

Pollutants from an old mine have recently been released into the Animas River. This is a compilation of the most frequently asked questions that we have gathered from concerned individuals.



## This river provides drinking water throughout the Durango and Farmington area. How can it be deemed safe to drink but not to swim in?

A: There are several types of “water” being considered and it is important to distinguish between them. The river closure is for direct contact with the untreated river water. Drinking water in the public water system comes from various sources and is treated before being delivered to homes and businesses.

Depending on the source of water for a public water system, drinking water may be unaffected or only partly affected by the mine release. Durango water system uses water from the Animas River and the Florida River. Currently they are only using water from the Florida River until the Animas River water meets drinking water standards.



## How does contamination from the mine release move down river?

A: Much of the groundwater impact from mine drainage is near a mine. Water can collect in the mine from rocks and fractures at the mine. Chemical reactions within the mine cause the water to become acidic and may contain dissolved metals and sediment with elevated metals concentrations.

Following the release from the mine, water with high concentrations of metals flowed out through Cement Creek and the Animas River. This water continued to travel downstream carrying the concentrations of metals. As the water flows downstream, the metals and sediment can drop out along the banks of the river. You can see this in some places where the banks have changed color. The orange color is due to iron from the mine rocks, the same as rust.

The pH and water chemistry will continue to change as the water flows further away from the mine. Some dissolved metals will combine with the iron oxide and become part of the sediment that may drop along the banks. The sediment is how the contamination travels down river.



## I live in this area, how do I know if my drinking water is impacted?

A: The Colorado Department of Public Health and Environment (the department) advises concerned citizens to determine their source of drinking water. Some citizens are served drinking water by a regulated public water system. Other citizens may get drinking water from a private well or a small water company which is not large enough to be regulated. Concerned citizens near the Animas River should know the source of their drinking water to understand how the water may be impacted by the mine release.

### Public drinking water systems in the area potentially affected by spill

#### From Silverton south to Durango

- Animas Water Company
- Bar D Chuckwagon
- Blue Sky Ranch
- City of Durango
- Glacier Club
- Goodman Property Owners Association
- Lilly Belle

#### From Durango south to New Mexico

- Old Homestead Mobile Home Park
- Scenic Square Subdivision
- Sundown Acres RV Park

*(Note: these systems have wells on hwy 550 south of Durango - far from Animas River)*

Based on the available information, the department concludes that the spill has not impacted the drinking water in the above entities. The direct intakes on the Animas River are all currently closed and the shallow wells have not shown signs of contamination. The department is consulting with each entity above to take additional sampling to further confirm the quality of the water. The department will make that water quality available when testing has been completed.

### Citizens served by private wells or unregulated water companies

- If you use a private well, or a water source that is an unregulated water company, your drinking water originates at a source that the department does not regulate. Therefore the department cannot verify drinking water quality specifically for your source.
- Each private well is constructed differently and built in different years. Some wells are new and some are very old. Some wells can be very shallow and close to the river and others are deep and farther from the river. Wells that are very shallow and close to the river are more likely to see impacts from the release. Not all wells will be affected by the spill. Therefore, the department recommends testing your well for the water quality indicators outlined.

The USEPA is offering free sampling to affected drinking water wells through [www.NMEDRiverWaterSafety.org](http://www.NMEDRiverWaterSafety.org). If your well tests positive for one of the metals of concern - You should seek and alternative source of water until your well is safe to drink. The department can assist you with evaluating your water sample results. NOTE: Many private wells do not have pre-spill water quality data so it is possible the well may have been contaminated prior to this environmental spill.



## Are wells impacted immediately?

A: River water can flow through soil and fill a well. For old very shallow wells very near the river, the water quality is likely similar to the river water. Wells a bit further from the river but in the sands of the Animas alluvium adjacent to the river may be impacted by the high river flow, but any spill related waters in the alluvium are expected to flush rather quickly - not quite as fast as the river, but within days or a couple of weeks. As groundwater wells become farther away from the river and deeper, potential impacts from the spill become less. Not all wells will be affected by the spill. The department recommends testing your well for the water quality indicators outlined.



## Will the sediment impact the river?

A: The sediment can impact the river. Rain storms or high currents can wash sediment into the river or stir up some sediment, just like when sediment is disturbed from the bottom of a stream and the water becomes cloudy. The chemistry of the sediment is expected to be fairly stable in the river water so additional dissolving of the metals is not expected to be significant. The department will continue to monitor the water quality.



## Why are the results so different at the same or similar location?

A: The mine release traveled as a very large plume of water with color changing impacts and also high concentrations of pollutants. As the plume heads downstream, the concentrations of pollutants will decrease so sample results must be compared to other sample locations and sample dates. For example, results during the event at one location would see results increase as the plume approaches and decrease after the plume passes. The river below Silverton will begin to reduce in levels sooner than downstream portions of the river in Durango. It is expected that there will be different concentrations at different locations in the river on the same day, and different concentrations at the same location from day to day.



## Can cattle or other livestock drink or be in contact with the water?

A: As with other questions, the answer is dependent on the concentrations of metals in the water at the time. The concentrations are expected to decrease with time. If water is approved for human consumption it is safe for livestock.