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A Black Mound of Canadian Oil Waste Is Rising Over Detroit

By IAN AUSTEN

WINDSOR, Ontario — Assumption Park gives residents of this city lovely views of the Ambassador Bridge and the Detroit skyline. Lately they've been treated to another sight: a three-story pile of petroleum coke covering an entire city block on the other side of the Detroit River.

Detroit's ever-growing black mountain is the unloved, unwanted and long overlooked byproduct of Canada's [oil sands](#) boom.

And no one knows quite what to do about it, except Koch Carbon, which owns it.

The company is controlled by Charles and David Koch, wealthy industrialists who back a number of conservative and libertarian causes including activist groups that challenge the science behind climate change. The company sells the high-sulfur, high-carbon waste, usually overseas, where it is burned as fuel.

The coke comes from a refinery alongside the river owned by Marathon Petroleum, which has been there since 1930. But it began refining exports from the Canadian oil sands — and producing the waste that is sold to Koch — only in November.

“What is really, really disturbing to me is how some companies treat the city of Detroit as a dumping ground,” said Rashida Tlaib, the Michigan state representative for that part of Detroit. “Nobody knew this was going to happen.” Almost 56 percent of Canada's [oil](#) production is from the petroleum-soaked oil sands of northern Alberta, some 2,000 miles away.

An initial refining process known as coking, which releases the oil from the tarlike bitumen in the oil sands, also leaves the petroleum coke, of which Canada has 79.8 million tons stockpiled. Some is dumped in open-pit oil sands mines and tailing ponds in Alberta. Much is just piled up there.

Detroit's pile will not be the only one. Canada's efforts to sell more products de sands to the United States, which include transporting it through the proposed pipeline, have pulled more coking south to American refineries, creating more here.



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Marathon Petroleum's plant in Detroit processes 28,000 barrels a day of the oil sands bitumen.

Residents on both sides of the Detroit River are concerned that the coke mountain is both an environmental threat and an eyesore.

"Here's a little bit of Alberta," said Brian Masse, one of Windsor's Parliament members. "For those that thought they were immune from the oil sands and the consequences of them, we're now seeing up front and center that we're not."

Mr. Masse wants the International Joint Commission, the bilateral agency that governs the Great Lakes, to investigate the pile. Michigan's state environmental regulatory agency has submitted a formal request to Detroit Bulk Storage, the company holding the material for Koch Carbon, to change its storage methods. Michigan politicians and environmental groups have also joined cause with Windsor residents. Paul Baltzer, a spokesman for Koch's parent company, Koch Companies Public Sector, did not respond to questions about its storage or the ultimate destination of the petroleum coke.

Coke, which is mainly carbon, is an essential ingredient in steelmaking as well as producing the electrical anodes used to make aluminum.

While there is high demand from both those industries, the small grains and high sulfur content of this petroleum coke make it largely unusable for those purposes, said Kerry Satterthwaite, a petroleum coke analyst at [Roskill Information Services](#), a commodities analysis company based in London.

"It is worse than a byproduct," Ms. Satterthwaite said. "It's a waste byproduct that is costly and inconvenient to store, but effectively costs nothing to produce."

Murray Gray, the scientific director for the Center for Oil Sands Innovation at the University of Alberta, said that about two years ago, Alberta backed away from plans to use the petroleum coke as a fuel source, partly over concerns about greenhouse-gas emissions. Some of it is burned there, however, to power coking plants.

The Keystone XL pipeline will provide Gulf Coast refineries with a steady supply of diluted bitumen from the oil sands. The plants on the coast, like the coking refineries concentrated in California to deal with that state's heavy crude oil, are positioned to ship the waste to China or Mexico, where it is burned as a fuel. [California exports](#) about 128,000 barrels of petroleum coke a day, mainly to China.

Tony McCallum, a spokesman for the Canadian Association of Petroleum Producers, played down the impact of Keystone XL. "Most of the Canadian oil earmarked for the U.S. Gulf Coast is

to replace declining heavy oil imports from Mexico and Venezuela that produces the same amount of petcoke, so it doesn't create a new issue," he wrote in an e-mail.

Much of the new coking investment has gone into refineries in the Midwest to allow them to take advantage of the oil sands. BP, the British energy company, is building what it describes as the second-largest coke refinery in Whiting, Ind. When completed, the unit will be able to process about 102,000 barrels of bitumen or other heavy oils a day.

And what about the leftover coke? The Environmental Protection Agency will no longer allow any new licenses permitting the burning of petroleum coke in the United States. But D. Mark Routt, a staff energy consultant at KBC Advanced Technologies in Houston, said that overseas companies saw it as a cheap alternative to low-grade coal. In China, it is used to generate electricity, adding to that country's air-quality problems. There is also strong demand from India and Latin America for American petroleum coke, where it mainly fuels cement-making kilns.

"I'm not making a value statement, but it comes down to emission controls," Mr. Routt said. "Other people don't seem to have a problem, which is why it is going to Mexico, which is why it is going to China."

"One man's junk is another man's treasure," he said. One of the world's largest dealers of petroleum coke is the Oxbow Corporation, which sells about 11 million tons of fuel-grade coke a year. It is owned by William I. Koch, a brother of David and Charles.

Lorne Stockman, who recently published a study on petroleum coke for the environmental group Oil Change International, says, "It's really the dirtiest residue from the dirtiest oil on earth," he said.

Rhonda Anderson, an organizing representative of the Sierra Club in Detroit, said that the mountain's rise took her group by surprise, but it had one benefit.

"Those piles kind of hit us upside to the head," she said. "But it also triggered a kind of relationship between Canada and the United States that's allowed us to work together."

This article has been revised to reflect the following correction:

Correction: May 24, 2013

An article on Saturday about a growing pile of petroleum coke, a byproduct of the refining of Canadian oil sands, along the Detroit River described incorrectly the location of northern Alberta, the heart of oil sands production, relative to Detroit. It is about 2,000 miles away to the west-

northwest; it is not “to the north.”