

Commerce Street Plume Superfund Site

Groundwater Remedial Action Update

May 2023

Site Background

The Commerce Street Plume Superfund Site encompasses approximately **70 acres of contaminated groundwater**, including the Mitec Systems Corporation (Mitec) facility formerly located at 96 Commerce Street in Williston, VT. The Site was added to the U.S. Environmental Protection Agency (**USEPA**) **National Priorities List** in 2005 due to contamination related to Mitec's past use of **trichloroethylene (TCE)**, an industrial degreaser, during manufacturing and electroplating operations. TCE remains the primary contaminant at the Site, having been released to groundwater via an unlined wastewater lagoon and, to a lesser extent, a septic system leach field. The wastewater lagoon and associated contaminated soil were removed in 2018.

Remedial Goals

- **Clean up groundwater** to meet Vermont drinking water requirements
- **Prevent the spread** of TCE contamination



An example of the machinery that will be used for trenching

Groundwater Status

Residences and businesses within the Site and surrounding areas are served by public water and are not at risk from exposure to contaminated groundwater provided they **don't install and/or utilize groundwater wells or excavate in saturated soils within the plume area without following a regulatory-compliant work plan**. Excavation work within the plume area is restricted/controlled by the Town of Williston's building permit bylaw, Chapter 4.4.2. Because groundwater in the plume area is **not safe to drink** due to current TCE concentrations, the Vermont Department of Environmental Conservation (VTDEC) has designated groundwater in this area as Class IV (non-potable/not drinkable) to ensure that it is not used as a drinking water resource.

Groundwater Cleanup Update

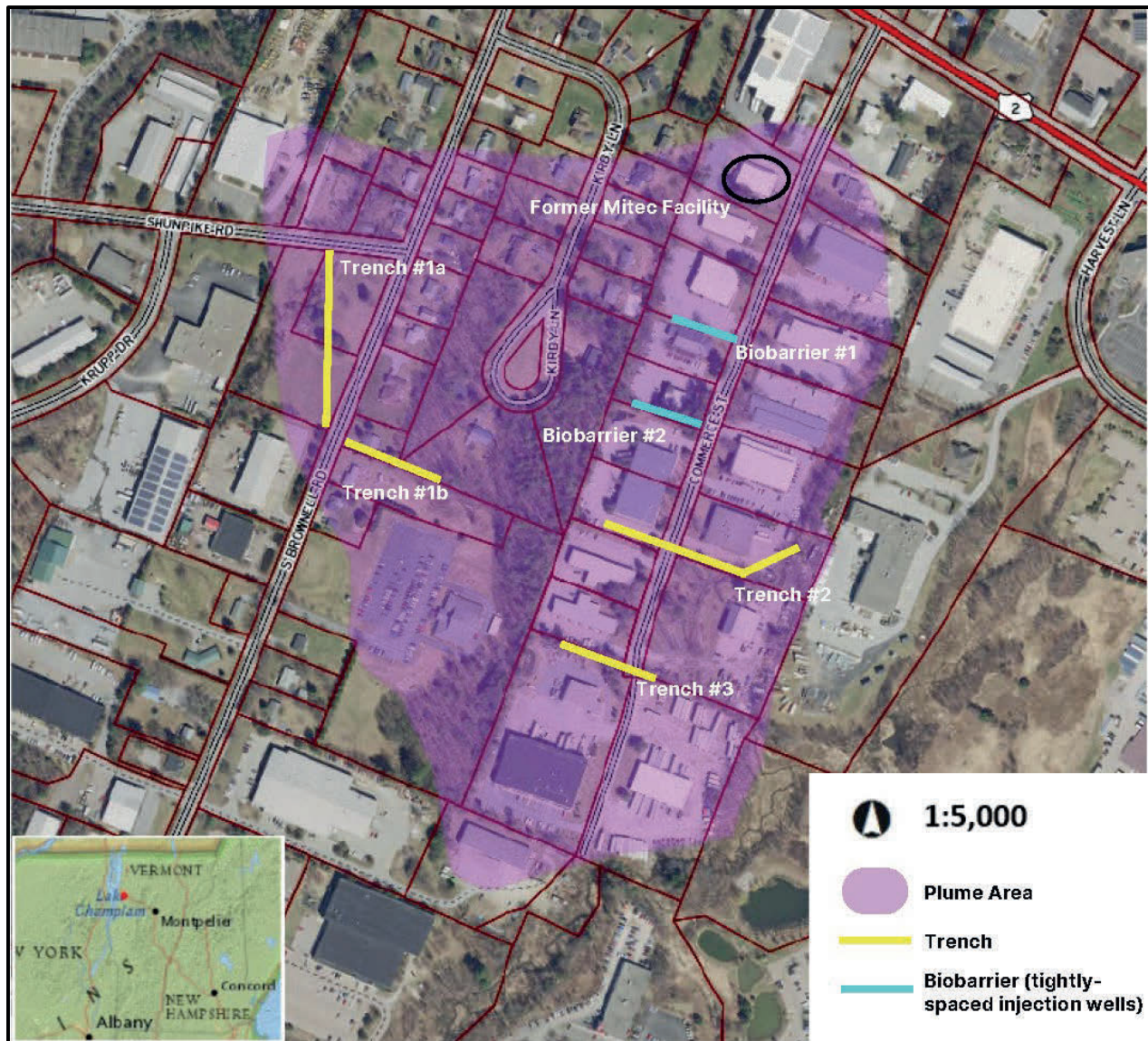
USEPA has recently granted cleanup funding for groundwater contamination at the Commerce Street Plume Superfund Site to VTDEC from the Infrastructure, Investment and Jobs Act. To cleanup or remediate groundwater on-site, **in situ bioremediation (ISB)** will be implemented. ISB cleans groundwater in place by adding specific materials to the

groundwater, including vegetable oil and nutrients, that fuel bacterial processes and accelerate the natural breakdown of contaminants. More information on bioremediation and the processes involved can be found at <https://semspub.epa.gov/work/HQ/401583.pdf>. USEPA and VTDEC consider bioremediation to be a reliable, safe, and sustainable technology to clean up contamination and do not expect major disturbance to human activities or the environment by the implementation of ISB at the Site.

ISB utilizes one-pass trenching to introduce the necessary bioremediation materials specifically selected for the Site into belowground **trenches**. One-pass trenching machinery, like the one pictured, places the materials within the trenches at specified depths and backfills soils in one "step" or pass, thereby minimizing excavation time and disturbance to surrounding areas. Groundwater is cleaned up as it flows through the trenches. This process will be supplemented by using subsurface "**biobarriers**" comprised of tightly spaced injection wells, to target higher contamination areas along

Commerce Street. Following initial trench and injection well construction, groundwater will be monitored for several years to ensure that bioremediation is occurring as planned.

The map below shows the proposed locations of ISB trenches and biobarriers. Work is expected to begin in 2024. Prior to remediation, an archeological investigation will determine if historic resources are present on-site. A preliminary archeological investigation identified the potential for archeological features that may need to be avoided during the upcoming work. The archeological investigation will be conducted in the vicinity of the intersection of South Brownell Road and Shunpike Road and is planned for this Summer/Fall 2023.



Please reach out to any of the contacts listed if you have questions about the upcoming work. VTDEC will be communicating directly with property owners where the cleanup work is expected to occur.

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