

From: <Khawklee@aol.com>
To: <comments.hmwm@state.co.us>
Date: 9/25/2010 1:07 PM
Subject: Avramenko
Attachments: Uranium 51 micrograms down gradient of abandoned mine.pdf; USGSTallahassee1950to1977SiteData_070620101951.xls; 1976 130 U below abandoned mine 21A.jpg

Dear Mr. Avramenko,

Consider these my formal comments on the following:

The "Policy for a 'No Further Action' Determination When Contamination Remains Above the Colorado Ground Water Standards" and "Guidance for the Closure of Low-Threat Sites with Residual Ground Water Contamination."

I'd like to better understand what is meant by the following statement:

"The process outlined in these documents is meant to deal with situations where a) residual ground water contamination poses residual ground water contamination poses little to no threat to human health and the environment and b) the activities undertaken at the site will allow for eventual achievement of the Colorado Ground Water Standards or other Division-approved remediation goals within a reasonable period of time."

I do not wish the department's resources to be squandered. But we have a specific situation in our area that needs clarification before you consider finalizing your policy. The facts and attachments presented below explain why there should be more specific language in making the determination that you are posing in your policy.

"...little to no threat to human health and the environment":

I live in the Tallahassee area of Fremont County. In this area there are 16 35-acre developments. Most of the homes of retiring baby-boomers have not yet been built, but many plan to build their homes within the next 5-10 years. Therefore, it may appear that this area is sparsely populated and there would be "little to no threat" from allowing lingering groundwater contamination, when that is not the case.

In the 1950s, there were 14 small and 2 large Uranium Mines prospected and mined. We have proof that 20 years and 50 years, respectively, after mining ended groundwater contamination still lingers. (Edgar Ethington of (CDPHE) has determined that at least two of these sites have exposed "overburden earth piles" that are radioactive. These two sites measured gamma radiation at from 4 to 40 times over the baseline readings for the immediate area.)

Contamination 20 years post mining:

Attachment #3 is a Google Earth photo showing water contamination from a USGS test sample taken in 1976 from a Spring down-gradient of one of the large Uranium mines 20 years after it was mined. The dark spot towards the top of the photo is the water that sits in the bottom of the abandoned mine. Water sits in the bottom of that abandoned mine to this day.

The photo displays that 20 years hence it was still contaminating the down-gradient spring with 130 micrograms/L of Uranium (4 times the State Standard of 30 micrograms/L). To my knowledge there has been no more recent test at that spring than the USGS test in 1976 that I've sited on Google Earth using the X,Y coordinates.

I arrived at this data with the assistance of Pat Edelmann, the Chief of the Pueblo USGS Water Science Center. Mr. Edelmann, guided me in the use of

their water-quality data repository for the Arkansas River Basin. In the 1970's, USGS took water quality samples all over the United States. The Tallahassee Area was tested extensively.

Contamination 50 years post mining:

My neighbor's water well had 51 micrograms/liter of dissolved uranium in 2008. Their well is located approximately 1/4 mile below the Glenn Williams abandoned mine. They are unfortunately choosing not to treat their water. (I've given a copy of this well test to Alyssa Schultz and Martin O'Grady of your Division and attached it for your convenience.)

Define "within a reasonable period of time":

Therefore, due to these two (2) instances of lingering contamination, the situation begs the question: What is "within a reasonable period of time?" What is the criteria your agency will be using to determine the reasonableness of elapsed time?

Conclusion and Requests:

1. I believe "little to no threat to human health" is too nebulous and should instead be defined as "remote from population." And that "remote from population" should be given a definitive numerically quantifiable distance. Studies from the area should prove that migration of any contamination would not ever gravitate toward that population's groundwater and water wells before there is any determination that "no further action" is needed.

2. I believe "within a reasonable period of time" is also too nebulous of a statement to leave in a policy. As these test results prove, contamination can linger from 20-50 years.

Thank you for the opportunity to give comments.

Sincerely,

Kay Hawklee

Vice President Tallahassee Area Community, inc. (TAC)

Board member Colorado Citizens Against ToxicWaste (CCAT)

Attachments:

1. USGS download of 1976 test results from Spring Sample C20470 in photo Attachment #3.
2. Uranium test 51mcg/L down-gradient of Glenn Williams Abandoned Mine.
3. Google Earth photo of contamination of Spring down-gradient of Abandoned mine 20 years after mining ceased.