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Scott Florence, District Manager
Bureau of Land Management
Arizona Strip District Office
345 East Riverside Drive
St. George, Utah 84790

Re: Notice of Proposed Withdrawal—74 Fed Reg. 35887

Dear Mr. Florence,

As the scientist who has spent over 30 years mapping and studying the breccia pipe terrain across northern Arizona, with the US Geological Survey and as a private consultant, I am attaching here scientific data to provide insight into the decision that you in the Interior Department are faced with on the northern Arizona land conflict. During my career I have traversed, mapped, and sampled over 1500 collapse structures/breccia pipes, and published over 70 refereed articles (see attached professional record). Below I summarize quickly some of the major allegations and objections made to support a land withdrawal, to which I have provided appropriate data and comments. Attached as a separate document is my testimony that was presented in front of the Grijalva subcommittee on Capitol Hill, July 2009 that is part of the congressional record and provides you with carefully presented detailed data and references.

Allegations/Objections:

1. *Allegation:* There was a “massive spill” in Hack Canyon that carried ore rock down to perennial waters of Kanab Creek.
Fact: A flash flood clipped the toe of an ore pile of natural rock and was carried a brief distance (not 8 miles). The resultant “massive spill” was cleaned up when two wheel barrels were loaded the next day by Energy Fuels Nuclear employees and pushed the few hundred feet back to the ore pile.
2. *Allegation:* The Orphan Mine has been polluting Horn Creek.
Fact: The one 15 year-old data point to prove this allegation could not be replicated by the US Geological Survey’s Water Resources Division study (Monroe and others, 2004) that found all samples collected to contain acceptable levels of uranium for drinking.
3. *Allegation:* Although the water table is well below the mine there are perched water tables within the level of the mines.
Fact: These perched water tables are small and generally contain water that is not fit for human consumption containing very high salinity waters. It is unlikely that mining would be able to increase the salinity and metal content of these waters. Many of these perched water tables have already been depleted by water needs on the Arizona Strip, and others were naturally drained by dissection from the adjacent canyons.

4. *Allegation:* Mining will contaminate the water supply of millions of downstream users.

Fact: It is unlikely that more than 5 breccia pipes would ever be in production at one time. Yet, over 100 breccia pipes are exposed today in the Grand Canyon region with their orebodies forming open sewers into the Grand Canyon water shed – however, there is no evidence that the water supply of millions of downstream users is contaminated with uranium from The Grand Canyon region. This natural metal contamination could not be replicated by the mining industry if they tried. In testimony before Grijalva’s field hearing in Flagstaff, AZ, March 2007, the Kane County commissioner, Dale Hulet, testified that the mining industry is doing the environment a favor by removing the offending metals, but if they are not allowed to mine, perhaps the entire “Grand Canyon region should be made a superfund site”.

Scientific fact, data, and conclusions cannot be determined by popular vote or mass hysteria. I encourage you to set aside the 10s of thousands of nearly identical letters written by the masses, who have little knowledge or concern over the data that have been carefully collected during the past 4 decades, and concentrate on the evidence that has been compiled for you. There has been finger pointing of bias, by those dead set against any mining, directed at those of us who have done research in the northern Arizona area. As a scientist, I can assure you that any bias I have now and or have had in the past, has been toward the scientific results that have been carefully collected and the conclusions that I draw from these data. I have seen no evidence of any contamination to the environment that has been created by the mining industry, which isn’t dwarfed by what nature has done by erosion and oxidation to the uranium deposits that are currently exposed or have been previously removed by erosion. I can provide you with over 100 locations within the Grand Canyon region of mineralized breccia pipes that are currently draining naturally into the Grand Canyon watershed through erosion. Yet, there is no evidence that people in Las Vegas or Los Angeles are currently drinking contaminated water from the Grand Canyon Region. Hence, I do not believe that withdrawal of this land can serve any positive purpose, but will have the negative impact of denying citizens of the US access to over 40% of our uranium resources that can go a long ways toward energy self-sufficiency. I am strongly opposed to this proposal to withdraw land from mineral entry in northern Arizona.

I have attached my professional record – included within it is a list of publications on the breccia pipes, some of which you may find of interest in your decision-making process. If I can be of any further assistance to you, or answer any questions, please don’t hesitate to contact me [as an aside, I am a registered Democrat and always have been; I provide this info to further dispel any concerns of bias]. I can think of few places in the world where mining during the past 30 years has left such a small footprint, and caused essentially no impact on the environment, visual or otherwise. To remove such a mineral treasure from our country’s assets would set us even further astray from our goal of energy independence for the United States.

Sincerely,

Karen Wenrich

Dr. Karen Wenrich
Geologist/Geochemist

2 Attachments:

Congressional Testimony – 21 July 2009
Wenrich Professional Record