

Oil and Water

by Nancy Price

Oil and water don't mix. But water is part of the "mix" in energy extraction and production, from separating bitumen oil from tar sands to cooling nuclear plants. In the face of climate change, water scarcity and drought, it is time to learn more about water use in energy production. What rights do corporations have to waste and pollute water?

Northern Alberta Province holds much of the world's tar sands reserves. Tar sands is the common term for a dense and viscous form of oil. Recently, the method of producing oil from these sands has met with severe criticism.

Tar sands typically need two to four barrels of water transformed into steam to produce a barrel of oil. As Chris Nelder puts it: this water consumption is enough to sustain a city of two million people. At the current rate, water levels in the Athabasca River are going down, yet the target is to quadruple the rate by 2020. This would not leave enough water to sustain the Athabasca River and Delta. The water supply of 300,000 aboriginal people and Canada's largest watershed, the Mackenzie River Basin, would be threatened. After use, the water is toxic with contaminants, so it cannot be released into the environment. Vast quantities are pumped into enormous settlement ponds that contain high levels of heavy metals and other health-threatening elements that gradually pollute the groundwater aquifer.

Critics also point out that vast quantities of natural gas are used to heat the water into steam. Over the next ten years, this usage of natural gas adds to the demand that experts agree will exceed available amounts of natural gas in North America. Since natural gas is a major fuel for electricity generation, its depletion is leading to talk of building nuclear plants. (see page 13).

Another problem has been pointed out by Maude Barlow, who emphasizes that Alberta is destroying its water heritage to produce oil profits for American-owned companies. This trade is no doubt one of the impetuses for the Canamex Highway—one of the six north/south super-corridor transportation routes—complete with oil and gas pipelines—of the Security and Prosperity Partnership of North America. Barlow warns that the governments of Alberta and Canada could be forced to shell out hundreds of millions of dollars in compensation to foreign-owned oil sands companies under the North American Free Trade Agreement (NAFTA) if a drought—or perhaps the degradation of the Athabasca River—forces the province to ration water.

In a vote that can be seen as a move against sepa-

rating oil out of tar sands, the US Conference of Mayors in June adopted a resolution to specifically avoid high-carbon fuels such as tar sands that emit approximately three times more carbon dioxide pollution per barrel extracted as conventional oil production. One clause states: "The health of the planet, including its oceans, wild lands, rivers, air, and climate, faces increasing threats from our continued dependence on fossil fuels."

Finally, this resolution encourages the use of life cycle analyses to evaluate greenhouse gas emissions from the production—extraction, refining, and transportation—of fuels, including unconventional and synthetic fuels. It supports creation of clear Federal and State guidelines for tracking the origin of various types of fuel in order to facilitate life cycle analysis and encourages mayors to track and reduce the life cycle carbon dioxide emissions from their municipal vehicles by preventing or discontinuing the purchase of higher-carbon, unconventional or synthetic fuels for these vehicles.

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photo: desmogblog.com

Questions and Sources:

In holding energy extraction corporations accountable for waste and pollution of fresh water we might ask: What right do corporations have to fresh water sources? What do extraction/mining and energy corporations pay for the water? Isn't the cost subsidized by all the life dependent on that water? What pollutants contaminate the water? How is the polluted water treated—on site with little accountability or at taxpayer expense through a municipal system? What conservation and recycling measures could be adopted to protect water resources and public health or should we join the Mayors and publicize and support their resolution?

For more information, see:

- Security and Prosperity Partnership of North American at www.thealliancefordemocracy.org/spp
- Is the tar sands' water supply protected by NAFTA? by Meera Karunanathan April 16, 2008 www.canadians.org/integratethis/water/2008/Apr-16.htm
- US Conference of Mayors resolution, www.USmayors.org/resolution?76th_conference/energy_05.asp
- Chris Nelder on Canada's Tar Sands, <http://canada.theoil drum.com/node/2931>
- Go to Council of Canadians, do a search on tar sands or go to www.canadians.org/cgi-bin/htsearch