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U.S. Oil Sands submits water-monitoring program to state, expects to begin tar sands production by winter

by Molly Marcello *Staff Writer* 10.01.15 - 09:08 am



The Utah Division of Oil, Gas, and Mining (DOGM) is currently reviewing a water monitoring plan for the PR Spring tar sands mine located in the Book Cliffs in Uintah and Grand counties northeast of Moab. In July, the state agency required the mine's owners, Canada-based U.S. Oil Sands, to create the plan after a University of Utah study found that several springs in the area could potentially be impacted by the development.

The revised notice of intention issued July 17 by DOGM requires that a subsurface water monitoring program be implemented and evidence of compliance with U.S. Environmental Protection Agency's air quality regulations be shown before the company can process any ore or oil shale at the mine site.

Although some local environmental advocacy groups believe the additional DOGM requirements may have caused a slowdown at the tar sands operation, U.S. Oil Sands officials said last week that they expect to produce oil as soon as this winter.

"The fact is, this project's going ahead. It's approved, we have monitoring, and we're complying with the regulators," U.S. Oil Sands CEO Cameron Todd told The Times-Independent. "The requirement with the EPA, the water regulations — these are things we've always had to do. We look at all of that as business as usual."

U.S. Oil Sands officials said they will monitor two deep-water wells and four springs — three springs located in Main Canyon and the fourth adjacent to Seep Ridge Road — checking for water flow, dissolved solids, pH levels, ions, and a d-Limonene tracer. D-Limonene is a citrus-based solvent used in company's tar sands mining process to extract the oil.

According to the water monitoring plan, the company will monitor the wells and springs three times a year for the first two years, and then twice a year after that. Summary reports of the monitoring can either be submitted to DOGM upon request or annually with the company's mining progress reports.

In an official critique of the U.S. Oil Sands operation, University of Utah geology and geophysics professor Dr. William Johnson, said that diesel and gasoline range organics should also be monitored and the process should occur more frequently. Johnson recommends monitoring wells and springs three times a year — spring, summer, and fall — for 10 years beyond the lifetime of the mine.

"The cost of this monitoring is very modest and there is no reason not to continue the three per year plan indefinitely," Johnson stated in his critique.

It was Johnson's study, created with graduate level researchers over two years that proved several natural springs in the canyons are hydrologically connected to the ridgetops at the mine site, leading DOGM to mandate that U.S. Oil Sands implement the water-monitoring program.

"We looked at the springs, and looked at how the [water's] chemical signature changed," Johnson said. "When you look at the carbon and oxygen isotopes, it all suggests it's coming locally from the ridgetop, so you can't rule out potential impact [of tar sands mining]."

As they review the monitoring plan, DOGM representatives said that if they find Johnson's critique to hold "valid concerns," they will also take his perspective into consideration before giving U.S. Oil Sands final approval to begin production.

Todd said he does not feel that the tar sands project will negatively impact the environment. In fact, he suggested the U.S. Oil Sands method of removing bitumen — with no liquid tailings, recycled water, and reclaimed topsoil — is the most environmentally friendly tar sands extraction method yet developed.

"I would say that we consider ourselves environmentalists. We set out to do something that could be used as a sustainable future for our kids. I'm a father and a grandfather -I don't want to leave the world a worse place," Todd said. "[Our method] is a smaller environmental footprint at a cheaper cost ... If you're a true environmentalist you should be in support of this."

Will Munger of the Moab-based environmental advocacy group Canyon Country Rising Tide disagrees. He said it is inconceivable that U.S. Oil Sands was not required to have a water-monitoring plan in place before the company's PR Springs permit was approved by DOGM in 2010.

"[U.S. Oil Sands] shouldn't have been allowed to propose this project without having [the water monitoring program] in there. It's mind-blowing that it wasn't required of them in the first place," Munger said. "If Cameron Todd is concerned about the safety of future generations, he would take that money and do something very different with it."

Munger believes U.S. Oil Sands' public narrative that its tar sands mining process

is environmentally safe is disconnected from the reality of the development happening at the PR Spring mine.

"If they want to open a mine, they should just be honest about what that involves. They're strip mining the Book Cliffs," Munger said of the work that is underway in Uintah County. "When you walk around the contours of where they strip, you witness 100-year old ponderosas pushed over, you see the elk walking along this landscape that has been forever altered. [And] you can't believe what they're saying. You can't believe someone would have the hubris to claim that. There's such a disconnect between their words and the reality on the ground."

But Todd maintains that the PR Springs project is far different than the largescale tar sands extraction happening in places like Alberta, Canada. He said workers at the Utah site never create an opening pit larger than a college football stadium, and are reclaiming the land as they mine.

"It's a continuous cycle, you keep on mining, you keep on refilling so the hole doesn't get any wider," Todd said. "Think of a large college football stadium and parking lot — it never gets any bigger than that."

While that may be the case, Munger said U.S. Oil Sands holds leases to mine 32,000 acres, including some lands in Grand County — which will include mining areas that are equivalent to hundreds of college football stadiums.

He also argues that tar sands extraction is very different than a typical oil and gas operation in terms of threats to the land and the nearby water supply.

"I work with miners and roughnecks and cowboys up [in the Book Cliffs] who have seen oil development out there and they see the difference [with tar sands]," Munger said. "It's not just bulldozing a pad and drilling a well, it's bulldozing 32,000 acres. It's an entirely different industry ... You can be into oil drilling, you can be into mining. But you can also understand that if you don't have water you don't have a future."

John Weisheit, conservation director for Moab-based Living Rivers, said U.S. Oil Sands' water monitoring plan has not put his mind at ease about tar sands impacting the water supply in the Book Cliffs.

"There's a lot more work to be done in their plan," Weisheit said. "I don't see any comfort in their plan, it just seems to be protecting their investments."

If the PR Springs monitoring results show any pollution, Weisheit said Living Rivers will attempt to shut down the development.

"We get to see the monitoring reports and see if there's pollution. If there is, we're going to shut it down," Weisheit said. "I don't see how they're going to get around it ... We've got them in a headlock, and we're not going to let go." But Todd does not expect U.S. Oil Sands to go anywhere soon. He feels confident the company will produce oil at PR Springs before year's end.

"If we produce at full capacity we'll produce 700,000 barrels of oil in a year. That's a pretty modest amount. We've got about 184 million barrels discovered. There's a long future in front of us and we need to be patient, demonstrate that it works," Todd said. "We're going to be here a long time."

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