



File: 100.38.090

November 19, 2018

Re: Contaminated Groundwater Advisory

Dear Resident:

The Alaska Department of Environmental Conservation (DEC) is releasing a Contaminated Groundwater Advisory, attached to this letter, for property owners within the North Pole water system expansion project. The purpose of this advisory is to help residents whose private water wells are contaminated by sulfolane and/or per- and poly-fluoroalkyl substances (PFAS) avoid unintentional contact with or spreading of contamination.

As you may know, DEC has unfortunately discovered an increasing number of areas where private water wells have become contaminated by industrial chemicals. In order to protect the public and the environment from exposure to the contamination, DEC is issuing contaminated groundwater advisories to affected residents.

When contamination is found to be affecting people's drinking water supplies, DEC's initial response is to protect the public by encouraging, or requiring, responsible parties to provide immediate clean alternative drinking water, such as bottled water or treatment systems. Now, a permanent alternative water supply is becoming available through the City of North Pole's water expansion. This project is the result of many years of work between DEC, the City of North Pole and Flint Hills Resources Alaska to provide clean drinking water to residents affected by the sulfolane plume. Residents in construction zones 1 and 2 can connect to water utility service in 2019, while zone 3 and 4 residents will be able to connect in 2020.

**DEC advises eligible property owners to connect to the City of North Pole's water utility service and similarly advises against using untreated, contaminated well water after a property is connected to the water utility service.** Once that service is available to your property, if you wish to continue using your water well, it will be your responsibility to determine that it does not contain contamination above levels of concern. While we recognize that this advice may be new information to you, connecting to piped water and stopping the use of untreated, contaminated well water is an important step towards preventing further groundwater contamination.

DEC encourages you to attend an upcoming Open House to be held on December 5, 2018 from 11:30am to 1:30pm and 4:30pm to 6:30pm at the North Pole City Council Chambers. DEC will be

available to provide guidance on this water use advisory, information about recent groundwater monitoring activities, and to answer any questions or concerns you might have. More detail on the Open House will be sent to you by the City of North Pole.

If you have any questions, please feel free to contact me at (907) 451-2143 or via electronic mail at [james.fish@alaska.gov](mailto:james.fish@alaska.gov).

Sincerely,

James Fish  
Environmental Program Specialist

Enc. Contaminated Groundwater Advisory



## Contaminated Groundwater Advisory North Pole Piped Water Expansion

The Alaska Department of Environmental Conservation (ADEC) is providing this contaminated groundwater<sup>1</sup> advisory to property owners within the North Pole piped water expansion area. Some private water wells within this area draw groundwater that has been contaminated by sulfolane and/or per- and poly-fluoroalkyl substances (PFAS). This Advisory explains precautions to help residents avoid unintentional contact with or spreading of contamination.

**Description of Contamination:** Releases of sulfolane at the former North Pole Refinery contaminated the groundwater throughout much of the City of North Pole and beyond the city boundaries. The sulfolane contamination affects many residents, homeowners, and landowners and is expected to remain in the groundwater for many years. The area of groundwater carrying sulfolane is approximately 2 miles wide, 3.5 miles long and over 300 feet deep. The sulfolane plume is not static. It continues to gradually migrate towards the north-northwest, and contaminant concentrations in groundwater wells may change over time.

The State has recently determined that historical releases of PFAS (chemicals used in some fire-fighting foams) at the former North Pole Refinery have also contaminated some of the groundwater in the North Pole area. Groundwater sampling is ongoing, and the extent of PFAS pollution has not yet been delineated.

**Water Use Advisory:** ADEC advises eligible property owners to connect to the expanded water utility service.

- The 2017 settlement agreement between the State of Alaska, Flint Hills Resources, Alaska (FHRA), and the City of North Pole will extend the city's piped water system to include the area currently impacted by sulfolane along with areas expected to be impacted in the future.
- Connecting to water utility service will protect the owner and anyone else on the property from any health effects that could be caused by exposure to contaminated well water.

ADEC similarly advises against using untreated, contaminated well water after a property is eligible for connection to the water utility service.

- Ceasing use of untreated, contaminated well water reduces spreading the pollution and eliminates human exposure. The sulfolane plume is not static, and concentrations in wells can change over time. In addition, the extent of PFAS pollution in the groundwater is still uncertain. Understanding of the toxicity of these chemicals is also still evolving, with long-term toxicity studies on sulfolane pending and new cleanup levels for PFAS recently proposed. To best prevent spreading these chemicals to places where people might be exposed to them, ADEC is seeking community assistance in ceasing the spread of chemicals from untreated, contaminated groundwater use.
- To avoid spreading the contaminants and help the community minimize additional impacts, owners are advised to cease future use of their existing well and to not construct new wells unless concentrations of sulfolane and PFAS are below levels of concern. ADEC is available to help owners with this determination and will provide guidance at the December 5, 2018 Open House.

**Monitoring:** Groundwater samples are being collected periodically (generally annually) from some private water wells to track movement of the contamination. ADEC may request access to your water well by the State of Alaska, FHRA, Williams Alaska Petroleum, Inc., and/or agents acting on their behalf for purposes of collecting groundwater samples and monitoring the groundwater contamination. Monitoring parties will always notify you prior to the desired sample date and work with you to sample during mutually agreeable times.

**For additional information, please contact ADEC at 907-451-2143.**

<sup>1</sup> The term, groundwater, refers to water stored under the surface of the ground in the tiny pore spaces between rock, sand, soil, and gravel. The term, well water, refers to groundwater that is obtained through a supply well.