



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

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ASSISTANT ADMINISTRATOR  
FOR ENFORCEMENT AND  
COMPLIANCE ASSURANCE

Mr. Amos Hochstein  
Special Envoy and Coordinator for International Energy Affairs  
Bureau of Energy Resources  
U.S. Department of State  
Washington, DC 20520

Ms. Judith G. Garber  
Acting Assistant Secretary  
Oceans and International Environmental and Scientific Affairs  
U.S. Department of State  
Washington, DC 20520

Dear Mr. Hochstein and Ms. Garber:

In accordance with our authorities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA has reviewed the Department of State's (Department) Final Supplemental Environmental Impact Statement (SEIS) for a Presidential Permit application by TransCanada Keystone Pipeline, LP (Keystone) to construct and operate the Keystone XL Project (Project). We are providing these comments now, rather than when the Final SEIS was published, because of the possibility that a decision of the Nebraska courts would have led to changes to the Final SEIS.

EPA recognizes that the Department has made a considerable effort to evaluate the potential environmental impacts associated with the proposed Project and reasonable alternatives, and to consider measures to mitigate potential harmful effects. The Final SEIS is comprehensive and provides responses to our April 2013 comments on the Draft SEIS. We would like to especially point out the usefulness of the new compilation of all of the proposed mitigation measures (Appendix Z).

The Department has also strengthened the analysis of oil spill prevention preparedness, response and mitigation and has committed to requiring numerous mitigation measures regarding leak prevention and detection, as well as spill cleanup measures. While risks of oil spills and adverse impacts remain, and spills of diluted bitumen can have different impacts than spills of conventional oil, the Department has included provisions to reduce those risks, including working with the state of Nebraska to develop an alternative route that avoids much of the Sand Hills region, and incorporating mitigation measures recommended by both the Pipeline Safety and Hazardous Materials Administration and the independent engineering analysis. We note as particularly important the commitment by Keystone to be responsible for clean-up and

restoration of groundwater as well as surface water in the event of a release or discharge of crude oil. These efforts will decrease the risk of spills and leaks, and provide for necessary remediation should spills occur. Nonetheless, the Final SEIS acknowledged that the proposed pipeline does present a risk of spills, which remains a concern for citizens and businesses relying on groundwater resources crossed by the route.

The analysis of climate change issues has also improved from the Draft SEIS. The Final SEIS makes clear that oil sands crude has significantly higher lifecycle greenhouse gas emissions than other crudes. The Final SEIS states that lifecycle greenhouse gas emissions from development and use of oil sands crude is about 17% greater than emissions from average crude oil refined in the United States on a wells-to-wheels basis.<sup>1</sup>

The Final SEIS also finds that the incremental greenhouse gas emissions from the extraction, transport, refining and use of the 830,000 barrels per day of oils sands crude that could be transported by the proposed Project at full capacity would result in an additional 1.3 to 27.4 million metric tons of carbon dioxide equivalents (MMTCO<sub>2</sub>-e) per year compared to the reference crudes.<sup>2</sup> To put that in perspective, 27.4 MMTCO<sub>2</sub>-e per year is equivalent to the annual greenhouse gas emissions from 5.7 million passenger vehicles or 7.8 coal fired power plants.<sup>3</sup> Over the 50-year lifetime of the pipeline, this could translate into releasing as much as 1.37 billion more tons of greenhouse gases into the atmosphere.<sup>4</sup>

Until ongoing efforts to reduce greenhouse gas emissions associated with the production of oil sands are more successful and widespread, the Final SEIS makes clear that, compared to reference crudes, development of oil sands crude represents a significant increase in greenhouse gas emissions.

The Final SEIS also provided a more robust market analysis, and examined how market dynamics may influence the levels of greenhouse gas emissions associated with the proposed Project. Based on that market analysis, the Final SEIS concluded, in January of 2014, that if the Project were not approved, oil sands crude would be likely to reach the market some other way, most likely by rail. The Final SEIS acknowledged that the alternative of shipment by rail is more expensive than shipment by pipeline, and would therefore increase the costs of getting oil sands crude to market.<sup>5</sup> However, the Final SEIS concluded that given global oil prices projected at that time this difference in shipment costs would not affect development of oil sands, which would remain profitable even with the higher transportation costs of shipment by rail. Therefore, the Final SEIS concluded that although development of oil sands would lead to significant additional releases of greenhouse gasses, a decision not to grant the requested permit would likely not change that outcome, i.e., those significant greenhouse gas emissions would likely happen regardless of the decision on the proposed Project. This conclusion was based in large part on projections of the global price of oil.

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<sup>1</sup> Final SEIS Executive Summary, p. ES-15.

<sup>2</sup> Final SEIS Executive Summary, p. ES-15.

<sup>3</sup> Final SEIS p. 4.14-46.

<sup>4</sup> Final SEIS p. 4.14-41.

<sup>5</sup> Final SEIS p. 1.4-90.

Given the recent variability in oil prices, it is important to revisit these conclusions. While the overall effect of the Project on oil sands production will be driven by long-term movements in the price of oil and not short term volatility, recent large declines in oil prices (oil was trading at below \$50 per barrel last week) highlight the variability of oil prices. The Final SEIS concluded that at sustained oil prices of \$65 to \$75 per barrel, the higher transportation costs of shipment by rail “could have a substantial impact on oil sands production levels – possibly in excess of the capacity of the proposed project.”<sup>6</sup> In other words, the Final SEIS found that at sustained oil prices within this range, construction of the pipeline is projected to change the economics of oil sands development and result in increased oil sands production, and the accompanying greenhouse gas emissions, over what would otherwise occur. Given recent large declines in oil prices and the uncertainty of oil price projections, the additional low price scenario included in the Final SEIS should be given additional weight during decision making, due to the potential implications of lower oil prices on project impacts, especially greenhouse gas emissions.

Finally, we note that the Final SEIS includes additional information on how the Department screened pipeline route alternatives, and determined what routes to analyze in detail in the SEIS. Through this process, the Department determined that the Keystone Corridor alternatives, which would parallel the entire existing Keystone pipeline route in the United States, are not reasonable alternatives for the purposes of NEPA. The additional information provided in the Final SEIS is useful, but we note that eliminating alternatives from a detailed analysis based on an abbreviated estimate of environmental impacts is not the preferred approach under NEPA’s requirement to take a “hard look” at alternatives, which would provide a more detailed and comprehensive discussion of the issues associated with these route alternatives.

Please feel free to contact me or have your staff contact Susan Bromm, Director, Office of Federal Activities, at (202) 564-5400 if you have any questions or would like to discuss our comments.

Sincerely,



Cynthia Giles

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<sup>6</sup> Final SEIS Executive Summary, p. ES-12.