



Daily Climate News and Analysis

Athabasca South? Activity Hints at Tar Sands Development in Utah

One Company Hopes to Produce 2,000 Barrels a Day by 2011

by Dave Levitan - Mar 30th, 2010



Much of the more than 2 million barrels of oil Canada sends south every day comes from the tar sands of the Athabasca region in Alberta. The ongoing tar sands boom in the area has been called an [environmental crime](http://www.independent.co.uk/environment/the-biggest-environmental-crime-in-history-764102.html) (<http://www.independent.co.uk/environment/the-biggest-environmental-crime-in-history-764102.html>) of enormous proportions, and there are hints that some of the dirty processes required might be heading south as well, to the Uintah Basin in Utah.

Several companies have been operating small-scale projects in tar sands areas mines in Utah. Now, [Earth Energy Resources](http://www.earthenergyresources.com/index.php) (<http://www.earthenergyresources.com/index.php>) has obtained the permits required to expand its site to a 62-acre mine that the company hopes will eventually produce about 2,000 barrels of oil per day.

This doesn't compare with the enormous projects in Alberta — some of which are in the hundreds of thousands of barrels per day range — but environmentalists are concerned about the impact on Utah's other natural resources.

“Even if it were economically viable, I think it would be extremely destructive environmentally, and we would be very eager to see the competent authorities keeping an eye on water and air quality problems,” said Mark Clemens, of the [Sierra Club](http://utah.sierraclub.org/) (<http://utah.sierraclub.org/>)'s Utah Chapter.

Utah's Tar Sands Resource

According to the [Utah Geological Survey](http://geology.utah.gov/surveynotes/articles/pdf/tarsand_resources_39-1.pdf) (http://geology.utah.gov/surveynotes/articles/pdf/tarsand_resources_39-1.pdf), the state has between 14 and 15 billion barrels of measured oil locked up in tar sands. When estimated resources are included, another 23 to 28 billion barrels make an appearance. For comparison, the entire U.S. used about 7 billion barrels of oil in all of 2008.

“We have a large resource that's out there in the Uintah basin area and elsewhere in southeastern Utah, but our deposits tend to be ... harder to mine than the ones in Alberta,” said Dave Tabet, a geologic manager with the Utah Geologic Survey.

“They're a little bit lower in richness, so they're not as attractive that way either. They're a little bit more difficult to extract than the Canadian oil sands.”

The tar sands in Alberta actually do resemble sand, while Utah's are much more rock-like, making them more difficult to mine.

“It's the difference between mining something that's hardened or something that's loose aggregate,” Tabet said. “Down here, you might have to drill and blast if you really wanted to move a lot of material.”



Tar Sands Impacts

The Canadian tar sands have produced any number of environmental issues, from water contamination in the Athabasca River to massive greenhouse gas emissions, both from the mining projects themselves and from burning millions of barrels of extracted oil.

Perhaps the most striking problem is that of the giant tailings ponds, where waste products from the mining are left to — hopefully — settle out from a toxic slurry of water and solid waste.

“Nobody is proposing that for Utah; they would never get away with having a tailings pond like that,” said [Jennifer Spinti](http://www.heavyoil.utah.edu/people.html) (<http://www.heavyoil.utah.edu/people.html>), a chemical engineer with the Utah Heavy Oil Program at the University

of Utah.

Earth Energy Resources says its process, which it hope to put into production by late 2011 if financing can be obtained, will result in no tailings ponds at all.

“We can recover 95 percent of our water right away,” said D. Glenn Snarr, the president and CFO of Earth Energy Resources. “The only water we use is in the damp, clean sand, and that goes back into the mine pit and actually helps the reclamation process.”

Snarr said that a proprietary solvent is used to extract the bitumen, or oil, from the mined sands, and the remaining sand is then put back in the ground and the land is reclaimed. The sand has an oil content of less than 0.4 percent at that point, and water content of 14 percent, comparable to “golf course sand after it rains,” he said.

Another of the major concerns with the Alberta tar sands projects lies in the immense amount of water required to extract bitumen from tar sands. There, companies have the benefit of one of the world’s largest watersheds — the Athabasca River. Utah has no such resource.

“All of the companies that are operating in the Uintah basin are certainly aware of the water issues, that there is not this huge water supply like the Athabasca River,” said Spinti. “The kinds of things they’ve been doing in Canada on a large scale, the resource in Utah doesn’t lend itself to that.”

Snarr said about 1.5 barrels of water are needed to produce one barrel of oil from Utah’s tar sands. The company will be getting that water from deep groundwater, he said.

Unlikely Road Ahead

Still, the major barrier to tar sands development in Utah has historically been economics.

“When the price of oil was over \$100 a barrel, we saw a lot of interest,” said Tabet, of the Utah Geological Survey. “Right now there is nominal interest in the oil sands, but there is not a big push.”

Clemens pointed out that interest could increase after passage of state [Senate Bill 242](http://le.utah.gov/~2010/bills/sbillenr/sb0242.htm) (<http://le.utah.gov/~2010/bills/sbillenr/sb0242.htm>). The legislation was intended to provide tax incentives to develop “alternative” energy sources, but amendments ended up spreading the definition of alternative to include, among other things, tar sands projects.

Still, the scattered nature of the Utah tar sands resources and the difficulty in extracting them make them less attractive to investors.

“I just think that over the long term we probably won’t see a lot of development of oil shale and tar sands,” said Clemens. “In some cases, Utah’s resources have four strikes against them: They’re in relatively inaccessible locations, they’re deep down, they’re low quality, and they’re in rock that has to be crushed in order to get at the deposit. And that’s in complete [contrast] to the tar sands that are being exploited in Alberta.”

See also:

[Coastal First Nations Oppose Canada Tar Sands Pipeline](http://blog/20100325/coastal-first-nations-oppose-canada-tar-sands-pipeline) ([/blog/20100325/coastal-first-nations-oppose-canada-tar-sands-pipeline](http://blog/20100325/coastal-first-nations-oppose-canada-tar-sands-pipeline))

[Report Warns Oil Sands Investors of Toxic Wastewater's Financial Risk](http://blog/20100303/report-warns-oil-sands-investors-toxic-wastewaters-financial-risk) ([/blog/20100303/report-warns-oil-sands-investors-toxic-wastewaters-financial-risk](http://blog/20100303/report-warns-oil-sands-investors-toxic-wastewaters-financial-risk))

[Utah House Passes Resolution Implying Climate Change Conspiracy](http://blog/20100210/utah-house-passes-resolution-implying-climate-change-conspiracy) ([/blog/20100210/utah-house-passes-resolution-implying-climate-change-conspiracy](http://blog/20100210/utah-house-passes-resolution-implying-climate-change-conspiracy))

(*Map: Utah Division of Water Resources*)

Dave Levitan has a master's degree in science, health and environmental reporting from New York University. He is a freelance writer based in New York.

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On April 1st, 2010 Uncle B (not verified) said:

Canada needs to use Saskatchewan Uranium in Chinese reactors designed by Tsinghua University for high efficiency to make heat to refine Tar Sands to oil - Selling both oil in primary fashion and Nuclear power in secondary fashion to the U.S.A. Remember: The Tar Sands are worth nothing sitting, cold, in the swamps, and the land destroyed was not in use anyway! Bull* 30 year old American weapons producing calamities are of no use in the modern world and the

Candu is an anachronism at best! If Americans are dumb enough to stay on a liquids fueled economy , let Canada join the Saudis in the "Take" Eventually they will see the light and convert to and electric economy, but in the meantime profits can be made!

[Other costs \(/blog/20100330/athabasca-south-activity-hints-tar-sands-development-utah#comment-6939\)](/blog/20100330/athabasca-south-activity-hints-tar-sands-development-utah#comment-6939)

On March 30th, 2010 [morgan \(http://itsgettinghotinhere.org\)](http://itsgettinghotinhere.org) (not verified) said:

As we run out of oil, we are driven to use less and less efficient/easy sources of it, notably tar sands and oil shale. Any industry creates jobs, but creating jobs is not a justification for any industry. The Uintah basin is beautiful ranching and cattle country, not to mention adjacent to Dinosaur national monument.

[An increase in oil shale \(/blog/20100330/athabasca-south-activity-hints-tar-sands-development-utah#comment-6937\)](/blog/20100330/athabasca-south-activity-hints-tar-sands-development-utah#comment-6937)

On March 30th, 2010 CEA said:

An increase in oil shale production would cause an increase in employment within the regions where shale oil production occurs, or within regions that contain industries providing inputs to the production process. A few hundred thousand jobs would likely be associated, directly and indirectly, with oil shale production. The net effect on nationwide employment is uncertain, however, because increases in employment arising from oil shale production could be partially offset by reductions in employment in other parts of the country. Of course much of this depends on price of conventional oil. But the point is the potential is there.

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