A struggle over a proposed uranium mine in the Black Hills of South Dakota — far from population centers — illuminates important aspects of water issues, Native American rights, deep disposal wells, the Environmental Protection Agency's (EPA) role, and the legal issues swirling around them all. Uranium mining is an issue of national importance, because it is the first step in the nuclear chain. Without uranium mining, there could be no nuclear power or nuclear weapons. But the issues start with water.

BACKGROUND

The Black Hills are a beautiful and unique area in the middle of the northern Great Plains, characterized by pine-covered hills, dramatic rock outcrops, and fresh water that flows into underground aquifers to recharge groundwater across the region. The Black Hills are subject to treaties between the Lakota (Sioux) people and the United States that reserved control of the Hills to the Lakota.
In a classic case of environmental injustice, this promise has not been kept. But the Lakota maintain a strong legal, traditional, and spiritual link to the Black Hills.

The Hills are probably best known today as the home of Mount Rushmore and the Sturgis motorcycle rally. Most tourists today don't know that the area experienced uranium mining and milling in the 1950s to early 1970s. This left 169 abandoned mines and prospects and a trail of contaminated land and water to the south and west of Mount Rushmore. In the late 1970s, determined and diverse citizen opposition — and eventually a drop in the price of uranium — held off that wave of uranium fever.

In the mid-2000s, there was again a boom in uranium exploration, as the price of a pound of yellowcake (minimally processed uranium) jumped to $138 from a low of $7. Eleven companies expressed an interest in Black Hills uranium. One, Powertech Uranium, is the focus of — again — determined and diverse citizen opposition. It is also the subject of a pending Environmental Protection Agency (EPA) action that should concern people across the United States.

THE POWERTECH PROJECT
The proposed Powertech Uranium project is located in Custer and Fall River Counties. It is known as the Dewey-Burdock project, and the site is over 10,000 acres, or about half the size of Manhattan.

Powertech, which has never mined uranium, proposes to drill 4,000 wells into an aquifer that is used for domestic water and livestock. The project would use 9,000 gallons of water per minute, 1/3 larger than the amount of groundwater used by nearby Rapid City, the second-largest town in the state. It also plans to pump its wastewater into another aquifer that is used by area residents through four deep disposal wells. If it fails to get permission for deep disposal wells, it plans to spray its wastewater on the surface of the ground, covering 1,052 acres. All told, the project would impact water from 3 of the 4 major drinking water aquifers in the Black Hills, a semi-arid area that relies on groundwater.

Resistance to the project includes the City Council of Rapid City. It also includes the South Dakota State Medical Association, which passed a resolution against the proposed mine in 2013. The Oglala Sioux Tribe has taken leadership in fighting the proposal, and all nine tribal governments within South Dakota have passed resolutions against it. Local non-profit groups have also led the opposition.

Powertech, which was organized in Canada, has become part of Azarga Uranium. Azarga has ties to China and Kyrgyzstan. Its largest investor, Platinum Partners, was organized in the Cayman Islands. Seven corporate leaders were charged in New York federal court with fraud and other crimes in December 2016. Platinum Partners is now in receivership.

Powertech/Azarga needs to get at least ten federal, state, and county permits for underground aquifer. The method involves pumping a solution underground through wells. The solution is forced through a uranium deposit and leaches the uranium out of the rock. The solution is then pumped back to the surface, and the uranium is removed for further processing.