In 2009, sulfolane was detected in drinking water wells near the North Pole Refinery, about 15 miles east of Fairbanks. Under DEC oversight, Flint Hills Resources Alaska (FHRA), owner of the refinery, responded quickly by providing affected residents and businesses with alternative drinking water and initiating an extensive characterization effort. The sulfolane groundwater plume is currently approximately 2 miles wide, 3.5 miles long and over 300 feet deep, and continuing to migrate to the north-northwest.

FHRA and the State of Alaska announced on February 7th, 2017, that they will be working with the City of North Pole to significantly expand their piped public water system to provide sulfolane-free drinking water to residents impacted by the sulfolane groundwater plume. On February 25th 2017, an estimated 100 people attended a Community Open House, held at the North Pole Plaza. Attendees from the area talked with representatives from the DEC, FHRA and the City of North Pole regarding specifics of the project.

**Current Events**

Stantec, an international engineering firm with a local office in Fairbanks, was contracted to design the piped water system expansion. The design is complete, and the City of North Pole is currently evaluating proposals for construction anticipated to begin in early 2018.

With expansion of the piped water system, the alternative water supply (AWS) program is being phased out. Alternative water will continue to be provided to properties with sulfolane detections and properties potentially in the migration path of the sulfolane plume until the expanded piped water system is available for connection.

DEC will continue regulatory oversight. Groundwater monitoring of the sulfolane plume will continue during and after construction of the piped water expansion. This monitoring will focus on the plume boundaries to track the sulfolane plume expansion and include monitoring of buffer zone properties for protection from potential exposure to sulfolane in drinking water. In the event the sulfolane plume migrates beyond the expanded service area, provisions are in place to supply clean alternative water to additional impacted properties if sulfolane in a private drinking water well exceeds a protective level, currently set at the U.S. Environmental Protection Agency’s Regional Screening Level of 20 parts per billion.
Area of Expanded Public Water

The design phase of the North Pole piped water expansion project began shortly after the February 2017 agreement. The Stantec engineers worked with a steering committee, including representatives from FHRA, the State, and the City of North Pole, to prepare the design documents for the project. The design was completed in October and received engineering review by the DEC Drinking Water Program. The City of North Pole will be the contract manager for the construction phase and is currently evaluating proposals for the project, with construction slated to begin in Spring 2018.

Milestones from the design phase are listed below:

- An in-depth property review was conducted by the design team to finalize the number of service connections, currently estimated to be 706. The boundaries of the service area have not changed since the February 2017 project announcement and include all improved properties impacted by the sulfolane plume, both within the City of North Pole and outside the city limits. The expansion area includes the Garden, Riddle Estates, Poodle, Pine Stream, Steelhead and Sorores subdivisions.

- The project will include approximately 35 miles of new pipe. The majority of the new pipe will be constructed of high-density polyethylene (HDPE).

- Land has been purchased for an additional water reservoir and pump station along Badger Road.

- Stantec is working with a subcontractor, R&M Consultants, on right-of-way acquisition throughout the project area. The majority of the easements necessary for new piping trenching already exist; however, there are a number of new easements to be acquired. This has been an ongoing process throughout this past summer. There are also many private properties with existing easements the project intends to utilize. If you have questions about easements across your property, please see the Contacts on page 3.

Construction

Construction will take place in phases. The first phases are anticipated to occur in Zones 1 and 2 (see map on Page 4) and are scheduled to begin in Spring 2018. Construction timeframe details will be worked out between the construction contractor and the City of North Pole. While the system will be installed throughout 2018 and 2019, it will not be operational and providing public service until 2019/2020.

Piped Water Connections and Costs

An agreement between the State of Alaska, FHRA and the City of North Pole was reached in February 2017 to expand the piped water system. As outlined in the agreement, the project will not exceed $100 million. The agreement also includes a $1 million Operations Fund to the City of North Pole to fund the initial operation and maintenance of the finished pipeline system. Interim allocation for funding the project is split, with FHRA paying 80% and the State of Alaska paying 20%. This interim allocation may change pending continued litigation against Williams, the former refinery owner.

In order to connect to piped water, each property owner will need to sign up with the City of North Pole. Plans are currently underway to hold a Community Open House, Saturday, February 24, 2018, North Pole Plaza Mall, 2:30 – 4:30 p.m., to provide information to the public and solicit comments and questions on the upcoming community water expansion project (see Early Announcement next page).

(continued, next page)
Costs of installing service lines and hookup to the system are covered in the February 2017 agreement. A $2,000 water credit will also be provided to all property owners currently identified as eligible for connection within the service area. According to the City of North Pole, this credit should cover an average residential utility water bill for two to three years depending upon usage. Alternative drinking water will continue to be provided until the piped water extension is available for connection.

Ensuring Clean Water:
DEC’s Drinking Water Program

DEC's Drinking Water Program requires public water systems to be in compliance with state and federal drinking water regulations and will be the regulatory entity to review and approve the design of this piped water expansion project. The City of North Pole's public water system is regulated by the State's Drinking Water Program.
Area of the North Pole Water Distribution System Expansion, with zones identified for phased construction.