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THE OIL INDUSTRY'S DILBIT COVER-UP:

Tar sands bitumen spills harder and costlier to clean up

By Joyce Nelson

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It's amazing to watch the lengths to which Enbridge and the oil industry will go in pretending that tar sands diluted bitumen (dilbit) is no different from conventional oil.

On Aug. 26, the Canadian Press reported that the Northern Gateway spill-response plan filed by Enbridge with the National Energy Board's Joint Review Panel (JRP) deals only with conventional oil, not specifically with the dilbit that the proposed pipeline will carry.

Similarly, Enbridge would prefer that details of its disastrous 2010 spill of 20,000 barrels of dilbit into Michigan's Kalamazoo River remain unknown. In August, media reports revealed

that Enbridge had not provided the JRP with any parts of the U.S. National Transportation Safety Board (NTSB) Kalamazoo investigation. On Aug. 23, *The Tyee* reported: "After days of indecision and denial," the JRP "finally asked Enbridge to submit copies of the NTSB final report as evidence on how the company reacts to bitumen spills in waterways."

The corporate reluctance to admit to any differences between dilbit and conventional oil was apparent within

days of the 2010 Michigan spill. Reporters on the scene from *OnEarth* and the *Michigan Messenger* asked Enbridge CEO Patrick Daniel if the oil spilled from Line 6B had any connection to the Alberta tar sands. In both cases, he initially said no.

In July 2011, when an ExxonMobil pipeline ruptured into the Yellowstone River in Montana, ExxonMobil reluctantly admitted, two weeks after the 1,500-barrel spill, that its pipeline had carried tar sands dilbit. That came as a surprise to Richard Opper, head of the Montana Department of Environmental Quality, who told Reuters (July 14, 2011): "If the question is, did we know it was carrying tar sands oil? Hell, no." He added, "If companies are changing the kinds of materials in pipelines to mixes that make them more likely they will leak or rupture, that raises huge concerns."

Tar sands producers generally produce either "synthetic crude," which has passed through an on-site upgrader, or dilbit, which is raw bitumen thinned with lighter petroleum products and proprietary chemicals. With vastly increased production over the last few years, tar sands producers (which are mostly foreign-owned) are now piping out far more dilbit in order to cut their costs. In fact, over the next decade, they plan to triple the amount of dilbit they pipe.

On July 23, 2012, the U.S. National Academy of Sciences

began hearing expert briefings on whether dilbit increases the risk of pipeline spills, as environmentalists claim (see Sept. *CCPA Monitor*).

What is already obvious, however, is that dilbit is far more difficult and costly to clean up.

The Kalamazoo spill was the first time that the U.S. Environmental Protection Agency (EPA) had to deal with a dilbit spill of this size into water. Ralph Dollhopf, EPA incident commander for the spill, told the *Kalamzoo Gazette* (July 24, 2011) that responders are "writing the book" on how to deal with dilbit.

According to the NTSB's final report, only *two days* after the spill the denser bitumen had separated from the dilutants in the dilbit and sunk to the bottom of the river bed, covering about 40 kilometres. Meanwhile, the dilutants — containing benzene, toluene, and micropolyaromatic hydrocarbons (PAHs) — began off-gassing in the area, causing symptoms such as nausea, dizziness, headaches, coughing, and fatigue in 60% of the local population. Oil spill expert

Riki Ott recently told a Vancouver Island audience (see Sept-Oct. *Watershed Sentinel*) that micro-PAHs are major health hazards, causing cancer, asthma, hormone and reproductive problems by "jamming immune system and DNA functions."

The NTSB further found that Enbridge was not prepared for a spill involving oil which does not float on water. According to National Public Radio (Aug. 17, 2012), "Cleanup crews didn't know what they were dealing with. They expected [dilbit] to act like oil usually does and float on water. So they focused on vacuuming oil and skimming it from the surface. But about a month into the cleanup, some fish researchers got a surprise. One of them jumped from a boat into the river. With each step he took, little globs of black oil popped up. That kicked off a search for sunken oil," which they found everywhere they looked.

After two years of extensive dredging of the river bed, blobs of bitumen reportedly are still sitting on the bottom of the Kalamazoo. The so-called "clean-up" has already cost more than \$800 million — 40 times more per barrel of oil than spills of conventional oil, according to Environmental Defence.

The April 2011 spill of 28,000 barrels of dilbit in Lubicon territory in Alberta (see July-Aug. 2011 *CCPA Monitor*) is still

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Plan to pipe dilbit through Ontario and Quebec to Maine

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being cleaned up 18 months later.

Faced with growing opposition to its pipeline plans in B.C., Enbridge is now moving quickly on a plan to pipe tar sands crude through Ontario, Quebec, and New England to Atlantic tidewater in Portland, Maine. From there it would be shipped by tankers to refineries on the U.S. east coast and elsewhere.

Last May, Enbridge announced a \$3.2 billion expansion of its pipeline system, including the reversal of Line 9, which currently carries 240,000 barrels per day of conventional oil from Montreal to Sarnia, Ont. In order for tar sands dilbit to reach Atlantic tidewater, another pipeline (the Portland/Montreal pipeline, which brings conventional oil from Portland, Maine to Montreal) would also have to be reversed.

The Portland/Montreal pipeline is majority-owned by tar sands producers Imperial Oil and Suncor. A year ago, the *Globe and Mail* (Aug. 25, 2011) reported that officials with the Portland/Montreal pipeline are in talks to reverse the flow of that line, which passes through Quebec, Vermont, New Hampshire, and Maine.

More recently, the *Globe and Mail* (June 1, 2012) confirmed that Enbridge intends to export tar sands crude

from Portland, Maine: "In a recent conversation with *Streetwise*, Stephen Wuori, Enbridge's president of liquids pipelines, said his company believes it can export crude from the U.S. without consequence. Asked if it would be possible to send oil to international markets from Maine, he said the answer is yes."

Enbridge has quietly been increasing the capacity of its dilbit pipeline between Chicago and Sarnia (the line that ruptured in Michigan) to 500,000 barrels per day. On July 27, the National Energy Board granted approval for the reversal of a portion (9A) of Line 9 between Sarnia and Westover, Ont. Enbridge plans to file for the reversal of the remaining portion (9B) between Westover and Montreal this autumn. On Aug. 2, Reuters reported that Enbridge is assessing whether to expand its Line 9 pipeline capacity beyond 240,000 barrels per day.

In late July, RBC Capital Markets urged that TransCanada Corp. stop focusing on Keystone XL in the U.S. and instead convert part of its Canadian natural gas mainline system to carry 900,000 barrels per day of tar sands crude from Alberta to Sarnia, and then use Enbridge's Line 9 to move it to Montreal.

So, potentially, more than a million barrels per day of tar sands crude could be piped through Ontario, Quebec, and New England en route to refineries on the U.S. east coast and elsewhere.

An "Eastern Access" pipeline would pass through the most populated parts of Canada and put at risk the health and drinking water of millions. Because of the changes in Bill C-38, the project will not have to undergo an environmental review.

Proponents of the project argue that some of the tar sands crude would be refined in Ontario (Imperial Oil, Suncor, Shell) and Quebec (Suncor, Valero) to replace imported conventional oil. But environmentalists across Eastern Canada and New England are redflagging the risks that tar sands pipelines pose en route to such refining.

The Alberta government is too timid and subservient to require that all tar sands production be upgraded or refined on-site. As a result, tar sands pipelines will continue to be fought across North America.

(Joyce Nelson is an award-winning freelance writer/researcher and the author of five books.)

Canada permits drilling for oil and gas in Lake Erie

The industry push is on to open up drilling for oil and natural gas in the Great Lakes, but, unknown to many Canadians, the governments of Canada and Ontario have long allowed such drilling to be done on the Canadian side of Lake Erie.

The U.S. has federally banned offshore oil and gas drilling in the Great Lakes since 2005, but Canada and Ontario have allowed it for decades.

Derek Coronado, spokesman for the Citizens' Environmental Alliance of Southwestern Ontario, recently told me that there are "about 400 active wells, mostly for natural gas," in the Ontario waters of Lake Erie between Sarnia and Hamilton. Most of the gas wells are 15 to 60 kilometres offshore.

The companies involved — mainly Talisman Energy Inc. and Dundee Energy Ltd. (both Calgary-based) — are also using horizontal drilling to obtain oil from 23 oil wells drilled on-shore but extended under the Lake.

"There are rigs out on Lake Erie," says Coronado. "They're not like a North Sea setup, they're automatic operations. And there are [onshore] pump-jacks, about a dozen, in the area.

"One of the ironies," says Coronado, "is that this production is such a tiny fraction of Ontario's natural gas consumption — 1% to 2% — which is a very small benefit

for a potentially huge risk to the freshwater."

The Ohio Public Interest Research Group has called Ontario's drilling "an accident-ridden and understudied source of pollution" in Lake Erie. Now the U.S. oil and gas industry wants to follow the Ontario example.

"All the big players are involved in lobbying for oil and gas drilling in the Great Lakes," says Coronado. "There is resentment in the U.S. industry over the fact that there is drilling by Canadian companies" on this side of the waters. "And yes, they use that as leverage" in their lobbying.

Meanwhile, Ontario's drilling is the proverbial "elephant in the room." Ontario's Great Lakes Protection Act (currently undergoing public hearings) does not include oil and gas drilling as one of the environmental "Challenges in the Great Lakes Today."

Similarly, the Great Lakes Water Quality Agreement has had "no specific references to Ontario's drilling in the past," says Coronado. "What's in the new agreement, nobody knows."

The amendments to the Great Lakes Water Quality Agreement were not made public before it was signed on Sept. 7 by federal Environment Minister Peter Kent and Lisa Jackson, the U.S. EPA administrator.