United States Environmental Protection Agency

Findett Corp. Superfund Site Frequently Asked Questions

St. Charles, Missouri – EPA Region 7

November 2022

Frequently Asked Questions

EPA has prepared the following Frequently Asked Questions regarding the site.

1. ***Can I drink my water?***

St. Charles' drinking water supply meets the drinking water health standards established by Missouri's Safe Drinking Water Law and EPA's Safe Drinking Water Act. Water being distributed to the public after treatment at the City's water treatment plant has regularly been sampled for volatile organic compounds (VOCs), including vinyl chloride (VC) and cis-1,2-dichloroethylene (DCE) for over 20 years, and has never shown any level of contamination. EPA has found no reason to indicate that there are any health risks posed by drinking, cooking, bathing, or otherwise using the water that is supplied by the City of St. Charles.

2. ***Has the drinking water in St. Charles ever exceeded the Safe Drinking Water Act's maximum contaminant levels for VC or DCE?***

Water being distributed to the public from the City's water treatment plant has been sampled regularly since 2008 as part of EPA's investigations and has never shown any level of contamination of VOCs, including VC and DCE. In addition, water samples are routinely collected by the City after all treatment processes at the entry point to the water distribution system. These samples represent water you would receive in your home. For over the past 20 years, the compliance samples collected by the City and reported to the Missouri Department of Natural Resources-Public Drinking Water Branch have not shown any detections of VOC contamination.

3. ***What is the Elm Point Wellfield?***

The Elm Point Wellfield is a source of drinking water for the City of St. Charles. Water is pumped from the Elm Point drinking water supply wells, or City Wells, to the City's drinking water treatment plant, where the water from the City Wells is treated and blended with water purchased from the City of St. Louis prior to distribution to the community. Since 1987, according to the City's website, the City has been purchasing part of their water supply from the city of St. Louis because the City's treatment plant does not have the capacity to produce 100% of the City's drinking water. More information about the City's water treatment plant history, capacity, and treatment processes can be found at the City's website, available at https://www.stcharlescitymo.gov/832/Water-Treatment.

4. ***How did the Elm Point Wellfield become contaminated?***

The Elm Point Wellfield lies near an electrical substation operated by Union Electric Company d/b/a Ameren Missouri (Ameren), and a defunct chemical facility, Findett Corporation (Findett), which operated from 1962-1973.

During Findett's operation, Findett's customers sent hazardous substances to Findett for reprocessing and disposal. The reprocessing fluids and materials that were used also contained hazardous substances, including VOCs. Findett's historical operations prior to the enactment of hazardous waste laws resulted in the release of VOCs into groundwater. EPA and a group of Findett's former customers conducted investigations in 2001 that identified VOC contamination in groundwater near the Elm Point Wellfield and later determined that this contamination came from a groundwater plume originating from the former Findett facility.

In June 2010, DCE was detected in City Well 5 of the Elm Point Wellfield, located approximately 180-200 feet north of the Ameren substation boundary. Between 2011 and 2015, a group of Findett's former customers performed additional investigations and response actions to address the contamination. Based on the analytical data Findett's customers collected in 2011, as well as independent testing by Ameren in 2012, EPA determined that the contamination in City Well 5 came from a separate groundwater plume originating from the Ameren substation, not the Findett facility plume. The source of this contamination is Ameren's historic use of the product Mozel, a cleaner and degreaser, prior to the enactment of hazardous waste laws.

In December 2021, VOC concentrations in a monitoring well at the site (PZ-11) increased without explanation. EPA plans to perform investigative work this year to determine if the contamination in PZ-11 is related to the Ameren substation, the defunct Findett facility, or an unknown source.

5. What has EPA done to address the contamination in the Elm Point Wellfield?

In 2001, EPA and a group of Findett's former customers began investigating potential contamination near the Elm Point Wellfield. Contamination near City Well 8 is being addressed under a 2005 Record of Decision (ROD) issued by EPA, which provides a remedy for a contaminated groundwater plume originating from the Findett facility. Since 2007, a group of Findett's former customers have been addressing the contamination under a consent decree and continue to monitor, sample, and clean up the Findett groundwater plume. The ongoing monitoring has shown a decrease in overall contaminant concentrations within the plume. Documents further detailing the cleanup of the Findett groundwater plume, or OU3, can be found in the "Key Documents" page of EPA's Findett Corporation Superfund Site website, available at www.epa.gov/superfund/findettcorp.

Since 2012, EPA and Ameren have actively been investigating and cleaning up the groundwater plume originating from the Ameren substation. This included implementation of a number of contaminant cleanup technologies in a series of four pilot studies conducted from 2014-2018. Cleanup technologies included operation of a groundwater extraction and treatment system and successive treatments of zero valent iron and sodium persulfate outside the substation, and treatments of potassium permanganate (soil only), bioaugmentation, and sodium persulfate inside the substation. As a result of these treatments, VOC concentrations in all monitoring wells associated with the Ameren plume outside of the substation, except for one, have been reduced to amounts significantly below the Safe Drinking Water Act's maximum contaminant levels (MCLs) and in most cases VOCs are not being detected. Documents further detailing the cleanup of the Ameren groundwater plume, or OU4, can be found in the "Key Documents" page of EPA's Findett Corporation Superfund Site website, available at www.epa.gov/superfund/findettcorp.

6. What is EPA doing to address increased VOC concentrations in PZ-11 and CW-6?

EPA and Ameren's investigations have included the installation of various monitoring wells and piezometers to monitor the levels of contamination in the groundwater plume and around the City Wells. (Monitoring wells and piezometers do not provide drinking water to the City.) After years of data indicating a decreasing plume, VOC concentrations in piezometer 11 (PZ-11) and City Well 6 (CW-6), which are located near each other, increased without explanation in December 2021. Since January 2022, Ameren has been performing biweekly sampling of PZ-11 and CW-6 to monitor any increasing trends or potential threats to the City's water supply. While some sampling at PZ-11 has shown contaminant levels above the MCLs, historical sampling has not indicated the presence of VOCs in CW-6 above safe drinking water standards. However, sampling conducted on October 28, 2022, detected VC in CW-6 at 2.0 micrograms per liter, which is the MCL for VC.

In addition, Ameren doubled the rate of the groundwater extraction and treatment system in January. In July, Ameren also did a bioaugmentation treatment within the substation.

Since April, EPA has been working with the City to gain access to investigate contamination around PZ-11 and CW-6. EPA is preparing a workplan to perform characterization work in the soils and groundwater around PZ-11 and CW-6. Once the workplan is finalized, EPA intends to use direct push technology to help determine the source of the contamination in PZ-11 and CW-6. This additional characterization work is being planned for later this year and is critical in determining the next steps needed to address the increased contaminant concentrations in order to protect the Wellfield.

7. ***How is EPA going to ensure that other wells in the Wellfield do not become contaminated and my drinking water is safe in the future?***

EPA is committed to ensuring that an adequate response is performed to protect the Elm Point Wellfield, including the recent contaminant detections in PZ-11 and CW-6. EPA plans to conduct additional investigations this year to identify the source of the contamination that was recently detected in PZ-11 and CW-6. Once the source is identified, EPA plans to take appropriate action to address this contamination.

In the Record of Decision (ROD) EPA issued on June 30, 2021, EPA selected the remedy to clean up contamination in the Elm Point Wellfield caused by the Ameren groundwater plume and help ensure that other wells do not become contaminated in the future. The remedy in the ROD includes:

- **Enhanced Bioaugmentation**: use of naturally occuring bacteria to break down VOCs in the groundwater
- **Groundwater Extraction and Treatment System**: If needed, groundwater will be pumped from three extraction wells through an air stripper to remove VOCs
- **Ongoing monitoring** to confirm VOC breakdown and evaluate need for additional bioaugmentation
- **Contingency actions** if an MCL is exceeded for any contaminant of concern outside of the Ameren substation or there is an increasing trend inside the substation

This ROD was developed as a result of four pilot studies Ameren conducted in 2014-2018, as well as a Remedial Investigation/Feasibility Study EPA conducted in 2019-2020. The remedy in the ROD, as demonstrated by the pilot studies, has been shown to be successful in reducing contaminants in the Elm Point Wellfield and preventing their spread.

The objectives of the selected remedy include:

- Preventing exposure to VOCs above their MCLs in groundwater.
- Preventing potential future risks to human receptors from inhalation of groundwater VOCs via the vapor intrusion pathway.
- Preventing future migration of groundwater contamination offsite.
- Restoring groundwater to beneficial reuse within a reasonable timeframe.

Once the Consent Decree with Ameren is approved by the U.S District Court for the Eastern District of Missouri, EPA will begin the Remedial Design of the remedy to address OU4, the Ameren groundwater plume. During the Remedial Design, EPA will further evaluate how to adjust the chosen remedy to ensure that it adequately addresses the groundwater plume. The Remedial Design will also ensure that monitoring wells are appropriately located to evaluate the cleanup actions and ensure their effectiveness. If the remedy is not effective, EPA can either adjust the remedial design, or if the failure is broad enough in scope, cost, or performance, EPA can amend the remedy. Entry of the Consent Decree will not prevent EPA from changing the remedy if that is required in the future.

In addition, contamination near City Well 8 is being addressed under a 2005 ROD issued by EPA, which provides a remedy for a contaminated groundwater plume originating from the Findett facility. Since 2007, a group of Findett's former customers have been addressing the Findett plume contamination under a consent decree and continue to do so. Under EPA's oversight, these customers monitor the degredation of the contaminants and size of the Findett plume and have a contingency plan in place in the event contamination increases. EPA continues to evaluate the effectiveness of this remedy.

8. ***What does the consent decree do? Does it require Ameren to pay for cleanup of the Wellfield contamination?***

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, commonly referred to as Superfund), 42 U.S.C. § 9601 *et seq.*, operates under the "polluter pays" principle. The proposed Consent Decree under CERCLA requires Ameren to implement and pay for the remedy selected in the Record of Decision (ROD) EPA issued on June 30, 2021, in order to clean up contamination in the Elm Point Wellfield caused by the Ameren groundwater plume and help ensure that other wells do not become contaminated in the future. The remedy in the ROD includes:

- **Enhanced Bioaugmentation**: use of naturally occuring bacteria to break down VOCs in the groundwater
- **Groundwater Extraction and Treatment System**: If needed, groundwater will be pumped from three extraction wells through an air stripper to remove VOCs
- **Ongoing monitoring** to confirm VOC breakdown and evaluate need for additional bioaugmentation
- **Contingency actions** if an MCL is exceeded for any contaminant of concern outside of the Ameren substation or there is an increasing trend inside the substation

Pursuant to the Consent Decree, Ameren will perform these actions under EPA oversight and will pay for all the costs of implementing this work. The proposed Consent Decree allows future actions if ROD cleanup standards aren't met and also provides for monetary penalties if Ameren does not comply with the Consent Decree.

9. How do I comment on the consent decree?

The consent decree is open for public comment until December 5, 2022. Pursuant to CERCLA § 122(d)(2) and 28 C.F.R. § 50.7, the Attorney General provides an opportunity for persons who are not parties to the action to comment on proposed judgments before they are entered by a court. The EPA and the Department of Justice carefully consider public comments, which help inform whether the United States ultimately decides to seek court approval of the proposed Consent Decree or withdraw it and work with the parties on changes to the terms. Written comments are filed with the U.S. District Court for the Eastern District of Missouri, and if it decides to move forward with the Consent Decree, the United States will provide responses to the comments explaining its decision.

Comments may be submitted either by email to pubcomment-ees.enrd@usdoj.gov or mail to Assistant Attorney General, U.S. DOJ—ENRD, P.O. Box, 7611, Washington, DC 20044-7611.

During the public comment period, the Consent Decree may be examined and downloaded at this Justice Department website: https://www.justice.gov/enrd/consent-decrees. Alternatively, a paper copy of the Consent Decree will be provided upon written request and payment of reproduction costs. Please mail your request and payment to: Consent Decree Library, U.S. DOJ—ENRD, P.O. Box 7611, Washington, DC 20044-7611. Please enclose a check or money order for $34.75 for the Consent Decree and appendices, and $8 for only the Consent Decree without appendices (25 cents per page reproduction cost) payable to the United States Treasury.

10. Does the consent decree with Ameren limit EPA's ability to investigate or clean up contamination at the Elm Point Wellfield?

The proposed Consent Decree allows future actions if ROD cleanup standards aren't met and also provides for monetary penalties if Ameren does not comply with the Consent Decree. It will not prevent EPA from investigating or conducting cleanup of Wellfield contamination. Nor will it prevent EPA from requiring Ameren or other responsible parties to investigate or conduct cleanup of Wellfield contamination or holding liable parties responsible for future response actions. Without a Consent Decree, EPA cannot require Ameren to take any response actions regarding Wellfield contamination.

11. Why aren't you requiring Ameren to provide the City a new wellfield or upgrade the City's water treatment plant?

EPA is required to follow the process set forth in CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The pilot studies, remedial investigation, and feasibility study conducted from 2014-2020 support the remedy EPA selected in the June 30, 2021 ROD. However, if a significant change to the ROD is needed, EPA can issue an Explanation of Significant Differences or a ROD Amendment, as appropriate and consistent with the applicable regulations and guidance. EPA selects its remedies after careful analysis using the NCP's factors set forth in 40 C.F.R. § 300.430.

12. What are maximum contaminant levels and how are they different from regional screening levels?

The Safe Drinking Water Act (SDWA), 42 U.S.C. § 300f *et seq.*, was passed by Congress in 1974, with amendments added in 1986 and 1996, to protect our drinking water. Under the SDWA, EPA sets the standards for drinking water quality and monitors states, local authorities, and water suppliers who enforce those standards. As part of the SDWA, EPA has set maximum contaminant levels (MCLs) for over 90 different contaminants in public drinking water. An MCL is the highest level of a contaminant that is allowed in drinking water delivered to the consumer (e.g., as the water flows out of the treatment plant and to a consumer's tap). These standards are legally enforceable under the SDWA. The MCL for VC is 2.0 micrograms per liter (µg/L), and the MCL for DCE is 70 µg/L.

Regional screening levels (RSLs) are used when a potential site is initially investigated to determine whether concentrations of potential contaminants are present at levels that may warrant further investigation or action. RSLs are not legal cleanup standards. Instead, RSLs are used in site "screening" to help identify areas, contaminants, and conditions that require further federal attention. Generally, when contaminant concentrations fall below RSLs, no further action or study is warranted under the Superfund program. Detection of chemicals at concentrations greater than their RSLs would not automatically trigger a site cleanup; however, exceeding an RSL would likely warrant further investigation of the site.

13. What is vinyl chloride and what are the health effects if I am exposed to it?

Vinyl chloride, also called VC, is a manufactured substance used to make polyvinyl chloride (PVC). PVC is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials. Vinyl chloride can also be formed when other substances, such as dichloroethylene, trichloroethylene and tetrachloroethylene, are broken down by microorganisms in the environment. Long-term exposure to vinyl chloride at levels above the MCL has the potential to cause neurological and liver effects. Vinyl chloride also has the potential to cause cancer from a lifetime exposure at levels above the MCL. For more information, refer to https://www.atsdr.cdc.gov/toxfaqs/tfacts20.pdf.

14. What is cis-1,2 dichloroethylene and what are the health effects if I am exposed to it?

Cis-1,2-dichloroethylene, also called cis-1,2-dichloroethene or DCE, is a manufactured substance historically used as a solvent for waxes, resins, and acetylcellulose, in the extraction of rubber, and as a coolant in refrigeration plants. Like vinyl chloride, cis-1,2-dichloroethylene can be formed when other substances, such as trichloroethylene and tetrachloroethylene, are broken down by microorganisms in the environment. Long-term exposure to cis-1,2-dichloroethylene has the potential to cause kidney, liver, and blood effects. The EPA has determined that cis-1,2-dichloroethylene is not classifiable as to its human carcinogenicity. For more information, refer to https://www.atsdr.cdc.gov/toxfaqs/tfacts87.pdf.

15. Has the EPA detected contamination of VC and DCE elsewhere in the St. Charles area, and if so, how has the EPA responded?

VOCs, including VC and DCE, are common contaminants in groundwater at Superfund sites, including Superfund sites in the St. Charles area. When responding to VOC contamination, the EPA prefers to treat contaminants to reduce their toxicity, mobility, or volume. EPA also commonly controls the source of groundwater contamination (such as treating contaminated soil) and contains the contaminated plume (such as pumping to control groundwater flow). The following are common Superfund remedies for groundwater contamination:

- **Pump and treat**; wherein groundwater is extracted and conveyed to an above-ground treatment system that removes the contaminants. Pump and treat systems are also used to contain contaminant plumes.
- **In situ treatment**; wherein groundwater is treated in place without extraction from the aquifer. In situ treatment technologies can destroy, immobilize, or reduce contaminant concentrations.
- **Containment**; wherein vertical engineered barriers such as slurry walls or sheet pile walls are used to control or divert the flow of groundwater.

- **Monitored natural attenuation**; wherein natural processes such as groundwater microbials are relied upon to achieve remediation objectives within a reasonable timeframe.
- **Institutional controls**; wherein administrative and legal controls, such as ordinances, well districts, or environmental covenants are used to minimize the potential for human exposure to contamination.

For more information on the types of Superfund response actions in the St. Charles area, please visit EPA's Cleanups in My Community website, available at https://www.epa.gov/cleanups/cleanups-my-community.

16. I haven't heard anything about this site until now. How has EPA engaged the public regarding the site?

EPA published the proposed cleanup plan for the Ameren groundwater plume, or OU4, on February 2, 2021 and submitted the proposed plan for public comment from February 2, 2021 to March 9, 2021. On February 9, 2021, EPA held a public meeting to discuss the proposed cleanup. Since then, we have published the OU4 Consent Decree for public comment on October 4, 2022, and extended the public comment period by 30 days, to December 5, 2022, and are holding a community meeting and availability session on November 17, 2022. We have also updated the Site profile page and have fact sheets available.

Throughout the cleanup process at this Site, EPA has engaged the public by publishing notice of each stage of each response action on the Site website and in a City newspaper, and holding public meetings prior to selection of cleanup remedies at each operable unit of the Site.

EPA believes that providing the public information is very important and keeps the public informed of ongoing and planned cleanup activities in various ways. Information regarding the Site is posted on the Findett Corporation Superfund Site website, available at www.epa.gov/superfund/findettcorp. Additionally, information about the Site and other sites in the St. Charles area may be found at EPA's *Cleanups in My Community* website, available at https://www.epa.gov/cleanups/cleanups-my-community. The Missouri Department of Natural Resources' E-START website also contains a map with sites that MoDNR investigates, as well as information for each site. E-START is available at https://apps5.mo.gov/ESTARTMAP/map/mobile.action.

17. There has been a lot of information sent to me about the Elm Point Wellfield. How do I know if information is coming from the EPA?

EPA is aware that some residents of the St. Charles area have received mail or email messages regarding contamination at the Elm Point Wellfield. It is important for you to know that EPA is not involved with those messages in any way. Any form of printable communication that you might receive from EPA Region 7 – particularly any email message, fact sheet, marketing flyer, brochure, or other printed material – will be clearly marked as coming from EPA. EPA's materials often include an official agency seal and will typically include an EPA staff member's name and contact information so that you can verify that what you are reading is legitimate.

18. Who should I contact if I have additional questions?

Questions or requests for site information may be submitted to:

Benjamin Washburn
Chief, Public Engagement and Communication Services
Email: R7PublicAffairs@epa.gov or washburn.ben@epa.gov
Phone: 913-551-7364 or 1-800-223-0425