

## Clondyke Tailings Water Quality Assurance Revolving Fund Site July 2009

### SITE DESCRIPTION

The Arizona Department of Environmental Quality (ADEQ) is investigating soil and groundwater contamination at the Klondyke Tailings Water Quality Assurance Revolving Fund (WQARF) Site. The ADEQ WQARF program, which is also known as state Superfund, investigates and cleans up contaminated groundwater and soil sites throughout the state.

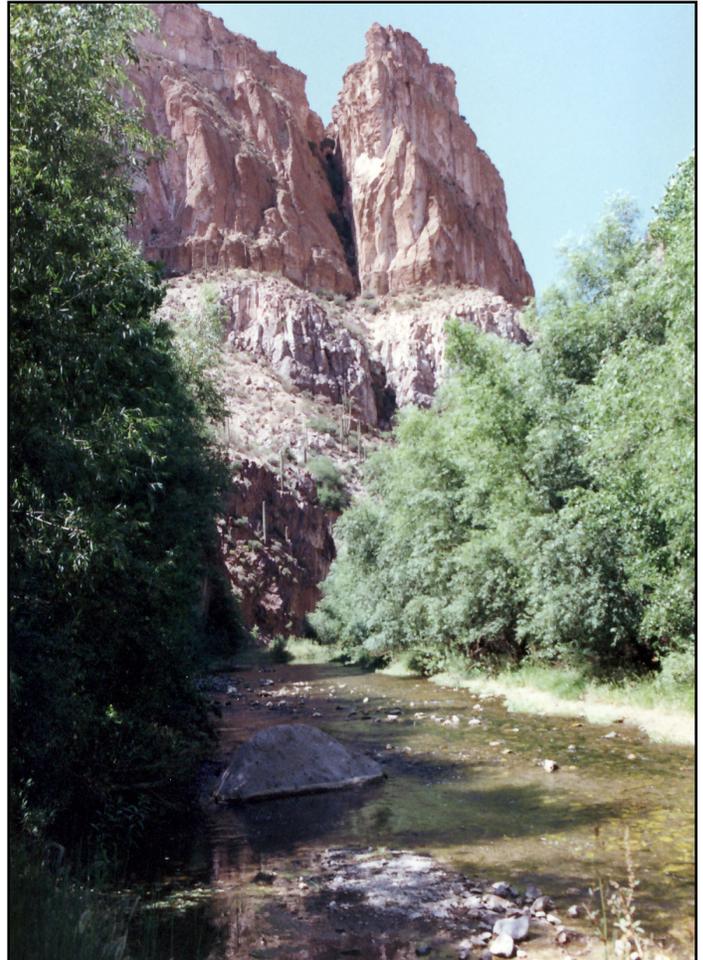
The Klondyke Tailings WQARF Site is located on the north bank of Aravaipa Creek, approximately 4.5 miles upstream of the Aravaipa Canyon Wilderness Area. The boundaries of this site are irregular. The site is comprised of two piles of mine tailings, the soil between and adjacent to these piles, and the area approximately 50 feet into the stream bed of Aravaipa Creek, directly adjacent to the tailings piles. The site is bounded to the east and north by the Klondyke County Road.

### WHAT ARE THE CONTAMINANTS AT THE SITE?

The current contaminants of concern at the site include lead, cadmium, antimony, beryllium, copper, manganese, arsenic, and zinc. Physical evidence and testing of the surface water and soil in the area indicate that runoff and leaching into Aravaipa Creek from the tailings piles may be occurring, and flooding of the creek could erode contaminated materials into the creek bed. Contaminants of concern at the site may change as new data become available.

### HEALTH/WATER QUALITY

ADEQ has sampled private wells in the area and no drinking water standards were exceeded in any of the wells tested. Results indicated very good water quality. ADEQ is working to better understand the nature and extent of environmental impacts from historic activities at this site and intends to take measures, as may be necessary, to protect human health and the environment. If you have a private well near the site, please call Scott Goodwin, ADEQ project manager, (602) 771-4452 or toll free at (800) 234-5677.



*Aravaipa Canyon Wilderness*

### SITE INVESTIGATION/CLEANUP ACTION

The site was placed on the WQARF Registry in September 1998. In July 2001, 15 private wells in the Klondyke area were sampled. No drinking water or Aquifer Water Quality Standards (AWQS) were exceeded in any of the wells tested. Results indicated very good water quality. In December 2001, samples of tailings were collected and analyzed to assess the long-term potential for generating and releasing acidity and metals from the tailings as a result of storm water runoff. The results of this investigation indicated high levels of stored acidity in the two tailings piles.

During 2005-2006, ADEQ completed one early response action (ERA) at the site to determine if there were any buried tanks, drums or pipelines needing removal. None were found. In addition to the ERA, a small amount of laboratory chemicals still present at the site was also removed. At the same time, ADEQ conducted minor earth moving repairs such as repairing berms around the tailings pile and correcting drainage problems to contain storm water runoff on the tailings piles.

In 2007, groundwater sampling continued at the site and analyses of groundwater samples from on-site wells indicated there were no impacts to the groundwater beneath the site above AWQS. Private wells in the area continue to be sampled at the property owners' request. During fiscal year 2008, ADEQ spent approximately \$3 million on construction of the erosion protection and cap for the upstream tailings pile. ADEQ is in the process of completing draft Remedial Investigation Report.

### **WHAT ARE ADEQ'S FUTURE PLANS AT THIS SITE?**

ADEQ and the U.S. Environmental Protection Agency are currently evaluating soil removal options on the residential properties near the site. Once the scope of the removal is determined, soil removed from these properties will be consolidated with the downstream tailings pile, and the downstream pile will receive the same erosion protection and clean soil cap installation as the upstream pile.

### **FOR MORE INFORMATION:**

A community advisory board (CAB) has been formed for the site. The purpose of the CAB is to advise ADEQ, the public and other interested parties about the issues and concerns of the community related to the investigation and cleanup of a WQARF site. Details of CAB meeting agendas and minutes for 2009 can be viewed at the ADEQ Web site. CAB meetings are open to the public.



*Completed erosion protection and clean cap on upstream tailings pile.*

### **Technical Information:**

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### **Community Involvement:**

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Hearing-impaired individuals may call our TDD line at (602) 771-4829.

Interested parties can review select site documents at the Safford City–Graham County Library, Reference Section, located at 808 Seventh Avenue in Safford, (928) 348-3202. During October through April, some files can also be viewed at the Bureau of Land Management (BLM) Ranger Station in Klondyke.

The complete site file can be reviewed at the ADEQ main office located at 1110 West Washington Street, Phoenix. With 24-hour notice, an appointment to review related documentation is available Monday through Friday from 8:30 a.m. to 4:30 p.m. at the ADEQ Records Management Center, 1110 W. Washington Street in Phoenix. Please contact (602) 771-4380 or (800) 234-5677 to schedule an appointment to review these documents. Hearing-impaired individuals may call our TDD line at (602) 771-4829.

For more information on this WQARF site or others sites in Arizona, please visit the ADEQ Web site at: [www.azdeq.gov](http://www.azdeq.gov). In the left hand column, click on Waste Programs, then Superfund/WQARF. Look for site information and map link.

Para información en español sobre este sitio, comuníquese con Felicia Calderon al (602) 771-4167.