



Superfund  
Redevelopment  
Initiative

# SITE REDEVELOPMENT PROFILE

Oronogo-Duenweg Mining Belt Superfund Site  
Joplin, Missouri



A lake created during remediation. (Source: EPA)

**Site Location:** Various places in and around Joplin, Missouri.

**Size:** 250 square miles

**Existing Site Infrastructure:** All major types of infrastructure are located on site.

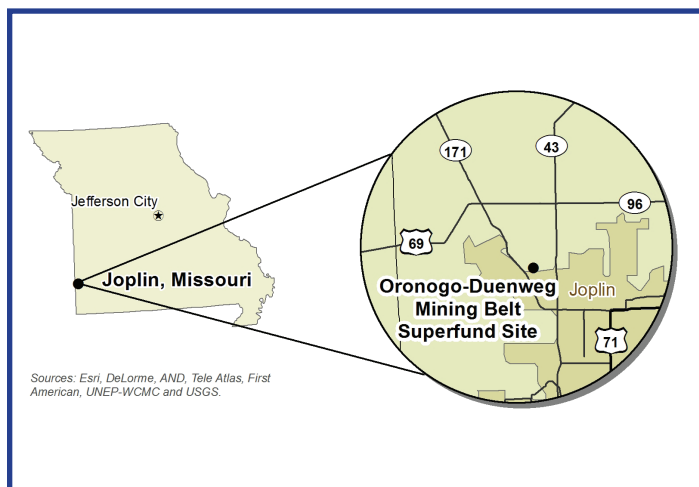
**Current Site Uses:** Residential, agricultural, commercial, industrial and public service uses are located on site.

**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 for new residential development.

**Surrounding Population:** 52,288 people live in Joplin, Missouri.

Encompassing about 2,500 square miles in Oklahoma, Kansas and Missouri, the Tri-State Mining District was once one of the richest lead and zinc ore deposits in the world. Mining, milling and smelting of lead and zinc ores at the site began in the 1850s and continued in some areas until the 1970s. The Oronogo-Duenweg Mining Belt Superfund site is about 250 square miles in size and constitutes the Missouri portion of the larger Tri-State Mining District. In its heyday, about 200 mines were operating in and around the Oronogo and Duenweg areas. Distribution of nearly 150 million tons of mining and milling wastes across an 11,000-acre area, as well as the 10 million tons of waste remaining on site, have resulted in heavy metal contamination of surface water, groundwater and surface soils. Former smelting operations also led to the airborne dispersal of contaminants over a large area.

EPA placed the site on the National Priorities List



Location of the site in Joplin, Missouri.

(NPL) in 1990. EPA conducted a time-critical removal action to address high blood lead levels in local children. The remedy included excavation of contaminated soils and extension of municipal water supply lines to affected properties. To date, EPA has cleaned up 2,951 residential properties

## SITE HISTORY AND REDEVELOPMENT TIMELINE

- 1850s - 1970s** Mining, milling and smelting of lead and zinc ores on site.
- 1990** EPA added the site to the NPL.
- 1995** A scrap metal recycling facility began operating on site.
- 2001** The Missouri Highway and Transportation Department completed Route 249 across part of the site.
- 2001** Residential property cleanup completed.
- 2003** Completion of residential connections to public water supplies.
- 2007** Cleanup of mine waste underway.
- 2008** Route 249 open to the public.
- 2018** Site in continued residential, agricultural, commercial, industrial and public service use.

*"The value of the property around the highway will go up, and we again will be a thriving community like it used to be. We want our town to grow and prosper. We used to be on top of a lead mine. Now, it's a gold mine."*

– Dale Davenport, Mayor, Carterville, Missouri

and thousands of acres of lands previously covered with mine waste, and addressed 17 million tons of waste. EPA also installed 50 miles of water mains and provided alternate water to over 500 homes. With cleanup advancing and risks to human health and the environment being addressed, it was time to shift gears from dealing with the site's past to planning for its future. Today, through the efforts of EPA, the state of Missouri and the community, the site is in productive reuse.

In 2001, EPA's Superfund Redevelopment Initiative provided a pilot grant to local governments to develop a site reuse plan and a cost-benefit analysis to verify the economic feasibility of reuse efforts. The Jasper County Commission engaged with the Environmental Task Force of Jasper County and Newton County to not only support continued site uses, such as residential and commercial land uses, but to pave the way for additional land revitalization and commercial redevelopment to attract jobs, increase annual incomes and generate greater tax revenues for area communities.

Through a Prospective Purchaser Agreement with EPA, a scrap metal recycler bought and cleaned up 40 acres of the site prior to building its facility on site. An agreement between EPA and the state



An aerial view of the site. (Source: Missouri Department of Transportation)





King Jack Park after remediation. (Source: EPA)

of Missouri enabled the Missouri Highway and Transportation Department to build the Route 249 highway bypass across part of the site in 2001. The project reused mine wastes as fill material and developed a guideline for the proper development of areas containing mining wastes. The Route 249 Development Plan contains details on zoning, land use and institutional controls to facilitate sustainable development, while protecting human health. Cleanup of mine waste began in 2007. The Route 249 bypass opened to the public in 2008.

EPA also developed other innovative solutions for disposal of site wastes to allow for future development.

***“That area will be great for manufacturing. You can ship product from there to anywhere in the United States. It’s near the center of the country and two major arteries, Highway 71 and Interstate 44. There’s lots of land and lots of people to work... We’re in great shape to bring somebody in here who is involved in manufacturing or distribution.”***

– John Biggs, former Mayor, Webb City, Missouri

Areas on the east side of Webb City have been cleaned up and are currently being developed for commercial use.

Cleanup also included back filling and revegetation of removal areas and construction of wetlands, which has helped restore ecosystem services as well as provided for continued ecological and recreational uses. Remediated neighborhoods and agricultural lands also remain in continued use across the site. With over 4,000 acres of cleaned-up land currently ready for redevelopment at the Oronogo-Duenweg Superfund site, Jasper County is open for business, attracting new residential, commercial and recreational opportunities.

#### FOR MORE INFORMATION

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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)