# EPA Region 5 Superfund Redevelopment


EPA United States Environmental Protection Agency

EPA Region 5
Superfund Division
Chicago, IL 60604

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www.epa.gov/region5/superfund

## About EPA's Superfund Redevelopment Initiative

EPA's Superfund Redevelopment Initiative helps communities return hazardous waste sites to safe and productive uses. While cleaning up these Superfund sites and making them protective of human health and the environment, the Agency is working with communities and other partners to consider future use opportunities and integrate appropriate reuse options into the cleanup process. Consideration of a site's potential future use is an important part of EPA's responsibility to ensure the long-term protectiveness of site remedies.

With the cooperation of communities and EPA, areas that were once hazards to human health and the environment are now being cleaned up and turned into office parks, athletic fields, commercial centers, residential areas, tourist attractions, and nature preserves. Sites that were abandoned have become valuable community resources and many are now generating tax revenue and spurring broader economic revitalization. Nationwide, more than 550 cleaned-up Superfund sites are ready for reuse, or have already returned to productive uses. A survey of 123 of these sites in 2008 found 27,000 jobs at the sites, and businesses located on these sites reported annual sales of more than $22 billion.

*The MacGillis & Gibbs Superfund Site in New Brighton, Minn., before and after redevelopment. Source: EPA*


*The South Point Superfund Site in South Point, Ohio, before and after redevelopment. Source: EPA*

## Superfund Redevelopment in Region 5

Region 5 is the nation's leader in supporting Superfund redevelopment. Region 5's Superfund program identifies hazardous waste sites and cleans them up. Before, during, and after the Superfund cleanup process, Region 5's Superfund Redevelopment Initiative works to ensure that these sites will be returned to safe and productive uses. Returning sites to beneficial use will provide local communities with valuable green space, recreational amenities, and commercial property. Removing the stigma associated with fenced and vacant Superfund sites may also increase local property values and the tax base.

This brochure provides updated information about Region 5 SRI, past and ongoing Region 5 SRI projects, and how community members can get involved in reuse planning at Superfund sites. It also provides more detailed information about how reuse can be incorporated into the cleanup process.

## About Region 5 SRI

Region 5 has more sites on the Superfund National Priorities List than any other EPA Region. The goal of Region 5 SRI is to protect human health and the environment and support communities and the productive reuse of as many NPL sites as possible, by confronting the issue of Superfund-related site stigmatization and by providing information about sites to ensure that they are reused safely. Thanks in part to Region 5 SRI support, site owners have implemented many types of reuse: recreational, ecological, commercial, and residential. With every type of reuse, the goal of Region 5 SRI is to integrate the reuse with the remedy in place at the site.

*Residents, local officials and Region 5 staff gather in Antioch, Ill. on Earth Day to celebrate the opening of the Tim Osmond Sports Complex at the H.O.D. Landfill site. Source: EPA*

For more information about Superfund sites in Region 5, please visit www.epa.gov/region5superfund/redevelop/.

www.epa.gov/region5/gov/region5superfund/redevelop/

## Site-Specific Reuse Information

Region 5 SRI has developed fact sheets that provide information about Superfund sites that are in actual use or are in the process of being returned to use.

**Site Reuse Fact Sheets:** These fact sheets provide information about the cleanup and potential reuse status of sites. They contain information about the location and size of each site, surrounding land uses and population sizes, zoning, land use restrictions, and each site's cleanup status. The fact sheets also provide pictures of the sites. There are four categories of fact sheets:

> ***In Reuse*** fact sheets provide information about sites that have been cleaned up and are currently in reuse. They describe the relationship between the cleanup process and the reuse process as well as the current use of the site.
>
> ***In Continued Use*** fact sheets describe the readiness for use and remedial status for sites that are supporting continued use.
>
> ***Ready for Reuse*** fact sheets provide information about sites that have been cleaned up and could be ready for some type of use. They also describe uses that the site's remedy may support, although it is always important to work with EPA, landowners, responsible parties, and other stakeholders who may be playing an important role in making sure the remedy remains protective of human health and the environment.
>
> ***Potential for Future Use*** fact sheets describe sites that are in the process of being cleaned up and may be ready for reuse in the future.

Region 5 has 47 site reuse fact sheets for sites in the Region. To download fact sheets, please visit www.epa.gov/region5superfund/redevelop/success/reusefactsheet.htm**.**

www.epa.gov/region5superfund/redevelop/success/reusefactsheet.htm

# Region 5 Superfund Redevelopment

**Case Studies:** Sharing lessons learned is a good way to help stakeholders understand the issues, strategies, and opportunities they may encounter while reusing Superfund sites. EPA has captured many of these stories, some of which include economic impacts and social and environmental benefits. Many of these case studies can be accessed at www.epa.gov/superfund/programs/recycle/live/region5.html. Region 5 also has additional in-depth case studies that are available to stakeholders interested in the reuse of sites.

*H.O.D. Landfill in Antioch, Ill., before (left) and after (right) redevelopment. Source: EPA*

*Commercial reuse at the South Point Superfund site in South Point, Ohio, (left) and the Southside Sanitary Landfill in Indianapolis, Ind., (right). Source: EPA*

www.epa.gov/superfund/programs/recycle/live/region5.html

**SRI Pilot Project Fact Sheets:** From 1999 to 2002, fourteen communities received cooperative agreements or in-kind service grants from EPA headquarters to look at future use opportunities for their Superfund sites. Region 5 continues to provide communities with in-kind service grants to consider future use at sites. Information about these pilot projects can be seen at www.epa.gov/superfund/programs/recycle/activities/pilot.html.



*Before cleanup of Tar Lake Superfund site in Mancelona, Mich., (left), and conceptual drawing of reuse with a biomass fuel plant (right). Financing negotiations for redevelopment are underway. Source: EPA (left), HDR / Cummins and Barnard (right)*

www.epa.gov/superfund/programs/recycle/activities/pilot

## Return to Use Initiative

In order to focus on Superfund sites that have already been cleaned up but remain vacant, EPA has established the Return to Use (RTU) Initiative. The RTU Initiative has one major purpose: to remove barriers to reuse that are not necessary for the protection of human health and the environment. The RTU Initiative focuses on NPL sites that were cleaned up prior to EPA's emphasis on considering reuse during response activities. With appropriate oversight, communities can reclaim these unused sites. The Initiative is using a variety of actions to enable the reuse of sites: modifying fences, providing information about site environmental conditions, eliminating misleading signs, and implementing effective institutional controls.

*Superfund Director Michael B. Cook (far left) announces the Return to Use Initiative at the Butterworth Landfill in Grand Rapids, Mich., in November 2004, joined by George Heartwell (second from left), Mayor of Grand Rapids, and Jay Steffen (far right), Director of Parks and Recreation in the City of Grand Rapids. Source: EPA*

Establishing partnerships with communities and other stakeholders to overcome obstacles to reuse is the focus of the RTU Initiative. These site-specific partnerships, referred to as demonstration projects, can be as formal or informal as communities wish, ranging from a "handshake" agreement between community representatives and EPA Regional representatives, to a Memorandum of Understanding between Regional Offices and local stakeholders.

Region 5 has more RTU demonstration projects than any other region in the nation. In 2004, there were 11 RTU demonstration projects nationwide, with five in Region 5; in 2006, there were 19 RTU projects nationwide, with seven in Region 5; and in 2007, there were 12 RTU projects nationwide, with three in Region 5. In 2009, an additional two sites were nominated in the region. Region 5 is committed to returning cleaned up Superfund sites to communities to be used in a productive and protective manner. Fact sheets are available for all of Region 5's RTU demonstration projects at www.epa.gov/superfund/programs/recycle/activities/rtudemos.html.

www.epa.gov/superfund/programs/recycle/activities/rtudemos.html

## Renewable Energy Projects

Region 5 places special emphasis on pursuing reuse that focuses on renewable energy development. Ongoing renewable energy projects include:

*H.O.D. Landfill* - A methane co-generation plant has been operating on this Antioch, Ill., site since September 2003 and provides ninety percent of the local high school's electrical, heat and hot water needs. The project has received several awards including the 2004 National Honor Award from the American Council of Engineering Companies.

*Rose Township Dump BioFuels Project* - This site is being used to grow, harvest and test biofuel feedstock including canola, switchgrass and corn. The project features partnerships between EPA, Michigan Department of Environmental Quality, NextEnergy, Michigan State and Chrysler.

*Tar Lake* - A 140 million dollar biomass plant is moving towards construction phase. The plant is expected to bring 50-60 permanent jobs to Mancelona, Mich., and will use about 400,000 tons of clean wood waste to generate 283,800 Megawatt hours of "green" energy each year.

*Manistee Lake* - This Manistee, Mich., site supports a wind turbine which is collecting data for a potential field of wind turbines along the eastern coast of Lake Michigan.

*Lake Sandy Joe* -Van Buren Missionary Baptist Church is in the initial stages of a windfarm project that will produce small scale electrical energy for the nearby environmental justice residential area of Gary, Ind.

*Reuse at the Rose Township Dump in Michigan explores how biomass - organic material made from plants or animals - can be used as an alternative energy source. Soybeans, corn, sunflowers, canola and switchgrass have been planted and processsed to determine how contaminated lands may support the development of biomass as a renewable energy source. Source: EPA*

*Mt. Greeley* - Wind gradient measurements are being taken at this site in Mount Greeley, Mich., to assess potential for a wind-generation electricity project.

## Tools and Resources

Various tools and resources are available for stakeholders interested in the reuse of Superfund sites.

### *Funding Technical Service Opportunities*

EPA provides several funding opportunities for citizens interested in becoming more involved in the planning process for their local Superfund site. EPA supports Community Advisory Groups (CAGs), which are groups of citizens that communicate to EPA their concerns regarding site cleanup and future use. EPA can provide technical advisors to help community members understand technical issues at their Superfund site through the Technical Assistance Services for Communities (TASC) program. For more information on the TASC program, visit www.epa.gov/superfund/community/tasc/index.htm.

www.epa.gov/superfund/community/tasc/index.htm

*CAG members from the Bay Harbor Regional Stakeholder Group meet to discuss the Little Traverse Bay CKD Release Site (Site) in Petosky, Mich., (above). Resort hotels, private residences and a golf course have been developed on the Site, which formerly included a cement factory and a quarry (below). Source: EPA*

## Tools and Resources continued

### *Ready for Reuse (RfR) Determinations*

Region 5 SRI issues RfR determinations for real estate parcels at selected Superfund sites to provide potential developers, purchasers, local governments, and communities with current information for these parcels. The RfR determination is an environmental status report that documents a technical determination by EPA, in consultation with states, tribes, and local governments, that all or a portion of a real estate property can support specified types of uses and remain protective of human health and the environment, based upon cleanup goals met for the site.

As of October 2009, Region 5 SRI has issued RfR determinations for the following sites:

- H.O.D. Landfill in Antioch, Ill.
- South Point Plant in South Point, Ohio
- Augustus Hook in Frankfort, Ind.
- Ingram-Richardson in Frankfort, Ind.


EPA

*On this day: September 12, 2007,*
the U.S. Environmental Protection Agency (U.S. EPA)
Determines that

*Ingram-Richardson Superfund Site*
*Is Ready for Commercial/Industrial Reuse*

*Jack Dowden, area director of closed sites for Waste Management, Inc., and Antioch's Mayor Taso Maravelas hold the H.O.D. Landfill's Ready for Reuse determination (top). Ingram-Richardson Ready for Reuse cover sheet (bottom). Source: EPA*

Region 5 is working with additional communities to decide whether the RfR determination is the right tool to support reuse at their site. For more information about Ready for Reuse determinations, visit www.epa.gov/superfund/programs/recycle/tools/rfrguidance.html. RfR determinations for the H.O.D. Landfill and South Point Plant sites are also available at this Web site.

www.epa.gov/superfund/programs/recycle/tools/rfrguidance.htm

## Tools and Resources continued

### *Reuse Planning Opportunities in Region 5*

EPA's primary responsibility at Superfund sites is to ensure the protection of human health and the environment. With forethought and effective planning, communities can coordinate with EPA and return sites to productive use without jeopardizing the effectiveness of the remedy. With this in mind, EPA Region 5 supports community-based planning efforts at Superfund sites which integrate future land use information with site information and remedy considerations so that future site uses will ensure the protectiveness of site remedies.

EPA Region 5 offers a range of contractor services for communities that are planning for future use at Superfund sites, including community involvement support, research and analysis services, the development of site reuse planning strategies, and partnership support.

*Community involvement* activities can range from the coordination of small stakeholder groups to the formation of larger land use committees. Facilitators work with participants to identify opportunities and constraints at Superfund sites; they also support participants in identifying potential future use opportunities that will best meet the needs of the larger community. Community involvement can also include the coordination and facilitation of public meetings where community members can learn about and offer feedback on the reuse planning process. For more information about community involvement at Superfund sites, visit www.epa.gov/superfund/community/index.htm.

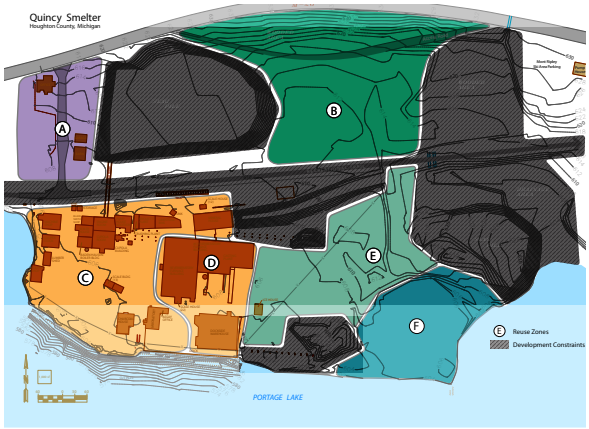
*Stakeholders participate in a site tour and reuse discussions at Quincy Smelter in Franklin Township, Mich.*
*Source: EPA*

www.epa.gov/superfund/community/index.htm

## Tools and Resources continued

*Research and analysis* are key elements of the reuse planning process that identify each site's existing conditions and history as well as key community characteristics that will inform the reuse planning process. Site stakeholders work with a consultant team and EPA to consider the types of uses that a site may be able to support and compare that information with area land trends, economic conditions, and community needs. The process helps establish realistic community expectations for future uses at a site.

A *site reuse planning strategy* incorporates research and analysis findings as well as stakeholder feedback into a written document and a graphic framework that outlines key opportunities and constraints that affect potential future uses at a Superfund site. Community members work together, with support from a consultant team and advisory assistance from EPA staff, to develop a site reuse plan that reflects the project's research findings and the community's reuse preferences and priorities. A reuse planning strategy highlights a site's existing conditions, surrounding context, and potential reuse opportunities and challenges that need to be addressed to ensure the most appropriate long-term outcomes at the site.




*The reuse planning process for the Quincy Smelter site in Franklin Township, Mich., identified reuse zones based on site considerations and suitability analysis. Source: EPA.*

## Tools and Resources continued

*Partnership support* is an integral element of the reuse planning process supported by Region 5. The process is not just about information, it is about people and partnerships. Project stakeholders such as municipal representatives, potentially responsible parties, community stakeholders, and others, work together to identify shared interests and build consensus regarding a site's potential future land use opportunities. The reuse planning process also focuses on local, regional, and national partnership opportunities with nonprofit organizations like the U.S. Soccer Foundation and the Academy of Model Aeronautics to help communities return sites to appropriate uses. By working with the U.S. Soccer Foundation, Region 5 SRI supported the conversion of the closed H.O.D. Landfill into athletic fields, open space, a methane co-generation plant, and restored wetlands. Region 5 SRI and the Academy of Model Aeronautics are teaming up to convert Superfund sites into flying fields for model airplane enthusiasts.


*FMC Corporation site in Fridley, Minn., has been used by Academy Model Aeronautics since 2006 under a renewable yearly contract with the site owner. Source: EPA*

## Helpful Links

**EPA's Superfund Redevelopment Program:**
www.epa.gov/superfund/programs/recycle/

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For information on **reusing Superfund sites,** the following reports may be helpful:

Recreational Reuse of Land Above Hazardous Waste Containment Areas:
www.epa.gov/superfund/programs/recycle/pdf/recreuse.pdf

Reusing Superfund Sites: Commercial Use Where Waste is Left on Site:
www.epa.gov/superfund/programs/recycle/pdf/c_reuse.pdf

Recreational Opportunities at Abandoned Mine Lands:
www.epa.gov/superfund/programs/recycle/pdf/rec_mining.pdf

Reusing Cleaned Up Superfund Sites: Golf Facilities Where Waste is Left on Site:
www.epa.gov/superfund/programs/recycle/pdf/golf.pdf

Wind Energy at Former Mining Sites:
www.epa.gov/superfund/programs/recycle/pdf/wind_energy.pdf

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For more information on **RfR determinations**, see:

RfR Determination Fact Sheet:
www.epa.gov/superfund/programs/recycle/pdf/rfrfactsheet.pdf

RfR Determination Guidance:
www.epa.gov/superfund/programs/recycle/pdf/rfrguidance.pdf

H.O.D. Landfill RfR Determination:
www.epa.gov/superfund/programs/recycle/pdf/hodfinalrfr.pdf

Ingram Richardson RfR Determination:
www.epa.gov/superfund/programs/recycle/pdf/southptrfr.pdf

South Point Plant RfR Determination:
www.epa.gov/superfund/programs/recycle/pdf/southptrfr.pdf

## Helpful Links

For more information on **partnerships**, see:

U.S. Soccer Foundation:
www.ussoccerfoundation.org/

EPA/AMA partnership information:
www.epa.gov/superfund/programs/recycle/activities/partnerships.html

AMA:
www.modelaircraft.org/

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For more information on **CAGs**, see:

CAG fact sheet:
www.epa.gov/superfund/community/cag/resource/quickeng.htm

CAG case studies:
www.epa.gov/superfund/community/cag/resource/casestdy.htm

CAG guidance:
www.epa.gov/superfund/community/cag/resource/guidance/caguide.pdf

CAG toolkit summary:
www.epa.gov/superfund/community/cag/pdfs/cagtlktc.pdf

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For more information on **TASC**, see:

TASC brochure:
www.epa.gov/superfund/community/tasc/pdfs/tasc_brochure.pdf

TASC services:
www.epa.gov/superfund/community/tasc/services.htm

TASC assistance:
www.epa.gov/superfund/community/tasc/assistance.htm

For more information on reuse tools and guidance documents, see:
www.epa.gov/superfund/programs/recycle/tools/index.html

## Contact Region 5 SRI

For more information about Region 5 SRI, please visit the website:
http://www.epa.gov/region5superfund/redevelop/
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or 800-621-8436.

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