

Site Redevelopment Profile

Oronogo-Duenweg Mining Belt National Priorities List Superfund Site

Newton and Jasper Counties
Missouri

Property Overview

Size

250 square miles

Current Site Uses

- Residential
- Recreational
- Agricultural
- Commercial
- Industrial
- Public Service

Use Restrictions

- Use of capped areas is restricted.
- Groundwater use for drinking water is prohibited in contaminated shallow aquifer areas in Jasper County and Newton County.
- Soil sampling is required prior to new residential development.

Surrounding Population

- About 90,887 people live within the site boundary.
- Within the site boundary, 39% of the population is considered low income compared to the state average of 31%.



Figure 1. The location of the Oronogo-Duenweg Mining Belt site in Missouri

Site History and Redevelopment Timeline

1850s-1970s

Various companies mined, milled and smelted lead and zinc ores on site. At one time, around 200 mines were operating in and around Jasper County. Companies dispersed over 150 million tons of mining and milling wastes across 11,000 acres, contaminating soils, surface water and groundwater.

1990

EPA added the site to the Superfund program's National Priorities List (NPL).

1995-1996

EPA conducted a time-critical removal to clean up lead soil contamination at child care centers and residential yards.

2001-2003

EPA and the Missouri Department of Transportation (MoDOT) entered into an agreement to develop a Route 249 highway bypass across part of the site.

EPA completed cleanup of about 3,000 residential yards and child care centers and supplied over 500 homes with a clean, permanent source of drinking water.

2008

MoDOT completed the Route 249 highway bypass and opened it to the public.

2018-2019

Developers began work on a 300-acre commercial business park – Centennial Park – on site. Commercial businesses began opening at the site.

2021

A solar developer constructed a pilot community solar installation on site.

Present

The site continues to support residential, agricultural, commercial, industrial and public service uses. Reuses such as a commercial scrap metal recycler and the pilot community solar installation, continue to operate on site. Additional reuse planning is underway and over 4,000 acres of cleaned-up land are ready for redevelopment.

History and Cleanup

The 250-square-mile Oronogo-Duenweg Mining Belt Superfund consists of numerous mine waste areas in southwestern Jasper County and northwestern Newton County, Missouri. In the 1850s, various companies began mining, milling and smelting lead and zinc ores at the site, which is located in the Tri-State Mining District. These operations continued in some site areas until the 1970s. Former mining and smelting operations spread lead mine waste throughout the area, dispersed airborne contaminants, and contaminated soil, surface water and groundwater with heavy metals, including lead.

EPA added the site to the NPL in 1990. EPA led a time-critical removal action to address high blood lead levels in local children. EPA cleaned up over 3,000 residential properties and agricultural lands in surrounding communities. EPA also installed 51 miles of water mains, connecting 520 homes to public water supplies.

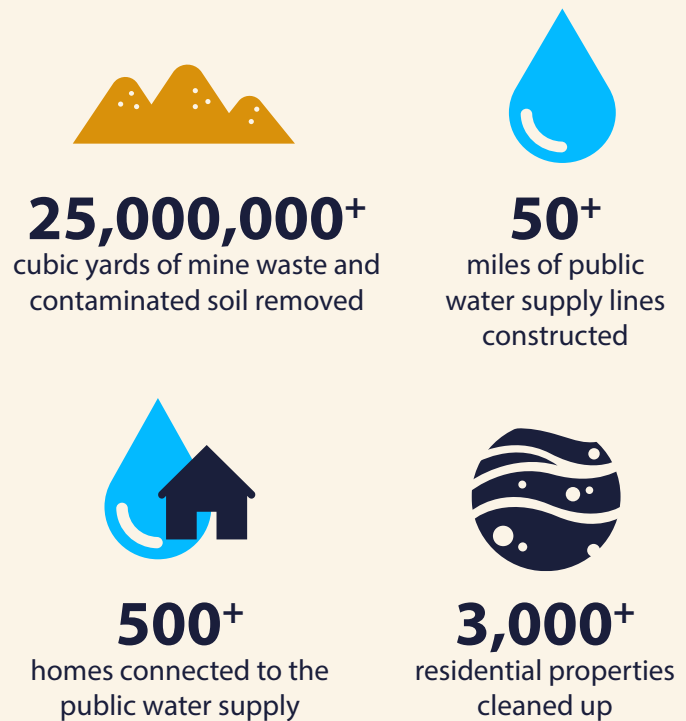
In 2009, EPA Region 7 received about \$12 million in American Reinvestment and Recovery Act (ARRA) funds to support cleanup. After a tornado hit the city of Joplin in 2011, the city cleaned up lead-contaminated soil at 440 more homes as part of its recovery activities.

Cleanup of the site is ongoing. EPA's additional cleanup plans include addressing contaminated sediments in the Spring River. Land use controls were placed on the site in 2006. The controls restrict groundwater use and require soil sampling prior to residential redevelopment. EPA has ongoing partnerships with the state of Missouri and the Joplin and Jasper County Health Departments. Jasper County enforces a county-wide Lead Health Ordinance to protect human health and the environment and ensure the protectiveness of the remedy.

Redevelopment

EPA has worked closely with the state of Missouri, local governments, communities and companies to ensure the safe continued use and beneficial reuse of parts of the site. In 1995, EPA signed a Prospective Purchaser Agreement (PPA) with Missouri Metal Recycling, Inc., a scrap metal recycler, to purchase 40 acres of the site. Under the agreement, the company agreed to clean up the site area needed to speed its redevelopment.

In 2001, EPA entered into an agreement with MoDOT for the state to build a Route 249 highway bypass across part of the site. EPA's innovative waste disposal practices allowed for the redevelopment of former narrow containment areas into over 3 miles of roads for Webb City. MoDOT reclaimed mine tailings



as fill material and developed the Route 249 Development Plan to guide development of areas containing the fill. The plan includes details on zoning, land use and institutional controls to assist sustainable redevelopment and protect human health.

Starting in 2018, developers began construction of a 300-acre commercial business park on site. The business park – Centennial Park – hosts a variety of commercial businesses such as the Atwoods Ranch and Home store, restaurants and a Sleep Inn & Suites hotel. Development of the business park is ongoing.

In 2021, Liberty Utilities, a local utility provider, completed a 12-acre, 2-megawatt community solar farm pilot on part of the site. The community solar installation is the first renewable generation program in southwest Missouri. It offers utility customers the opportunity to participate directly in the solar generation assets installed on the electric grid. Community solar projects engage low- and moderate-income households, allowing homeowners and renters to reduce monthly energy costs. The utility plans to expand the solar farm by 48 acres if the pilot project is a success.

Residential and agricultural land uses are ongoing. Nearly 120,000 people live in Jasper County. While most people live in the city of Joplin and the surrounding communities of Webb City, Carterville and Duenweg, the site includes several other small communities. The area has been growing rapidly in recent years, creating demand for expanded housing and community amenities.

The continued use and reuse of the site is vital to ensuring local governments can continue to meet the demands of area communities. With EPA's cleanup of over 4,000 acres complete and additional cleanup ongoing, local stakeholders continue to plan for safe and beneficial reuses across the site. EPA will also continue working with local stakeholders to ensure future uses are compatible with the site's cleanup and protective of human health and the environment.

Interested in Developing Property? Superfund Redevelopment and Liability Considerations

Two primary Superfund liability protections for prospective purchasers of Superfund sites include the statutory Bona Fide Prospective Purchaser (BFPP) defense and a settlement agreement called a Prospective Purchaser Agreement (PPA).

The 2002 Brownfields Amendments to the Superfund law created a category of liability protection, called the BFPP defense, for parties who purchase a Superfund site with knowledge of contamination. A key advantage of the BFPP defense is that it is self-implementing and, therefore, can be faster than negotiating a settlement agreement with EPA. To become a BFPP and maintain this liability protection status, a party must fulfill threshold statutory criteria before purchasing a site and must fulfill ongoing obligation criteria to maintain BFPP status for as long as potential liability exists.

At some sites, a PPA may be appropriate. PPAs provide liability protections in exchange for a prospective purchaser agreeing to performing some cleanup work at the site and/or monetary payment.

For more information about the available liability protections, please see EPA's [Revitalization Handbook: Addressing Liability Concerns at Contaminated Properties](#).

Contacts

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For more information, please visit www.epa.gov/superfund/oronogoduenwegmining.



Figure 4. The 12-acre, 2-megawatt community solar farm pilot on site

