http://insideclimatenews.org/news/20120726/pipeline-safety-act-congress-phmsa-diluted-bitumen-spills-leaks-ntsb-enbridge-tar-sands?page=show

New Pipeline Safety Regulations Won't Apply to Keystone XL

Proposed federal rules to strengthen pipeline safety won't be in place before construction could begin on the Keystone XL or other new dilbit pipelines.

By Elizabeth McGowan and Lisa Song, InsideClimate News Jul 26, 2012

A 34-mile stretch of the Kalamazoo River was closed to the public for almost 2 years after the July 2010 oil spill near Marshall, Mich. Credit: Terry Heatlie, NOAA

WASHINGTON—Efforts to beef up oversight of the nation's oil pipelines are progressing so slowly that it's unlikely any additional safeguards will be in place before construction begins on thousands of miles of new pipelines, including the proposed Keystone XL.

Part of the delay stems from how slowly the Pipeline and Hazardous Materials Safety Administration [2] (PHMSA)—the federal agency with the authority to issue new regulations—is moving on its rulemaking process. For instance, PHMSA began examining [3] at least six safety regulations in October 2010, three months after a ruptured pipeline spilled more than 1 million gallons of oil [4] into Michigan's Kalamazoo River. None of those changes is in effect nearly two years later.

Congress's latest pipeline safety bill, which was signed into law in January, did little to speed up the process.

The measure did not address two of the key regulatory failures that InsideClimate News found during a recent seven-month investigation of the Michigan spill [5]. It did not force PHMSA to enforce deadlines for repairing pipeline defects or require that pipeline operators identify exactly what type of oil is flowing through their lines. Both of those

failures were also detailed in a report released this month [6] by the National Transportation Safety Board [7].

"Tens of thousands of miles of new pipelines are going into the ground, and there aren't going to be regulations that make them safer for years," said Carl Weimer [8], executive director of the Pipeline Safety Trust [9], a nonprofit watchdog organization based in Bellingham, Wash.

Representatives of the Trust testified at least 10 times on Capitol Hill as Congress was shaping the Pipeline Safety Act.

"We saw that the final bill really didn't do much for safety," Weimer said. "We're just happy it didn't go in the wrong direction. With this Congress, not going in the wrong direction is a win."

The bill did address two problems that became apparent after the Michigan disaster. It authorized a study of diluted bitumen, or dilbit [10]—the type of oil that spilled into the Kalamazoo and would also be carried on the Keystone XL. And it ordered the Department of Transportation to study the technology that the pipeline industry uses to detect leaks. PHMSA is a division of the Transportation Department.

Neither of those studies will be done in time to have much impact on the new pipeline construction that is predicted [11] for the United States.

The dilbit study won't be ready until next summer, and it will consist only of a review of the existing literature, not new research. The leak detection study won't be ready until 2014 at the earliest, because Congress stipulated that PHMSA spend two years on the project.

Democrat John Dingell, who has represented southeastern Michigan in the House for 58 years and helped craft the House version of the bill, called it a "good first step" but said "we have much more to do."

"The NTSB report on the Enbridge spill in the Kalamazoo River highlights important issues which Congress and PHMSA need to address to ensure that our aging pipeline system is as safe as possible," the former chairman of the Energy and Commerce Committee said via e-mail.

Rep. Fred Upton (R-Mich.) the current committee chairman who crafted the House version of the bill with Dingell, didn't return requests for comment. Neither did Sen. Frank Lautenberg (D-N.J.) who helped to shepherd the bill through the Senate.

Former Rep. Jim Oberstar (D-Minn.), who was voted out of office in 2010 several months after he chaired a House Transportation and Infrastructure Committee hearing on the Marshall spill, said the bill was so weak that he wouldn't have supported it. It's up to regulators to intervene when pipeline operators ignore the public's health and safety, he said, and Congress fell short this time.

"If you don't have a corporate culture of safety, then the public sector must rigorously oversee operations where there is a hazard to public health and safety," Oberstar said. "And that is the issue we're dealing with in the pipeline sector."

Sara Gosman, a lecturer at the University of Michigan Law School who studies pipeline safety in the Great Lakes region, said that instead of nibbling around the edges, Congress should tackle pipeline safety in the same overarching manner that the landmark Clean Air and Clean Water acts focus on protecting people and natural resources.

"We haven't had a big environmental act passed in this country in the last 20 years," Gosman said. "We're just not seeing shifts in the way pipelines are regulated. The opportunity is there ... but Congress just isn't looking forward."

Below is a review of six regulatory problems that became apparent after the Michigan pipeline accident and the action that is—or isn't—being taken in response.

Pipeline contents still a mystery. The federal officials and cleanup crews who rushed to the scene of the Marshall, Mich., accident didn't know for at least two weeks that they were dealing with dilbit, not conventional oil. Current regulations don't require operators to provide that information, even after a spill.

The Kalamazoo disaster [5] showed that the distinction is important. Conventional oil floats on the water's surface, where it can easily be vacuumed or skimmed away. But bitumen is so thick that it must be thinned with liquid chemicals before it can flow through pipelines. When the pipeline ruptured in Michigan, those light chemicals began to evaporate, compounding the concerns of health officials. The heavy bitumen then sank to the river bottom, making traditional cleanup methods almost useless.

The bill Congress passed didn't ask PHMSA to require pipeline operators to reveal whether their lines are carrying dilbit or conventional oil. But the NTSB has twice recommended that PHMSA direct operators to inform local emergency responders about the contents of their pipelines—last year after it investigated the 2010 San Bruno, Calif., gas line explosion that killed eight people, and earlier this month after it announced its findings for the Michigan spill [12].

Although Congress didn't mandate disclosure of pipeline contents, PHMSA has the authority to take that step itself. But PHMSA spokesman Damon Hill said no efforts are underway to do that.

Little is known about dilbit. Cleanup and health experts struggled to respond to the Michigan spill in part because so little is known about dilbit. InsideClimate News found few peer-reviewed articles on dilbit while researching the Michigan spill. Studies may have been conducted by the oil industry, but they're not available to the public. InsideClimate News relied on information from government publications, petroleum engineering textbooks and interviews with oil analysts, watchdog organizations and university scientists who have worked with the industry.

Although the Pipeline Safety Act directed PHMSA to conduct a study of dilbit, the study will be limited to a survey of the current scientific literature. No new research is planned.

A spokeswoman for the National Academy of Sciences [13], which is conducting the study for PHMSA, said it's too early to know whether it will include only peer-reviewed research or whether it will also look at industry and government publications.

The study mandated by Congress has also been limited to a narrow topic: whether dilbit is more likely than conventional oil to corrode pipelines. It will not explore two questions that emerged after the Michigan spill: How does dilbit differ from conventional oil when it spills into water? And how does that difference affect health and cleanup responses?

"Diluted bitumen behaves differently, particularly in water bodies [after] a spill," said Anthony Swift [14], an attorney and pipeline specialist with the Natural Resources Defense Council [15]. "Spill responders haven't developed methods to contain and remediate those spills, and emergency response plans certainly don't incorporate the unique properties of dilbit in their response ... and nobody's evaluating that right now."

"We need regulatory agencies to do the [studies], or to commission it to be done. And it hasn't. In the end ... I would expect [the committee] to come to the same conclusion we [at NRDC] have, which is that there hasn't been enough basic science to understand the risks of moving diluted bitumen in pipelines."

The 12-member research committee from the National Academy of Sciences met for the first time Monday in downtown Washington. Swift, one of several experts invited to the meeting, was the only invited speaker from an environmental organization. He presented evidence along with representatives from Enbridge, TransCanada, the American Petroleum Institute, the Association of Oil Pipelines and researchers from the Alberta government.

The National Academy's study isn't expected to be finished until summer 2013. By then, the next president will almost certainly have decided whether the northern half of the Keystone XL pipeline can be built.

Deadlines for repairing corrosion and other defects still loose: The defect that led to the Michigan spill in 2010 was identified as early as 2005, when Enbridge, the pipeline operator, self-reported the anomaly to federal regulators. However, the company was allowed to delay the repairs without violating any PHMSA regulations.

Congress did not address the subject of repair deadlines in its legislation and it isn't on the agenda for PHMSA's current rulemaking session.

Any rules PHMSA proposes are reviewed by the agency's 15-member Liquid Policy Advisory Committee, made up of five representatives from government, five from industry and five from the public.

PHMSA is supposed to conduct a cost-benefit analysis before it approves major rules. Congress added that mandate in 1996. Weimer, the Pipeline Safety Trust's executive director, said that requirement allows industry to reject fixes it deems too expensive.

A briefing paper [16] issued recently by the Trust points out that a cost-benefit analysis can be effective when costs and benefits can be easily identified and monetized, "but it is not so tidy or easy when trying to value environmental, health and safety factors, as in the pipeline safety field."

"Economic valuation of a healthy child, a clean river, or a safe neighborhood is difficult to undertake," the paper said.

According to research [17] compiled by the Center for Progressive Reform [18], the Consumer Product Safety Act is the only other federal statute in the health, safety or environment fields that requires a cost-benefit analysis.

Federal rulemaking usually doesn't follow a fixed timeline because it involves so many variables. It tends to be a cumbersome, multi-step process [19] that includes taking the concerns of industry, watchdogs and other interested parties into consideration.

"In general, each stage takes a year," said PHMSA spokesman Damon Hill. The entire process can take "up to five or six years. It depends on all the factors involved."

Access to spill response plans limited: When the Enbridge accident occurred, local officials in Marshall, Mich., said they knew almost nothing about the pipelines that snaked through their community and weren't prepared for an oil spill of such magnitude.

The NTSB report found flaws with Enbridge's spill response plan and criticized PHMSA for not reviewing the plans more carefully. It pointed out [20] that the agency had just 1.5 full-time positions to manage 450 response plans when the spill occurred in July 2010. The report also noted that both the U.S. Coast Guard and the Environmental Protection Agency have more rigorous review procedures and more staffers to handle the task.

"It is doubtful that the Enbridge plan could have received more than a cursory review," NTSB investigators wrote in their July 10 report. "If PHMSA had dedicated the resources necessary to conduct thorough reviews, it likely would have identified deficiencies and disapproved the Enbridge plan because it lacked sufficient resources for response to a worst-case discharge."

In its Pipeline Safety Act, Congress directed PHMSA to provide copies of all spill response plans to the public upon request, minus any proprietary or security-sensitive information.

But they are still not easy to access. When InsideClimate News recently asked for copies for the existing Keystone pipeline, the proposed Keystone XL and the new Pipeline 6B in Michigan, PHMSA said they would only be available if a request was filed via the Freedom of Information Act.

Spill response plans require pipeline operators to identify personnel and equipment capable of resolving a worst-case oil discharge; pre-position those resources so they can respond efficiently to an emergency; detail a chain of authority for incident response; and describe training, testing and drilling procedures.

The Pipeline Safety Trust is urging PHMSA to make spill response plans broadly available, without the public having to make a special request. The Trust also wants the public to be allowed to review the plans and any revisions and also provide suggestions.

Spill reporting still lax: Pipeline operators are required to report spills to the National Response Center, which is responsible for quickly alerting state and federal agencies about unfolding disasters. Enbridge didn't notify the National Response Center until almost two hours after the company had confirmed the Michigan spill. But that apparently complied with PHMSA's requirement that operators notify the center at "the earliest practicable moment" after spills that caused death, a fire or explosion, significant property damage or water pollution.

The 2012 legislation directs PHMSA to revise that regulation and require pipeline operators to report large spills "at the earliest practicable moment following confirmed discovery" but "not later than 1 hour following the time of such confirmed discovery."

PHMSA has not yet taken steps to revise the rule to meet that directive, said Hill, the agency spokesman.

Slow progress on detecting leaks: The NTSB investigation into the Kalamazoo spill found that Enbridge's leak detection system was partly to blame for the 17-hour gap between when the pipeline ruptured in Michigan and when Enbridge became aware of the spill.

The Pipeline Safety Act calls for the Department of Transportation to spend two years studying the technical limitations of leak detection systems, and to determine if it would be practical to create performance-based standards for those systems.

Ironically, the legislation will delay any new rules in this area, said the NRDC's Swift.

PHMSA had started a rulemaking process to tighten leak detection regulations before the pipeline safety bill was passed. But because the legislation requires PHMSA to spend two years researching the subject, the agency won’t be able to issue a final rule until 2014.

"It basically stopped new [leak detection] regulations from coming from PHMSA for at least two years," Swift said. "Given the context of 2011, that's very unfortunate because national attention was on pipeline safety and the need for stronger regulations."

Attachment	Size
pipelinerulemakingchartINSIDECLIMATENEWS.pdf [19]	50.61 KB

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[5] http://insideclimatenews.org/news/20120626/dilbit-diluted-bitumen-enbridge-kalamazoo-river-marshall-michigan-oil-spill-6b-pipeline-epa
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[10] http://insideclimatenews.org/news/20120626/dilbit-primer-diluted-bitumen-conventional-oil-tar-sands-Alberta-Kalamazoo-Keystone-XL-Enbridge
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