

Mining on the honor system

By Cyndy Cole Sunday, January 16, 2011

Global demand for nuclear fuel touched down on the Colorado Plateau last winter, restarting an industry that had been on hold for two decades.

International mining company Denison Mines began hauling ore out of the first and only uranium mine to reopen so far, 35 miles southwest of Fredonia, in December 2009.

The ore is being trucked from the mine north of the Grand Canyon to southeastern Utah, where Denison owns and operates one of the nation's few uranium mills.

Environmental groups are countering with objections, lawsuits and legislation to put large chunks of public lands off limits to new mining -- saying the industry will leave environmental contamination in soil and water, and possible health risks.

But even with this higher profile, the first reopened mine, called Arizona 1, has been largely left to regulate itself.

State environmental inspectors didn't arrive for a first inspection at the mine until it had already been open for about nine months.

The Arizona Department of Environmental Quality (ADEQ) had unfilled requests for documents and inspections by engineers that it sought before the mine opened.

Mine operators set to work without answering some of these requests.

GROUND LEVEL ONLY

The first inspection at the mine came in September, and ADEQ inspected at the ground level only, not traveling into the mine that reaches more than 1,252 feet below. Nevertheless, the inspection yielded what ADEQ deemed four "major violations."

- -- There were no pumps in the mine to eliminate any water there.
- -- A test measuring the permeability of the rock in the mine hadn't been done.
- -- A pipe was sticking through a lined pond that is intended to prevent groundwater contamination from ore or water pumped out of the mine.
- -- Plans for the mine didn't match what inspectors found when they visited, they wrote.

ADEQ inspectors reported other problems, too. One of two linings of the pond -- which is a key new environmental precaution

intended to protect groundwater -- was so worn or old that ADEQ found that "many patches over patches were observed" and "the number of patches on the liner is excessive," and "patches lifting up on ends were observed all over the impoundment."

Rocks were being used to weigh down the liner's patches, ADEQ photos and notes show.

TIMELY RESPONSES LACKING

ADEQ had been asking for new drawings of the mine's surface operations since October 2009, and it had requested that the pond's liner be certified as free of defects by an engineer in June of 2009.

The mine's operator didn't provide the drawings or get the pond liner inspected before the mine opened, ADEQ documents show.

ADEQ asked Denison for corrections by letter in November 2010, almost a year after the mine had opened.

ADEQ requires businesses to use the "best available demonstrated control technology" to prevent water pollution at these mines before awarding what it calls an aquifer protection permit needed to open a mine, said Carrolette Winstead, who oversees such permits.

This mine is operating under a water permit issued in 1994.

The ADEQ inspectors' reports repeat the words, "according to mine personnel ..." in describing what they know, not first-hand inspections or measurements.

MINERS SELF-REGULATE

Denison and contractors are told to take measurements to identify non-radioactive rock (used to fill in the mine later) versus uranium ore, and segregate these items properly for storage or hauling, depending on what it contains.

Miners or contractors are also supposed to keep logs of samples they've taken regarding what's in any water pumped from the mine, for reporting to ADEQ.

The Arizona Radiation Regulatory Agency, which is tasked with management of most things radioactive in Arizona, used to take water and air samples at these mining sites.

That testing ended some years ago when the Southwest's uranium mines closed, the agency's director said.

Likewise, ADEQ's staff is down by about 20 percent due to state budget cuts.

"ADEQ is neither equipped nor inclined to regulate these mines in a way that even remotely ensures against irretrievable harm to the environment," said Taylor McKinnon, public lands campaigns director at the Center for Biological Diversity. "Aquifer contamination,

if it were to happen, would be permanent and impossible to clean up -- and neither the feds, nor the state nor the mining companies can guarantee that won't happen."

SOME VIOLATIONS CONTESTED

In the same month ADEQ inspectors arrived, federal inspectors concerned with worker safety cited Denison and contractors with air quality violations, failure to properly label power switches, equipment safety violations, lack of firefighting equipment inspections, and with another violation that is still being contested.

One contractor was injured at the mine site in 2009.

In all, the Mine Safety and Health Administration found 38 possible mine safety violations at the Arizona 1 Mine in 2010, many of which Denison is contesting.

Denison and contractors were fined \$5,424 for safety violations in 2010.

They have recently paid \$962 of those fines.