



ANACONDA / YERINGTON MINE

U.S. Environmental Protection Agency \$ Region 9 \$ San Francisco, CA \$ March 2009

Yerington, Nevada

Groundwater Monitoring to Expand

This fact sheet is being sent to the Yerington community to explain the groundwater monitoring program that is being expanded adjacent to the Anaconda Mine site. Field activities, which will begin this month, are expected to lead to an increased understanding of the relationship between contaminants on the site and the groundwater which moves from the site northward. These activities have been agreed upon by the U.S. Environmental Protection Agency (EPA), the Bureau of Land Management (BLM), the Nevada Division of Environmental Protection (NDEP), the Yerington Paiute Tribe and the Atlantic Richfield Company (ARC). ARC will conduct the sampling activities under EPA oversight.

Field Investigations Planned

Two objectives have been established for the upcoming groundwater monitoring:

1. Fill in the “data gaps” that exist in our understanding of the shallow groundwater north of the site where no groundwater samples have been collected. By expanding the sampling locations, we will better understand what is happening to groundwater as it leaves the mine site and whether that water contains site-related contaminants.
2. Evaluate the effectiveness of the “pumpback system.” This system has been operating since the 1980s and extracts groundwater at the northern end of the site. The goal of the system is to help keep contaminated groundwater from moving off site.

In order to accomplish the first objective we are asking for the cooperation of residents whose property is strategically located over the groundwater flow path. ARC and their contractors would like to take groundwater samples from below these properties by using a large truck called a “drill rig.” This drill rig utilizes “direct push” technology to drill boreholes. **No off-site permanent wells will be installed**

at this time. This testing will take less than one day per drilling location, with approximately 70 off-site wells drilled. EPA will work directly with property owners to ensure any concerns about this work are addressed.

Under NDEP oversight, the on-site pumpback system was designed as an interim action. EPA is trying to determine what measures may need to be taken for the long term. In order to see whether the pumpback system is preventing groundwater flow off site and contaminant migration to the north, the system must be turned off. By turning it off and thereby allowing the groundwater to flow naturally, we will be able to better evaluate this issue. Additional permanent monitoring wells will be installed as part of this study but they will all be located on site. While the system is off, water and contaminant levels will be measured in these new monitoring wells. Each pumpback well will be started up separately to determine its “zone of influence” (area of groundwater it captures). This study will take place beginning this month and continue over the next year. Because groundwater moves very slowly in this area, turning off the system for a year is not expected to present either a short or long-term risk to drinking water wells. However, if monitoring indicates the need, we can turn the system back on.

Importance of Local Groundwater and Potential Threats

Groundwater in the Yerington area is used for drinking water, agriculture and livestock. What we have seen during the time we have been monitoring the water moving northward from the mine site is a periodic increase in the levels of uranium and arsenic above federal safe drinking water standards (Maximum Contaminant Levels or MCLs) in certain wells. However, over the past two years no clear trends have been noted, with the levels of contaminants fluctuating both up and down (see Figure 1). By adding more monitoring wells we will be able to better evaluate the movement of water and contaminants. Since both uranium and arsenic occur naturally in the bedrock and alluvium (silty or sandy water-bearing unit under ground), it is important to know whether these constituents were concentrated and mobilized by mining operations.

As part of the existing monitoring program, ARC has been sampling domestic drinking water wells on a yearly basis to check for elevated levels of uranium and arsenic. All households with levels of uranium that have ever been above 25 ppb are eligible to receive bottled water. If you live north of the site and have not had your drinking water well tested and would like to, please contact us and we will pass your request on to ARC (see contact information at the end of this fact sheet).

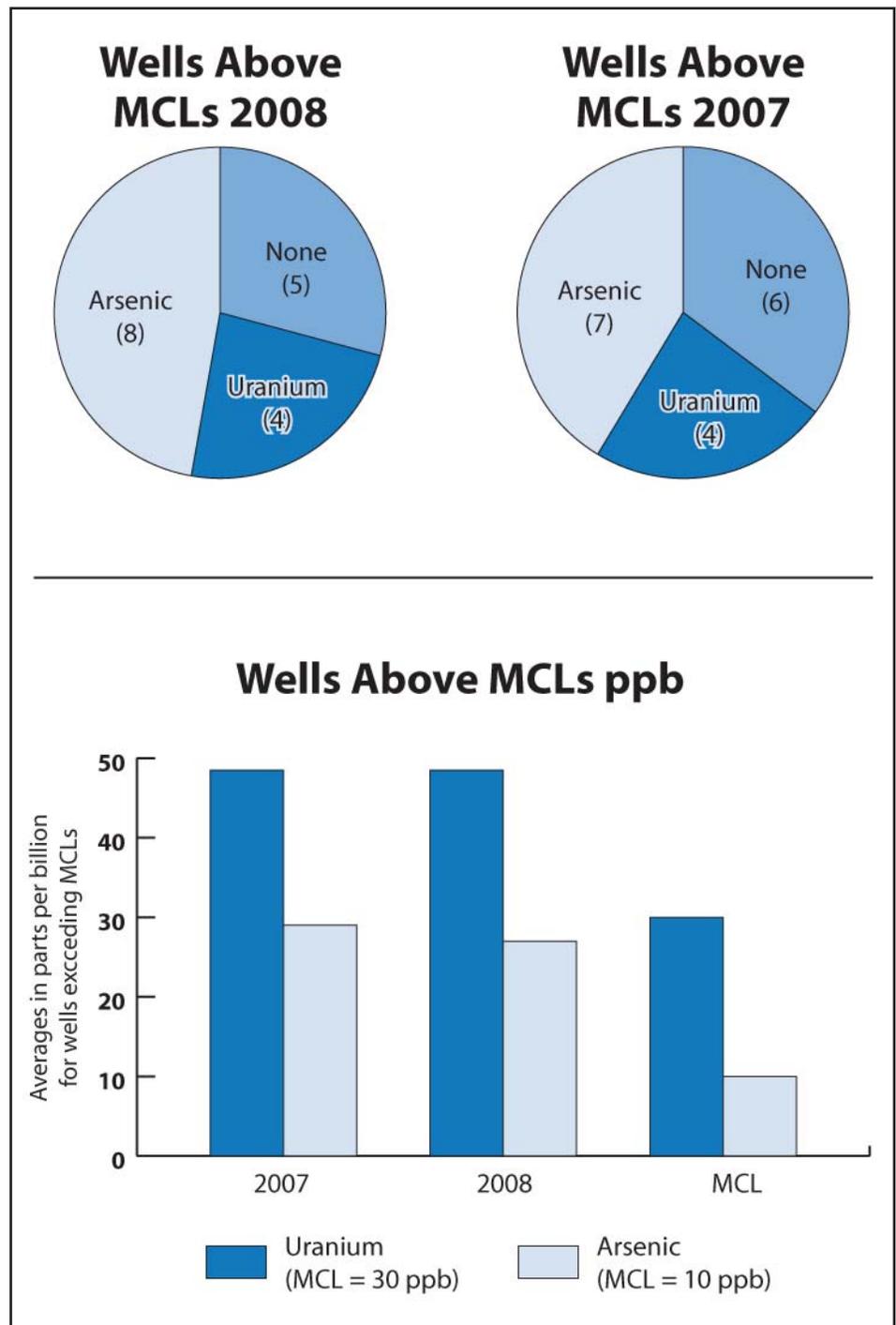


Figure 1: Arsenic and uranium levels in off-site wells

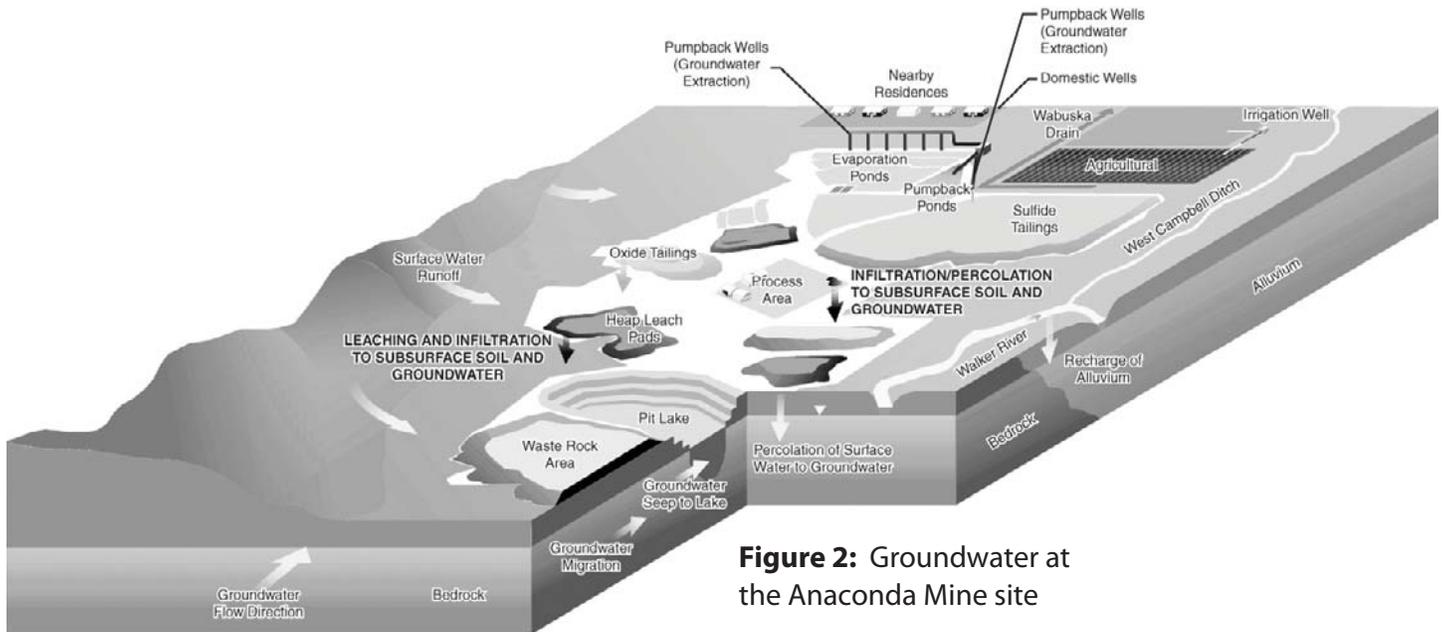


Figure 2: Groundwater at the Anaconda Mine site

A Little More About Groundwater

All groundwater, whether used for drinking water or other purposes, is considered a valuable resource. Getting the data needed to evaluate the appropriate cleanup objectives and prevent the movement of mine contaminants to areas off site is one of our main objectives at the Anaconda Mine.

In this area of the Mason Valley, groundwater comes from the Walker River watershed and occurs naturally in bedrock and alluvium (see Figure 2). The bedrock can be seen close to the ground surface in the former pit area on the mine site (now the pit lake) and in surrounding mountain

ranges. The alluvium fills the valley to the north of the pit and consists of weathered material eroded from mountains and deposited by the Walker River. In the area immediately adjacent to the pit lake, groundwater flows towards the pit. In other areas of the site, groundwater flows in a northerly direction.

The Yerington community has expressed interest in getting detailed information on the groundwater conditions at the mine site. We hope this fact sheet has been informative, and we will also be planning a community meeting within the next few months to discuss groundwater more in depth. Please feel free to contact us if you have any questions or concerns about groundwater or any site-related issues.

For More Information

If you have questions or concerns regarding the Anaconda Yerington Mine, please contact any of the people below:

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75 Hawthorne St.
San Francisco, CA 94105

EPA toll-free number (leave a message and your call will be returned): (800) 231-3075



Anaconda / Yerington Mine

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Information Repository

Site reports and other information on the Anaconda Yerington Mine can be found at:

Lyon County Library

20 Nevin Way
Yerington, NV 89447
(775) 577-5042

Hours: Mon, Wed, Fri – 9 am to 6 pm
Tues, Thurs – 9 am to 7 pm
Saturday – 9 am to 4 pm

EPA Superfund Records Center

95 Hawthorne St. (4th floor)
San Francisco, CA 94105
(415) 535-2000

Hours: Mon through Fri – 8 am to 5 pm

EPA website:

www.epa.gov/region09/anaconda



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