Need for Dane County and other counties on Enbridge Line 61 to have appropriate insurance to cover environmental remediation in the event of a tar sands spill

It is vital that the citizens and taxpayers of Dane County, and of other affected WI counties, be listed as named insured parties in the event of a spill from the Enbridge line 61 tar sands pipeline. With this, the County would have an equal right to claim money from the insurance company so that county-hired contractors can undertake the remediation required by law, and, crucially for tar sands, in a timely fashion.

As documented below, cleanup by the company may stretch over many years, characterized by protracted dispute with the EPA and dilatory actions by company insurers. Moreover, history shows that efforts by Enbridge and other companies focus on what is most evident, cleaning up the obvious signs of oil or tar sands. Other crucial things have lesser priority: This includes immediate planning to provide a cleanup that most effectively removes all possible product, rather than just dispersing it. Most crucially, this also means providing prompt and ongoing outside professional environmental assessment and remediation.

The County cannot safely rely on Enbridge's vaguely defined current insurance, which does not include environmental coverage, nor on Enbridge's unspecified deep pockets. This would leave the County and its taxpayers liable for enormous costs if there were a spill. Sadly, any environmental impact, including damage to farmlands, rivers, streams, forests, wetlands, and to fish and other wildlife, would likely await years before being properly assessed and completely remediated, if that were possible.

- Seven key considerations underlie the need for Dane and other counties to be protected with adequate insurance:

What is at risk in Dane County if there is a tar sands spill?

A tar sands spill in Dane County could devastate rivers, lakes, and wetlands. According to the Dane County Lakes and Watershed Division, we have 69 named lakes, and more than 400 miles of streams and rivers including 14 miles of the Wisconsin River.[1] The total surface water coverage in Dane County is more than 23,000 acres, or 36 square miles and is home to 52,000 acres of wetlands, part of what makes Dane County treasured. Water-related recreation activities contribute substantially to the region's economy, and water resources contribute to business, to waterways, wetlands, and wildlife.

A tar sands spill could also wreak havoc on property owners and farmers. Dane County farmers own and manage 504,420 acres, or two-thirds, of the county's land. This includes cropland, rangeland, pasture, tree farms and farm forests.[2] Dane county ranks first in total value of agricultural products sold. It is fifth ranked dairy producing county in the state and among the top three in corn for grain, soybeans, corn for silage, cattle and calves, and tobacco. Tar sands spilled on agricultural land would ruin crops and could lead to permanent damage.

Enbridge's dangerous safety record, including the Kalamazoo disaster

Enbridge is well-recognized for its very poor safety record, with more than 800 reported spills, including 6.8 million gallons of hydrocarbons into the land, water, and atmosphere[3] and has been the focus of withering criticism and/or huge fines from the state of Wisconsin, the Environmental Protection Agency (EPA), the Pipeline and Hazardous Materials Safety Administration (PHMSA), and the National Transportation Safety Board.[4,5]

Included among Enbridge's 800+ spills is the July 2010 Kalamazoo River tar sands spill, the worst inland pipeline spill in US history (843,444 gallons of tar sands.) Notably, the Enbridge emergency response plan that was on file with PHMSA at the time of the spill stated that a rupture would be detected within five minutes and the damaged segment closed in three minutes. However, the leak was not discovered or addressed for over 17 hours. Thirty-five miles of the Kalamazoo River and eventually the river sediment were severely contaminated, with great loss of fish and wildlife. In March 2013, the EPA ordered Enbridge to continue the cleanup and dredge portions of the river to remove submerged oil and oil-contaminated sediment.[6] Enbridge's continued sluggish response to EPA cleanup directives was evident in a November 2013 letter to Enbridge, insisting on further cleanup of submerged oil.[7] EPA stated "Although we recognize that the work required by the Order is unlikely to be completed by December 31, 2013, U.S. EPA believes that had Enbridge taken appropriate steps earlier as requested, it would not require an extension now. In particular, U.S. EPA believes that Enbridge has continuously failed to prepare adequate contingency plans for a project of this nature."

Of special note, Enbridge declined to provide requested funds for assessing injuries to natural resources which had been submitted by Michigan authorities and US Fish and Wildlife Service.[8] Critically, this tells the Zoning Committee that the EPA supervised cleanups of oil spills, almost certainly, will be significantly inadequate to meet Dane County's determination of what is necessary to restore its lands and waters to their original state.

Finally, PHMSA reports that from 2006 to 2014, Enbridge reported 15 spills in Wisconsin.[9]

Unprecented magnitude of a potential tar sands spill

Enbridge will pump 1.2 million barrels of tar sands each day if the Dane County pump station is upgraded as planned. This will

dwarf Keystone which would have been 830,000 barrels daily, and will be the highest pump rate of any pipeline in the USA. Each barrel is 42 gallons, so this is 50,400,000 gallons daily through line 61, which is 2.1 million gallons per hour or 35,000 gallons per minute. In other words, a line 61 pipeline rupture could spill as much as Enbridge spilled at Kalamazoo, in only 25 minutes.

Tar sands characteristics: nearly impossible to clean up, more environmentally damaging than crude oil

Tar sands are much more viscous than traditional crude oil and thus must be diluted with light, volatile organic chemicals to allow flow through a pipeline. When spilled, after the lighter chemicals evaporate, the heavy tar sands can sink to the bottom of waterways, making cleanup expensive. The Kalamazoo disaster is notable: it took nine days for most of the diluents to evaporate or dissolve into the water, although Enbridge did not move quickly enough to clean up when the tar sands remained afloat. Meanwhile, the heavier tar sands sank, which required an environmentally destructive dredging of the Kalamazoo River bottom. Once cleanup crews locate submerged oil, it is difficult to remove without destroying the riverbed. Cleanup workers in Marshall were forced to improvise less invasive procedures that balanced oil cleanup with protecting the ecosystem.[10] According to Steve Hamilton, Professor of Ecosystem Ecology at Michigan State University, and advisor to EPA for the cleanup, "First, before it even got to the bottom, we learned that in the first year, it stuck to surfaces of plants and debris that made a tarry mess that largely had to be manually removed." It was the removal of the submerged oil that made the cleanup last as long as it has. "It is so incredibly difficult to remove submerged oil from a complex river, extending over nearly 40 miles." [11]

The National Academy of Sciences is sufficiently concerned about the environmental risks of tar sands (diluted bitumen), that in November 2014 NAS assigned a committee of outside experts to analyze whether diluted bitumen's characteristics warrant modifications of the regulations governing spill response plans, spill preparedness, or cleanup. This study is underway.[12]

Costs for tar sands cleanup, greatly exceeding that for crude oil cleanup

Using figures from PHMSA's pipeline incident database, an attorney and researcher with the National Resources Defense Council calculated that the average cleanup cost of every crude oil spill from the past 10 years was $2,000 per barrel, whereas the Enbridge Kalamazoo spill has cost upwards of $29,000 per barrel. [10]
Thus, Dane and other Wisconsin counties "hosting" line 61, which carries tar sands, could be at much higher financial risk from a spill compared to a spill from conventional crude oil.

Extremely long delays between environmental events, cleanup, and inadequate restoration funding:

Inadequate and/or very slow restoration of areas devastated by spills of oil or tar sands are the rule rather than the exception, whether for Enbridge or other companies, as exemplified below.

These examples underscores the importance of funding from the responsible party, the extended lag time between an incident and a restoration agreement and then restoration funding, and the ultimate reality of inadequate restoration funding and poor or uncertain environmental restoration —a sad outcome for people, flora, and fauna in the area.

1996 San Francisco Drydock bunker fuel oil spill: The SS Cape Mohican discharged 96,000 gallons of fuel oil into a floating drydock at the San Francisco Shipyard, oiling a huge expanse of beaches and killing an estimated 593 birds and impacting recreational beach use, shoreline habitat, and fisheries.[13] A trustee agreement and consent decree was not completed until 1998, with a restoration plan, in 2002. The proposed restoration costs totaled $5,853,324, although only $3,625,000 was provided.

1999 Genesis crude oil pipeline spill near Soso, MS: 336,000 gallons of crude oil contaminated wetlands, a stream, and the Leaf River. Wetlands, groundwater, and wildlife habitat, were affected, with fish and especially wood ducks oiled and killed, and the wetlands lost all function.[14] Not until 2004 was there a settlement with the Department of Justice indicating Genesis was to pay $2 million for restoration, and there was inadequate documentation as to adequacy of restoration.

2000 East Walker River fuel oil spill by Advanced Fuel Filtration Systems: A tanker truck of Advanced Fuel Filtration Systems, Inc. (AFFS) overturned on California State Route 182 releasing 3,608 gallons of fuel oil which contaminated the East Walker River, with substantial injury and mortality to plants and animals.[15] There was a 2005 memorandum of understanding with AFFS and a 2009 restoration plan. Restoration costs exceeded the $350,000 AFFS paid, and the US Forest Service was liable for $162,600 for the remainder.

July 2002 Enbridge pipeline spill near Cohasset, MN: An Enbridge pipeline spilled 252,000 gallons of crude oil into wetlands, with the oil spill and subsequent one-day burn response causing near-complete loss of 11 acres of wetland vegetation and destroying migratory bird habitat. [16] A 2004 draft restoration plan was developed, but no consent decree for restoration was finalized with Enbridge until 2008. In 2014, an interim report by the US Fish and Wildlife Service

demonstrated that re-vegetation goals were still unmet, and with concerns that goals would not be met even within the agreed-upon 10-year time frame.

2010 BP Deepwater Horizon Gulf oil spill:[17-21] On April 20, 2010, the mobile drilling unit Deepwater Horizon exploded, caught fire, and sank, killing 11 workers. Oil spewed for 87 days, a total of 210 million gallons. Environmental damage: Oil covered thousands of square miles, polluting beaches, bays, estuaries, and marshes from the Florida Panhandle to west of the Mississippi River Delta, with estuaries and marshes hard hit and difficult to clean, and with 340 miles of coast still not cleaned up three years after the spill. Thousands of birds, mammals, and sea turtles were plastered with oil and died. As of 2014, some 950 whales and dolphins had been found stranded, representing only a tiny percentage of the animals affected. Birds were particularly vulnerable, and many perished from ingesting oil in attempts to clean themselves, or from cold exposure. Many species remain sickened by oil exposure, and oil continues to wash up on beaches and into marshes. Oyster reproduction remains depressed, many sea turtles continue to be stranded, fish are found with damaged hearts. Dolphins continue to strand at very high rates and in one recent survey were underweight, anemic, with liver, adrenal, and lung disease, with half of dolphins found to be extremely sick. Remaining oil: Although most of the oil has been removed by cleanup operations and other natural mechanisms, **up to 35% of the hydrocarbons were trapped and transported in persistent deep-sea plumes,** which can harm the population recovery of exposed animals.
Restoration and Funding: In 2011, an Early Restoration Plan and Environmental Assessment was agreed upon between BP and trustees. Numerous funding mechanisms have been considered, but BP continues to battle in court. It is still early days in the lifetime of this spill and its aftermath, both in terms of funding and for recovery of the environment. The trustees stated, "Restoration work will take many years to complete, long-term monitoring and adaptive management of the Gulf ecosystem will likely continue for decades until the Trustees can be certain that the public has been fully compensated for its losses." It is very worrisome that, although BP did pledge monies for environmental restoration, it is now disputing some of the claims of continuing harm to animals, and it is by no means certain that BP will fund all necessary environmental restoration. In the same vein, BP is now disputing economic claims of people living along the Gulf Coast, as well as fighting court battles over assignment of blame for the disaster.

2013 Mayflower AR Exxon tar sands spill: [22-27] An ExxonMobil pipeline ruptured in Mayflower, AR, spilling approximately 210,000 gallons of Canadian tar sands into a residential neighborhood and nearby waterways. The spill ruined 22 homes and other property, sickened residents, and killed birds, turtles, and other wildlife. Arkansas requested $4 million from Exxon to pay for the state's investigation, and the state and the Department of the Interior have filed a lawsuit against Exxon. The environmental impact is likely to be compounded by an evident failure to follow best practices after the spill, with assessment, cleanup, and restoration largely left to the state, which lacks the requisite resources and expertise. Recently, a judge ruled against landowners in a class action lawsuit, indicating that right-of-way land contracts didn't require Pegasus to maintain its pipeline.

Risk versus benefits for Dane and other counties: [28-29]
Although the focus in this paper is on risk to Dane County, the concept of risk without regard to benefit is incomplete. It is worth noting that Enbridge is a Canadian company, not a US company, and has a license to export unrefined petroleum products to other countries, which it does through the Gulf Coast. Moreover a recent report indicates that Gulf Coast refineries, which receive tar sands from Keystone as well as from Enbridge, now export 66% of refined products to foreign markets. Finally, although Enbridge does pay taxes in Wisconsin, these monies go into the general fund, not specifically to counties where Line 61 runs. Thus, little benefit accrues to potentially affected WI counties, which run all the risk.

In conclusion, the potential magnitude of an Enbridge line 61 tar sands spill in our valuable and pristine environment, coupled with the especially hazardous characteristics of tar sands, as well as Enbridge's poor safety record, is of great concern. Along with numerous instances of severely delayed environmental assessment, the documented drawn-out financial agreements and belated and/or incomplete restoration efforts after spills, whether from Enbridge or other companies, significantly heighten this concern. What is most clear in the event of a tar sands spill from Enbridge Line 61, is that Wisconsin's treasured environment will be at risk. Unless the County is a named insured, taxpayers and Wisconsin property owners will be at risk of footing much of the cost and at risking our environment and possibly livelihoods if a cleanup and ecological restoration is delayed too long or done poorly.

Taken together, these considerations make a strong case that Dane and other counties along Line 61 be listed as named insured parties in the event of a spill from the Enbridge tar sands pipeline, to achieve cleanup and environmental restoration as completely and expeditiously as possible.

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