St. Louis Park's industrial legacy

September 2019

About this publication

In August 2019, the City of St. Louis Park was notified that the Minnesota Pollution Control Agency (MPCA) is recommending that the Highway 100 and County Road 3 Groundwater Plume Site be proposed for placement on the U.S. Environmental Protection Agency (EPA) National Priorities List (NPL), making it eligible for investigation and cleanup under the Superfund program. Should the site be added to the list, it will become St. Louis Park's third Superfund site.

The city has a long and proud history of working with state and federal agencies to protect residents' health and safety and to manage contaminated sites resulting from the city's industrial past. However, not everyone is familiar with that history. This mailer is designed to provide information on the newest proposed site and to give background on St. Louis Park's success with its two previous Superfund sites, grounded in the city's longstanding commitment to protecting the environment. Resources for more information are located on page 3.

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City of St. Louis Park supports site placement on the EPA's National Priorities List

The City of St. Louis Park is pleased to report that the Minnesota Pollution Control Agency (MPCA) has recommended the Highway 100 and County Road 3 Groundwater Plume Site, previously known as the St. Louis Park Solvent Plume Site, for proposed placement on the U.S. Environmental Protection Agency (EPA) National Priorities List (NPL), making it eligible for investigation and cleanup under the federal Superfund program. The City of St. Louis Park is in full support of this step to ensure those responsible for the contamination are held responsible and to ensure the ongoing health and safety of residents. A 60-day comment period is required before sites are finally listed on the NPL. Visit **www.epa.gov/superfund/superfund-cleanup-process** to read more about the NPL site listing process.

Above, test boring underway related to the Highway 100 and County Road 3 Groundwater Plume.

History of the site

In April 2004, the Minnesota Pollution Control Agency began searching for the source of vinyl chloride contamination that had been detected in several City of Edina wells that drew water from the Prairie du Chien-Jordan Aquifer. Between 2006 and 2017, following sampling of test borings as well as both deep and shallow wells, the source was traced back to an area near Walker and Lake streets in St. Louis Park. While an exact source hasn't been identified, it's important to note that the businesses associated with the chemical release no longer operate in these areas; contamination in the groundwater is from previous uses.

In 2007, MPCA samplings of test borings and shallow aquifer wells in St. Louis Park detected high concentrations of certain chlorinated solvents in groundwater, which could cause vapor intrusion into buildings. The MPCA focused on evaluating soil vapor in the residential and commercial neighborhoods north of Highway 7 and south of Highway 7. The data indicated that the trichloroethane (TCE) and percholorethylene (PCE) vapors in the soil were high enough to adversely affect indoor air quality in homes and businesses. *(See vapor intrusion study/cleanup below.)*

Health concerns already addressed

Any health concerns related to vapor intrusion or drinking water safety as a result of this site have already been addressed by the MPCA, EPA and cities of St. Louis Park and Edina. Since the early 2000s, the city has been working successfully with the MDH, MPCA and the EPA to ensure the safety of its drinking water in relation to this site, and to protect residents from any adverse effects of this contamination.

The current activity is to pursue funding and further investigation into those responsible for the contamination. Below are activities that have already been completed to protect residents' health.

Vapor intrusion study/cleanup

In 2008, the EPA assisted in vapor testing 220 homes and 49 businesses in the Lenox, Sorenson and Elmwood neighborhoods, and in parts of the Brooklawns neighborhoods. Following testing, 41 homes with elevated levels of volatile organic compounds (VOCs) in their indoor air or in the soil beneath their homes were fitted with vapor extraction systems, at no charge to the homeowners. ***(**Source: EPA, **www.epa.gov/mn/st-louis-park-vapor-intrusion-site**)***

Water Treatment Plant #4

Water Treatment Plant #4 (WTP4), located at 4701 W. 41st in St. Louis Park, was taken out of service at the end of 2016 after aggressive, regular testing showed that while some volatile organic compounds (VOCs) were being reduced by an implemented short-term treatment solution, others were increasing. The VOCs were believed to result from the Highway 100 and County Road 3 Groundwater Plume Site.

The city was advised in early 2016 of exceedances of health risk levels, set by the Minnesota Department of Health (MDH) and at much lower limits than those of the EPA, for some types of VOCs at WTP4. At that time, the city had already been working with MDH to develop a short-term solution to lower VOCs at the plant. This short-term solution showed positive results for lowering certain VOC levels, including vinyl chloride, so the plant remained in service. However, later testing revealed an increase in other VOCs such as trichloroethene (TCE); it's those test results that prompted the decision to take WTP4 out of service.

The decision to take WTP4 out of service was made out of an abundance of caution and to preserve public trust in the quality of the city's drinking water. Even though water was meeting safe drinking water standards set by the US EPA, aggressive, regular testing continued to suggest that water quality at this plant was not where the city wanted it to be.

The city worked with the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Health (MDH) to design and implement upgrades in 2017 and 2018 to treat all identified contaminants, regardless of their source, down to published advisory levels. The upgrades included two air stripper units to treat the VOCs found in the water at this plant as well as many other upgrades, primarily to the interior. Following the re-opening of the plant in early 2019, residents were invited to attend tours at the plant to learn more about WTP4 and how the city produces water. *(Source: City of St. Louis Park, Park Perspective, February 2017 & February 2019)*

Above, the inside of Water Treatment Plant #4, upgraded to treat VOCs.

Making safe drinking water

The drinking water for St. Louis Park comes from a groundwater source: nine wells, ranging from 485 to 1,095 feet deep, that draw water from the Prairie du Chien-Jordan, Mt. Simon and Jordan aquifers.

St. Louis Park works hard to provide safe and reliable drinking water that meets federal and state water quality requirements. The city works with the Minnesota Department of Health (MDH) to test drinking water for more than 100 contaminants. It's not unusual to detect contaminants in small amounts. No water supply is ever completely free of contaminants. Drinking water standards protect Minnesota from substances that may be harmful to their health. Visit **bit.ly/2KFWITg** to learn more about the MDH's Basics of Monitoring and Testing of Drinking Water in Minnesota.

Each year, the city publishes a drinking water report that provides information on drinking water and tips on how to protect precious water resources.

Visit **www.stlouispark.org/drinking-water-report** to read current and past drinking water reports.

Contact Jay Hall, utilities superintendent, at 952.924.2557 or jhall@stlouispark.org if you have questions about St. Louis Park's drinking water. You can also ask for information about how you can take part in decisions that may affect water quality.

The EPA sets safe drinking water standards. These standards limit the amounts of specific contaminants allowed in drinking water and ensure tap water is safe to drink for most people. The U.S. Food and Drug Administration regulates the amount of certain contaminants in bottled water. Botted water must provide the same public health protection as public tap water.

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. For more information about contaminants and potential health effects call the EPA's Safe Drinking Water Hotline at 1.800.426.4791.

Your questions, answered

Is my drinking water safe?

YES! The drinking water in St. Louis Park is safe. Providing safe drinking water is the most important public duty we as a city have to our residents, and we take that duty very seriously. St. Louis Park's drinking water is regularly tested and must meet the drinking water standards set by the federal Safe Drinking Water Act, a requirement of any public water system. See sidebar at left for more information.

The Minnesota Department of Health (MDH) enforces these drinking water standards for public water supplies in Minnesota. MDH enforcement is based on the regular testing and monitoring of drinking water from public water supplies. Results of this testing are available to each consumer through an annual consumer confidence report which is distributed via mail each year to every household in St. Louis Park.

Visit **www.stlouispark.org/drinking-water-report** to view the reports.

Why is the Highway 100 and County Road 3 Groundwater Plume Site proposed for the Superfund program's National Priorities List (NPL)?

In partnership with the cities of St. Louis Park and Edina, the State of Minnesota has agreed to the NPL listing by the EPA because it needs additional resources to investigate and clean up the contaminated area and hold the polluters accountable. The groundwater contamination plume is approximately 300 feet deep and covers an undefined area in St. Louis Park and extending to Edina. The City of St. Louis Park is in full support of this step to ensure those responsible for the contamination are held responsible and to ensure the ongoing health and safety of residents.

The state has dedicated a large amount of funding and staffing to define the area to date; however, much work remains to be done. The resources required to identify the source area, pursue potentially responsible parties and implement a cleanup plan far surpasses the resources received each year by the state's Superfund program.

Resources from the federal government will assist with additional investigation activities and bring in additional technical expertise and specialized legal counsel to effectively address the complexities of the site in a timely manner. If a potentially responsible party(ies) can be identified, cost recovery efforts can be pursued.

EPA's Superfund program focuses on making a visible and lasting difference in communities, ensuring that people can live and work in healthy, vibrant places. The goal is to be an asset to the communities and enhance opportunities for growth and prosperity by deploying federal-level resources to the valuable ongoing work started by the local and state governments.

Are there other National Priorities List Superfund sites in Minnesota or across the nation that have groundwater plumes that provided a model for this listing?

Yes. Many of the more than 1,300 sites that have been listed on the NPL include a groundwater contamination plume. Two examples in Minnesota are the New Brighton/Arden Hills Superfund Site (also known as the Twin Cities Army Ammunition Plant or TCAAP Site) and the Baytown Groundwater Contamination site. The TCAAP Site plume extends under several cities including New Brighton, Arden Hills, Columbia Heights, St. Anthony and Minneapolis. The Baytown Groundwater Contamination plume is approximately five miles long, covers about seven square miles and extends from the eastern portion of the City of Lake Elmo through Baytown Township, West Lakeland Township and the City of Bayport to the St. Croix River.

What are the contaminants at the Highway 100 and County Road 3 Groundwater Plume Site?

The Highway 100 and County Road 3 Groundwater Plume Site contamination consists of volatile organic compounds (VOC) including tetrachloroethylene (PCE), trichloroethylene (TCE), cis dichloroethylene (DCE) and vinyl chloride (VC), collectively known as chlorinated VOCs. PCE is an industrial solvent used to degrease metals. Under the right conditions, PCE can break down in the environment to form TCE, DCE and VC. Minnesota Pollution Control Agency (MPCA) staff have conducted investigations to identify the source of the release, but additional work is needed to complete the investigation.

What are the possible health effects of VOCs?

VOCs are typically described as human carcinogens and can also cause problems with liver and kidney function. The potential for VOCs to be a health concern depends on the toxicity and concentration of the contaminant, the exposure conditions, and the duration or exposure. Factors like age, health condition, gender, and exposure to other chemicals can impact potential health effects for individuals.

Visit **www.pca.state.mn.us/sites/default/files/voc-fs.pdf** and **www.health.state.mn.us/communities/environment/air/toxins/voc.htm** for more information.

Is the soil in my yard contaminated?

The proposed Highway 100 and County Road 3 Groundwater Plume Site NPL listing is for the deep groundwater plume. The deep groundwater plume is at a depth of more than 300 feet. Due to its depth, the deep contamination does not affect the soil on individual properties.

The major concern of the deep groundwater plume is its impact to the cities' municipal wells. To ensure safety of the drinking water, both the cities of St. Louis Park and Edina have installed treatment systems to ensure their drinking water meets the requirements of the federal Safe Drinking Water Act and the state's drinking water guidance values. Once the site is placed on the EPA's National Priorities List, the EPA and the MPCA will continue working to identify sources of the deep groundwater contamination plume.

Will the Highway 100 and County Road 3 Groundwater Plume Site affect my property values?

This is, understandably, of great concern to homeowners. Unfortunately, there's no clear-cut answer to this question. EPA suggests that concerned property owners consult a professional who can give a more accurate response to property value questions and concerns.

It is important to note that the impact of the plume is to the groundwater and not to residential properties' surfaces. MPCA maps of the area delineate an estimated plume hundreds of feet below the surface and not surface contamination on residential properties.

2004
MPCA begins searching for source of vinyl chloride contamination in City of Edina wells

2006-2017
Source is traced back to area near Walker and Lake streets in St. Louis Park

2008
EPA conducts vapor testing in 220 St. Louis Park homes; installs vapor extraction systems in 41 homes to ensure safe indoor air quality

2008-
MPCA continue

Definitions

National Priorities List: the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. Placement on the NPL make a site eligible for investigation and cleanup under the Superfund program.
Visit **www.epa.gov/superfund/superfund-national-priorities-list-npl** for more information.

Superfund program: EPA's Superfund program is responsible for cleaning up some of the nation's most contaminated land and responding to environmental emergencies, oil spills and natural disasters. To protect public health and the environment, the Superfund program focuses on making a visible and lasting difference in communities, ensuring that people can live and work in healthy, vibrant places. Visit **www.epa.gov/superfund** to learn more about the program.

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.

Volatile organic compounds (VOCs): Volatile organic compounds are a group of chemicals used in solvents, paints and dry-cleaning fluid. *See "What are the possible health effects of VOCs?" on page 2.*

Learn more

St. Louis Park Vapor Intrusion Site (EPA)
www.epa.gov/mn/st-louis-park-vapor-intrusion-site
St. Louis Park solvent plume and vapor intrusion site (MPCA)
www.pca.state.mn.us/waste/st-louis-park-solvent-plume-and-vapor-intrusion-site
Reilly Tar & Chemical Corp. (EPA)
bit.ly/epa-reilly
Reilly Tar & Chemical Corp. (City of St. Louis Park)
www.stlouispark.org/reilly
Drinking water reports (City of St. Louis Park)
www.stlouispark.org/drinking-water-report
Water Treatment Plant #4 (City of St. Louis Park)
www.stlouispark.org/government/departments-divisions/water-treatment-plant-4
Know your H2O Open House and Tour video (City of St. Louis Park)
www.youtube.com/watch?v=Kl_jYlycj4A
November 2018 Reilly Tar & Chemical public meeting
bit.ly/reillypublicmtg

Contacts

City of St. Louis Park
Questions about drinking water, the Reilly site or the Highway 100 and County Road 3 Groundwater Plume Site:
Mark Hanson, public works superintendent, 952.924.2186 or mhanson@stlouispark.org

Questions about vapor intrusion related to the Highway 100 and County Road 3 Groundwater Plume Site:
Brian Hoffman, director of building and energy
952.924.2584, bhoffman@stlouispark.org

Minnesota Pollution Control Agency (MPCA)
Questions about the Highway 100 and County Road 3 Groundwater Plume Site:
Crague Biglow, 651.757.2229, crague.biglow@state.mn.us

Minnesota Department of Health (MDH)
Questions about drinking water, VOCs or other health concerns:
651.201.4897, health.hazard@state.mn.us

U.S Environmental Protection Agency (EPA)
Questions about the Superfund process:
Heriberto Leon, 312.886.6163 or leon.heriberto@epa.gov

A history of environmental leadership

St. Louis Park, like many other communities located in urban areas, has had its share of challenges to manage from the legacy of poor environmental stewardship predating the 1970s. As awareness grew of the toll that pollution was taking on the environment and human health, regulations and laws to manage contaminants were put in place. St. Louis Park often led the way in taking measures to protect its own residents and to set an example for the state. That included managing its industrial legacy responsibility, such as the Reilly Chemical & Tar Corp site and several others. Here are a few examples of St. Louis Park's proud tradition of future-forward thinking about environmental issues.

In 1969 St. Louis Park became the only suburb with a strict anti-pollution ordinance. Its provisions were a basis for the state pollution control law. Among other activities, the St. Louis Park ordinance banned burning of leaves and required a license to burn refuse and a permit for recreational fires and barbeques.*

Also in the 1960s, St. Louis Park was the first city in Minnesota to establish weekly residential trash pickup. The first citywide curbside recycling pickup was on April 16, 1984, with collections made twice a month at no charge to residents. This pilot program received state and national coverage due to the high rate (50 percent) of residents who used the program. In 1987, St. Louis Park was named the leading city in Hennepin County for its efforts to recycle glass, paper, cans and yard waste.** In 2013, the city started its organics collection program, which now has close to 4,500 households participating.

While it didn't come to be, in 1970 the St. Louis Park City Council heard a proposal to switch from internal combustion engines to propane gas for city gas stations and city cars.* This proposal was a few decades ahead of its time – the city began purchasing hybrid vehicles in 2007 and purchased its first electric vehicle in 2016. In 2019 the city joined an electric vehicle purchasing collaborative, adding several more hybrid and electric vehicles to the city fleet. A recently passed ordinance will help expand electric vehicle charging equipment in the city.

In 2018, the St. Louis Park City Council adopted the Climate Action Plan, with the ambitious goal of achieving carbon neutrality by 2040. To achieve those goals, the city has already implemented energy efficiency practices, increased renewable energy use and made other improvements. Visit **www.stlouispark.org/climate-action-plan** for more information.

* Source: St. Louis Park Historical Society, **slphistory.org/environmental**
** Source: St. Louis Park Historical Society, **slphistory.org/garbage**

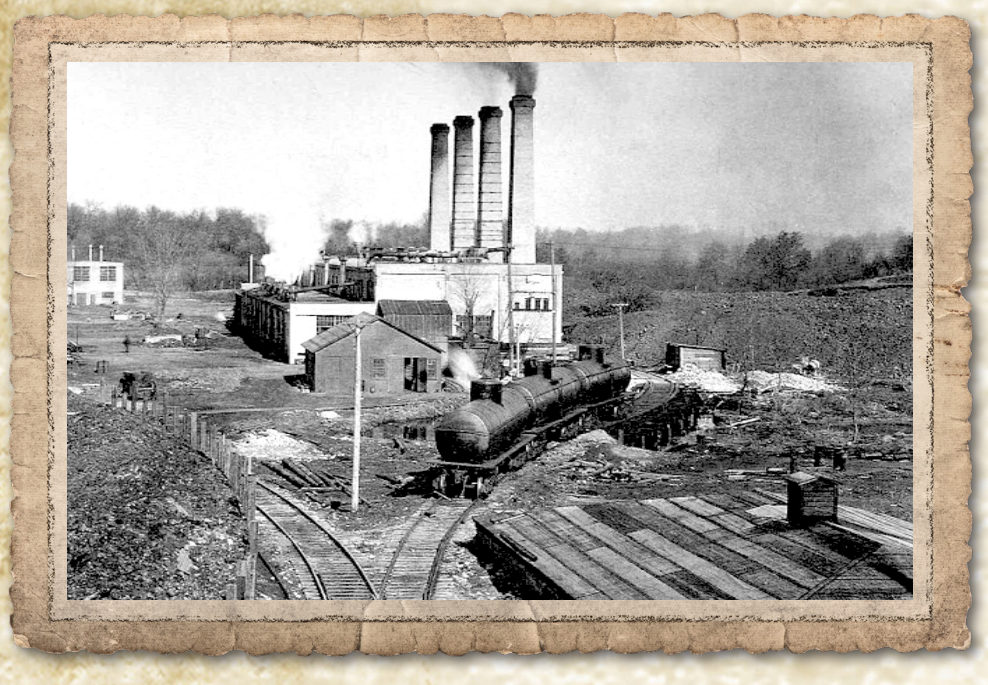
-2018
es investigation

2016
Water Treatment Plant #4 taken out of service due to an increase in some VOCs

January 2019
Water Treatment Plant #4 reopens following upgrades to remove VOCs

October 2019
Highway 100 and County Road 3 Groundwater Plume Site recommended for EPA's National Priorities List

Superfund success: Reilly Tar & Chemical Corp. site



Above, a photo of a portion of the Reilly Tar & Chemical Corp. site.

Site history

From 1917 to 1972, Reilly Tar & Chemical Corp. distilled coal tar and treated wood products at a plant known as Republic Creosoting, located near the intersection of Louisiana Avenue and Hwy. 7 in St. Louis Park. 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 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.

Superfund status

In 1982, the U.S. Environmental Protection Agency (EPA) provided funds to the Minnesota Pollution Control Agency (MPCA) to clean out two contaminated wells. The site was listed on the National Priorities List in 1983. In 1984, a record of decision was issued requiring Reilly Industries, the potentially responsible party, to build a granular-activated carbon (GAC) treatment plant for two existing contaminated municipal wells (SLP 10 and SLP 15) and assist with containing the contaminant plume from reaching other municipal wells by building a source control system in the upper aquifers.

Below, boundaries of the Reilly Tar & Chemical Corp. site.

Reilly Industries eventually came forward with a practical, cost-effective remediation plan that expedited the cleanup and reuse process. Reilly's plan led to a settlement of the lawsuit over liability and a 1986 agreement between all parties for remediating the site. Under the settlement, the city agreed to share the responsibility for operating and maintaining the municipal water treatment plants and performing long-term ground water monitoring. The city 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 treatment remains effective.

The city spends about $500,000 per year to ensure the ongoing safety of both the water and the soil at the Reilly site. The city undertook this cost because city leaders wanted to do the right thing and ensure that the site was cleaned up and taken care of properly.

Now the area is home to 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.

EPA conducts five-year reviews of the site to determine if the remedy for the site still protects people and the environment. The reviews identify issues and recommend how to resolve them. Five five-year reviews have been done so far: in 1996, 2001, 2006, 2011, with the fifth five-year review in 2016. Recommended actions have been completed or are in progress, and EPA has determined that the cleanup is still working.

Latest news

In August 2019, the St. Louis Park City Council approved an amended consent decree and remedial action plan (CD-RAP) for Reilly Tar & Chemical Corp., which will replace the 1986 consent decree. The amended CD-RAP provides greater flexibility for the city and regulatory agencies to follow the most current drinking water quality standards and to make modifications as needed to groundwater pumping and treatment.

Once the CD-RAP is signed by all parties, it will be filed with U.S. District Court for final approval. This is a major step in the 30-year journey of addressing the contamination left behind by Reilly Tar & Chemical Corp., and in ensuring the health and safety of residents. As part of the process, a public meeting for residents living near the site was held in November 2018. Visit **http://bit.ly/reillypublicmtg** to watch the meeting.

National Lead: another success story

Delisted from the Superfund program's National Priorities List in 1998, the NL (National Lead) Industries/Taracorp/Golden Auto site met the EPA's requirements for reuse in 2009 and is now home to industrial, commercial office and warehouse space employing nearly 100 people and generating more than $17 million in annual sales revenue. The site is located southeast of the former Sam's Club site off Louisiana Avenue and Highway 7.

Above, an early view of the NL Industries/Taracorp/Golden Auto site.

History

From 1940 to 1982, a secondary smelter operated on site recovering lead from lead plates, battery fragments and lead containers. The waste disposal activities at the smelter and the metal refining business resulted in high lead levels in the air, soil and groundwater. In 1983, EPA placed the site on the Superfund program's National Priorities List. Cleanup involved removing contaminated soil, refilling and revegetating the area, cleaning or demolishing buildings and installing a protective asphalt cover. Groundwater monitoring continues.
*(Source: EPA, **bit.ly/NLindustries**)*