

ENVIRONMENTAL Fact Sheet



Euclid Road Groundwater Site, Deep Creek, WA

U.S. Environmental Protection Agency, Region 10

October 2007

Summary of EPA activities January - October 2007

The U.S. Environmental Protection Agency (EPA) has been testing drinking water wells in the Deep Creek area of Spokane County since 2005. Testing in this area began after EPA scientists detected a solvent called TCE in a drinking water well near Euclid Road as part of an investigation of the former Nike Missile Battery 87.

When the TCE was discovered, EPA installed filters on three home wells which had TCE levels greater than federal drinking water standards. EPA tests the filtered water every three months to ensure that the filters are continuing to remove the TCE. EPA also tests monitoring wells in nearby groundwater.

EPA has not detected TCE in extensive testing of other home wells in the Deep Creek community. It appears that the TCE may be limited to an area along Euclid Road, near North Wood and Ritchie Roads. EPA is further investigating the area this fall.

This fact sheet is one of a series of updates on the testing and search for the source of the TCE. For more background, please visit EPA's website or the Airway Heights Public Library. Contact information is listed at the end of this fact sheet.

Results of Spring 2007 Testing:

EPA began testing for NDMA and perchlorate in March 2006 because, like TCE, these chemicals were used at missile sites across the country. In June of this year, contractors working for the Environmental Protection Agency tested 126 drinking water wells in the thirty-five square mile investigation area. Each of these wells had been previously tested for the presence of NDMA and perchlorate and was tested again to see if there were any changes in levels.

In April and May of this year, EPA also tested for TCE in 11 wells, including the three TCE affected drinking water wells, nearby drinking water wells, and groundwater monitoring wells.

All laboratory results from testing to date, including spring 2007, are available on EPA's web-site (see web site address below). Each well owner received a copy of their sample results in the mail.

The spring 2007 testing confirms the results of previous tests:

- low levels of perchlorate were detected throughout the investigation area.
- NDMA levels were very low or undetected.
- TCE was detected only in a small part of the Euclid Road investigation area and was above drinking water standards in the same three drinking water wells.
- Filters installed in these wells to remove TCE are effective.

TCE

TCE is a commonly used degreaser and is also an ingredient in many products such as paint removers and adhesives. EPA is working with other agencies to understand what is affecting the levels of TCE in the Euclid Road area.

The federal drinking water standard for TCE is five parts per billion. When drinking water has more than five parts of TCE per billion parts of water, the water should be treated to remove the TCE. EPA has installed filters on each of the three wells that had more TCE than the drinking water standard allows.

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Tests over the last year and a half have shown that levels of perchlorate and NDMA have not changed much from season to season and do not pose an immediate threat to people's health. EPA, the Washington Department of Health and the Spokane Regional Health District (SRHD) are evaluating the results of all the EPA drinking water testing in the Deep Creek area to determine if the levels of these chemicals pose a health concern if residents are exposed to them for many years.

In addition to the well testing described above, this spring EPA placed a series of TCE-absorbing probes three feet below ground near the wells where TCE was found. The probes did not detect TCE. This suggests that the TCE in the affected Euclid Road wells got there by moving in groundwater after being spilled or dumped elsewhere. Groundwater in the area of the wells flows from the northwest.

Corps of Engineers Investigation Report:

The Corps of Engineers (COE) looked at military documents to see if there were any records of spills or disposal of TCE at the nearby former Nike Missile Battery 87 that might have reached area wells. They also interviewed people to find out if anyone could remember a specific incident where TCE had been spilled or buried.

The Corps did not find any reports of a specific spill in the area and concluded that EPA testing to date does not prove a link between Battery 87 and the TCE contaminated groundwater. However, the Corps' investigation noted that TCE was generally used at missile launch sites and that TCE and other products were sometimes dumped or shared with area residents during or at the end of a missile site's operation. For Nike Missile Battery 87, the missile launch site is southwest of the affected wells, while the control site is northwest of these wells. A copy of the Corps' report is in the Airway Heights Library.

Ongoing focus on TCE:

Based on the testing of drinking water wells in the investigation area, EPA has concluded that TCE has been detected in only four drinking water wells. Since 2005, filters have been effective at removing the TCE from the three drinking water wells with

TCE levels greater than federal standards. No filter was installed on the fourth well because the water meets federal drinking water standards. TCE has been detected at a low level in only a few tests over the last two years. EPA will continue to test for TCE at this well.

EPA will continue testing the EPA monitoring wells, affected drinking water wells, and filtered water to confirm that the filters are effective and to monitor TCE levels. If the TCE moves or spreads, it could flow in groundwater toward the Deep Creek ravine. For this reason, EPA will also test drinking water wells between the affected area and the Deep Creek ravine. Further testing of other drinking water wells in the area is not planned at this time.

EPA is also investigating where the TCE is coming from and how large the area of affected groundwater is. Field work underway this fall involves field inspections, additional monitoring wells, TCE-absorbing probes, and other tools. If a source is found, EPA will decide whether action can be taken to prevent additional TCE from entering groundwater (for example, by removing contaminated soil or TCE containers) or to stop the spread of TCE in groundwater. It may also help determine who may be liable for the costs of responding to the TCE problem.

There are many ways TCE could have reached groundwater. Someone may have poured or spilled TCE on the ground or in a well or may have buried a container that is leaking. This might have happened once or several times, in one area or several areas, fifty years ago or more recently. It may not be possible to identify the source or cause of the contamination.

Got information?

If you have any information that could help EPA find out how and where TCE got into the water, please call Renee Dagseth at EPA. You do not need to provide your name. Contact information is at the end of this fact sheet.

Thinking about drilling a new well in the area? Check with the EPA!

If you are thinking about drilling a new well in the area close to where TCE has been found in groundwater, please contact EPA for current information about where the contamination may be located. Drilling wells in and near this area is not restricted. However, the water may not be safe for home or farm use.

EPA will not provide TCE filter systems for new wells drilled in the area of known contamination.

Well-owners or users are encouraged to test for TCE when they test for bacteria and nitrate. Mike LaScuola of the Health District can provide information about correct sampling methods, laboratories capable of analyzing for TCE, sampling costs, and health information regarding the results. See contact information at the end of this fact sheet.

PERCHLORATE

Perchlorate is a manufactured salt found in rocket fuels, explosives, flares, fireworks, some bleach products, and some herbicides. It also occurs naturally in arid environments and has been found in natural fertilizers imported from Chile. It has been detected at low levels in drinking water in the Deep Creek area.

While there is no federal drinking water standard for perchlorate, no filtering or otherwise treating drinking water for perchlorate is necessary for these low levels.

NDMA

NDMA has been found at rocket fuel facilities and also has been found where chlorinated waste water has been spread on land. It is in some foods such as cured meat. There is no federal drinking water standard for NDMA.

Some Deep Creek wells tested in 2006 had low levels of NDMA. In 2007, two out of 126 wells tested had NDMA at very low levels. The remaining wells had no detected NDMA. No filtering or treatment of drinking water in the Deep Creek area is necessary for these low levels of NDMA.

For More Information, contact:

For general information or to be added to the mailing lists shared by EPA, Washington Dept. of Health, and Spokane Regional Health District:

Renee Dagseth

EPA Community Involvement Coordinator
800-424-4372 or 206-553-1889
dagseth.renee@epa.gov

For questions about having your well tested:

Calvin Terada

EPA On Scene Coordinator
206-553-4141
terada.calvin@epa.gov

Visit EPA's website for Euclid Road:

<http://yosemite.epa.gov/r10/cleanup.nsf/sites/euclid>

For questions about TCE, perchlorate, NDMA and health:

Mike LaScuola

Spokane Regional Health District, 509-324-1574
mlascuola@spokanecounty.org

Barbara Trejo

Washington Department of Health
1-877-485-7316, Barbara.trejo@doh.wa.gov

The Administrative Record (important site documents) can be reviewed at:

Airway Heights Library
1213 S. Lundstrom St.
Airway Heights, WA 99001
509-893-8250

EPA Records Center, 7th Flr
1200 6th Avenue
Seattle, WA 98101
800-424-4372



U. S. Environmental Protection Agency
Region 10
1200 Sixth Avenue, Suite 900, ETPA-081
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*If you need materials in an alternative format, please call Renee Dagseth.
TTY users, please call the Federal Relay Service: 800-877-8339.*

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