

## Early, Marti (DEC)

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**From:** Early, Marti (DEC)  
**Sent:** Wednesday, January 20, 2010 5:20 PM  
**To:** Undisclosed recipients  
**Subject:** Update #3 on North Pole Refinery investigation

Greetings to those interested in sulfolane issues in the North Pole area,

Work progresses to get all those with private wells which might have sulfolane contamination switched to using bottled water for drinking purposes. Eighty-five private wells have been sampled so far, and 57 of them have had some detection of sulfolane. We expect new monitoring well data next week. Flint Hills has installed and sampled its furthest wells, the "D-series," to the north and northwest of the refinery. The results should be in by next week. These wells appear in the aerial photo on our web page summary as yellow dots. See the web page for the photo and to download the map with the full set of wells shown: [www.dec.alaska.gov/spar/csp/sites/npolerefinery.htm](http://www.dec.alaska.gov/spar/csp/sites/npolerefinery.htm).

State health officials continue to say that using water with sulfolane in it, at the levels found so far in private wells, is safe for washing and bathing.

We have received calls from residents over the past week or two and have begun developing answers to frequently asked questions. The three we added to our website appear below. We'll be adding more as time goes on, so please let us know if you have a question you would like answered on the website. We will also be adding historical groundwater data as soon as possible.

**Q** Why haven't wells been tested in areas close to, but east of the Refinery? Just because the river flows away from the area doesn't mean that it hasn't traveled to the east, right?

**A** As of early January, wells have been tested to the east of the refinery, and the lab results listed non-detection for sulfolane for all of them. The private wells tested to the east are on Laurance Rd. and Evolyn Drive toward the south end of Blanket Blvd. Monitoring wells on the refinery property have allowed testing over years and have helped to determine groundwater flow direction. The groundwater, and therefore the sulfolane, is not traveling to the east. Data from monitoring wells on the east portion of the refinery's pad itself have tested non-detect. We also have regional groundwater flow information from the U.S. Geological Survey as well as the new testing off the refinery property to the north and northwest. All of this information supports our understanding of the groundwater and contaminant flow direction to the north and northwest, generally paralleling the Tanana River. The direction of groundwater flow may vary over time, and its depth may vary seasonally. However, all of the chemical and water data we have to date about the refinery and the surrounding areas do not indicate contaminant movement to the east. Ongoing monitoring will continue in order to track the plume and any changes.

**Q** What's a "monitoring well" or a "sentinel" well?

**A** Monitoring wells are put in only to sample and test water, rather than for drinking or other purposes. Their installation is regulated and the details of construction are well-documented. The wells can be temporary or permanent depending on their purpose. Their depth is recorded. Flint Hills is installing monitoring wells that will remain in place and continue to be sampled over the years. These wells will be used to more thoroughly understand the regional and local groundwater flow and chemical movement. "Sentinel" wells are monitoring wells installed at the edge of a plume or beyond it as a way of understanding the leading edge of the plume and any changes in the groundwater or contaminant movement. Drinking water wells can also be used for monitoring purposes with the owner's permission, however the depth of drinking water wells and other important construction details are often unknown.

**Q** Why is Flint Hills doing the monitoring of groundwater and not DEC?

**A** DEC is monitoring the work of Flint Hills. Alaska law is set up so that the “spiller” must report and clean up the spill, with DEC oversight. The refinery’s prior owners were the spillers, as far as we know, and Flint Hills assumed responsibility for the spilled product when they bought the refinery in 2004. They have honored that commitment and acted quickly and proactively to test private wells, attempting to be as sensitive as possible to residents and homeowners, given a short timeframe. The company has been actively researching options to resolve the sulfolane groundwater issue, options which will be quite expensive to them. DEC oversees the process, reviewing successive plans for investigating the plume of contamination and looking at improvements made to the remediation (groundwater cleanup) system on the refinery property. Flint Hills is using reputable consulting firms to test water, proceed with the investigation and look for solutions. DEC can step in and take over a response when we feel the responsible party is not doing a good job, causing the public to be at a higher risk. This is not the case with Flint Hills. They are acting responsibly and we encourage homeowners and residents to cooperate with them in the testing of private wells.

If you know of others who would like to receive updates via email, please have them email me and I’ll include them in the future. We will also send out updates by postal service to those at the meeting who don’t have email. If you have questions about DEC’s work on this issue, please write or call me.

About future emails: We respect your privacy and will send out updates in a way to keep your email addresses hidden. If you do not want to receive future emails from DEC on this topic, please write back and let me know.

Sincerely,

*Marti*

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