

January 2022

PROTECTING MAHOPAC'S DRINKING WATER & INVESTIGATING EMERGING CONTAMINANTS

The New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH), working with the Town of Carmel and Putnam County Department of Health (PCDOH), are providing this community update to share progress on the agencies' efforts to ensure the protection of drinking water in Mahopac and protect the community from potential exposures. These steps follow groundwater sampling at the nearby Mahopac Business District Site that detected the emerging contaminants per- and polyfluoroalkyl substances (PFAS), specifically perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), at levels above New York State's maximum contaminant level (MCL) standards for public drinking water.

MAHOPAC BUSINESS DISTRICT SUPERFUND SITE

The Mahopac Business District site is a State Superfund site (NYSDEC Site No. 340013) impacted by releases of dry-cleaning chemicals prior to 1980. The contaminants of concern at that time were volatile organic compounds (VOCs) such as tetrachloroethylene (PCE), trichloroethene (TCE), and 1,2-dichloroethane (1,2-DCE) in the soil, groundwater, and sewer sediment. In the early 2000s the VOC contamination was removed to reduce exposure and prevent the migration of those contaminants off-site.

NYSDEC continues to monitor the site and, as part of New York State's Emerging Contaminant Sampling Initiative to evaluate and address emerging contaminants in drinking water, began sampling on-site groundwater in 2020 with NYSDOH to determine if PFAS or other contaminants may be present.

MAHOPAC DRINKING WATER WELLS: DISCOVERY OF PFAS

PFAS was discovered in the Mahopac Business District groundwater monitoring wells requiring NYSDOH and NYSDOH to complete a groundwater drinking water well assessment to identify wells within 1/4 mile of the Mahopac Business District site (Area of Interest).

The site and several surrounding mixed-use properties

INFORMATION ON PFAS

Per- and Polyfluoroalkyl Substances (PFAS) are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. Fluoropolymer coatings are blends of resins and lubricants used in products such as water-repellent clothing, furniture, adhesives, paint and varnish, food packaging, heat-resistant non-stick cooking surfaces and insulation of electrical wires. Chemicals in this group include perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS).

Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Some of these compounds remain in the environment and in the human body for many years, but levels go down once exposures have ended.

are connected to a public water supply sourced from Lake Mahopac, which does not exceed state's MCLs for PFOA or PFOS. Based upon available water supply information provided to the NYSDOH and NYSDOH, however, nearby residential and commercial areas may depend on groundwater supply wells for drinking, household, and commercial uses.

DRINKING WATER WELL SAMPLING

NYSDEC and NYSDOH are dedicated to ensuring that all area residents have access to clean drinking water. As part of this commitment, the two agencies are overseeing the sampling of drinking water wells in the area and are providing an alternate water supply if levels of PFOA and/or PFOS contamination are

detected above public drinking water standards. To prevent potential exposure to the PFAS known to be present in groundwater at the Mahopac Business District, NYSDEC and NYSDOH with assistance from the PCDOH, began offering sampling of public and private drinking water wells in phases, beginning with wells closest to the site. Treatment or an alternate water supply is being immediately provided if levels of PFOA and/or PFOS are detected above MCLs.

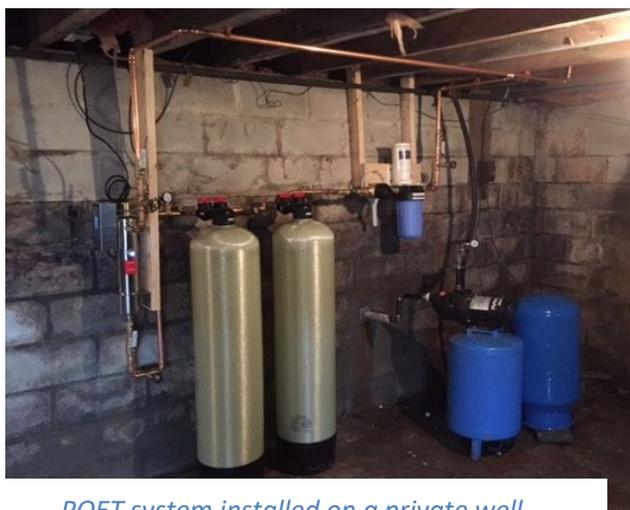
Currently, sampling was offered to an Area of Interest consisting of 48 properties and of these 48 properties, samples were collected at 26 drinking water wells. All samples had results of PFOA and/or PFOS that were above the New York State MCLs.

NYSDEC is installing Point-of-Entry-Treatment systems (or POETs) in locations with MCL exceedances to filter out PFAS and provide clean drinking water on a longer-term basis.

DEC will maintain these systems for as long as necessary to prevent potential exposure to contamination.

NY'S STRINGENT DRINKING WATER STANDARDS

New York's MCLs were developed for public water supplies but are also used as guidance when evaluating drinking water well data. The MCLs are highly protective and among the most stringent PFAS standards in the country, much lower than the current federal drinking water health advisory level for PFOA and PFOS of 70 parts per trillion (ppt); New York's MCL for these emerging contaminants is 10 ppt.



POET system installed on a private well

With the MCLs in place, NYSDEC and NYSDOH are

TIMELINE

- Fall 2020 – Sampling of groundwater at Mahopac Business District Site for Emerging Contaminants.
- Late Fall 2020 – Outreach to Phase 1 homeowners and business owners to request participation in New York State Emerging Contaminant Sampling Initiative.
- Winter 2021 – Sampling of drinking water wells of Phase 1 property owner volunteers for PFAS.
- Spring 2021 – Outreach to Phase 2 property owners to request participation in New York State Emerging Contaminant Sampling Initiative.
- Summer 2021 – Sampling of drinking water wells of Phase 2 property owner volunteers for PFAS.
- Winter 2022 (*next step*) – Sampling of drinking water wells identified in Phase 3

investigating groundwater for emerging contaminants at new and legacy State Superfund and Brownfield Cleanup Program sites, including the Mahopac Business District, and landfills. Whenever testing at these sites demonstrates an exceedance of the State's MCLs for emerging contaminants, NYSDEC and NYSDOH work with local health departments to expand sampling and evaluate community exposures. NYSDEC and NYSDOH then launch, with partners including county departments of health, a review of potential sources, followed by comprehensive investigations to determine the nature and extent of contamination.

NYSDEC SOURCE INVESTIGATION

In addition to the on-site investigation underway, NYSDEC is working closely with NYSDOH, PCDOH, and the town of Carmel to conduct a comprehensive investigation to identify any other potential sources of the PFAS contamination in the groundwater at and around the Mahopac Business District site.

The presence of PFAS in groundwater at the Site is not necessarily linked to the sources of dry-cleaning chemical releases in the Mahopac Business District. Additional investigation is required to determine if there is a correlation between PFAS in groundwater and former dry-cleaning operations.

There are no other new or legacy State Superfund or Brownfield Cleanup Program sites or landfills that are

located in proximity to the Area of Interest and that are expected to be a contributing source of PFAS impacts in groundwater.

COMPREHENSIVE ASSESSMENT OF OTHER POTENTIAL SOURCES

NYSDEC is overseeing a source evaluation that consists of a review of existing sampling data and a records review. The data has revealed the following:

- Relatively uniform PFAS concentrations in groundwater was detected throughout the area;
- Results for site monitoring wells suggest that there may be more than one source;
- Ratios of PFAS compounds (fingerprint) are not characteristic of a specific product such as Aqueous Film Forming Foam (AFFF) used in firefighting; and
- Potential sources may include septic systems, dry cleaners, historic fires, among others.

Additional information is being sought to better understand the local groundwater flow through bedrock, use of AFFF in the vicinity of the site, drinking water well construction details, and municipal sewer construction details. In addition, NYSDEC will be installing additional and repairing existing monitoring wells for use in these investigations to improve understanding of groundwater conditions and to better define the extent of PFAS impacts present in groundwater near the Site.

COMMUNITY ENGAGEMENT

Residents within the Area of Interest will be invited to participate in sampling by mail and/or door-to-door outreach. If a resident in the Area of Interest has not responded to the letters from NYSDEC and is interested in sampling, the resident may reach out to the contact information provided in the letter. Arcadis will subsequently coordinate sampling and alternative water supplies as appropriate. Sampling results will be discussed and provided to property owners by NYSDOH.

NYSDEC, NYSDOH, and PCDOH will continue to keep the community informed about area-wide activities throughout the process.

WHO TO CONTACT

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

For questions related to the site and remedial activities, drinking water well sampling, and PFAS source evaluation:

Brianna Scharf, Project Manager
(518) 402-5987
Brianna.Scharf@dec.ny.gov

For questions related to the provision of an alternate water supply (i.e., bottled water, POET, or public water supply connections):

David Chiusano, Project Manager
(518) 402-9813
David.Chiusano@dec.ny.gov

DEPARTMENT OF HEALTH

For health-related questions:

Stephen Lawrence, Project Manager
(518) 402-0450
bee@health.ny.gov

NEXT STEPS

PCDOH, NYSDEC, and NYSDOH will continue to implement the currently planned drinking water well sampling as well as evaluate the need for and oversee any additional drinking water well sampling, including taking actions to address exposures.

At this time, NYSDEC has not identified a source of the emerging contaminants impacting groundwater at the Mahopac Business District and nearby drinking water supplies. Additional field activities are being developed and will be implemented to support the source evaluation.

The feasibility and benefits of widespread installation and maintenance of POETS or possible extension of public water mains is being evaluated by NYSDEC in coordination with the Town of Carmel.

NYSDEC and NYSDOH will continue to keep the community informed throughout this process.

Sign up to receive updates by email:
www.dec.ny.gov/chemical/61092.html

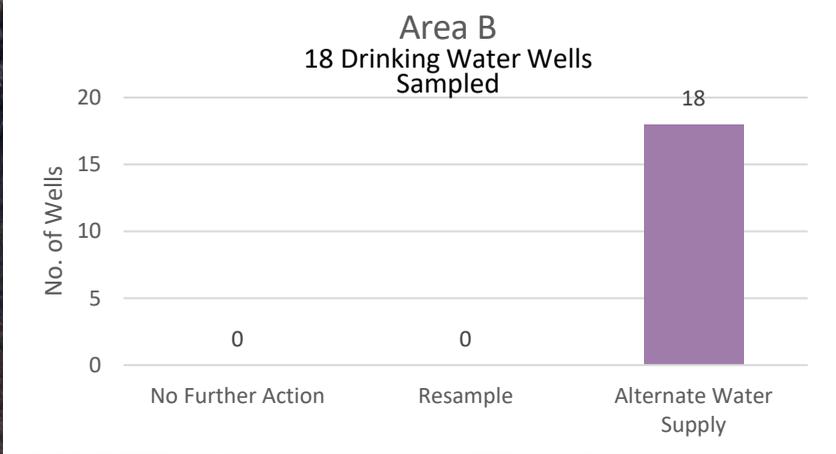
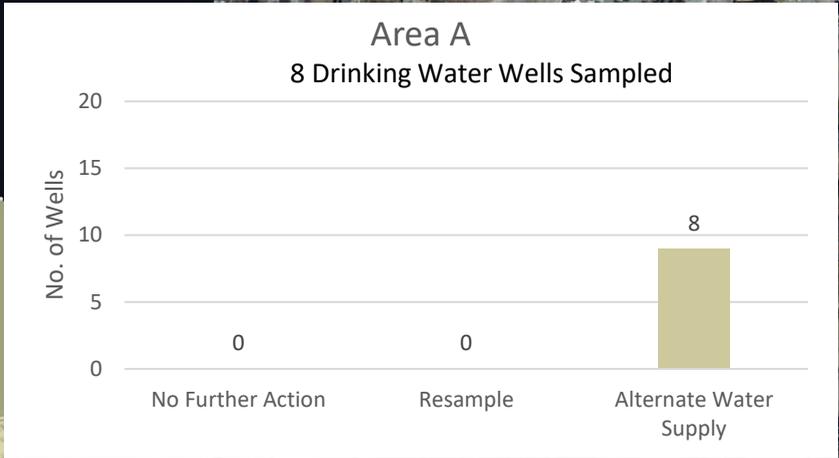
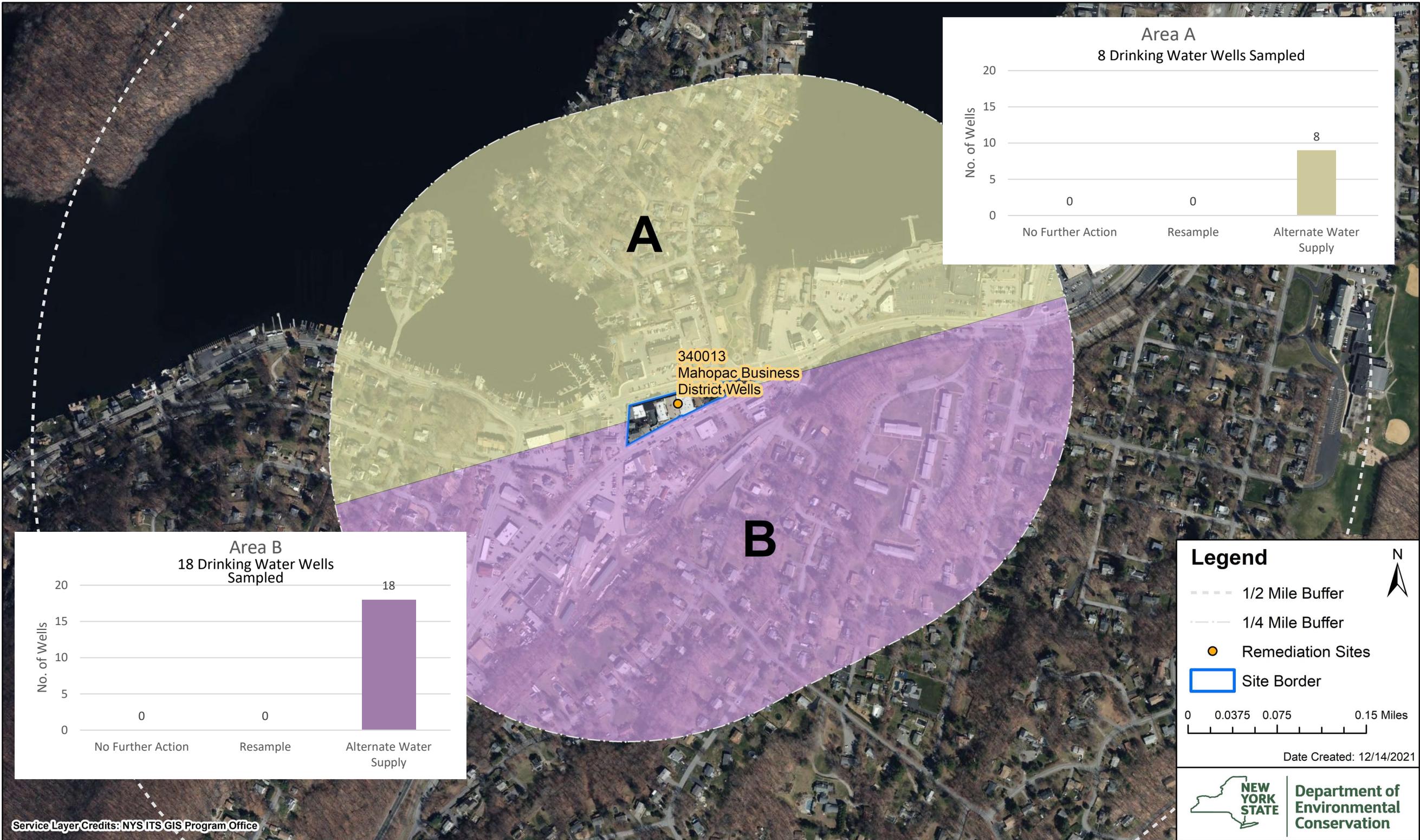
WHERE TO FIND INFORMATION

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY FACT SHEETS

<https://www.atsdr.cdc.gov/pfas/>

PFAS INTERSTATE TECHNOLOGY AND REGULATORY COUNCIL (ITRC) FACT SHEETS ON PFAS

<https://pfas-1.itrcweb.org/fact-sheets/>



Legend

- 1/2 Mile Buffer
- 1/4 Mile Buffer
- Remediation Sites
- Site Border

0 0.0375 0.075 0.15 Miles

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