and Crestline. Cleanup included providing a clean, permanent water source for residents, removing waste from streams, and digging up residential soils and filling the areas in with clean material. As of 2019, more than 800 residential yards have been cleaned up. Over 500 homes now connect to a clean, permanent source of water.

EPA’s Superfund Redevelopment Program supported the community in exploring reuse opportunities. Today, the site is home to many continued uses and reuses, including agricultural, commercial, recreational, public service, residential and industrial uses and ecological areas. Cleanup has enabled many businesses, primarily in urban centers, to continue operating, preventing job losses and the loss of community income. Businesses on site bolster the local economy and generate local and state tax revenues. Cleanup in Galena enabled the development of a medical complex on part of the site. In 2013, the Premier Surgical Institute opened in Galena, providing inpatient and outpatient surgeries, imaging and other wellness services. Restaurants and other small businesses are also on site.

Thousands of acres of land at the site that were covered with mine wastes have been cleaned up and restored for agricultural use, livestock grazing and wildlife habitat. During the cleanup, EPA’s Superfund Redevelopment Program helped evaluate how ongoing cleanup decisions could take the site’s future land uses into account. As part of this assistance, EPA developed a brochure for landowners that summarizes best practices and resources for improving soil productivity on former mining lands. Tall, warm season, native grasses were planted in areas affected by the cleanup, restoring green space and wildlife habitat. Agricultural uses include farming for cash crops such as wheat and soybeans.

Other site uses include historic sites, public services, recreation spaces and homes. Route 66, one of the first federal highways, passes through the site on its way from Chicago to Los Angeles, attracting visitors to points of interest across the site. In 2018, the largest car museum on Route 66 opened in downtown Baxter Springs. Public services and recreation areas on site that remained open during cleanup include schools, post offices, libraries, police and fire stations, and public parks. New recreation amenities include two ballparks in Baxter Springs. During the cleanup process, new residential developments were built. In 2020, about 250 businesses at the site generated nearly $600 million in sales revenue and provided over $140 million in annual income. Careful planning and collaboration among EPA, local communities, the Quapaw Nation and the state has helped ensure the long-term protectiveness of the remedy and supported continued uses as well as new opportunities for economic revitalization.

Figure 16. Left: Recreational reuse includes new baseball fields in Baxter Springs. Center: Gift shop along historic Route 66 in Baxter Springs. Right: Agricultural uses in Treece include growing wheat.
HASTINGS GROUND WATER CONTAMINATION
Sustaining the Local Economy, Growing New Reuse Opportunities

The Hastings Ground Water Contamination Superfund site in Hastings, Nebraska, is one of EPA’s largest and most complex groundwater cleanup projects. Industrial activities, including landfills, a former coal gas plant and a grain elevator, contaminated public and private water sources. EPA placed the site on the NPL in 1986. Cleanup included landfill capping, provision of alternate water supplies for affected users, a well inventory, land use controls and groundwater monitoring. EPA worked with the U.S. Army Corps of Engineers and the Nebraska Department of Environment and Energy on a groundwater treatment and extraction system for the site that reuses treated groundwater to irrigate the city park. Long-term monitoring and cleanup activities are ongoing.

Early in the cleanup process, EPA and the city considered how the cleanup could support future redevelopment and benefit the community. The site is now home to industrial, commercial and residential uses. The U.S. Department of Agriculture, the Nebraska National Guard, Central Community College and several private landowners are active on site. In total, about 43 businesses operate on site, including warehouses, manufacturers, a country club and education facilities. These businesses employ over 1,000 people and generate nearly $258 million in sales revenue.

The Rainwater Basin Management District also maintains about 1,000 acres of the site as the McMurtrey Waterfowl Production Area. More than two-dozen species of waterfowl regularly use the Rainwater Basin wetlands during migration, including more than one-third of the continent’s northern pintails, 50% of the continent’s mallards, and over 90% of the mid-continent’s greater white-fronted geese. About 300,000 shorebirds comprising more than 30 species use the basins regularly. In addition to protecting habitat for migrating birds, the area also provides protected habitat for elk, coyote, mule deer, burrowing owls, bobcats, river otters and prairie dogs.

Figure 17. Top Left: Swainson’s hawks, one of the migratory birds that use the McMurtrey Waterfowl Production Area, typically migrate about 12,000 miles roundtrip between North America and Argentina. [Credit: Tom Koerner/USFWS] Top Right: About one-third of the North American northern pintail population migrates through the Rainwater Basin District each year. Bottom Left: The Hastings Energy Center, a coal-fired power plant on site, uses treated groundwater as cooling water.
RIVERFRONT
Continued Use and Public Services and Industrial Redevelopment

The 321-acre Riverfront Superfund Site is in New Haven, Missouri. In 1986, the Missouri Department of Natural Resources found that the public water supply wells on site were contaminated with industrial chemicals. EPA identified six different areas of concern where different sources contributed to the contamination. EPA added the site to the NPL in 2000. Cleanup at the site includes groundwater monitoring and use restrictions, land use restrictions, treatment of soil and groundwater contamination, and installation of water treatment units for area homes.

Today, the site supports new and continued uses. They include residential areas, businesses, an industrial park, a church and a public works property. One of the areas of concern includes the Old City Dump. It is now a yard waste/gravel storage and composting area used by the city of New Haven’s Public Works Department. An area of concern where a former metal fabrication plant operated is now a part of an industrial park that hosts warehouses and manufacturers. On part of the site near the Missouri River, a bed and breakfast, distillery, brewery and kayak/paddle board manufacturer attract people visiting area wineries. In 2020, businesses supported about 120 area jobs and generated nearly $58 million in annual sales revenue. Other parts of the site include residential and rural areas.

Cooperation among EPA, the responsible parties and the city of New Haven allowed for an efficient cleanup that fits well with continued site uses and reuses. Institutional controls ensure the long-term protectiveness of the remedy. EPA is working to investigate and address the risk of vapor intrusion at the site. EPA continues to work with the city and community to support long-term protectiveness and reuse and continued-use success at the site.

Figure 18. Top: View of exterior of Paddle Stop New Haven. Two residents bought part of the building from the City of New Haven for $1. This 20,000 square foot building is more than 50 years old and was falling into disrepair. The new owners were required to spend ~$30,000 in upgrades to the old building. Bottom: The building has been completely renovated into a shop where the owner hand makes canoes, kayaks, and paddle boards and offers rentals and excursions on the Missouri River. This business has been a key factor in the revitalization of the downtown area.
REDEVELOPMENT ON THE
HORIZON IN REGION 7

DES MOINES TCE
Transforming Former Industrial Plants into a Stadium Complex

The 200-acre Des Moines TCE Superfund site is southwest of downtown Des Moines, Iowa, on the east side of the Raccoon River. Past industrial operations on a 40-acre parcel of the site resulted in soil and groundwater contamination. These operations included a grey iron foundry, a steel wheels manufacturing plant, a chemical and herbicide distribution center, and a pesticide formulation processing plant. This 40-acre parcel is known as the former Dico property and was identified as the potential source of contamination for the Des Moines City water supply. EPA added the site to the NPL in 1983.

Cleanup focused on the former Dico property. It included removing contaminated soil, cleaning and applying epoxy coatings to remove contaminants and encapsulate some building surfaces, and putting a protective asphalt cap in place. In anticipation of future reuse opportunities at the site, the city rezoned most of the site in 2005 to support a range of land uses, including residential and commercial office and retail uses. In the same year, EPA worked with the city to relocate monitoring wells that would enable the extension of the Martin Luther King Jr. Parkway across the northernmost part of the site. As part of a 2021 settlement agreement, the responsible parties agreed to reimburse EPA $11.5 million for its cleanup activities and pay $2.9 million toward EPA’s future demolition of contaminated buildings and upgrades to the site’s 35-year-old groundwater treatment system. The settlement also requires that the responsible parties transfer the former Dico property to the city of Des Moines.

EPA’s Superfund Redevelopment Program has supported community efforts to identify appropriate future uses and evaluate redevelopment proposals for the site. EPA is working closely with the city and a current potential developer, Krause Group, which proposed a $535 million professional soccer stadium complex for the property. Geophysical studies are assessing the area’s capacity to support the proposed facility. In addition to the stadium, the complex would include a plaza, parking areas, a convenience store, retail space, a hotel, soccer practice fields and a training center. There is also interest in using the site as a recreational access point to the Raccoon River. EPA coordinates regular meetings with the city and development partners to discuss final cleanup activities and coordinate anticipated redevelopment activities and timelines with EPA’s efforts at the site.

Figure 19. Left: Aerial view of proposed redevelopment areas at the site. Right: View of the site from across the Raccoon River.
CARTER CARBURETOR
Transforming Manufacturing Areas and Testing Facilities into Recreation Space and Wildlife Habitat

The 11-acre Carter Carburetor Superfund Site is in St. Louis, Missouri. The site is in a commercial area. Neighborhoods are also nearby. Many properties in the area are vacant. The site was once home to the Carter Carburetor Corporation, an auto parts supplier that adapted carburetors for gasoline and diesel-powered engines from the early 1900s to 1984. Manufacturing and testing at its facilities resulted in the contamination of soils and debris with PCBs and industrial solvents.

Cleanup included removal actions, excavation and off-site disposal of contaminated soils, debris and building material, demolition of site buildings, capping of the foundations and floors of the demolished buildings, and soil remediation. During the cleanup, community members raised concerns about the facility’s impact on surrounding areas and shared priorities for returning the site to beneficial use and bringing jobs to the community. EPA partnered with local leaders and other stakeholders and hosted public meetings and information sessions to make sure the community had a voice in site activities. EPA Region 7 and EPA’s Superfund Redevelopment Program also launched a reuse planning process in 2019 to align reuse planning with remedy features and long-term monitoring at the site. Cleanup finished in 2020. Long-term monitoring is ongoing.

In 1967, the Herbert Hoover Boys and Girls Club (the Club) opened on a property next to the site. In September 2020, EPA signed a Prospective Purchaser Agreement with the Club providing liability protections for the Club, who acquired the site in early 2021. The Club plans to open an urban golf center in collaboration with Gateway PGA Reach, a non-profit dedicated to positively affecting the lives of youth by increasing access to the game of golf. In addition to golf activities, the center will provide after-school resources, mentoring and a path to college education for neighborhood youth. Another part of the site, owned by the city of St. Louis, is currently being considered for ecological use, which could include urban bird watching and a pollinator habitat. EPA and local partners are working to refine the reuse plan for this part of the site. Looking back, cleanup and collaboration at the site have resulted in planned reuses that are set to benefit the community and the environment in diverse ways.

“Cleaning up the Carter Carburetor site was no small task given the multiple contaminants, including PCBs, TCE, asbestos and others,” said EPA Region 7 Administrator Jim Gulliford. “The Boys & Girls Clubs of Greater St. Louis, the community leaders and partners worked tirelessly with EPA to see this through; and, now that the site has been cleaned up the community can move forward in redeveloping the property into a tremendous community asset.”

Figure 20. Left: Debris removal in preparation for building demolition. St. Louis’ famous Gateway Arch is visible in background. Right: The Herbert Hoover Boys and Girls Club is planning to develop a golf facility at the site in collaboration with Gateway PGA Reach.
EPA works closely with its partners at Superfund sites across Region 7 to make sure sites can safely be reused or remain in continued use during and following cleanup. EPA also works with businesses and organizations at Superfund sites throughout the cleanup process to make sure they can remain open.

The businesses and organizations at these sites provide jobs and income for communities and generate local and state taxes. Cleanup and redevelopment also help stabilize and boost property values. There are 67 NPL sites and 22 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 remains committed to working with all stakeholders to support Superfund redevelopment opportunities in Region 7.

The redevelopment of Superfund sites takes time and is often a learning process for project partners. Ongoing coordination among EPA, tribes, state agencies, local governments, communities, potentially responsible parties, site owners, developers, and nearby residents and business owners is essential. EPA tools, including reuse assessments and plans, comfort letters and 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 Region 7, Superfund sites are now home to major commercial and industrial facilities, mid-size developments and small businesses providing services to surrounding communities. EPA is committed to working with all stakeholders to support the restoration and renewal of these sites as long-term assets.

**EPA Superfund Redevelopment Resources**

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

*Superfund Sites in Reuse*: find more information about Superfund sites in reuse. [www.epa.gov/superfund-redevelopment/find-superfund-sites-reuse](http://www.epa.gov/superfund-redevelopment/find-superfund-sites-reuse)

*Superfund Redevelopment Program Website*: tools, resources and more information about Superfund site reuse. [www.epa.gov/superfund-redevelopment](http://www.epa.gov/superfund-redevelopment)

*EPA Office of Site Remediation Enforcement Website*: tools that address landowner liability concerns [www.epa.gov/enforcement/landowner-liability-protections](http://www.epa.gov/enforcement/landowner-liability-protections)
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STATE REDEVELOPMENT PROFILES

[Images of state profiles: Iowa, Kansas, Missouri, Nebraska]
EPA partners with the Iowa Department of Natural Resources to oversee the investigation and cleanup of Superfund sites in Iowa. Iowa has 24 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in Iowa.

**Businesses and Jobs**

EPA has collected economic data for 21 businesses and organizations operating on 14 sites in reuse or continued use in Iowa.

### Table 3. Detailed Site and Business Information for Sites in Reuse and Continued Use in Iowa (2020)

<table>
<thead>
<tr>
<th></th>
<th>Sites</th>
<th>Sites with Businesses</th>
<th>Businesses&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Total Annual Sales&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Total Employees</th>
<th>Total Annual Employee Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Reuse</td>
<td>12</td>
<td>6</td>
<td>8</td>
<td>$5 million</td>
<td>140</td>
<td>$6 million</td>
</tr>
<tr>
<td>In Reuse Use</td>
<td>9</td>
<td>6</td>
<td>7</td>
<td>$260 million</td>
<td>389</td>
<td>$22 million</td>
</tr>
<tr>
<td>In Reuse and in Continued Use</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>$971 million</td>
<td>1,838</td>
<td>$134 million</td>
</tr>
<tr>
<td>Totals</td>
<td>24</td>
<td>14</td>
<td>21</td>
<td>$1.2 billion</td>
<td>2,367</td>
<td>$162 million</td>
</tr>
</tbody>
</table>

<sup>a</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use. One site is a Federal Facility. Federal Facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> 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 six Superfund sites in reuse or continued use in Iowa. These sites span 39 property parcel and 33 acres.

### Table 4. Property Value and Tax Information for Sites in Reuse and Continued Use in Iowa<sup>a</sup>

<table>
<thead>
<tr>
<th></th>
<th>Total Land Value (6 sites)</th>
<th>Total Improvement Value (6 sites)</th>
<th>Total Property Value (6 sites)</th>
<th>Total Annual Property Taxes (6 sites)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$2 million</td>
<td>$12 million</td>
<td>$14 million</td>
<td>$396,000</td>
</tr>
</tbody>
</table>

<sup>a</sup> The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2019 to 2021.

**Did You Know?**

Formerly a manufactured gas plant, the Peoples Natural Gas Co. Superfund site in Dubuque, Iowa, now supports the city’s Department of Public Works. With cleanup underway, the city acquired part of the site in 2006, using it as a public works garage. Today, the facility is home to the city’s Jule public transit system, including storage and light maintenance space, as well as dispatch and management offices and meeting spaces.

Figure 22. Dubuque’s public transit system headquarters on the Peoples Natural Gas Co. site.
EPA partners with the Kansas Department of Health & Environment to oversee the investigation and cleanup of Superfund sites in Kansas. Kansas has 18 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in Kansas.

**Businesses and Jobs**

EPA has collected economic data for 294 businesses and organizations operating on 12 sites in reuse or continued use in Kansas.

**Table 5. Detailed Site and Business Information for Sites in Reuse and Continued Use in Kansas (2020)**

<table>
<thead>
<tr>
<th>Sites with Businesses</th>
<th>Businesses</th>
<th>Total Annual Sales</th>
<th>Total Employees</th>
<th>Total Annual Employee Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In Reuse</strong></td>
<td>8</td>
<td>6</td>
<td>$24 million</td>
<td>213</td>
</tr>
<tr>
<td><strong>In Continued Use</strong></td>
<td>8</td>
<td>6</td>
<td>$427 million</td>
<td>2,890</td>
</tr>
<tr>
<td><strong>In Reuse and in Continued Use</strong></td>
<td>2</td>
<td>2</td>
<td>249</td>
<td>$601 million</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>18</td>
<td>12</td>
<td>$1.1 billion</td>
<td>6,423</td>
</tr>
</tbody>
</table>

- **Site Information**
  - Site information is not available for all businesses on all Superfund sites in reuse or continued use. One site is a Federal Facility. Federal Facility sites are excluded from all other detailed site and business data presented above.
  - 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 six Superfund sites in reuse or continued use in Kansas. These sites span 8,228 property parcels and 90,717 acres.

**Table 6. Property Value and Tax Information for Sites in Reuse and Continued Use in Kansas**

<table>
<thead>
<tr>
<th>Total Land Value (5 sites)</th>
<th>Total Improvement Value (5 sites)</th>
<th>Total Property Value (6 sites)</th>
<th>Total Annual Property Taxes (6 sites)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$116 million</td>
<td>$462 million</td>
<td>$578 million</td>
<td>$4 million</td>
</tr>
</tbody>
</table>

- The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2020 to 2021.

**Did You Know?**

After EPA cleanup of soil contamination from a metal salvage business, a medical and consumer textile manufacturing company purchased the Osage Metal Company Superfund site in 1999 through a Prospective Purchaser Agreement. Today, on-site businesses, including Knit-Rite, Inc., employ about 80 people and generate over $9 million in annual sales.
EPA partners with the Missouri Department of Natural Resources to oversee the investigation and cleanup of Superfund sites in Missouri. Missouri has 32 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in Missouri.

Businesses and Jobs

EPA has collected economic data for 1,466 businesses and organizations operating on 15 sites in reuse or continued use in Missouri.

Table 7. Detailed Site and Business Information for Sites in Reuse and Continued Use in Missouri (2020)

<table>
<thead>
<tr>
<th></th>
<th>Sites</th>
<th>Sites with Businesses</th>
<th>Businesses</th>
<th>Total Annual Sales</th>
<th>Total Employees</th>
<th>Total Annual Employee Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Reuse</td>
<td>12</td>
<td>6</td>
<td>9</td>
<td>$5 million</td>
<td>46</td>
<td>$2 million</td>
</tr>
<tr>
<td>In Continued Use</td>
<td>16</td>
<td>7</td>
<td>116</td>
<td>$3.2 billion</td>
<td>8,536</td>
<td>$715 million</td>
</tr>
<tr>
<td>In Reuse and in Continued Use</td>
<td>4</td>
<td>2</td>
<td>1,341</td>
<td>$2.2 billion</td>
<td>15,595</td>
<td>$604 million</td>
</tr>
<tr>
<td>Totals</td>
<td>32</td>
<td>15</td>
<td>1,466</td>
<td>$5.4 billion</td>
<td>24,177</td>
<td>$1.3 billion</td>
</tr>
</tbody>
</table>

*a Business information is not available for all businesses on all Superfund sites in reuse or continued use. Three sites are federal facilities. Federal Facility sites are excluded from all other detailed site and business data presented above.

*b 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 eight Superfund sites in reuse or continued use in Missouri. These sites span 50,382 property parcels and 550,602 acres.

Table 8. Property Value and Tax Information for Sites in Reuse and Continued Use in Missouri

<table>
<thead>
<tr>
<th>Total Land Value (6 sites)</th>
<th>Total Improvement Value (6 sites)</th>
<th>Total Property Value (8 sites)</th>
<th>Total Annual Property Taxes (8 sites)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$501 million</td>
<td>$2.4 billion</td>
<td>$3.5 billion</td>
<td>$47 million</td>
</tr>
</tbody>
</table>

*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 2019 to 2020.

Did You Know?

For more than a century, mining companies mined lead at the Big River Mine Tailings/St. Joe Mineral Corp. (Big River) Superfund site in St. Francois County, Missouri. Cleanup has enabled residential, commercial, industrial, recreational, public services and agricultural uses to continue on site, as well as innovative redevelopment projects that help to offset the loss of jobs from mine closures. Today, on-site businesses employ about 11,600 people and generate nearly $1.5 billion in annual sales.

Figure 24. With mining closures, innovative businesses such as this mine diving facility have located at the Big River site.
EPA partners with the Nebraska Department of Environmental Quality to oversee the investigation and cleanup of Superfund sites in Nebraska. Nebraska has 15 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in Nebraska.

**Businesses and Jobs**

EPA has collected economic data for 74 businesses and organizations operating on 10 sites in reuse or continued use in Nebraska.

**Table 9. Detailed Site and Business Information for Sites in Reuse and Continued Use in Nebraska (2020)**

<table>
<thead>
<tr>
<th>Sites</th>
<th>Sites with Businesses</th>
<th>Businesses&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Total Annual Sales&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Total Employees</th>
<th>Total Annual Employee Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Reuse</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Continued Use</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>$64 million</td>
<td>328</td>
</tr>
<tr>
<td>In Reuse and in Continued Use</td>
<td>6</td>
<td>5</td>
<td>66</td>
<td>$1.4 billion</td>
<td>2,395</td>
</tr>
<tr>
<td>Totals</td>
<td>15</td>
<td>10</td>
<td>74</td>
<td>$1.4 billion</td>
<td>2,723</td>
</tr>
</tbody>
</table>

<sup>a</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use. One site is a Federal Facility. Federal Facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> 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 four Superfund sites in reuse or continued use in Nebraska. These sites span 531 property parcel and 13,232 acres.

**Table 10. Property Value and Tax Information for Sites in Reuse and Continued Use in Nebraska<sup>a</sup>**

<table>
<thead>
<tr>
<th>Total Land Value (4 sites)</th>
<th>Total Improvement Value (4 sites)</th>
<th>Total Property Value (4 sites)</th>
<th>Total Annual Property Taxes (4 sites)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$38 million</td>
<td>$64 million</td>
<td>$102 million</td>
<td>$1 million</td>
</tr>
</tbody>
</table>

<sup>a</sup> The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2019 to 2020.

**Did You Know?**

An innovative cleanup approach at the Lindsay Manufacturing Co. Superfund site in Lindsay, Nebraska, enabled a unique partnership at the site. A neighboring farm uses treated groundwater for seasonal irrigation, reducing operating costs for the groundwater cleanup system. Lindsay Manufacturing Company (now Lindsay Corporation) continues to operate on site; it makes galvanized irrigation sprinkler equipment. Today, on-site businesses employ about 520 people and generate over $165 million in annual sales.
Summaries of sites in reuse or continued use included in this profile are based on available EPA resources, including Superfund Redevelopment Program case studies as well as other resources. Links to EPA’s Superfund Redevelopment Program case studies and other resources are included below.

**EPA Resources**


**Other Resources**


Carter Carburetor. 2015. Carter Carburetor Superfund Site PowerPoint presentation.


Other Resources (cont.)


Photos

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BUSINESS, JOBS, SALES AND INCOME INFORMATION

Information on the number of employees and sales volume for on-site businesses comes from the Hoovers/Dun & Bradstreet (D&B) [https://www.dnb.com] database. EPA also gathers information on businesses and corporations from D&B. D&B maintains a database of over 330 million active and inactive businesses worldwide.

When Hoovers/D&B research was unable to identify employment and sales information for on-site businesses, EPA used the Reference Solutions database, formerly known as ReferenceUSA [https://www.data-axe.com/what-we-do/reference-solutions/]. In cases where Reference Solutions did not include employment and sales information for on-site businesses, EPA used the Manta database [https://www.manta.com]. The databases include data reported by businesses. Accordingly, some reported values might be underestimates or overestimates. In some instances, business and employment information came 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.

EPA obtained wage and income information from the U.S. Bureau of Labor Statistics (BLS). Part of the U.S. Department of Labor, the BLS is the principal federal agency responsible for measuring labor market activity, working conditions and price changes in the economy. All BLS data meet high standards of accuracy, statistical quality and impartiality.

EPA used the BLS Quarterly Census of Employment and Wages database to obtain average weekly wage data for site businesses. Average weekly wage data were identified by matching the North American Industry Classification System (NAICS) codes for each type of business with weekly wage data for corresponding businesses in site counties. If weekly wage data were not available at the county level, EPA sought wage data by state or national level, respectively. In cases where wage data were not available for the six-digit NAICS code, EPA used higher-level (less-detailed) NAICS codes to obtain the wage data.

To estimate the annual income earned from jobs at site businesses, EPA multiplied 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 2020. Estimated annual employment income was calculated using 2020 jobs data and BLS average weekly wage data for those jobs from 2019 (the latest available wage data at the time of this profile). Federal facility sites were included in calculations of total sites in reuse or continued use only. Federal facility sites were excluded from all other calculations (i.e., number of sites with businesses, number of businesses, total jobs, total income and total annual sales). All sales and income figures presented have been rounded for ease of reading. Throughout this report, sales and annual employee income may not sum exactly to the totals presented due to rounding.

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 typically varied from 2019 to 2021 where date information was provided. Throughout this report, property and tax values may not sum exactly to the totals presented due to rounding.