



# PUTTING SITES TO WORK

*How Superfund Redevelopment in the Great Lakes Region  
Is Making a Difference in Communities*



2018

*Cover page photos:*

*Dupage County Landfill/Blackwell Forest Preserve (Illinois), Allied Paper, Inc./Portage Creek/Kalamazoo River (Michigan),  
Boise Cascade/Onan Corp./Medtronics, Inc. (Minnesota), Petersen Sand & Gravel (Illinois),  
South Point Plant (Ohio), FMC Corp./Fridley Plant (Minnesota)*

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Figure 1. Golf course at Southside Sanitary Landfill (Indiana).

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In May 2017, EPA established a task force to restore the Superfund program to its rightful place at the center of the Agency’s core mission to protect health and the environment.

[epa.gov/superfund/superfund-task-force](https://epa.gov/superfund/superfund-task-force)

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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 Initiative, the Agency contributes to these communities' economic vitality by supporting the return of sites to productive use.

EPA has established a renewed focus on accelerating work and progress at all Superfund sites across the country and has created the Superfund Task Force whose work includes promoting redevelopment and community revitalization.

Working closely with communities, developers and property owners, EPA is leading the way to return these once-contaminated sites back to productive 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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# INTRODUCTION

Since the 1950s, the states in EPA Region 5 – the Great Lakes region of Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin – have faced major changes in the manufacturing sector. Spurred by globalization, advances in technology and a transition to a service-based economy, these changes have contributed to significant job losses and substantial neighborhood and downtown decline in industrial communities across the region. While continuing to emphasize manufacturing as an economic cornerstone and a source of jobs, state and local leaders across the region are helping communities adjust to these large-scale economic changes. Much of this work centers on investing in workforce development, retaining existing businesses, encouraging new business development and repurposing old industrial land, including Superfund sites. The Superfund program in EPA Region 5 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 redevelopment can revitalize a local economy with jobs, new businesses, tax revenues and local spending.

Through programs like the Superfund Redevelopment Initiative, EPA Region 5 helps communities reclaim cleaned-up Superfund sites. Factoring in future use of Superfund sites into the cleanup process promotes their safe redevelopment. In addition, EPA Region 5 works closely with state and local officials to remove barriers that have kept many Superfund sites underused. EPA Region 5 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 for communities.

Superfund sites across Region 5 are home to commercial and industrial parks, retail centers, condominiums and single-family homes. Many sites continue to host industrial operations, including large-scale manufacturing facilities. Some sites now support alternative energy projects. Others have been transformed into ecological preserves, parks and recreation complexes. On-site businesses and organizations at current and former Region 5 Superfund sites provide an estimated 12,944 jobs and contribute an estimated \$960 million in annual employment income. Cleaned-up sites in use in Region 5 generate \$10 million in annual property tax revenues for local governments.<sup>1</sup>

## Region 5 Sites in Reuse and Continued Use: Business and Job Highlights

<b>Businesses:</b>	447
<b>Total Annual Sales:</b>	\$5 billion
<b>Number of People Employed:</b>	12,944
<b>Total Annual Employee Income:</b>	\$960 million



Figure 2. Dalco Enterprises operates within the New Brighton Corporate Park III at the MacGillis & Gibbs Co./Bell Lumber & Pole Co. site (Minnesota).

<sup>1</sup> Business and property value tax figures represent only a subset of the beneficial effects of sites in reuse or continued use in Region 5. There are 56 Superfund sites in reuse or continued use in Region 5 for which EPA does not have business data, including 14 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 76 sites in reuse or continued use in Region 5 for which EPA does not have property value or tax data, including 14 NPL federal facilities.



This 2018 profile looks at how redevelopment activities at Superfund sites make a difference in communities across Region 5. 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 following cleanup 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 5.



Figure 3. Left: Kaufman Container at the Naval Industrial Reserve Ordnance Plant site (Minnesota). Right: The City of Plainwell operates its new Public Safety Department at the Allied Paper, Inc./Portage Creek/Kalamazoo River site (Michigan).

# SUPPORT FOR SUPERFUND REDEVELOPMENT

EPA Region 5 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 5 partners with stakeholders to encourage redevelopment opportunities at Superfund sites. Region 5 helps communities and cleanup managers consider redevelopment during cleanup planning and evaluate remedies already in place to ensure appropriate redevelopment 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 redevelopment support efforts in EPA Region 5 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 5 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 Academy of Model Aeronautics, the U.S. Soccer Foundation, The Trust for Public Land and the Rails-to-Trails Conservancy.
- 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 5, 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.

# SUPERFUND REDEVELOPMENT: THE BIG PICTURE

EPA can take and oversee immediate action at contaminated sites through short-term cleanup actions, also called removal actions.<sup>2</sup> EPA then 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 material and evaluates alternative cleanup approaches. EPA then proposes a cleanup plan and, after collecting public input, issues a final cleanup plan. The Agency then cleans up the site or oversees cleanup activities. EPA has placed 320 sites in Region 5 on the NPL.

Whenever possible, EPA seeks to integrate redevelopment priorities into site cleanup plans. In Region 5, 116 NPL sites and 14 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. 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 on current and former Superfund sites in Region 5.

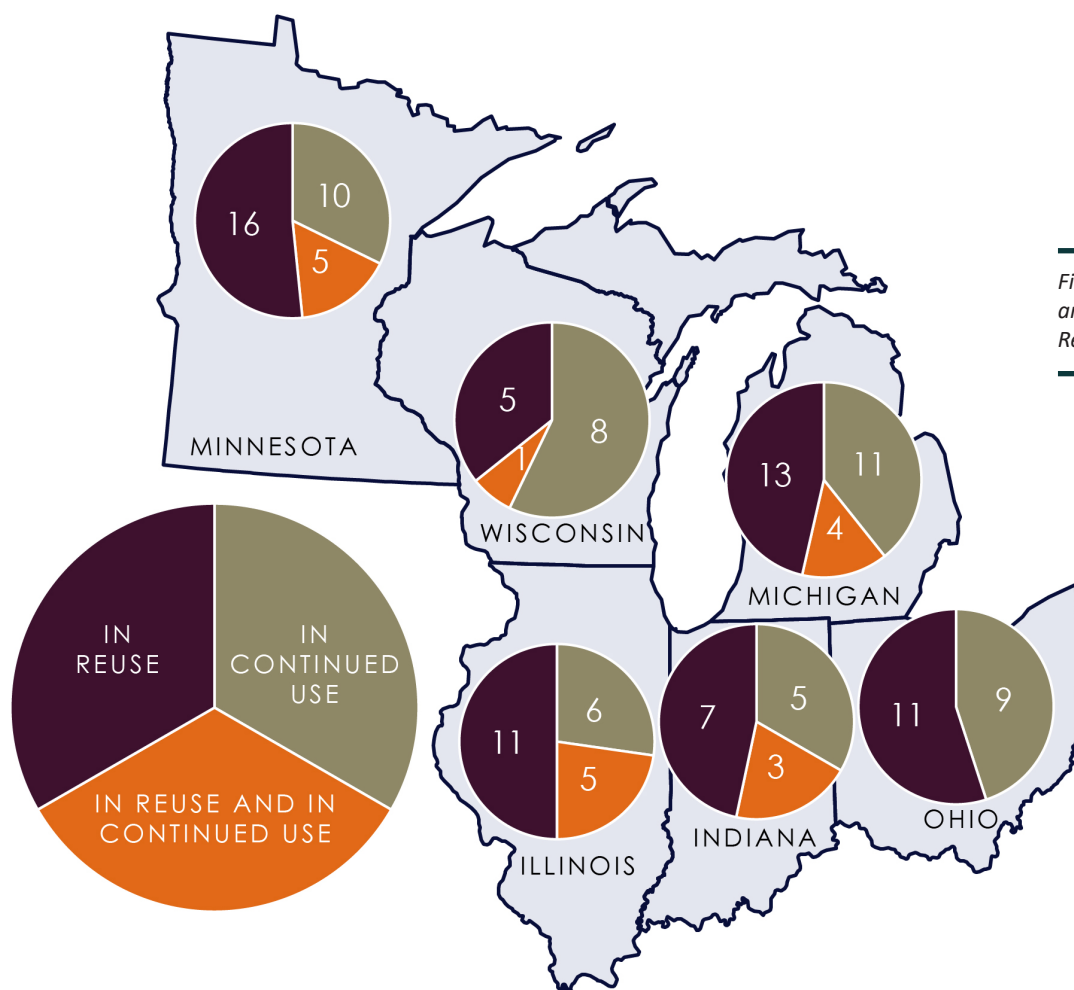


Figure 4. Sites in Reuse and Continued Use in Region 5

<sup>2</sup> Removal actions may be taken at sites on the NPL and not on the NPL.



# BENEFICIAL EFFECTS OF SUPERFUND SITE REDEVELOPMENT IN REGION 5

## Businesses and Jobs

EPA has collected economic data for 447 businesses, government agencies and civic organizations operating on 71 NPL sites and three non-NPL sites in reuse and continued use in Region 5.<sup>3</sup> (See the State Redevelopment Profiles for each state's reuse details.) Businesses and organizations at these sites are part of several different sectors, including manufacturing, construction, medical services, wholesale trade and retail trade.

Most of the businesses and organizations at Region 5 Superfund sites tend to be standalone or branch operations. A smaller number of sites host headquarters facilities for a wide range of companies. For example, the Boise Cascade/Onan Corp./Medtronics, Inc. site, a former wood-treating facility near Minneapolis, Minnesota, is the headquarters location for Cummins Power Generation.

The businesses and organizations at these sites earn about \$5 billion in estimated annual sales and employ about 12,944 people, earning an estimated \$960 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. More detailed information is presented in Table 1.<sup>4</sup>

**Table 1. Site and Business Information for Region 5 Sites in Reuse and Continued Use (2017)**

	<b>Sites<sup>a</sup></b>	<b>Sites with Businesses<sup>b</sup></b>	<b>Businesses<sup>c</sup></b>	<b>Total Annual Sales<sup>d</sup></b>	<b>Total Employees</b>	<b>Total Annual Employee Income</b>
<b><i>In Reuse</i></b>	63	32	283	\$1.9 billion	5,278	\$289 million
<b><i>In Continued Use</i></b>	49	28	65	\$2 billion	3,513	\$291 million
<b><i>In Reuse and in Continued Use</i></b>	18	14	99	\$1.1 billion	4,153	\$380 million
<b><i>Total</i></b>	<b>130</b>	<b>74<sup>e</sup></b>	<b>447</b>	<b>\$5 billion</b>	<b>12,944</b>	<b>\$960 million</b>

<sup>a</sup> Fourteen sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> Also includes other organizations such as government agencies, nonprofit organizations and civic institutions.

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

<sup>d</sup> For information on the collection of business, jobs and sales data, see Sources.

<sup>e</sup> See footnote 1, page 1.

<sup>3</sup> See footnote 1, page 1.

<sup>4</sup> For additional information on the collection of business, jobs and sales data, see Sources.



Figure 5. Left: Former facilities at the General Mills/Henkel Corp. site now host a small business incubator (Minnesota). Right: Small businesses operating at the General Mills/Henkel Corp. site (Minnesota).

## Sites in Reuse and Continued Use: A Closer Look

Reuse Type	Description	Region 5 Example
<b><i>In Reuse</i></b>	<i>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.</i>	<i>General Mills/Henkel Corp. (Minnesota) – a privately held investment group turned this former chemical research facility into a business incubator enterprise development zone that supports the startup and growth of local small businesses.</i>
<b><i>In Continued Use</i></b>	<i>Historical uses at a site remain active; these uses were in place when the Superfund process started at the site.</i>	<i>Conrail Rail Yard (Elkhart) (Indiana) – the 675-acre rail yard area has been in operation since 1956.</i>
<b><i>In Reuse and Continued Use</i></b>	<i>Part of a site is in continued use and part of the site is in reuse.</i>	<i>Tomah Armory (Wisconsin) – armory remains active on site. In addition, the site now supports commercial uses; a consulting service operates on site.</i>

# 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 Joslyn Manufacturing & Supply Co. site in Minnesota are now valued at over \$22 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.

## Region 5 Sites in Reuse and Continued Use: Property Value and Tax Highlights

**Total Property Value:** \$403 million

**Total Annual Property Taxes:** \$10 million



Figure 6. Residential use at the Koppers Coke site (Minnesota)

EPA has collected property value and tax data for 54 Superfund sites in reuse and continued use in Region 5.<sup>5</sup> These sites span 804 property parcels and 3,719 acres. They have a total property value of \$403 million. The average total property value per acre is \$108,000.

Land and improvement property value information is available for 47 sites. These properties have a total land value of \$114 million and a total improvement value of \$278 million.<sup>6</sup>

Property tax information is available for 53 sites. The properties generate a combined \$10 million in local property taxes annually.

**Table 2. Property Value and Tax Information for Sites in Reuse and Continued Use in Region 5<sup>a</sup>**

Total Land Value (47 sites) <sup>b</sup>	Total Improvement Value <sup>c</sup> (47 sites)	Total Property Value (54 sites)	Total Property Value per Acre (53 sites) <sup>d</sup>	Total Annual Property Taxes (53 sites)
\$114 million	\$278 million	\$403 million	\$108,000	\$10 million

<sup>a</sup> Results are based on an EPA Superfund Redevelopment Initiative effort in 2018 to collect 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 2016 to 2018 where date information was provided. For additional information, see Sources.

<sup>b</sup> Detailed (land and improvement) property value data as well as tax data were not available for every site.

<sup>c</sup> Land and improvement value for six of the sites is listed as \$0.

<sup>d</sup> Based on total property value amount of \$402.9 million divided by total acreage of 3,719 for the 53 sites with acreage data.

5 There are 76 additional sites in reuse or continued use in Region 5 for which EPA does not have property value or tax data, including 14 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 5 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 can enable the integration of green spaces and habitat into site cleanup plans, resulting in the transformation of contaminated properties into valuable community and wildlife 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 and habitat 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 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. In 2012, outdoor recreation contributed \$646 billion to the U.S. economy, supporting 6.1 million jobs and generating \$39.9 billion in national tax revenue and \$39.7 billion in state and local tax revenue.<sup>7</sup> 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 5 provide recreational and ecological benefits. The DuPage County Landfill/Blackwell Forest Preserve site in Warrenville, Illinois, supports a recreation area with restored native prairie vegetation, picnic areas, trails, an observation area and a snow tubing run. Cleanup of the Industrial Excess Landfill site in Uniontown, Ohio, included planting of thousands of trees and shrubs at the site as part of the vegetative cover, creating valuable wildlife habitat. The responsible parties have also removed invasive species and installed kestrel nest boxes, bluebird boxes and bat boxes to enhance the habitat. The Petersen Sand & Gravel site in Libertyville, Illinois, supports Independence Grove Forest Preserve, which features a 115-acre lake, an education center, amphitheater and gift shop.



Figure 7. Trail entrance at the DuPage County Landfill/Blackwell Forest Preserve site (Illinois).

<sup>7</sup> The Outdoor Recreation Economy. Outdoor Industry Association. Available at [outdoorindustry.org/pdf/OIA\\_OutdoorRecEconomyReport2012.pdf](http://outdoorindustry.org/pdf/OIA_OutdoorRecEconomyReport2012.pdf).



Figure 8. Wetlands created along the Scioto River at the Bowers Landfill site (Ohio).

## Why Are Wetlands Economically Important?

Superfund site reuse can support wetland habitat, as seen at several sites in Region 5. Cleanup of the Allied Chemical & Ironton Coke site in Ironton, Ohio, included wetland development. At the Bowers Landfill site in Circleville, Ohio, wetlands along the Scioto River floodplain have helped protect the landfill cap and provided valuable habitat for plants, birds, fish and animals.

Wetlands provide a variety of benefits. The combination of shallow water, high levels of nutrients and primary productivity is ideal for 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 acting 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*: [nepis.epa.gov/Exe/ZyPDF.cgi/2000D2PF.PDF?Dockey=2000D2PF.PDF](https://nepis.epa.gov/Exe/ZyPDF.cgi/2000D2PF.PDF?Dockey=2000D2PF.PDF).
- EPA's *Why Are Wetlands Important?*: [www.epa.gov/wetlands/why-are-wetlands-important](https://www.epa.gov/wetlands/why-are-wetlands-important).



## Beneficial Effects from Alternative Energy Projects

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

Several efforts in Region 5 have encouraged opportunities for alternative energy project development on Superfund and other impaired sites:

- The **Southside Sanitary Landfill** site in Indianapolis, Indiana, is home to an award-winning landfill gas management system. Crossroads Greenhouses, one of the largest methane-powered greenhouses in the United States, has captured more than 2.2 million cubic feet of methane gas each day from the site since 1998. Decomposing waste at the site provides all energy used by the 6.5-acre greenhouse. In addition, the landfill sells methane generated on site to the nearby Rolls-Royce Corporation's Indianapolis facilities and Vertellus Specialties' Indianapolis facility for use as boiler and generator fuel. Because methane burns much more cleanly than other fuels, the use of this energy source helps reduce facility emissions.
- In 2009, BAE Systems Land and Armaments L.P. installed four solar panel arrays at the **FMC Corp. (Fridley Plant)** site in Fridley, Minnesota. Each array consists of 16 solar panels and is mounted on a dual axis tracker that follows the sun across the sky for maximum daily power production. The 14.7-kilowatt system provides 30 percent of the electricity needed to power the site's groundwater treatment system and generates a total of about 26,000 kilowatts of energy annually, enough to power about four average-size homes.
- The **Omega Hills North Landfill** site in Germantown, Wisconsin, became the state's first landfill gas-powered electrical generation site in 1985. Stakeholders installed two Caterpillar turbines to combust gas generated by the landfill. The 4,500-horsepower turbines are each capable of generating 3.3 megawatts of electricity for sale to the local utility. As part of a pilot project, a prototype Caterpillar 3600 series engine installed at the site in July 1992 began producing power the following October. Caterpillar modified the engine to run on landfill gas. The modified design reduced air emissions by a third compared to earlier generation turbines.



Figure 9. Greenhouse located near the Southside Sanitary Landfill site (Indiana).



Figure 10. Since 1998, methane produced by the landfill at the Southside Sanitary Landfill site has been used to power and heat the 6.5-acre Crossroads Greenhouse (Indiana).



# REDEVELOPMENT IN ACTION

## BOISE CASCADE/ONAN CORP./MEDTRONICS, INC.

### Large-Scale Industrial Development

From 1921 to 1961, several companies operated wood-treating facilities at the area now known as the Boise Cascade/Onan Corp./Medtronics, Inc. Superfund site in Fridley, Minnesota. Site operations and waste disposal practices contaminated soil and groundwater with creosote and pentachlorophenol (PCP). EPA placed the site on the NPL in 1984. Cleanup included removal of contaminated soil, containment and capping of remaining contaminated waste and soil, groundwater treatment, and collection and off-site disposal of thousands of gallons of oil.

Early site development began in the 1980s and included construction of an office building and parking lot on the western part of the site by Medtronic, and construction of an office building, manufacturing facility and parking lots on the eastern part of the site by Onan Corp. The site's potentially responsible parties completed remedy construction in 1992 and EPA took the site off the NPL in February 1995.

EPA's carefully designed cleanup supports safe redevelopment of the site property by requiring that parties notify the Minnesota Pollution Control Agency (MPCA) prior to any excavation work. This provision enables the state to oversee any excavation work and help manage any potentially impacted materials that may be discovered during the work. Contamination was discovered on site during construction of the Murphy Warehouse development in 1999 and later, during preparations for the construction of the Cummins Power Generation Test Cell Facility, referred to as the Acoustical Testing Center (ATC), in 2009. Under the oversight of the MPCA's Voluntary Investigation and Cleanup Program, the property owners addressed the newly discovered contamination, enabling site redevelopment plans to move forward.

Today, the site is home to the 400,000-square-foot Murphy Warehouse Company. This logistics services business is committed to resource efficiency and reducing greenhouse gas emissions. The facility has a small, roof-mounted solar array that provides renewable power for the company's use. An 11-acre prairie habitat has been planted with wildflowers and is home to birds, rabbits, deer and foxes. Generator manufacturer, Cummins Power Generation also operates its Fridley headquarters and state-of-the-art ATC facility on site. The 23,000-square-foot facility is the largest engine-testing facility of its kind in the world. Other on-site businesses include a medical device manufacturer, a bank and a distribution company.

This once-contaminated area supports new and long-time businesses that provide jobs and services to the community and strive to do so in environmentally conscious ways. Today, on-site businesses employ over 3,000 people and provide nearly \$318 million in estimated annual employee income. In 2017, on-site businesses generated over \$968 million in estimated sales revenue. In 2017 the combined site properties generated over \$3 million in local property taxes. In 2018, the value of the site properties exceeded \$83 million.



*Figure 11. Entrance to Cummins Power Generation's facilities at the Boise Cascade/Onan Corp./Medtronics, Inc. site (Minnesota).*

# REDEVELOPMENT IN ACTION

## CONTINENTAL STEEL CORP.

### Soccer, Solar Energy and Stormwater Infrastructure

From 1914 to 1986, a steel manufacturing facility operated at the 183-acre Continental Steel Superfund site in Kokomo, Indiana. Facility operations included handling, storage and disposal of hazardous materials. Facility operations contaminated soil, sediment, surface water and groundwater with volatile organic compounds, polychlorinated biphenyls and metals. In 1989, EPA added the site to the NPL.

As cleanup began, EPA, the state, the community and local developers worked together to support the return of portions of the site to productive use. In 1991, a local florist began using an on-site warehouse and sublet part of the property for equipment storage. EPA also worked with the community to evaluate other reuse opportunities. Part of the cleanup allowed the local government to move forward with a stormwater project that uses the on-site quarry as a stormwater retention/detention basin. EPA worked with Howard County to remove and relocate fill material from an area with poor drainage, thereby saving the project thousands of dollars. Cleanup includes treatment of contaminated groundwater, excavation of contaminated soil and sediment, capping areas of residual contamination, and institutional controls. Three wind turbines on site produce over half of the energy needed to power groundwater treatment operations.

A community-based redevelopment plan, announced in 2006, called for retail space as well as recreation areas at the site. The first phase of the 60-acre Wildcat Creek Soccer Complex sports facility was completed in 2015. When finished, it will accommodate 30 youth and full-size soccer fields, a 1.25- mile walking trail, parking for 400 vehicles, a concession stand, storage facilities and restrooms. The Complex has enhanced community access to recreational and outdoor activities. In December 2016, a \$10 million, 7-megawatt solar facility began operating at the site. The 29-acre Kokomo Solar Park includes 21,000 solar panels and provides power for up to 1,000 homes. It revitalizes part of the site that had been vacant for decades. In April 2017, EPA Region 5 presented the local government with a RENEW Award in recognition of excellence in site reuse. EPA Region 5 developed the RENEW Award to recognize outstanding efforts in the reuse of Superfund sites that strengthen communities and advance environmental protection.



*Figure 12. The Kokomo Solar Park at the Continental Steel Corp. site (Indiana).*

# REDEVELOPMENT IN ACTION

## JOSLYN MANUFACTURING & SUPPLY CO.

### Twin Lakes Business Park Development

The 30-acre Joslyn Manufacturing & Supply Co. Superfund site is located in Brooklyn Center, Minnesota. Beginning in the 1920s and ending in 1980, a succession of companies operated a wood-treating facility on site. The companies placed wastes in waste disposal ponds, buried sludge on site and spilled wood-treating solutions onto the ground. These practices contaminated soil and groundwater. EPA placed the site on the NPL in 1984.

Cleanup under Minnesota Pollution Control Agency (MPCA) oversight began in 1985. Cleanup included removal, treatment and disposal of contaminated soil. It also includes ongoing groundwater treatment and removal of dense non-aqueous-phase liquids.

In 2017, MPCA proposed a cleanup plan for remaining soil contamination. EPA, state agencies and Real Estate Recycling (RER), a company specializing in redevelopment of once-contaminated lands, worked together to support reuse outcomes at the site. RER purchased the site property, continued cleanup and then redeveloped the area into the Twin Lakes Business Park. In 2002, EPA took the redeveloped part of the site off the NPL. The redevelopment has resulted in the beneficial use of a valuable property in the heart of the Minneapolis-St. Paul metropolitan area and spurred additional development nearby.

The business park provides 421,000 square feet of commercial and industrial space for a variety of tenants. Today, site businesses employ over 140 people and provide nearly \$11 million in estimated annual employee income. In 2017, site businesses generated an estimated \$272 million in sales revenue. The total value of site properties in 2016 exceeded \$22 million. In 2017, site properties generated nearly \$245,000 in local property taxes.



*Figure 13. The Automation, Inc. facility at the Joslyn Manufacturing & Supply Co. Superfund site (Minnesota).*



# REDEVELOPMENT IN ACTION

## MACGILLIS & GIBBS CO./BELL LUMBER & POLE CO. New Brighton Corporate Park III

The 68-acre MacGillis & Gibbs Co./Bell Lumber & Pole Co. site consists of two adjoining properties in New Brighton, Minnesota. Wood-preserving facilities operated on both properties through most of the 20th century. Site operations and waste disposal practices contaminated soil, sediment and groundwater. EPA added the site to the NPL in 1984.

Cleanup included off-site disposal of waste oil, sludge and some contaminated soil, treatment of highly contaminated soil, cleaning of process tanks and vaults, demolition and off-site disposal of site structures, capping of some contaminated soil, and groundwater treatment. Land and groundwater use restrictions are also in place for the site. EPA and the Minnesota Pollution Control Agency completed most of the cleanup by 2001. Before and during the cleanup, the city focused on laying the groundwork necessary to redevelop the MacGillis & Gibbs property. This effort is part of city plans to revitalize a historic road that was once a main route through Minneapolis and St. Paul.

In 1997, the city of New Brighton and state and federal agencies successfully negotiated a Prospective Purchaser Agreement to resolve the city's liability concerns about acquiring the property. The site's cleanup and the agreement made possible the construction of New Brighton Corporate Park III, a 32-acre development that includes manufacturing, distribution and other businesses. Today, on-site businesses employ over 500 people and contribute an estimated \$35 million in annual employment income. In 2017, site businesses generated over \$94 million in estimated sales revenue. The combined value of site properties in 2017 exceeded \$38 million. On-site properties also generated \$1.1 million in property taxes in 2017.



*Figure 14. The Donatelle Plastics facility at the MacGillis & Gibbs Co./Bell Lumber & Pole Co. site (Minnesota).*

# REDEVELOPMENT IN ACTION

## SOUTH POINT PLANT

### The Point Industrial Park

The 610-acre South Point Plant site is located in the village of South Point in southern Ohio. From the 1940s to the late 1990s, manufacturing facilities at the site produced explosives, industrial chemicals and fuels. Spills and improper waste handling practices resulted in the contamination of groundwater and soils. EPA placed the site on the NPL in 1984. Cleanup activities included excavation, on-site consolidation, off-site disposal of contaminated soil, capping of contaminated soil and groundwater containment as well as land and groundwater use restrictions.

After assessing several locations in the region, the Lawrence Economic Development Corporation (LEDC) chose the site as the ideal place to host an industrial park. Centrally located on the Ohio River, the site offered direct access to major transportation networks as well as extensive infrastructure. EPA supported redevelopment efforts by awarding a Superfund Redevelopment Initiative pilot grant to the LEDC in 2001. The LEDC used the grant to develop reuse plans that fit well with the site's remedy. After cleanup finished, EPA issued a Ready for Reuse (RfR) Determination in 2004 indicating that the site's remedy could support commercial and industrial uses. In 2011, EPA determined that the site met the requirements for a Site-wide Ready for Anticipated Use (SWRAU) determination based on previous remedial action and all documents reviewed for the site. A SWRAU determination was signed by EPA on September 22, 2011.

Today, the site hosts one of the nation's premier industrial parks. The Point is home to 25 logistics and other industrial businesses, including a FedEx distribution facility; Jennmar McSweeney, LLC, a mining machinery and equipment manufacturing company; Engines Inc. of Ohio, a machining and fabrication company; and Orica Ground Support, which specializes in plastics material and resin manufacturing. Together, these businesses employ nearly 700 people and contribute an estimated \$36 million in annual employment income. On-site properties generate a combined \$230,000 in property taxes annually. The combined assessed value of the parcels in 2017 was over \$17 million.

The future is also looking bright at The Point. HarbisonWalker International, a manufacturer of high-temperature resistant ceramics, broke ground on a \$30 million facility in the summer of 2017. The facility will employ 40 people. In the spring of 2018, the LEDC held a groundbreaking celebration for a new, 9,000-square-foot commercial building on site.

"The LEDC and the village of South Point requested our assistance to address potential stigma or public safety concerns that prospective businesses might have regarding the site ... we have worked with them to develop several tools that have supported the site's reuse while also ensuring that the community's health is protected."

- Tom Bloom,

EPA Region 5 Superfund Redevelopment Coordinator



Figure 15. A sign highlighting the jobs made possible by the site's redevelopment (Ohio).

# REDEVELOPMENT IN ACTION

## REILLY TAR & CHEMICAL CORP. (INDIANAPOLIS PLANT)

### Chemical Manufacturing and Solar Energy Production

The 120-acre Reilly Tar & Chemical Corp. (Indianapolis Plant) Superfund site is located in Indianapolis, Indiana. Until 1972, a coal-tar refining and wood treatment facility operated at the site. Site activities included on-site disposal of facility wastes in a trench, pond, landfill and in several pits. Waste handling practices resulted in groundwater and soil contamination. A specialty chemicals production facility has also operated on site since the early 1950s.

EPA placed the site on the NPL in 1984. Cleanup involved containment and treatment of contaminated groundwater, construction of a permeable cover over the wood treatment and storage area, and removal or treatment of contaminated soil. Land and groundwater use restrictions are in place at the site. Groundwater monitoring is ongoing.

Vertellus Specialties continues to operate at the site. The company makes chemicals used in diverse applications, processes and market sectors, including agriculture, life sciences, industrial specialties, nutrition, personal care and plastics. In 2017, the company employed over 120 people and provided nearly \$8 million in estimated annual employee income.

The site is also home to the Maywood Solar Farm. Vertellus Specialties worked with EPA, state and local agencies, the solar developer (Hanwha Q CELLS), and several other partners to develop the solar farm on part of the site's south landfill and a former drainage ditch. Hanwha Q CELLS worked with EPA to develop a plan for the solar installation that minimized disturbance of the soil and gravel covers and used the area's existing topography. Vertellus Specialties began operating the solar farm on the southern 43 acres of the site in February 2014. The company's lease with the solar developer calls for the farm to operate for up to 30 years. The 10.8-megawatt installation includes over 36,000 solar panels. It is the first utility-scale solar farm on a Superfund site in the Midwest. The project created 75 to 100 jobs during construction. In April 2014, EPA presented Hanwha Q CELLS with the first-ever Region 5 RENEW Award in recognition of its commitment to the site's safe and beneficial use. EPA Region 5 developed the RENEW Award to recognize outstanding efforts in the reuse of Superfund sites that strengthen communities and advance environmental protection.



*Figure 16. Maywood Solar Farm at the Reilly Tar & Chemical Corp. (Indianapolis Plant) site (Indiana).*



# REDEVELOPMENT ON THE HORIZON IN REGION 5

## TRANSFORMING A FORMER MANUFACTURING PROPERTY INTO A RECREATIONAL AND COMMERCIAL ASSET

The 17-acre Aircraft Components (D & L Sales) Superfund site is located next to the Paw Paw River in Benton Harbor, Michigan. Several manufacturing companies operated on site, including an airplane parts resale business. Some of the aircraft parts contained radioactive paint. Site investigations found that some of the aircraft parts had deteriorated, raising concerns that radioactive paint and dust could leak out.

EPA led emergency cleanup activities in 1995 and added the site to the NPL in 1996. Cleanup included removal and disposal of radioactive materials, contaminated soil and sediment as well as cleanup and demolition of on-site buildings and groundwater treatment.

Today, the site is part of a community-wide development project and has been included on EPA's Redevelopment Focus List of sites with the greatest expected redevelopment and commercial potential. In 2007, Harbor Shores BHBT Land Development redeveloped the majority of the site into the Harbor Shores Golf Course, a premier golf course that has hosted the Senior PGA Championship.

The golf course is at the heart of economic revitalization efforts in the area, which included the remediation and redevelopment of several Brownfield sites. Revenues from course operations fund local educational and job training programs. The course is also connected to the local arts community, and features sculptures at each hole created by area artists.

EPA continues to work with Michigan Department of Environmental Quality and Harbor Shores BHBT Land Development on other redevelopment efforts at the site, including expansion plans for a local brewery. The expansion will support cold storage, warehousing and beer bottling. Long-term plans call for a new brewhouse and larger fermenters at the facility in the future.



*Figure 17. A view of Hole 14 of the Harbor Shores Golf Course on the Aircraft Components (D & L Sales) site (Michigan)*

# CONCLUSION

EPA works closely with its partners at Superfund sites across Region 5 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 helps stabilize and boost property values. There are 116 NPL sites and 14 non-NPL Superfund sites in Region 5 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 5, including at least one site in each of the six Region 5 states. EPA remains committed to working with all stakeholders to support Superfund redevelopment opportunities in Region 5.



Figure 18. Andover Cinema at the South Andover site (Minnesota)

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 5, 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 Site Redevelopment Resources

### ***EPA Region 5 Superfund Redevelopment Initiative Coordinator***

Tom Bloom | 312-886-1967 | [bloom.thomas@epa.gov](mailto:bloom.thomas@epa.gov)

*Superfund Sites in Reuse*: find more information about Superfund sites in reuse

[www.epa.gov/superfund-redevelopment-initiative/find-sites-reuse](http://www.epa.gov/superfund-redevelopment-initiative/find-sites-reuse)

*Superfund Redevelopment Initiative Website*: tools, resources and more information about Superfund site reuse

[www.epa.gov/superfund-redevelopment-initiative](http://www.epa.gov/superfund-redevelopment-initiative)

*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)

# STATE REDEVELOPMENT PROFILES







# ILLINOIS REDEVELOPMENT PROFILE

EPA partners with the Illinois Environmental Protection Agency to oversee the investigation and cleanup of Superfund sites in Illinois. Illinois has 22 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 and continued use in Illinois.

## Businesses and Jobs

EPA has collected economic data for 60 businesses and organizations operating on 10 sites in reuse and continued use in Illinois.

**Table 3. Detailed Site and Business Information for Sites in Reuse and Continued Use in Illinois (2017)**

	Sites <sup>a</sup>	Sites with Businesses	Businesses <sup>b</sup>	Total Annual Sales <sup>c</sup>	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	11	4	22	\$21 million	184	\$9 million
<i>In Continued Use</i>	6	3	4	\$14 million	171	\$15 million
<i>In Reuse and in Continued Use</i>	5	3	34	\$56 million	362	\$20 million
<b>Total</b>	22	10	60	\$91 million	717	\$44 million

<sup>a</sup> Five sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use.

<sup>c</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 and continued use in Illinois. These sites span 22 property parcels and 448 acres.

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

Total Land Value (6 sites)	Total Improvement Value (6 sites)	Total Property Value (6 sites)	Total Annual Property Taxes (6 sites)
\$122,000	\$32,000	\$154,000	\$13,000

<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 2016 to 2017.



Figure 19. This auto parts store operates at the Ottawa Radiation Areas site.

## Did You Know?

The Ottawa Radiation Areas site consists of 16 areas scattered across Ottawa, Illinois, 14 of which have been cleaned up. These areas are now in commercial and industrial reuses. Site reuses also include a parking lot and a YMCA. Businesses at the site employ 35 people. They provide almost \$1.4 million in estimated annual income and generate over \$2.6 million in estimated annual sales.



# INDIANA REDEVELOPMENT PROFILE

EPA partners with the Indiana Department of Environmental Management to oversee the investigation and cleanup of Superfund sites in Indiana. Indiana 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 and continued use in Indiana.

## Businesses and Jobs

EPA has collected economic data for 17 businesses and organizations operating on seven sites in reuse and continued use in Indiana.

**Table 5. Detailed Site and Business Information for Sites in Reuse and Continued Use in Indiana (2017)**

	Sites	Sites with Businesses	Businesses <sup>a</sup>	Total Annual Sales	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	7	3	10	\$103 million	255	\$8 million
<i>In Continued Use</i>	5	2	3	\$44 million	99	\$5 million
<i>In Reuse and in Continued Use</i>	3	2	4	\$33 million	129	\$8 million
<b>Total</b>	<b>15</b>	<b>7</b>	<b>17</b>	<b>\$180 million</b>	<b>483</b>	<b>\$21 million</b>

<sup>a</sup> 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 seven Superfund sites in reuse and continued use in Indiana. These sites span 65 property parcels and 287 acres.

**Table 6. Property Value and Tax Information for Sites in Reuse and Continued Use in Indiana<sup>a</sup>**

Total Land Value (7 sites)	Total Improvement Value (7 sites)	Total Property Value (7 sites)	Total Annual Property Taxes (6 sites)
\$6 million	\$12 million	\$18 million	\$421,000

<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 2016 to 2017.



Figure 20. The Wellfield Botanic Gardens at the Main Street Well Field site.

## Did You Know?

During cleanup, a 15-well municipal well field continued to operate at the Main Street Well Field site in Elkhart, Indiana. The well field provides drinking water for city residents. In 2001, the city put in biking, jogging and walking trails and later added the Wellfield Botanic Gardens, enhancing the site's western area.



# MICHIGAN REDEVELOPMENT PROFILE

EPA partners with the Michigan Department of Environmental Quality to oversee the investigation and cleanup of Superfund sites in Michigan. Michigan has 28 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 and continued use in Michigan.

## Businesses and Jobs

EPA has collected economic data for 72 businesses and organizations operating on 20 sites in reuse and continued use in Michigan.

**Table 7. Detailed Site and Business Information for Sites in Reuse and Continued Use in Michigan (2017)**

	Sites <sup>a</sup>	Sites with Businesses	Businesses <sup>b</sup>	Total Annual Sales	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	13	9	26	\$75 million	305	\$18 million
<i>In Continued Use</i>	11	8	10	\$173 million	452	\$34 million
<i>In Reuse and in Continued Use</i>	4	3	36	\$54 million	392	\$20 million
<b>Total</b>	28	20	72	\$302 million	1,149	\$72 million

<sup>a</sup> One site is a federal facility. Federal facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> 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 seven Superfund sites in reuse and continued use in Michigan. These sites span 96 property parcels and 27 acres.

**Table 8. Property Value and Tax Information for Sites in Reuse and Continued Use in Michigan<sup>a</sup>**

Total Land Value (1 site)	Total Improvement Value (1 site)	Total Property Value (7 sites)	Total Annual Property Taxes (7 sites)
\$1 million	\$2 million	\$12 million	\$468,000

<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 2016 to 2017.



Figure 21. The Kentwood Branch library opened at the Kentwood Landfill site in 2010.

## Did You Know?

The city of Kentwood and Kent County worked with EPA on plans for the future use of the Kentwood Landfill site in Kentwood, Michigan. This collaboration resulted in successful reuse – a public library and farmer’s market are located on site. The library provides over \$600,000 in estimated annual income.





# MINNESOTA REDEVELOPMENT PROFILE

EPA partners with the Minnesota Pollution Control Agency to oversee the investigation and cleanup of Superfund sites in Minnesota. Minnesota has 31 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 and continued use in Minnesota.

## Businesses and Jobs

EPA has collected economic data for 205 businesses and organizations operating on 20 sites in reuse and continued use in Minnesota.

**Table 9. Detailed Site and Business Information for Sites in Reuse and Continued Use in Minnesota (2017)**

	Sites <sup>a</sup>	Sites with Businesses	Businesses <sup>b</sup>	Total Annual Sales	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	16	9	155	\$1 billion	2,818	\$160 million
<i>In Continued Use</i>	10	6	28	\$1.2 billion	1,711	\$172 million
<i>In Reuse and in Continued Use</i>	5	5	22	\$998 million	3,256	\$332 million
<b>Total</b>	<b>31</b>	<b>20</b>	<b>205</b>	<b>\$3.2 billion</b>	<b>7,785</b>	<b>\$664 million</b>

<sup>a</sup> Two sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> 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 20 Superfund sites in reuse and continued use in Minnesota. These sites span 386 property parcels and 1,226 acres.

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

Total Land Value (19 sites)	Total Improvement Value (19 sites)	Total Property Value (20 sites)	Total Annual Property Taxes (20 sites)
\$91 million	\$224 million	\$318 million	\$9 million

<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 2016 to 2018.



Figure 22. Target is one of many commercial businesses at the South Andover site.

## Did You Know?

From 1954 to 1981, waste disposal and salvage facilities operated at the South Andover site in Andover, Minnesota. Cleanup finished in 1994 and the city of Andover bought the property and led redevelopment efforts. Commercial businesses and a townhome development are now located on site. The businesses employ 300 people. They provide an annual estimated income of over \$8.5 million and generate nearly \$14 million in estimated annual sales.



# OHIO REDEVELOPMENT PROFILE

EPA partners with the Ohio Environmental Protection Agency to oversee the investigation and cleanup of Superfund sites in Ohio. Ohio has 20 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 and continued use in Ohio.

## Businesses and Jobs

EPA has collected economic data for 79 businesses and organizations operating on 10 sites in reuse and continued use in Ohio.

**Table 11. Detailed Site and Business Information for Sites in Reuse and Continued Use in Ohio (2017)**

	Sites <sup>a</sup>	Sites with Businesses	Businesses <sup>b</sup>	Total Annual Sales	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	11	5	64	\$544 million	1,501	\$82 million
<i>In Continued Use</i>	9	5	15	\$523 million	661	\$45 million
<i>In Reuse and in Continued Use</i>	0	0	0	\$0	0	\$0
<b>Total</b>	20	10	79	\$1.1 billion	2,162	\$127 million

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

<sup>b</sup> 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 seven Superfund sites in reuse and continued use in Ohio. These sites span 217 property parcels and 1,272 acres.

**Table 12. Property Value and Tax Information for Sites in Reuse and Continued Use in Ohio<sup>a</sup>**

Total Land Value (7 sites)	Total Improvement Value (7 sites)	Total Property Value (7 sites)	Total Annual Property Taxes (7 sites)
\$15 million	\$36 million	\$51 million	\$557,000

<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 2016 to 2017 where date information was provided.



Figure 23. Behr Dayton's facilities at the Behr Dayton Thermal System VOC plume site.

## Did You Know?

Since 1936, the Behr Dayton Company has continued to operate at the Behr Dayton Thermal System VOC Plume site in Dayton, Ohio. Other site uses include residential, commercial and industrial areas. Facility operations contaminated groundwater beneath the site. Site investigations and cleanup planning are ongoing. The Behr Dayton Company generates nearly \$23 million in estimated annual sales and provides over \$5 million in estimated annual income.



# WISCONSIN REDEVELOPMENT PROFILE

EPA partners with the Wisconsin Department of Natural Resources to oversee the investigation and cleanup of Superfund sites in Wisconsin. Wisconsin has 14 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 and continued use in Wisconsin.

## Businesses and Jobs

EPA has collected economic data for 14 businesses and organizations operating on seven sites in reuse and continued use in Wisconsin.

**Table 13. Detailed Site and Business Information for Sites in Reuse and Continued Use in Wisconsin (2017)**

	Sites	Sites with Businesses	Businesses <sup>a</sup>	Total Annual Sales <sup>b</sup>	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	5	2	6	\$62 million	215	\$12 million
<i>In Continued Use</i>	8	4	5	\$98 million	419	\$20 million
<i>In Reuse and in Continued Use</i>	1	1	3	\$386,000	14	\$593,000
<b>Total</b>	<b>14</b>	<b>7</b>	<b>14</b>	<b>\$160 million</b>	<b>648</b>	<b>\$33 million</b>

<sup>a</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use.

<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 seven Superfund sites in reuse and continued use in Wisconsin. These sites span 18 property parcels and 260 acres.

**Table 14. Property Value and Tax Information for Sites in Reuse and Continued Use in Wisconsin<sup>a</sup>**

Total Land Value (7 sites)	Total Improvement Value (7 sites)	Total Property Value (7 sites)	Total Annual Property Taxes (7 sites)
\$1 million	\$4 million	\$5 million	\$99,000

<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 was 2017 for all data collected where date information was provided.



**Figure 24. The Northern Engraving Corporation continues to manufacture car dials.<sup>8</sup>**

## Did You Know?

Past wastewater treatment and disposal practices at the Northern Engraving Co. site in Sparta, Wisconsin, resulted in soil, surface water and groundwater contamination. The Northern Engraving Corporation continues to operate on site. The company makes metal nameplates, dials and decorative trim for the automotive industry. The company generates \$30 million in estimated annual sales and provides close to \$14 million in estimated annual income.

8. Carina GT Dials available at [https://commons.wikimedia.org/wiki/File:Carina\\_GT\\_Dials.jpg](https://commons.wikimedia.org/wiki/File:Carina_GT_Dials.jpg). CC BY-SA 3.0 available at <https://creativecommons.org/licenses/by-sa/3.0/>.



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# SOURCES

# 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) ([www.dnb.com](http://www.dnb.com)) 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.

When Hoovers/D&B research was unable to identify employment and sales volume for on-site businesses, EPA used the ReferenceUSA database ([resource.referenceusa.com](http://resource.referenceusa.com)). In cases where ReferenceUSA did not include employment and sales volume for on-site businesses, EPA used the Manta database ([www.manta.com](http://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 2017. Estimated annual employment income was calculated using 2017 jobs data and BLS average weekly wage data for those jobs from 2016 (the latest available wage data at the time of this profile). Federal facility sites are included in calculations of total sites in reuse or continued use only. Federal facility sites are 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 the convenience of the reader.

# 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 2016 to 2018 where date information was provided. All figures presented have been rounded for the convenience of the reader. Federal facility sites are excluded from all property value and tax calculations.



# REUSE INFORMATION SOURCES

Write-ups of sites in reuse or continued use included in this profile are based on available EPA resources, including Superfund Redevelopment Initiative case studies as well as other resources. Links to EPA's Superfund Redevelopment Initiative case studies and other resources are included below.

## **EPA Resources**

Boise Cascade/Onan Corp./Medtronic, Inc. 2017. Reuse and the Benefit to the Community, Boise Cascade/Onan Corp./Medtronic, Inc. [semspub.epa.gov/src/document/HQ/197013](https://semspub.epa.gov/src/document/HQ/197013).

Continental Steel Corp. EPA Region 5 RENEW Award. EPA Region 5. [www.epa.gov/superfund-redevelopment-initiative/epa-region-5-renew-award](https://www.epa.gov/superfund-redevelopment-initiative/epa-region-5-renew-award).

Reilly Tar & Chemical Corp. (Indianapolis Plant). 2015. Utility-Scale Solar Energy Development. [semspub.epa.gov/src/document/03/900106](https://semspub.epa.gov/src/document/03/900106).

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Joslyn Manufacturing & Supply Co. 2016. Reuse and the Benefit to the Community, Joslyn Manufacturing & Supply Co. [semspub.epa.gov/src/document/HQ/196754](https://semspub.epa.gov/src/document/HQ/196754).

Southside Sanitary Landfill. 2011. Reuse and the Benefit to the Community, Southside Sanitary Landfill. [semspub.epa.gov/src/document/05/633378](https://semspub.epa.gov/src/document/05/633378).

## **Other Resources**

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*Back cover photos: Allied Paper, Inc./Portage Creek/Kalamazoo River site (Michigan), MacGillis & Gibbs CO. site (Minnesota), Petersen Sand & Gravel site (Illinois)*



## United States Environmental Protection Agency

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