

Eddy, Andrew (MPCA)

From: Mustonen, Kevin (MPCA)
Sent: Thursday, June 03, 2010 3:55 PM
To: Eddy, Andrew (MPCA)
Subject: RE: Leaksite 3534

Andy,

From a risk-reduction standpoint, I feel that providing a municipal water hook-up has guaranteed results, while installing replacement wells does not, so from that angle, providing a municipal water hookup would be the preferred option. However, the issues associated with the site aren't that clear cut, so I would like to briefly discuss some of the problems associated with pursuing either path.

Replacement Wells:

I see two main issues that could prevent the installation of successful replacement (bedrock) water supply wells at the Radco and MMT properties.

- 1) The bedrock in the Duluth area tends to yield small volumes of groundwater. The resulting well yield can be low enough that it is barely adequate for domestic use or limited commercial use. The replacement bedrock wells should yield less volume than the current wells.
- 2) Due to the unpredictable nature of fractures in the bedrock, it is possible that the open-hole portions of the replacement wells could intersect a fracture that is hydraulically connected to the impacted groundwater found in the overlying glacial drift (i.e., the new wells might end up with VOC contamination).

Taking those issues into account, I would like to point out that Junction Food-n-Fuel's onsite petroleum-impacted water supply well was replaced in late 1997 and the replacement bedrock well has been VOC-free since that time. This indicates that replacement bedrock wells may be viable options for the MMT and Radco properties.

Municipal Water:

I see three main issues with pursuing the municipal water option.

- 1) 51% of the involved property owners need to support a municipal water extension and that might not happen. I would like to note that Steve Pelto (MMT Heating and Cooling) told Sarah Larsen that he was personally pursuing the municipal water extension option (collecting signatures?) since he doesn't want a replacement well. His requests for additional time to pursue this option have contributed to the delays in progress at the site.
- 2) If replacement water supply wells are a possible option (for a total cost around \$40k), will Petrofund support extending a municipal water line, which is going to cost significantly more?
- 3) The timeframe required to extend the water line could be significant since the engineering work needs to be started/completed and the blueprints/specifications need to be reviewed and approved by MDH before the work can proceed. Radco staff are already complaining to their landlord (Arthur Usan) about having to use bottled water and about how long the well-replacement process is taking. When I spoke with Mr. Usan earlier this week he told me that Radco is talking about moving to a different location because of the well issue. He also told me that he would lose approximately \$30k per year in rent if Radco vacates the property and that he might look at recouping his lost income through a lawsuit (against Steve Pelto?).

Considering the renter/landlord situation at Radco, I think we need to have an additional conversation with Arthur Usan in the near future to try to come up with a more acceptable interim solution than the current bottled water approach.

Kevin Mustonen
Hydrologist
Minnesota Pollution Control Agency
Petroleum Remediation Program
525 S. Lake Avenue, Suite 400
Duluth, MN 55802

Phone: 218-302-6641
Fax: 218-723-4727

From: Eddy, Andrew (MPCA)

Sent: Thursday, June 03, 2010 1:52 PM

To: Mustonen, Kevin (MPCA)

Subject: RE: Leaksite 3534

I spoke with John Klaers just now, and he said we need the property owners to present a petition with 51% of the involved property owners signatures on it. They present that to the city, then the city assigns an engineer and it goes out for bid. This could be our best option. Even if we have 2 of the 3 sign off it would be enough. I also believe the RP would be eligible for up to 90% of the cost back, so this wouldn't be a bad deal for him. The wells may not end up clean or of good enough water quality to satisfy everyone, and this would ensure a permanent solution. John Klaers said he agreed that this would be our best solution...that being said, we will see what Ann Cohen things, and likely Sandeep will get involved too. How do you feel about municipal hookup as opposed to well replacement?

Andrew Eddy
MPCA
Petroleum Remediation Program
Remediation Division
651-757-2331

-----Original Appointment-----

From: Mustonen, Kevin (MPCA)

Sent: Thursday, June 03, 2010 1:46 PM

To: Eddy, Andrew (MPCA)

Subject: Accepted: Leaksite 3534

When: Wednesday, June 09, 2010 1:00 PM-2:00 PM (GMT-06:00) Central Time (US & Canada).

Where: *MPCA_#RM 2-3 Recycle Cap 14

Andy,

I'll be down for the Division meeting, but I will be heading back to Duluth on Tuesday afternoon (no overnight stay).

-Kevin