

EPA and Partners Updating Cleanup Agreement

Reilly Tar & Chemical Site
St. Louis Park, Minnesota

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For more information:

For questions, comments or for more information about the Reilly Tar & Chemical Corp. site, contact:

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You may call EPA's Chicago regional office toll-free at 800-621-8431, weekdays, 8:30 a.m. to 4:30 p.m.

Site files are at:

St. Louis Park Public Library
3240 Library Lane

Websites:

www.epa.gov/superfund/reilly-tar
www.stlouispark.org/our-city/reilly-tar-chemical-corp



Historical photo of the Republic Creosoting Co. plant in St. Louis Park.

U.S. Environmental Protection Agency and its state and local partners are drafting new legal and technical documents to continue implementing the ongoing cleanup of groundwater contamination at the Reilly Tar & Chemical site. EPA is working with the Minnesota Pollution Control Agency, the Minnesota Department of Health and the city of St. Louis Park to oversee the city's groundwater monitoring to ensure the treatment remains effective. "Groundwater" is an environmental term for underground sources of fresh water. The new documents will replace the original 1986 Consent Decree and Remedial Action Plan and will ensure continued protection of human health and the environment.

Background

The Superfund site is near the intersection of Louisiana Avenue and U.S. Highway 7 in St. Louis Park. From 1917 to 1972, Reilly Tar & Chemical Corp. distilled coal tar and treated wood products at a plant known as Republic Creosoting. Reilly disposed of waste on-site in several ditches that flowed to an adjacent wetland. In 1972, the facility was dismantled and sold to the city of St. Louis Park. The property has been redeveloped by the city into Louisiana Oaks Park with adjacent multi-family housing.

The main pollutant is polycyclic aromatic hydrocarbons, or PAHs, which contaminated soil at the site, a nearby wetland and groundwater under the site. PAHs are a group of chemicals created by the incomplete burning of organic materials like coal, oil, gas and garbage. The Reilly Tar site was added to EPA's National Priorities List, or NPL, in 1983, making it eligible for investigation and cleanup under the Superfund program. Cleanup involved several actions to eliminate exposure to contaminants in the soil and groundwater.

Soil cleanup

Experts estimated the Reilly site and nearby wetlands contained 1 million cubic yards of contaminated soil and waste. EPA filled the wetland with 2-3 feet of clean soil to eliminate any potential exposure to people. The city of St. Louis Park also placed soil on top of the site as part of redevelopment. Any work that involves digging in contaminated areas must be approved by the Minnesota Pollution Control Agency and EPA. Work plans must include safe handling of any waste or contaminated soil found, and air monitoring to protect site workers and nearby residents if waste or contaminated soil is encountered. The St. Louis Park website (*see text box at left*) has additional information on soil cleanup.

Groundwater cleanup

Groundwater cleanup was done on a focus area or aquifer basis. EPA studied aquifers individually and made cleanup decisions on each from 1984 through 1995 (*see table below*).

What is an aquifer?

An aquifer is a geological formation capable of yielding a significant amount of water to a drinking water well or spring. There are several aquifers underneath the Reilly Tar site – the Glacial Drift, Platteville, St. Peter, Prairie du Chien/Jordan, Ironton/Galesville and Mt. Simon/Hinkley aquifers. The groundwater cleanup is outlined in the table below.

What is the difference between a drinking water well and a source control well? Drinking water wells that are part of the Reilly cleanup pump large volumes of water that is treated before use. Pumping these wells also helps control the movement of contaminated groundwater. St. Louis Park drinking water wells are identified by the letters “SLP.” Source control wells are used to pump and treat groundwater and control the spread of the contamination and can be identified by the letter “W” before the number. Water from source control wells is treated and discharged into either the sanitary sewer or into Minnehaha Creek.



Drinking water treatment plant.

Year cleanup decision made	Cleanup or focus area	Actions taken	Current status
1984	Drinking water	<ul style="list-style-type: none">Building a drinking water treatment plant for two city drinking water wells (SLP10 & SLP15).	<ul style="list-style-type: none">The treatment plant was built in 1985 and continues to operate today. It is maintained by the city of St. Louis Park. The water is treated and used for drinking water.
1986	Drinking water	<ul style="list-style-type: none">Monitoring, pumping, and treating water in the Prairie du Chien/Jordan aquifer until drinking water quality for PAHs is reached throughout the area.Monitoring, pumping and treating water in the Ironton/Galesville aquifer, to protect the underlying Mt. Simon/Hinkley drinking water aquifer from PAH contamination.Monitoring of the Mt. Simon/Hinkley aquifer, and contingency treatment if it becomes contaminated with PAHs.	<ul style="list-style-type: none">The city of St. Louis Park pumps a city well (SLP4) in the Prairie du Chien aquifer. According to the cleanup decision, the water could be discharged to surface water or treated and used for drinking water. A treatment plant was built in 1992 and since that time the water has been used for drinking water.The city of St. Louis Park pumped contaminated water from a source control well (W105) in the Ironton/Galesville aquifer from 1987 through 1991. The water was treated and discharged to the sanitary sewer. EPA and MPCA approved discontinuing pumping of this well because it met the cleanup goals.The city of St. Louis Park continues to monitor the Mt. Simon/Hinkley aquifer.
1986	Source area groundwater and liquid waste	<ul style="list-style-type: none">Monitoring, pumping and treating contaminated water and liquid waste in the Glacial Drift aquifer and in source control well W23 in the Prairie du Chien/Jordan aquifer.	<ul style="list-style-type: none">The city of St. Louis Park operates two source control wells (W420 & W421) to control groundwater in the source area. The water from both wells is treated and discharged to Minnehaha Creek.
1990	Source area groundwater	<ul style="list-style-type: none">Monitoring, pumping and treating contaminated water from source control well W410 to intercept and contain contaminated groundwater in the St. Peter aquifer.	<ul style="list-style-type: none">The city of St. Louis Park built and began pumping and treating contaminated water from a source control well (W410) in 1991. The well currently discharges the water to the sanitary sewer.
1992	Source area groundwater	<ul style="list-style-type: none">Monitoring, pumping and treating contaminated groundwater from source control well W422, and at least one additional well, to intercept and contain contaminated groundwater in the northern area of the Glacial Drift aquifer.	<ul style="list-style-type: none">The city of St. Louis Park built and began operating source control well W422 in 1987. The water is discharged to the sanitary sewer. An additional source control well (W439) was built and began operating in 1995. Pumping at well W422 was discontinued in 2000 when EPA and MPCA approved its shutdown. The city of St. Louis Park continues to pump well W439. The water is discharged to the sanitary sewer.
1995	Source area groundwater	<ul style="list-style-type: none">Monitoring, pumping and treating contaminated groundwater from source control well W434 in the northern area of the Platteville aquifer.	<ul style="list-style-type: none">Well W434 operated until 2006, when EPA and MPCA approved its shutdown.

Groundwater monitoring

The city of St. Louis Park regularly takes water quality samples from a large network of groundwater monitoring wells. EPA, MPCA and MDH oversee the city’s groundwater monitoring and ensure the treatment remains effective.



A city contractor takes a sample from an area drinking water well.

Vapor intrusion study

Between 2011 and 2014 EPA conducted an extensive study into possible vapor intrusion from site contamination on properties on and near the site. Vapor intrusion occurs when chemicals, such as volatile organic compounds, in groundwater give off dangerous gases that can seep into buildings through foundation cracks and holes, causing unsafe indoor air pollution. EPA and its contractors took samples from indoor air, soil gas beneath the basements and foundations, and background soil gas samples off-site. This sampling showed no danger to people from vapor intrusion. Any contamination detected in indoor air was below or within EPA’s acceptable ranges.

Five-year reviews

The five-year reviews determine whether the cleanup actions at the Reilly Tar & Chemical site still protects human health and the environment. The reviews identify issues and recommend how to resolve them. Reviews were done in 1996, 2001, 2006, 2011 and 2016. Recommended actions have been completed or are in progress, and EPA has determined the cleanup is still working.

Site reuse

Redeveloping the formerly contaminated property was important to the city's growth as a Minneapolis suburb, primarily because St. Louis Park has little land available for new construction other than previously used property. Ultimately, a strong commitment to redevelopment and the local government's willingness to invest in a contaminated property were key factors to overcoming impediments to reuse. Now the area has condominiums and townhouses, a restaurant and bowling alley, an office building and a recreational park with athletic fields, walking paths, a recreation center, a pond, a playground and a parking lot.



A playground on the former site.

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