

April 22, 2013

The Honorable F. John Kerry  
Secretary of State  
U.S. Department of State  
Washington, DC

SUBJECT: Public Comment on Draft EIS for the Proposed Keystone XL Pipeline Project

These are the formal comments of Larry E. Fink, Owner and Principal, Waterwise Consulting, LLC, on the Draft Supplementary Environmental Impact Statement (hereinafter the Draft EIS) now on public notice for the proposed Keystone XL Pipeline Project (hereinafter, the Proposed Project or Preferred Action) for conveying Canadian tar sand emulsion under pressure from the Alberta, Canada, tar sand region across the border between our two countries, into the United States of America, and over, adjacent to, or through various socially, economically, and/or environmentally sensitive areas prior to being joined with an existing pipeline segment in the USA. <http://www.state.gov/r/pa/prs/ps/2011/08/171084.htm> The Draft EIS is available at <http://keystonepipeline-xl.state.gov/draftseis/index.htm>. In support of the serious concerns about the serious deficiencies in the Draft EIS and the serious dangers posed by the Proposed Project/Preferred Alternative to the public health, safety, and welfare and the environment that I set forth below, please also incorporate all documents identified in the Reference section of my comments and by reference all comments received from all permit-issuing, consulting, and non-consulting Federal agencies regarding the Draft EIS for the Proposed Project.

The Proposed Project/Preferred Action is so contrary to the paramount public interest in the public health, safety, and welfare of all peoples in the U.S. and Canada that to conclude otherwise and issue the required permits for it based on that conclusion is to set in motion a process leading to mass displacement, debilitation, and death of human populations as the inevitable consequence of global warming, a heinous crime against humanity that is precluded by the Geneva Conventions on Genocide and Human Rights to which the United States of America and Canada are both signatories.

In recognition of these serious concerns and inherent dangers, I recommend that the Record of Decision based on the Final EIS find in favor of the no action alternative or an alternative action involving the construction of alternative energy facilities on an area equivalent to the physical footprint of the proposed pipeline corridor that are capable of delivering annually the electric power equivalent to the energy contained in the refined tar sand oil flowing through the pipeline annually at the same or less cost with a smaller environmental footprint. My detailed comments on the Draft EIS on public notice by the U.S. Department of State follow the Executive Summary set forth below.

Honorable Mr. Kerry  
April 22, 2013  
Page 2

### Executive Summary

There were neither sufficient local public hearings nor an adequate time for public comment to be gathered by such hearings based on the significance of the project and its environmental impacts as captured in the revised Draft EIS.

The known benefits of the Proposed Project/Preferred Action are far outweighed by the known and reasonably inferred social, economic, and environmental detriments associated with the each phase and element under routine and various failure modes. The adverse environmental impacts given short shrift by the EIS include those associated with refinery expansion and the increased use of our highways, railways, and ports and oceans for the transport of refined oil by overland and oversea oil tankers under routine conditions. The failure modes associated with routine project operation include the losses of toxic gases, liquids, and solids from routine leaks and spills and those associated with accidents caused by the acts of God, including more extreme weather events than those considered in the Draft EIS caused by global warming, or acts of man, including sabotage by domestic or foreign terrorists. There are also environmental impacts and costs associated with the remediation of leaks and spills of tar sand emulsion and refined oil in every environmental medium at every scale.

The Draft EIS also fails to demonstrate the reasonable assurances that there will be no significant adverse environmental impacts associated with each phase and element of the Proposed Project/Preferred Action that are needed for the issuance of the required permits for each phase and element of the Proposed Project or the remediation of the inevitable leaks and spills associated with routine operation and various failure modes. The Draft EIS does not adequately address the adverse impacts of various failure modes for the release of tar sand oil emulsion along the pipeline corridor, at the refinery, or for the transport of refined oil by road, rail, or ship.

The Draft EIS is so seriously scientifically and administratively deficient in scope and detail in addressing these known and inferred adverse environmental impacts that it must be withdrawn, revised to correct these serious deficiencies, and re-public noticed with adequate national and local public hearings and time for public comment.

The Proposed Project/Preferred Action is also contrary to applicable international treaties, including those with First Peoples, national environmental laws, regulations, and standards, Executive Orders regarding environmental justice, and county and municipal ordinances and codes protecting the public health. The U.S. Environmental Protection Agency (EPA) has issued an endangerment finding for the emissions of greenhouse gases, including carbon dioxide, under the Clean Air Act. The burning of refined tar sand oil from this project must necessarily be accompanied by the emissions of carbon dioxide that has been found by EPA to endanger the public health, safety, and welfare, both here and abroad. The USA cannot, though its action,

Honorable Mr. Kerry  
April 22, 2013  
Page 3

cause or contribute to a chain of events leading to human displacement, debilitation, or death on a scale so massive as to be considered a crime against humanity equivalent to genocide. The State Department cannot sanction a project that is contrary to the applicable Geneva or Human Rights Conventions.

When the Draft EIS is revised to correct the serious errors of omission and commission, including the systematic under-representation of the risks associated with various Proposed Project failure modes, the Record of Decision based on the revised Final EIS must find that the permit-issuing and consulting agencies do not have the required reasonable assurances for approving the applications for the permits required for the Proposed Project/Preferred Action, and there is no way to modify the project to provide those required reasonable assurances. This is because its greatest detriment is inherent to the combustion of refined tar sand oil, and the carbon emissions credits or offsets needed to balance nature's books in this regard would bankrupt the Proposed Project. In addition, for purposes of permitting the Proposed Project, TransCanada Corporation does not have sufficient insurance and reinsurance by independent licensed insurance providers adequate to cover the damages and costs associated with worst-case failure modes for various phases and elements of the Proposed Project, and if that insurance coverage is required, the annual costs to operate the pipeline will exceed the value of the refined tar sand oil pumped through it.

The Proposed Project/Preferred Action is so contrary to the paramount public interest in the public health, safety, and welfare that it does not meet the requirements for the government exercise of its eminent domain authority to acquire the private property needed for this project along the proposed pipeline right-of-way in the general public interest.

Based on what has been summarized above and set forth in detail below, none of the required permits can be lawfully issued for this Proposed Project/Preferred Action, even if the deficiencies in Draft EIS are corrected, because the environmental problems are inherent to the Proposed Project, not to the Draft EIS purporting to capture them as required by the National Environmental Policy Act.

#### Detailed Comments on the Draft EIS for the Proposed Keystone XL Pipeline Project

The known and reasonably anticipated adverse environmental impacts of the proposed project are contrary to and will necessarily result in one or both signatory nation's violating one or more provisions of the following international treaties, conventions, agreements, and obligations or regional inter-state compacts: Boundary Waters Treaty, Great Lakes Water Quality Agreement, Great Lakes Governors Agreement, Kyoto Protocol, Montreal Protocol, Stockholm Convention, North America Free Trade Agreement, and International Free Trade Agreement, the Geneva Conventions, and every Treaty with every First, Indigenous, or Native People or Indian Tribe and, therefore, no permits can issue for this project in either Canada or the United States. It is

Honorable Mr. Kerry  
April 22, 2013  
Page 4

also contrary to Presidential Executive Orders regarding environmental justice and the plans and programs for ensuring environmental justice in all decision-making by all Federal agencies, including the Department of State.

While it is acknowledged that the crossing of international boundaries is involved for the Proposed Project/Preferred Action, for purposes of preparing a Draft Environmental Impact Statement for the Preferred Action, the proper lead agency in the U.S. Government is the Department of Transportation, not the Department of State, any more than State is the lead agency when a new road is built between the U.S. and Canada or extended on either side of the border.

Even if the Department of State is the appropriate lead agency for the Proposed Project, it, and not TransCanada Corporation, should have prepared the draft EIS for public comment. That this occurred suggests that the State Department is unfamiliar with National Environmental Policy Act, its implementing regulations and guidelines, and its protocols and conventions. This is a fatal flaw for which there is no legal remedy other than to withdraw the Draft EIS and have it prepared as well as reviewed by an independent contractor.

The notice of the public comment period was neither timely nor adequate. Neither were there sufficient local public hearings nor an adequate time for public comment based on the significance of the project and its environmental impacts.

The Draft EIS does not include all relevant and significant reversible, irreversible but mitigatable, and irreversible and unmitigatable adverse environmental impacts associated with the proposed project right-of-way and collateral damage to the public health, safety, and welfare, registered paleontological, archaeological, and historical sites, human commercial and recreational uses, natural services, and endangered species and their critical habitats during pre-project surveying, testing, and layout, construction, operation, maintenance, repair, monitoring, closure, and decommissioning under normal and various failure modes, including air, wastewater, and solid and hazardous wastes generated as a result of leaks and spills and soil, groundwater, and surface water remediation activities.

The failure mode scenarios considered in the Draft EIS for each phase and unit of the Proposed Project omit sabotage by disgruntled employees or terrorists of domestic or foreign origin. For purposes of this failure mode risk analysis, the worst-case frequencies and content loss rates encountered in Iraq should be used. If the cost of guarding the pipeline from such sabotage are included, the profit margin decreases substantially.

The oil pipeline industry in general has systematically suppressed relevant data on the actual failure rates of various oil transport pipelines under various operating parameters as a function of age and systematically underreported actual leaks and spills. This has propagated into the

Honorable Mr. Kerry  
April 22, 2013  
Page 5

underestimate of the inferred probabilities of various pipeline failure modes and the associated magnitudes, durations, and frequencies of the adverse social, economic, and environmental consequences, with the intent to undermine sound science and sound decision-making based on sound science. As a result, the Draft EIS based on these inaccurate estimates is deficient, TransCanada Corporation's permit applications are also suspect, as are the claims that the permit-issuing and consulting agencies have the required reasonable assurances that there will be no significant adverse environmental impacts associated with the Proposed Project supported by the deficient draft EIS for the project.

The contractors involved in the design, operation, maintenance, repair, closure, and decommissioning of the proposed Keystone XL Pipeline Project are not adequately bonded and insured and reinsured by reputable insurance companies for the damages and clean-up costs of the collateral damage associated with the gas, liquid, emulsion, sludge, and solid releases from various failure modes, including multi-million gallon spills of tar sand emulsion like those that occurred into the Kalamazoo River, Michigan, three years ago and in Arkansas even as I write. Once the tar sand oil emulsion is broken and the oil is processed at the refinery, the refined oil is intended for transport overseas. This increases the risks of leaks and spills from the increased volume of oil being exported in this manner. There is also a likelihood that unrefined emulsion in excess of refining capacity will be transported overseas using the same oil tankers that are used for refined oil. The risks to estuarine and marine life associated with the loading, transport, and unloading of oil handled in this way are greater for the tar sand emulsion than for the refined oil. In support of this concern, consider the decision of Florida Power and Light to abandon the use of Orimulsion in its oil-burning power-generating facilities from Argentina, because the ecotoxicological risks to marine and estuarine life associated with a spill and the greater challenges associated with emulsified tar sand or shale oil spill cleanup during on-loading, transport, or off-loading that outweighed the benefits of the cheaper oil to FPL (Ed Zillioux, FPL, personal communication). These risks are captured in the Phase I and II Reports to Congress on the Environmental Impacts of the Use of Orimulsion prepared by the U.S. Environmental Protection Agency in 2001.

[http://nepis.epa.gov/Exe/ZyNET.exe/2000E78T.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2000+Thru+2005&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C00thru05%5CTxt%5C00000004%5C2000E78T.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL\)](http://nepis.epa.gov/Exe/ZyNET.exe/2000E78T.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2000+Thru+2005&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C00thru05%5CTxt%5C00000004%5C2000E78T.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL))

The acquisition of private property along the proposed pipeline corridor via eminent domain by the Federal Government for a private entity, TransCanada Corporation, exceeds the authorities

granted to it by the Constitution of the United States of America and applicable laws, regulations, standards of practice, and common conventions. Even if the exercise of eminent domain for the Proposed Project is eventually determined to be Constitutional and lawful, it must still be demonstrably in the paramount public interest. This test has not been met, because the risks to the public health, safety, and welfare and the social, economic, and environment detriments associated with the Proposed Project outweigh the benefits for every phase, element, medium, and jurisdiction. This is separate from the consequences of ocean acidification, sea level rise, and climate instability associated with the tens of millions of pounds per year of carbon dioxide emitted by internal combustion engines burning various distillate cuts after the Canadian tar sand emulsion is broken and refined. When they are added to the consideration, the Proposed Project/Preferred Action move from understandably unwise to the demonstrably dangerous.

The project is only cost-effective if the risks associated with the project are not socialized and implicitly subsidized by the Canadian, American, and First peoples. When these externalities are internalized and the subsidies withdrawn, the profits accrued for the lifetime of the project are less than the costs of design, lay-out, pre-construction testing, construction, operation, maintenance, repair, closure, monitoring, record-making and record-keeping, reporting, closure, and decommissioning and the annual cost of insurance and reinsurance for the damages and cleanup costs associated with the worst-case scenarios of various failure modes for the Proposed Project. The Canadian, American, and First Peoples have no obligation to continue to implicitly subsidize fossil fuels in this way in general or the Canadian tar sand oil for the Proposed Project in particular, because it is no longer in their paramount public interest to do so. To the contrary, it is now in the paramount public interest to switch to alternative sources of energy as quickly as possible to stave off the adverse environmental effects of carbon dioxide emissions above natural background rates for sea level rise, ocean acidification, global warming, biological organism stress as a consequence of the preceding, and ultimately climate instability and the end of civilization as we know it. The electric power generated by alternative solar, wind, geothermal, and hydrological energy projects that occupy the same right-of-way footprint of the pipeline corridor can be designed, constructed, operated, maintained, repaired, closed, and decommissioned at the same or less cost per Joule equivalent of the refined tar sand oil with a much smaller environmental footprint throughout the life cycle of each alternative energy project.

The proposed Keystone XL Pipeline Project is so contrary to the paramount public interest in the public health, safety, and welfare of all peoples in the U.S. and Canada that to conclude otherwise and issue the required permits for the Proposed Project based on that conclusion is to set in motion a process leading to mass displacement, debilitation, and death of large human populations, a heinous crime against humanity that is precluded by the Geneva Conventions on Genocide and Human Rights to which the United States of America and Canada are both signatories.

Honorable Mr. Kerry  
April 22, 2013  
Page 7

When the Draft EIS is revised to correct the serious errors of omission and commission, including the systematic under-representation of the risks associated with various Proposed Project failure modes, the Record of Decision based on the revised Final EIS must find that the permit-issuing and consulting agencies do not have the required reasonable assurances for approving the applications for the permits required for the Proposed Project/Preferred Action, and there is no way to modify the project to provide those required reasonable assurances. This is because its greatest detriment is inherent to the combustion of refined tar sand oil, and the carbon emissions credits or offsets needed to balance nature's books in this regard would bankrupt the Proposed Project. In addition, for purposes of permitting the Proposed Project, TransCanada Corporation does not have sufficient insurance and reinsurance by independent licensed insurance providers adequate to cover the damages and costs associated with worst-case failure modes for various phases and elements of the Proposed Project, and if that insurance coverage is required, the annual costs to operate the pipeline will exceed the value of the refined tar sand oil pumped through it.

Even if the deficiencies in Draft EIS are eventually corrected, the Proposed Project/Preferred Action still cannot be approved, because the social, economic, and environmental detriments that outweigh the benefits are inherent to the Proposed Project/Preferred Action, not to the Draft EIS purporting to capture them as required by the National Environmental Policy Act.

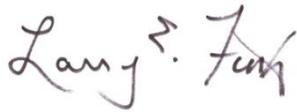
The Proposed Project/Preferred Action is so contrary to the paramount public interest in the public health, safety, and welfare of all peoples in the U.S. and Canada that to conclude otherwise and issue the required permits for it based on that conclusion is to set in motion a process leading to mass displacement, debilitation, and death of human populations as the inevitable consequence of global warming, a heinous crime against humanity that is precluded by the Geneva Conventions on Genocide and Human Rights to which the United States of America and Canada are both signatories.

In recognition of these serious concerns and inherent dangers, I recommend that the Record of Decision based on the Final EIS find in favor of the no action alternative or an alternative action involving the construction of alternative energy facilities on an area equivalent to the physical footprint of the proposed pipeline corridor that are capable of delivering annually the electric power equivalent to the energy contained in the refined tar sand oil flowing through the pipeline annually at the same or less cost with a smaller environmental footprint.

Thank you for this opportunity to comment on the draft EIS for the Proposed Project/Preferred Action.

Honorable Mr. Kerry  
April 22, 2013  
Page 8

Sincerely,

A handwritten signature in black ink that reads "Larry E. Fink". The signature is written in a cursive style with a small arrow pointing to the right above the letter 'y'.

Larry E. Fink, M.S.  
Owner and Principal  
Waterwise Consulting, LLC  
1601 S. Ocean Drive  
Suite 106  
Hollywood, FL  
33019-2405

(954) 923-7374 (O)  
(954) 226-9663 (C)

#### References

Boundary Waters Treaty: [http://en.wikipedia.org/wiki/Boundary\\_Waters\\_Treaty\\_of\\_1909](http://en.wikipedia.org/wiki/Boundary_Waters_Treaty_of_1909)

EPA's Draft Climate Change Adaptation Plan: <http://us-mg6.mail.yahoo.com/neo/launch?.rand=4u0kt56dk6ttm#mail>

EPA Clean Air Act Endangerment Finding of Imminent Threat to Human Health Posed By Emissions of Greenhouse Gases:  
<http://www.epa.gov/climatechange/endangerment/>

Supreme Court Ruling That EPA has the Authority to Regulate Greenhouse Gas Emission under the Clean Air Act:  
[http://scholar.google.com/scholar\\_case?case=16923241216495494762&hl=en&as\\_sdt=2&as\\_vis=1&oi=scholar;](http://scholar.google.com/scholar_case?case=16923241216495494762&hl=en&as_sdt=2&as_vis=1&oi=scholar;)

Environmental Justice Executive Order 12898: <http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>

Geneva Convention Against Genocide: [http://en.wikipedia.org/wiki/Geneva\\_Conventions](http://en.wikipedia.org/wiki/Geneva_Conventions)

Great Lakes Toxic Substances Control Agreement: <http://www.cglg.org/pub/toxics/index.html>

Great Lakes Water Quality Agreement: <http://www.epa.gov/glnpo/glwqa/>

Honorable Mr. Kerry  
April 22, 2013  
Page 9

References (continued)

Kyoto Protocol: [http://en.wikipedia.org/wiki/Kyoto\\_Protocol](http://en.wikipedia.org/wiki/Kyoto_Protocol)

Reports of the United Nations Intergovernmental Panel on Climate Change: <http://ipcc.ch/>  
National Academy of Science. Improving the Safety of Marine Pipelines:  
[http://www.nap.edu/openbook.php?record\\_id=2347&page=116](http://www.nap.edu/openbook.php?record_id=2347&page=116)

Montreal Protocol: <http://www.epa.gov/ozone/intpol/>

North American Free Trade Agreement (NAFTA): <http://www.ustr.gov/trade-agreements/free-trade-agreements/north-american-free-trade-agreement-nafta>

Stockholm Convention: [http://en.wikipedia.org/wiki/Stockholm\\_Convention](http://en.wikipedia.org/wiki/Stockholm_Convention)

United Nations Agreement on Human Rights: <http://www.hrweb.org/legal/undocs.html>