

Keystone XL: Pipeline to Nowhere

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Introduction

The United States is the largest consumer of oil in the world.¹ At nineteen million barrels per day, we require twice as much oil as any other country for our nation's day-to-day activities.² The U.S. imports about half of its oil, most of which comes from five countries: Canada (25%), Saudi Arabia (12%), Nigeria (11%), Venezuela (10%), and Mexico (9%).³ It should not come as a surprise then, that there is a constant debate in Washington about the sources of our energy. Part of the debate surrounds the construction of the highly controversial Keystone XL pipeline. TransCanada, a Canadian oil and gas company, is proposing to build a 1,700-mile crude oil pipeline from Hardisty, Alberta, to the Gulf Coast of Texas.⁴ If built, the pipeline would carry up to 830,000 barrels of tar sands oil from Fort McMurray, Alberta. The project would cost an estimated \$7 billion to build.⁵ Proponents of the pipeline assert that Canada is a friendly neighbor and can ensure a reliable supply of oil.⁶ They say the pipeline will create jobs and raise millions of dollars in tax revenue for states along the route.⁷ Opponents point to the environmental impact of Canada's tar sands, and threats to landowners and ecosystems along the

¹ U.S. CENTRAL INTELLIGENCE AGENCY, *Country Comparison: Oil – Consumption*, THE WORLD FACTBOOK, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2174rank.html> (last visited Oct. 12, 2011).

² *Id.*

³ *How Dependent Are We On Foreign Oil?*, U.S. ENERGY INFORMATION ADMINISTRATION, http://www.eia.gov/energy_in_brief/foreign_oil_dependence.cfm (last updated Jun. 24, 2011),

⁴ *Status and Timelines*, TRANSCANADA PIPELINES LIMITED, <http://www.transcanada.com/5738.html> (last updated May 25, 2011, 11:37 AM)

⁵ *Keystone XL Pipeline Project*, U.S. DEPARTMENT OF STATE, <http://www.keystonepipeline-xl.state.gov/clientsite/keystonexl.nsf?Open> (last visited Oct. 12, 2011).

⁶ *Our view: Allow Keystone oil pipeline expansion*, USA TODAY (March 17, 2011), http://www.usatoday.com/news/opinion/editorials/2011-03-18-editorial18_ST_N.htm.

⁷ *Jobs in the Pipeline*, WALL STREET JOURNAL (July 7, 2011), <http://online.wsj.com/article/SB10001424052702304760604576426050150189280.html>.

route.⁸ The construction of this controversial pipeline could have a long-lasting effect on how the nation sources and uses its energy.⁹

I. Canadian Tar Sands

Tar sands oil, or bitumen, is currently a hot topic among environmental groups and others opposed to the Keystone XL project. The tar sands are found in an area approximately the size of Florida under the Boreal Forest of Alberta, Canada.¹⁰ Extraction of tar sands oil is very energy-intensive.¹¹ The Boreal Forest must be clear cut in order to get at the oil underneath.¹² The forest is an important carbon sink, as well as a fragile ecosystem home to caribou and migratory birds.¹³ Tar sands extraction has an impact on the forest's ability to absorb carbon out of the atmosphere and its ability to sustain important species.¹⁴ Additionally, excavation requires thousands of gallons of water to separate the bitumen (heavy crude oil) from the sand.¹⁵ This mining process leaves behind toxic tailings ponds, the size of small lakes, that consist of the water used to separate the oil contaminated with the toxic chemicals that are the byproducts of the extraction process.¹⁶ Extraction of this oil is approximately three times more carbon intensive per barrel than conventional oil.¹⁷

⁸ *Keystone XL Pipeline*, NATIONAL WILDLIFE FEDERATION, <http://www.nwf.org/Global-Warming/Policy-Solutions/Drilling-and-Mining/Tar-Sands/Keystone-XL-Pipeline.aspx> (last visited October 24, 2011).

⁹ Aislinn Maestas, *Staying Hooked on a Dirty Fuel*, NATIONAL WILDLIFE FEDERATION (June 9, 2010), http://www.nwf.org/Global-Warming/Policy-Solutions/Drilling-and-Mining/~/_link.aspx?_id=1052E33A143E4894A35E6133546A888C&_z=z.

¹⁰ Susan Casey-Lefkowitz & Elizabeth Shope, *Say No to Tar Sands Pipeline: Proposed Keystone XL Project Would Deliver Dirty Fuel at a High Cost* page, NATURAL RESOURCES DEFENSE COUNCIL (March 2011), <http://www.nrdc.org/land/files/TarSandsPipeline4pgr.pdf> at 2.

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ Maestas, *supra* note 9.

¹⁵ Lefkowitz, *supra* note 10 at 2.

¹⁶ *Id.* at 3

¹⁷ *Climate Impacts*, THE PEMBINA INSTITUTE, <http://www.pembina.org/oil-sands/os101/climate> (last updated March 2011).

Mining of tar sands oil also threatens the indigenous communities that depend on the Athabasca River for their way of life. Higher incidence of cancer, high mercury levels in the food and water they rely on, and other health impacts have been reported in the communities downstream of the tar sands.¹⁸ As a result, these communities have asked the Canadian government for a moratorium on tar sands development until proper land management planning can be implemented.¹⁹

II. Keystone XL Pipeline

Keystone XL is not the first pipeline to bring tar sands oil into the U.S. There are already two operating pipelines that bring bitumen from Alberta to the Midwest.²⁰ TransCanada's Keystone I pipeline has a capacity of nearly 600,000 barrels a day, and Enbridge's Alberta Clipper has a capacity of 800,000 bpd.²¹ In 2010, the last year for which full data is available, the U.S. imported approximately 2.5 million barrels of oil a day from Canada—approximately 25% of our daily imports.²² As tar sands extraction grows, this heavy crude oil will become an increasing part of the Canadian oil export mix (and our import mix).²³ Pipelines like Keystone XL can facilitate the growth of the tar sands by providing an export market.²⁴ When we commit to importing fossil fuels, we inevitably must develop and maintain the infrastructure to support it. Once this is created, abandoning it makes little economic sense, thereby making a transition

¹⁸ Gabriel DeRita & Tom Valtin, SIERRA CLUB, *Toxic Tar Sands: Profiles from the Front Lines*, <http://www.sierraclub.org/dirtyfuels/tar-sands/faces/> (last visited Dec. 22, 2011).

¹⁹ Danielle Droitsch & Terra Simieritsch, THE PEMBINA INSTITUTE, *Canadian Aboriginal Concerns With Oil Sands* (Sept. 2010). This issue is beyond the scope of this paper, but is an important policy consideration. For more information visit the Pembina Institute at <http://www.pembina.org/oil-sands>.

²⁰ Lefkowitz, *supra* note 10 at 2.

²¹ *Id.*

²² *How Dependent Are We On Foreign Oil?*, U.S. ENERGY INFORMATION ADMINISTRATION, http://www.eia.gov/energy_in_brief/foreign_oil_dependence.cfm (last updated Jun. 24, 2011).

²³ Maestas, *supra* note 9.

²⁴ *Id.*

away from carbon-intensive fossil fuels nearly impossible.²⁵ Moreover, once the pipeline guarantees a way to transport tar sands oil to the U.S., oil companies seeking to expand tar sands extraction will have a guaranteed market in the U.S., in addition to access to ports for export abroad.²⁶ Keystone XL threatens to lock the U.S. into dependence on tar sands.²⁷

The Keystone XL pipeline will cross the Ogallala Aquifer, an important source of water for Midwest farmers.²⁸ A recent joint report by the Natural Resources Defense Council, National Wildlife Federation, Pipeline Safety Trust, and Sierra Club indicates that diluted bitumen—the raw form of tar sands—is more corrosive to pipelines than conventional crude oil.²⁹ This finding has raised concern among environmentalists about the probability of a spill from this type of pipeline and its potential effects on the fragile ecosystems it passes through.³⁰ In 2010, a pipeline operated by another Canadian oil company, Enbridge, spilled 840,000 gallons of tar sands oil into the Kalamazoo River.³¹ The spill still has not been fully cleaned up, and sections of the river remain closed.³² A spill of this magnitude could put the Ogallala aquifer at risk and affect farmers and those that rely on the aquifer for their water supply.³³

III. The Permitting Process

TransCanada applied for a Presidential permit to build the Keystone XL pipeline in September 2008. The U.S. State Department is tasked with the review and approval process for

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.* at 4.

²⁸ NATIONAL WILDLIFE FEDERATION, *supra* note 8.

²⁹ Anthony Swift, Susan Casey-Lefkowitz & Elizabeth Shope, Natural Resource Defense Council, National Wildlife Federation, Pipeline Safety Trust & Sierra Club, *Tar Sands Pipelines Safety Risks at 3*, (February 2011), available at <http://www.nrdc.org/energy/tarsandssafetyrisks.asp>.

³⁰ *Id.*

³¹ *Enbridge Oil Spill in Michigan*, NATIONAL WILDLIFE FEDERATION, <http://www.nwf.org/Global-Warming/Policy-Solutions/Drilling-and-Mining/Tar-Sands/Michigan-Oil-Spill.aspx>. (last visited Oct. 12, 2011)

³² *One Year Later: More Work Necessary to Clean Up Submerged Oil in Michigan's Kalamazoo River System*, U.S. ENVIRONMENTAL PROTECTION AGENCY, <http://epa.gov/enbridgespill/> (last updated Sept. 16, 2011).

³³ NATIONAL WILDLIFE FEDERATION, *supra* note 8.

the permit because the pipeline crosses an international border and therefore falls under the Department's jurisdiction.³⁴ The National Environmental Policy Act (NEPA) requires federal agencies to conduct an Environmental Impact Statement (EIS) for major federal projects.³⁵ This process requires an analysis of major environmental impacts of the project as well as any reasonable alternatives.³⁶ The State Department has sixty days following the release of the EIS to conduct a "national interest determination" analysis considering economic, environmental, energy security and foreign policy issues.³⁷

It is customary for an EIS to be outsourced to a private third party.³⁸ The project builder often has a say in selecting this third party.³⁹ TransCanada chose Cardno Entrix, an environmental contractor who has significant ties to the company and has worked with it on many previous projects.⁴⁰ Although NEPA allows outside contractors to conduct environmental studies, it requires that these contractors "have no financial or other interest in the outcome of the project."⁴¹ Cardno Entrix performs other services for energy companies, including oil spill response.⁴² The company has worked with TransCanada repeatedly.⁴³ The ability of a company with substantial ties to TransCanada and interest in this project to conduct a thorough and impartial EIS has been called into question.⁴⁴

³⁴ U.S. DEPARTMENT OF STATE, *supra* note 5.

³⁵ *National Environmental Policy Act*, COUNCIL ON ENVIRONMENTAL QUALITY, <http://ceq.hss.doe.gov/> (last visited Oct. 24, 2011)

³⁶ *NEPA Basic Information*, U.S. ENVIRONMENTAL PROTECTION AGENCY, <http://www.epa.gov/compliance/basics/nepa.html#requirement> (last updated Oct. 21, 2010).

³⁷ U.S. DEPARTMENT OF STATE, *supra* note 5.

³⁸ Elisabeth Rosenthal & Dan Frosch, *Pipeline Review Is Faced With Question of Conflict*, N.Y. TIMES, Oct. 7, 2011, at A11, *available at* http://www.nytimes.com/2011/10/08/science/earth/08pipeline.html?_r=1&nl=todaysheadlines&emc=tha23.

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

The EPA found fault with two versions of the draft EIS issued by Cardno Entrix.⁴⁵ While the EPA only serves as an advisory body during this process, the Agency can submit comments on its evaluation of the environmental study.⁴⁶ The EPA rated the draft EIS as inadequate⁴⁷—the lowest possible rating.⁴⁸ The State Department amended this draft to address some of the concerns raised by the EPA. However, the EPA found that this Supplemental EIS still failed to address several major issues.⁴⁹ The SEIS provided insufficient analysis of pipeline spill risks, environmental justice concerns on neighboring communities, environmental and health impacts of neighboring communities, lifecycle greenhouse gas, and other issues.⁵⁰

In August 2011, the State Department released the Final EIS (FEIS). To the dismay of many, the FEIS found that the Keystone XL project would cause “no significant impact” to the environment.⁵¹ The NRDC, along with many other environmental groups, found the FEIS severely flawed.⁵² The study did not consider an alternative route for the pipeline as repeatedly requested by Congressman, landowners, scientists and environmental groups; nor did it adequately consider the climate impacts of the project.⁵³ The EPA has not yet issued a statement on this FEIS.

⁴⁵ *State Department Releases Supplemental Environmental Analysis on Keystone XL Tar Sands Oil Pipeline*, FRIENDS OF THE EARTH (April 15, 2011), <http://www.foe.org/state-department-releases-supplemental-environmental-analysis-keystone-xl-tar-sands-oil-pipeline>.

⁴⁶ U.S. ENVIRONMENTAL PROTECTION AGENCY, *supra* note 36.

⁴⁷ See letter from Cynthia Guiles, EPA, to Jose W. Fernandez and Kerri-Ann Jones, U.S. Department of State (June 6, 2011), *available at* <http://www.bilateralist.com/wp-content/uploads/2011/06/keystone-xl-project-epa-comment-letter-20110125.pdf>.

⁴⁸ *Environmental Impact Statement (EIS) Rating System Criteria*, ENVIRONMENTAL PROTECTION AGENCY, <http://www.epa.gov/oecaerth/nepa/comments/ratings.html#adequacy> (last visited October 29, 2011).

⁴⁹ FRIENDS OF THE EARTH, *supra* note 45.

⁵⁰ *EPA Calls State Dept Tar Sands Review Insufficient*, SIERRA CLUB, <http://sierraclub.typepad.com/compass/2011/06/epa-calls-state-dept-tar-sands-review-insufficient.html> (June 7, 2011).

⁵¹ U.S. STATE DEPARTMENTS, *supra* note 5.

⁵² Susan Casey-Lefkowitz, *Keystone XL tar sands pipeline environmental review makes light of the very real concerns about damage to climate, health, and water*, NATIONAL RESOURCES DEFENSE COUNCIL – UWITCHBOARD (Sept. 7, 2011), http://switchboard.nrdc.org/blogs/sclefkowitz/keystone_xl_tar_sands_pipeline_1.html.

⁵³ *Id.*

Moreover, documents obtained through a Freedom of Information Act request by the Friends of the Earth reveal a possible conflict of interest between TransCanada's lead lobbyist and the State Department.⁵⁴ Email correspondence between the State Department and TransCanada staff show a possible bias towards approval, calling into question the supposed impartial analysis of the project that the State Department is supposed to provide.⁵⁵

IV. Eminent Domain

Keystone XL will cross six U.S. states between Hardisty, Alberta and the Gulf Coast ports – Montana, South Dakota, Nebraska, Kansas, Oklahoma and Texas.⁵⁶ The Kansas section has already been built, and TransCanada has also begun the process of negotiating leases with landowners whose property the pipeline will cross.⁵⁷ While some owners readily agreed to lease their land, those who don't have already been threatened with eminent domain. States have generally granted corporations building pipelines, roads, and other infrastructure and utility projects the right to seize private property through the power of eminent domain.⁵⁸ Because pipeline projects often have only one feasible route, and alternatives may prove to be expensive, corporations may need to enact the power of eminent domain for owners along the route who will not negotiate for the lease or sale of land.⁵⁹ Each state has its own laws on eminent domain and can confer this power to companies building certain projects.⁶⁰ The Texas Gulf Coast is the final destination of Keystone XL, and the pipeline will cut across the state's eastern half. Texas

⁵⁴ Elisabeth Rosenthal, *TransCanada Pipeline Foes See U.S. Bias in E-Mails*, N.Y. TIMES, Oct. 4, 2011, at A1, available at <http://www.nytimes.com/2011/10/04/science/earth/04pipeline.html>.

⁵⁵ *Id.*

⁵⁶ *Keystone XL Project Information*, TRANSCANADA CORPORATION, http://www.transcanada.com/project_information.html (last updated May 31, 2011).

⁵⁷ Leslie Kaufman & Dan Frosch, *Eminent Domain Fight Has a Canadian Twist*, N.Y. TIMES, Oct. 18, 2011, at A13, available at <http://www.nytimes.com/2011/10/18/us/transcanada-in-eminent-domain-fight-over-pipeline.html?pagewanted=all>.

⁵⁸ Amnon Lehavi & Amir N. Licht, *Eminent Domain, Inc.*, 107 COLUM. L. REV. 1704, 1710 (2007).

⁵⁹ *Id.* at 1710.

⁶⁰ Kaufman & Frosch, *supra* note 57.

law provides that “[i]n the exercise of the power of eminent domain . . . a common carrier may enter on and condemn the land, rights-of-way, easements, and property of any person or corporation necessary for the construction, maintenance, or operation of the common carrier pipeline”.⁶¹ The oil and gas industry is an important part of the Texan economy,⁶² as well as the other states that the pipeline crosses. States stand to earn substantial revenue from property taxes companies must pay on the land the pipeline crosses.⁶³ Therefore, there is often little recourse for a landowner who does not want to lease his land.⁶⁴ A landowner can challenge the designation of the company as a common carrier, gas utility, or gas corporation, but courts are not likely to overturn this designation.⁶⁵ Moreover, if a legislature has designated a corporation as a common carrier, the courts do not have authority to alter that determination.⁶⁶ Although regulations vary, most states allow corporations building gas or oil pipelines to condemn land.⁶⁷ Problems for landowners stem from the broad statutes granting almost any oil and gas company this power.⁶⁸

V. Section 526 of the Energy Independence and Security Act

In 2007, President George Bush signed into law the Energy Independence and Security Act.⁶⁹ Section 526 of the Act prohibits the Department of Defense and other federal agencies from procuring fuels with a lifecycle greenhouse gas impact that is higher than that of

⁶¹ Amanda Buffington Niles, *Eminent Domain and Pipelines in Texas: It's as Easy as 1, 2, 3 – Common Carriers, Gas Utilities, and Gas Corporations*, 16 TEX. WESLEYAN L. REV. 271, 281 (2010) (quoting V.T.C.A., Natural Resources Code § 111.019).

⁶² *Id.*

⁶³ *Keystone Pipeline Project: Economic Benefits*, TRANSCANADA (May 31, 2011), http://www.transcanada.com/economic_benefits.html.

⁶⁴ Kaufman & Frosch, *supra* note 57.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Energy Independence and Security Act*, U.S. DEPT. OF ENERGY, (Sept. 24, 2010), <http://www1.eere.energy.gov/femp/regulations/eisa.html>.

conventional fuels.⁷⁰ This provision currently proscribes the U.S. Government from purchasing tar sands oil.

The U.S. Government is the single largest consumer of energy in the country.⁷¹ The Department of Defense (DOD) accounts for 93% of that energy use.⁷² The types of sources from which it procures energy have an impact on how funding for research and infrastructure is spent.⁷³ There have been recent attempts in Congress to repeal Section 526.⁷⁴ Doing so could not only open the door for the rapid expansion of Canada's tar sands, but would also stifle important energy initiatives that this provision has enabled.⁷⁵ Section 526 has facilitated the DOD's major investments into renewable energy innovation.⁷⁶ The Navy and Air Force have both pledged that 50% of their fuels will come from non-petroleum based sources by 2016 and have launched major investments in advanced biofuels.⁷⁷ Additionally, this provision sends a signal to the private sector of where the federal government is headed: investment into renewable energy, instead of expansion of fossil fuel use.⁷⁸ This signaling provides security and incentive for private investment.⁷⁹ Keystone XL could compromise the security of investment in renewable energy technologies.⁸⁰ The DOD itself recently made statements advocating Section 526.⁸¹ The DOD stated that repealing Section 526 would strengthen our dependence on fossil fuels, and this

⁷⁰ *Protect Section 526 for America's National and Energy Security*, PEW ENVIRONMENTAL GROUP, (Jul. 13, 2011), <http://www.pewenvironment.org/news-room/fact-sheets/protect-section-526-for-americas-national-and-energy-security-85899361870>.

⁷¹ John Broder, *U.S. Government Plans to Reduce Its Energy Use*, N.Y. TIMES, Jan. 30, 2010, at A16, available at <http://www.nytimes.com/2010/01/30/science/earth/30efficient.html>.

⁷² PEW ENVIRONMENTAL GROUP, *supra* note 70.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ Liz Barratt-Brown, *DOD backs a federal ban on procurement of dirty fuels as Congress debates repeal*, NATIONAL RESOURCES DEFENSE COUNCIL – UNSWITCHBOARD (Jul. 12, 2011), http://switchboard.nrdc.org/blogs/lizbb/dod_backs_a_federal_bar_on_pro.html.

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

dependence “degrades our national security, negatively impacts our economy, and harms our planet.”⁸²

The U.S. is quickly lagging behind countries like China and India in energy innovation.⁸³ Section 526 is an important provision that allows the government to move forward in renewable energy innovation. Repeal of this provision would have a major impact on how the U.S. procures its energy. If Keystone XL is approved, Congress could be pressured to repeal this provision. Doing so would have a significant impact on our energy and emissions.⁸⁴ Keystone XL could lock the U.S. into dependence on tar sands oil.⁸⁵

Conclusion

The Keystone XL pipeline has become a major topic of controversy because of its far-reaching impact. Proponents of the pipeline refer to Canada as a friendly neighbor, claim that imports of Canada’s tar sands are a welcome alternative to imports of Middle Eastern oil, and assert that the project will create jobs.⁸⁶ Opponents to the project point to adverse environmental impacts and to health and equity impacts to neighboring communities. If the State Department approves the project, it will send a signal to oil companies that the U.S. is open to tar sands development. This decision would impact the energy future of the country by calling into question our commitments to renewable energy innovation and our emissions reductions goals.

⁸² *Id.*

⁸³ *Who’s Winning the Clean Energy Race?*, PEW CHARITABLE TRUSTS (March 24, 2010), http://www.pewtrusts.org/our_work_report_detail.aspx?id=57969.

⁸⁴ Maestas, *supra* note 9.

⁸⁵ *Id.*

⁸⁶ TRANSCANADA CORPORATION, *supra* note 56.