



## **Comments to the Department of State Regarding the Need for a Supplemental Environmental Impact Statement for the TransCanada Keystone XL Pipeline**

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Via electronic and U.S. mail to:

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Natural Resources Defense Council and the Sierra Club

December 16, 2010

Via electronic and U.S. mail

**Re: Comments to the Department of State Regarding the Need for a Supplemental Environmental Impact Statement for the TransCanada Keystone XL Pipeline**

Dear Mr. Hormats, Mr.Koh, and Ms. Jones;

On behalf of the Natural Resources Defense Council and the Sierra Club we submit the following comments regarding the need for a Supplemental Environmental Impact Statement (SEIS) for the proposed TransCanada Keystone XL Pipeline Project (hereinafter “Keystone XL,” the “Pipeline” or the “Project”). In the comments below, we outline significant new information and changed circumstances associated with the Project as well as substantial changes in the project, all of which occurred after the public comment period on the Draft Environmental Impact Statement (DEIS) closed in July 2010. We also identify substantial defects in the DEIS that should be corrected in an SEIS, which would further the purposes of the National Environmental Policy Act (NEPA).

Since publication of the DEIS, the scope of the project has changed considerably. TransCanada was granted common carrier status in Montana, which led to the addition of the Bakken Marketlink Interconnection that will require huge amounts of additional infrastructure and allow domestic oil producers to upload their product to market. TransCanada also withdrew its Pipeline and Hazardous Materials Safety Administration (PHMSA) special permit application that would have allowed Keystone XL to operate at a higher-than-normal operating pressure. Without a special permit, the capacity of the pipeline will change drastically. These changes in the project must be analyzed in an SEIS.

In addition, significant new information and circumstances have recently arisen that require analysis in an SEIS. A series of disasters over the summer, including a tar sands crude oil pipeline spill of over one million gallons of diluted bitumen (DilBit) into the Kalamazoo River in Michigan has exposed the challenges of transporting highly corrosive, acidic and potentially unstable DilBit through pipelines. Safety concerns have been confirmed and heightened by that and other recent pipeline spills, and an ongoing investigation by PHMSA regarding TransCanada’s potential use of defective steel in the Keystone I pipeline.

New circumstances and information have also arisen regarding impacts to protected and vulnerable species. For example, the DEIS’s cumulative analysis of impacts to species such as the Brown Pelican are outdated in light of the Deepwater Horizon oil spill disaster, which has adversely affected many species and rendered them more susceptible to impacts from this project. In addition, TransCanada recently announced that the Project is likely to adversely

affect the American burying beetle, a species listed as endangered under the Endangered Species Act (ESA). An SEIS is necessary to evaluate the Project's impacts on these species and consider alternatives which would mitigate impacts on these and other sensitive species.

We also identify a number of insufficiencies in the DEIS for which an SEIS should be issued to further the purposes of NEPA, including the failure to address DOE's concerns regarding the needs analysis for the Project; the failure to adequately analyze the Project's greenhouse gas impacts; the failure to analyze the unique risks associated with the transportation of DilBit through pipelines; alternatives that would avoid important aquifers; the failure to adequately address the environmental justice impacts of air and water pollution on communities; the failure to adequately address impacts on migratory birds; the failure to adequately identify and analyze mitigation measures; the failure to adequately analyze refinery emissions; the failure to adequately analyze wetland impacts; and the failure to evaluate transboundary impacts.

In light of major changes made to the project since the close of the comment period on the DEIS as well as new information and circumstances, we urge DOS to issue an SEIS for Keystone XL and provide sufficient opportunity for public comment. In addition, DOS should use this SEIS as an opportunity to correct the substantial deficiencies in the DEIS, which would further the purposes of NEPA.

## **I. LEGAL REQUIREMENTS FOR A SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT**

NEPA requires a supplement to an EIS when significant new information or changes in a project implicate significant changes in the environmental analysis. The NEPA regulations require that:

(1) Agencies...[s]hall prepare supplements to either draft or final environmental impact statements if: (i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.<sup>1</sup> (2) [Agencies] may also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.<sup>2</sup>

The use of the word 'shall' is mandatory: it creates a duty on the part of the agency to prepare a supplemental EIS if substantial changes from any of the proposed alternatives are made and the changes are relevant to environmental concerns.<sup>3</sup> In determining whether new

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<sup>1</sup> 40 C.F.R. § 1502.9 (1978).

<sup>2</sup> 40 C.F.R. § 1502.9 (1978).

<sup>3</sup> *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 372 (1989) (recognizing the duty where there are significant new circumstances or information); *see also Dubois v. U.S. Dep't. of Agric.*, 102 F.3d 1273, 1292 (1st Cir. 1996).

information is significant, a court should look to the NEPA “significance factors” found in 40 C.F.R. § 1508.27(b) (1978).<sup>4</sup>

When determining if new circumstances or new information require an agency to issue a supplemental EIS, a court should consider the following factors: (a) the environmental significance of the new information; (b) its probable accuracy; (c) the degree to which the agency considered the new information and considered its impact; and (d) the degree to which the agency supported its decision not to supplement its decision not to supplement its impact statement with explanation or additional data.<sup>5</sup>

## **II. DOS MUST PREPARE A SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT BECAUSE THERE HAVE BEEN SUBSTANTIAL CHANGES IN THE PROPOSED ACTION**

DOS must prepare an SEIS for the Project to address substantial changes in the proposed action. Subsequent to the close of the DEIS comment period in July 2010, the scale and design of the proposed project have changed significantly because of the addition of the Bakken Marketlink interconnection in Montana and because of the withdrawal of TransCanada’s application for a special permit from PHMSA.

### **A. Significant New Circumstances Have Arisen Regarding TransCanada’s Status as a Common Carrier in Montana and the State-Mandated Bakken Marketlink Interconnection Constitutes a Substantial Change to the Project**

The DEIS notes the possibility that a Montana interconnection pipeline system might allow Bakken oil to be uploaded in Eastern Montana, and describes the facilities that an interconnection would require.<sup>6</sup> In cursory fashion, the DEIS describes that this “speculative” interconnection would require an on-ramp pipeline, significant new aboveground infrastructure, and the modification of a Keystone XL pump station.<sup>7</sup> The DEIS briefly lists the potential impacts that could result from an interconnection.<sup>8</sup> However, it avoids NEPA’s required “hard

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<sup>4</sup> *Natural Res. Def. Council v. Lujan*, 768 F. Supp. 870, 886 (D.D.C. 1991) (a new report that contained a substantially different estimate of the amount of oil expected to be found in Alaska required the preparation of an SEIS).

<sup>5</sup> *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1025 (9th Cir. 1980); *Commonwealth of Massachusetts v. Watt*, 716 F.2d 946 (1st Cir. 1983).

<sup>6</sup> Keystone XL Draft Environmental Impact Statement (“DEIS”), 3.14-6 (available at <http://keystonepipeline-xl.state.gov> (last visited Dec. 15, 2010)).

<sup>7</sup> DEIS, 3.14-6. An interconnecting “on-ramp” pipeline would include pump stations with a receive trap and a pressure control valve/skid located at the receipt facility; a receipt/injection facility of at least 8 to 9 acres, including a complex custody transfer station; 7 acres of storage tanks capable of holding at least 300,000-600,000 barrels of oil; a booster pump system; an electronic substation and electrical building with additional controls and instrumentation; Modification of a Keystone XL pump station, including a connection to the pump station, two block valves, and two check valves. *Id.*

<sup>8</sup> DEIS, 3.14-7 (“Key issues would include visual resources in the vicinity of the storage tanks and pump stations, cultural resources, changes in land use, increased tax revenues, increased employment, and potentially accelerating the development of crude oil resources.”).

look” at the impacts or possible alternative configurations of a Bakken interconnection by dismissing it as “currently speculative” and implying that it is not economically feasible.<sup>9</sup>

In August 2010, the Montana Public Service Commission (PSC) awarded common carrier status to TransCanada.<sup>10</sup> As a result, Montana oil producers now have the legal right to upload oil onto the Pipeline at interconnection sites. The substantial new pipeline infrastructure required to link Montana oil shippers to the Keystone XL has become known as the “Bakken Marketlink Project.” In September, Governor Brian Schweitzer and TransCanada announced a “binding Open Season” to obtain firm commitments for the Bakken Marketlink Project.<sup>11</sup> This will allow Montana oil producers to transport their oil to Cushing, Oklahoma, and on to the Gulf Coast via the Project. TransCanada completed an Open Season on November 19 and is now evaluating bids for the Marketlink Project.<sup>12</sup>

The Bakken Marketlink Project is now well beyond the “speculative” stage. Regardless of the ongoing contract bidding process, this connected pipeline project is a “reasonably foreseeable” future action that requires NEPA analysis.<sup>13</sup>

This foreseeable new pipeline infrastructure has the potential for significant environmental impacts, could significantly alter the size and character of the Project, and comprises an alternative configuration of the Project that was not considered in the DEIS. A change in configuration of the Project that the public has not had a chance to comment on requires the preparation of a supplemental EIS.<sup>14</sup>

NEPA requires “connected actions” “to be considered together in a single EIS.”<sup>15</sup> The NEPA regulations provide direction on when projects such as the Keystone XL pipeline and the Bakken pipeline should be considered together in a single EIS. These regulations define “connected actions” as actions that are “closely related and therefore should be discussed in the same impact statement.”<sup>16</sup>

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<sup>9</sup> DEIS, 3.14-7.

<sup>10</sup> Energy Pipeline News, Montana PSC grants Keystone XL qualified eminent domain powers, August 18, 2010, <http://energypipelinenews.blogspot.com/2010/08/montana-psc-grants-keystone-xl.html> (last visited Dec. 15, 2010).

<sup>11</sup> The Billings Outpost, State, TransCanada launch Open Season for oil, Sept. 23, 2010, [http://www.billingsnews.com/index.php?option=com\\_content&view=article&id=1952:state-transcanada-launch-open-season-for-oil&catid=64:business-news&Itemid=113](http://www.billingsnews.com/index.php?option=com_content&view=article&id=1952:state-transcanada-launch-open-season-for-oil&catid=64:business-news&Itemid=113) (last visited Dec. 15, 2010).

<sup>12</sup> The Bakken Marketlink Project is expected to commence providing service in the first quarter of 2013. See <http://www.transcanada.com/bakken.html> (last visited Dec. 15, 2010).

<sup>13</sup> See *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1215 (9th Cir. 1998). In addition to TransCanada’s own literature cited above, the company also states that the Project is now more definite, “follow[ing] a successful expression of interest phase, which was conducted earlier in 2010” (<http://www.transcanada.com/bakken.html> (last visited Dec. 15, 2010)).

<sup>14</sup> *Dubois v. U.S. Dept. of Agric.*, 102 F.3d 1273, 1293 (1st Cir. 1996).

<sup>15</sup> *Thomas v. Peterson*, 753 F.2d 754, 758 (9th Cir.1985).

<sup>16</sup> 40 C.F.R. § 1508.25(a)(1)(1978). “Connected actions” are those that i) automatically trigger other actions which may require environmental impact statements; ii) cannot or will not proceed unless other actions are taken previously or simultaneously; and iii) are interdependent parts of a larger action and depend on the larger actions for their justification. *Klamath-Siskiyou Wildlands Center v. Bureau of Land*

The Keystone XL pipeline project and the Bakken Marketlink Pipeline are “connected actions.” The Bakken Marketlink Project is a pipeline interconnection that will be physically connected to the Project. Its utility absolutely depends on Keystone XL: if Keystone XL were not built, the Bakken Marketlink Project would serve no purpose (there would be no larger pipeline on which to upload Bakken oil). Furthermore, the Keystone XL pipeline could not take place without the Bakken Marketlink Project because Montana’s common carrier law now requires TransCanada to allow domestic producers to upload oil.

The Bakken Marketlink Project satisfies the “connected action” elements of 40 C.F.R. § 1508.25(a)(1) and therefore must be considered in a single EIS.<sup>17</sup> An SEIS must examine the environmental impacts of the interconnection facilities, and provide an analysis of several alternatives for these facilities, including analyses of their respective water crossings and proximity to sensitive areas.

An SEIS must also analyze and inform the public as to how the additional sources of conventional crude oil will interact with the tar sands crude oil being transported from Alberta, and whether any operational or design changes will be necessary. For example, an SEIS should examine whether the currently-planned pumping stations will be sufficient to accommodate the additional sources and additional capacity; whether the different chemical composition of oil from the Bakken project shippers will present different threats and impacts in the event of a leak or rupture; whether the amount of diluent or heating that is required to move the crude through the pipeline will change; what additional facilities, operational plans, or emergency response plans will be necessary. In addition, because it is now required to offer oil transportation services to oil shippers in Montana and North Dakota, the Project will likely increase the amount of oil development in this region. This increase in domestic oil development is an indirect, connected, and cumulative action. As such, its environmental impacts must be evaluated, including but not limited to an increase in the use of hydraulic fracturing, increases in greenhouse gas (GHG) emissions, and its displacement of alternative fuels and renewable energy development and sales.

#### **B. TransCanada’s Withdrawal of its PHMSA Special Permit Application Constitutes a Significant New Circumstance and a Change in the Project**

In August 2010, TransCanada withdrew its application for a special permit from PHMSA and substantially changed the design parameters of the Project. At the time the DEIS was published, PHMSA was considering granting a special permit that would allow TransCanada to operate the Pipeline at a higher maximum operating capacity, or “design factor” for the steel

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*Management*, 387 F.3d 989, 998 (9th Cir. 2004) (“Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.”); *Wetlands Action Network v. U.S. Army Corps of Engineers*, 222 F.3d 1105, 1118 (9th Cir. 2000) (the requirement to analyze connected action prevents an agency from “dividing a project into multiple actions, each of which individually has an insignificant environmental impact, but which collectively have a substantial impact”).

<sup>17</sup> See *Save the Yaak Comm. v. Block*, 840 F.2d 714, 719 (9th Cir. 1988) (finding a road reconstruction, timber harvest, and feeder roads to all be “connected actions”).

employed. TransCanada withdrew its application but announced that it would still use the same pipe in the construction of the Project and reserved the right to apply for the permit at a future date.

TransCanada's withdrawal of the Special Permit application means that the pipeline will operate at the lower, federally approved pressure, meaning the daily operating capacity of the Pipeline will be significantly reduced. The DEIS analyzes an initial capacity of 700,000 bpd and an ultimate capacity of 900,000 bpd.<sup>18</sup> Without the special permit, the maximum capacity is now dramatically reduced. This reduction in capacity constitutes a substantial change in the Project requiring a supplemental EIS.<sup>19</sup>

### **III. DOS MUST PREPARE A SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT BECAUSE THERE IS SIGNIFICANT NEW INFORMATION AND CIRCUMSTANCES**

DOS must prepare an SEIS for the Project to address significant new information and circumstances. Significant new information has arisen and changed circumstances have occurred concerning DilBit pipeline accident risks; a Federal investigation into TransCanada's procurement of defective steel for the Keystone Pipeline; the Project's impact on the endangered American burying beetle; and new information on increased susceptibility to wildlife affected by the Deepwater Horizon oil spill.

#### **A. The Kalamazoo River Spill and Other Recent Pipeline Spills Constitute Significant New Information and Circumstances Regarding the Inadequacies of the DEIS Spill and Response Analysis**

A pipeline spill of over one million gallons of diluted bitumen (DilBit) into the Kalamazoo River in Michigan on July 27, 2010 has exposed the challenges of transporting highly corrosive, acidic and potentially unstable DilBit through pipelines. The Kalamazoo spill and a string of other pipeline accidents have also highlighted major errors in the DEIS's oil spill and emergency response analysis, and displayed a need for further analysis in an SEIS.

The Kalamazoo River spill provides new information that casts strong doubt on assumptions the DEIS made regarding spill detection and response. DilBit flowing through pipelines can produce a phenomenon called "column separation" which occurs as its natural gas condensate component evaporates within the pipeline, forming a bubble that impedes the flow of oil.<sup>20</sup> Column separation and pipeline leaks present similar signals to pipeline Supervisory Control and Data Acquisition (SCADA) computer monitoring systems.<sup>21</sup> During the Kalamazoo

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<sup>18</sup> DEIS, ES-2.

<sup>19</sup> See *Commonwealth of Mass. v. Watt*, 716 F.2d at 951, (finding a substantial change in the potential environmental impacts of an offshore lease when the agency reduced the amount of oil expected to be discovered).

<sup>20</sup> Matthew McClearn, Enbridge: Under Pressure – The untold story of Enbridge's worst spill and the unsettling truth about pipeline safety, *Canadian Business*, Dec. 6, 2010, [http://www.canadianbusiness.com/markets/commodities/article.jsp?content=20101206\\_10023\\_10023](http://www.canadianbusiness.com/markets/commodities/article.jsp?content=20101206_10023_10023) (last visited Dec. 15, 2010).

<sup>21</sup> *Id.*

spill, the Enbridge pipeline gushed for over twelve hours as control room operators inaccurately interpreted the pipeline's monitoring data to indicate column separation.<sup>22</sup> This lengthy detection and response time constitutes new information regarding vulnerabilities in monitoring and spill response systems in DilBit pipelines and requires the preparation of an SEIS.

The DEIS assumes that the Project's SCADA monitoring system will alert operators to abnormal operating conditions, including spills or leaks.<sup>23</sup> The DEIS does not account for the tendency of DilBit pipelines to give false positives,<sup>24</sup> making interpretation of SCADA data and discovery of leaks difficult. The DEIS does not contain sufficient information regarding the Project's leak detection system to instill confidence that SCADA can reliably identify pipeline ruptures like the one which occurred in Michigan.

The DEIS pipeline incident frequency assessment for the Project is based on data which significantly underestimates the risk of spills from the Project. The DEIS bases its baseline spill risk assessment on historical data from the U.S. hazardous liquid pipeline system.<sup>25</sup> However, the majority of the U.S. hazardous liquid pipeline system transports conventional crude. Pipelines that transport highly corrosive DilBit have a higher risk of internal corrosion and over-pressure. For example, Alberta's hazardous liquid system, which carries a high proportion of diluted bitumen, had over four times as many reportable incidents per mile as the U.S. pipeline system between 1990 and 2005.<sup>26</sup> By basing the risk of spills on the existing U.S. conventional

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<sup>22</sup> *Id.*; Richard Kuprewicz, quoted in the Michigan Messenger, "Pipeline spill underlies fears of new tar sands development," Aug. 10, 2010, <http://michiganmessenger.com/40744/pipeline-spill-underlines-fears-of-new-tar-sands-development> (last visited Dec. 15, 2010) (stating that the viscosity of tar sands and the use of diluents create frequent pressure warnings in pipeline monitoring systems, false positives that can make it more difficult to detect a real pressure problem in the pipe which can indicate a leak).

<sup>23</sup> DEIS, 3.13-27.

<sup>24</sup> Matthew McClearn, Enbridge: Under Pressure – The untold story of Enbridge's worst spill and the unsettling truth about pipeline safety, *Canadian Business*, Dec. 6, 2010, [http://www.canadianbusiness.com/markets/commodities/article.jsp?content=20101206\\_10023\\_10023](http://www.canadianbusiness.com/markets/commodities/article.jsp?content=20101206_10023_10023) (last visited Dec. 15, 2010), (DilBit causes false positives when the pressure inside the pipeline drops below the pressure at which the natural gas condensate evaporates. Called "column separation" or "slack line" by the industry, the resulting bubble can impede the flow of oil. Column separation and a pipeline leak generate similar signals to a SCADA system.).

<sup>25</sup> DEIS, 3.13-7 - 3.13-14.

<sup>26</sup> Alberta Energy and Utilities Board, Pipeline Performance in Alberta, 1990-2005, April 2007, <http://www.ercb.ca/docs/documents/reports/r2007-a.pdf> (last visited Dec. 15, 2010), (Hazardous liquid pipelines include multiphase, crude oil and other product pipelines and exclude natural gas, sour gas and water pipelines). Alberta's hazardous liquid pipeline system included 81,917 km of operating pipelines as of December 31, 2005 (38,536 km multiphase, 28,479 km other products and 14,902 km crude oil, pg. 9). During the time between 1990 and 2005 there were 5333 reported hazardous liquid incidents (multiphase pipelines had 4726, (pg. 28), crude oil pipelines had 411 (pg. 30), other product had 196 (pg. 38)). This was 356 incidents per year in a 81,917 km system, which is a rate of 699 incidents per 100,000 miles of pipeline. It should be noted that this analysis understates the case, as the Alberta pipeline system was smaller than 81,917 km during most of this time. The United States onshore hazardous liquid system had 3,763 reported incidents during that period (PHMSA Pipeline Mileage and Incidents Reports, [http://primis.phmsa.dot.gov/comm/reports/safety/AllPSI.html?nocache=5046#\\_liquid](http://primis.phmsa.dot.gov/comm/reports/safety/AllPSI.html?nocache=5046#_liquid) (last visited Dec. 15, 2010)). This is a rate of 139 incidents per year per 100,000 miles in a 180,000 mile system (Congressional Research Service, Pipeline Security: Overview of Federal Activities and Current Policy

crude oil pipeline system, the DEIS significantly underestimates the Project's potential spill frequency.

The DEIS also reduces the baseline spill frequency for the Project and assumes fewer spills than PHMSA's U.S. pipeline average, reasoning that current pipeline construction and operational technologies reduce the frequency.<sup>27</sup> While pipeline age is an important parameter of spill risk in the U.S., pipeline incident data from Alberta suggests that the chemical properties of the petroleum product are a more important indicator. Despite being at least twenty years younger on average, the largely-DilBit Alberta pipeline system has four times as many pipeline incidents per mile as the U. S. system. The DEIS should have increased the Project's baseline spill frequency to account for the greater frequency of spills in Alberta's newer system.

For example, the DEIS estimates that there will be 2.2 spills in the Keystone XL pipeline over 10 years.<sup>28</sup> However, TransCanada's Keystone I pipeline has already spilled at least four times<sup>29</sup> in the six months it has been in operation<sup>30</sup> and the EIS for that project predicted between 1.4 and 1.9 spills over 10 years.<sup>31</sup> Several of the Keystone I spills have occurred since the Keystone XL DEIS was published in April. This constitutes new information about spill frequency and exposes the flawed spill frequency projections in the DEIS.

The DEIS uses hazardous liquid pipeline data from PHMSA to estimate risk of corrosion.<sup>32</sup> It then attributes a disproportionate frequency of corrosion-related incidents to pre-1950 pipelines. Because the rate of internal corrosion in the Alberta system is twenty-five times greater than the older U.S. system, the DEIS significantly underreports the risk of pipeline corrosion related failure for the Project.<sup>33</sup> While the cause of this disparity has not been studied,

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Issues, 2004, CRS-2, <http://www.fas.org/sgp/crs/RL31990.pdf> (last visited Dec. 15, 2010)). At a rate of 699 incidents per 100,000 miles, Alberta's system had an incident rate greater than four times that of the United States at 139 incidents per 100,000 miles.

<sup>27</sup> DEIS, 3.13-13.

<sup>28</sup> DEIS, 3.13-15.

<sup>29</sup> Plains Justice, Another Keystone Pipeline Leak in Nebraska, Dec. 7, 2010

(<http://tarsandspipelines.wordpress.com/2010/12/07/another-keystone-pipeline-leak-in-nebraska/> (last visited Dec. 15, 2010)).

<sup>30</sup> Ken Newton, St. Joseph News-Press, MO, Oil Flows Through Keystone, June 9, 2010,

([http://www.downstreamtoday.com/news/article.aspx?a\\_id=22938&AspxAutoDetecCookieSupport=1](http://www.downstreamtoday.com/news/article.aspx?a_id=22938&AspxAutoDetecCookieSupport=1) (last visited Dec. 15, 2010)) (the Keystone pipeline began operation on June 9, 2010).

<sup>31</sup> Keystone FEIS, 3.13-10.

<sup>32</sup> DEIS, 3.13-11.

<sup>33</sup> Internal corrosion caused 8.5% of the significant incidents on the United States' onshore hazardous liquid pipeline system between 1990 and 2010. (PHMSA, Significant Pipeline Incidents by Cause, National Hazardous Liquid Onshore: Significant Incident Details: 1990-2009, [http://primis.phmsa.dot.gov/comm/reports/safety/SigPSIDet\\_1990\\_2009\\_US.html?nocache=973#\\_liquid\\_on](http://primis.phmsa.dot.gov/comm/reports/safety/SigPSIDet_1990_2009_US.html?nocache=973#_liquid_on) (last visited Dec. 15, 2010)). Internal corrosion caused 2633 of the 5333 reported incidents on the Alberta hazardous pipeline system, including 2521 incidents for multiphase (pg. 28), 102 incidents for crude oil pipelines (pg. 30), and 8 other products (pg. 38) (Alberta Energy and Utilities Board, Pipeline Performance in Alberta, 1990-2005, April 2007, pg. 19, <http://www.ercb.ca/docs/documents/reports/r2007-a.pdf> (last visited Dec. 15, 2010)). Of 699 incidents per 100,000 miles of Alberta pipelines, 49%, or 343 incidents per 100,000 miles, were caused by internal

these pipeline systems may be distinguished by the product they transport. Highly corrosive DilBit derived from unconventional tar sands comprises as much as 70% of the product produced and transported in Alberta.<sup>34</sup> By comparison, DilBit currently comprises less than 3% of liquid fuels consumed in the United States.<sup>35</sup>

DOS should prepare an SEIS that considers the specific risks of a DilBit pipeline and allow for public review and full incorporation of these critical issues in the deliberations about whether to permit the Project.

### **B. There Is New Information Showing Possible Use of Defective Steel for the Keystone Pipeline**

PHMSA is currently investigating the possible use of defective steel in the construction of Keystone I pipeline. Reports indicate that the Keystone I pipeline may have stretched, potentially thinning the pipeline below the regulatory limits set by the United States<sup>36</sup> in at least 47 places; PHMSA has ordered more extensive testing and has ordered TransCanada to dig up 10 sections of the pipeline.<sup>37</sup> In response to this new information, an SEIS is necessary to evaluate TransCanada's quality control system for material acquisitions.

### **C. Significant New Information Shows that the Project Will Likely Adversely Affect the American Burying Beetle, a Federally Listed Endangered Species**

Both TransCanada's application materials and the DEIS conclude that the Project is "not likely to adversely affect" the American burying beetle, which is a listed species under the

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corrosion. This can be compared to the United States system, where 8.5% of 139 incidents per 100,000 miles, or 12 incidents, were caused by internal corrosion. Alberta's 343 incidents is 28.6 times the 12 incident rate of internal corrosion failure in the US system.

<sup>34</sup> In 2009, over 70% of Alberta's crude oil production was derived from unconventional tar sands (State of Alberta, Alberta's Energy Industry Overview 2009, [http://www.energy.alberta.ca/org/pdfs/Alberta\\_Energy\\_Overview.pdf](http://www.energy.alberta.ca/org/pdfs/Alberta_Energy_Overview.pdf) (last visited Dec. 15, 2010)), 765,000 bpd was transported as DilBit to be upgraded into Syncrude in Canada (ERCB, Alberta's Energy Reserves 2009, 2-24, [http://www.ercb.ca/docs/products/STs/st98\\_current.pdf](http://www.ercb.ca/docs/products/STs/st98_current.pdf) (last visited Dec. 15, 2010)) and 550,000 bpd was exported to the United States as un-upgraded DilBit (National Energy Board, Estimated Canadian Crude Oil Exports by Type and Destination, 2010 Q1, [http://www.neb-one.gc.ca/clf-nsi/rnrgynfntn/sttsc/crdlndptrlmpdct/2010/stmtdcndncrdlxprttpdstnt2010\\_q1.xls](http://www.neb-one.gc.ca/clf-nsi/rnrgynfntn/sttsc/crdlndptrlmpdct/2010/stmtdcndncrdlxprttpdstnt2010_q1.xls) (last visited Dec. 15, 2010)).

<sup>35</sup> The United States system handled 19.1 million bpd in 2010 (U.S. Energy Information Administration, Short Term Energy Outlook, Oct. 7, 2010, <http://www.eia.doe.gov/emeu/steo/pub/contents.html> (last visited Dec. 15, 2010)), of which 550,000 bpd, or less than 3%, was DilBit (National Energy Board, Estimated Canadian Crude Oil Exports by Type and Destination, 2010 Q1, [http://www.neb-one.gc.ca/clf-nsi/rnrgynfntn/sttsc/crdlndptrlmpdct/2010/stmtdcndncrdlxprttpdstnt2010\\_q1.xls](http://www.neb-one.gc.ca/clf-nsi/rnrgynfntn/sttsc/crdlndptrlmpdct/2010/stmtdcndncrdlxprttpdstnt2010_q1.xls) (last visited Dec. 15, 2010)).

<sup>36</sup> 49 CFR § 195.106.

<sup>37</sup> Phillip O'Connor, Faulty pipe checked for in TransCanada line to U.S., The Province, Dec. 10, 2010, <http://www.theprovince.com/opinion/Faulty+pipe+checked+TransCanada+line/3955809/story.html> (last visited Dec. 15, 2010).

Endangered Species Act (ESA).<sup>38</sup> The DEIS based this conclusion on a survey of the affected habitat and mitigation measures proposed by TransCanada.<sup>39</sup>

Subsequent to the release of the DEIS, TransCanada released a Biological Assessment where it announced for the first time that the Project “may affect and is likely to adversely affect” the beetle.<sup>40</sup> As a result, formal consultation has been initiated with the United States Fish and Wildlife Service (FWS) regarding potential impacts to the beetle.<sup>41</sup>

The presence of this new information indicating adverse effects on an endangered species triggers the need for an SEIS.<sup>42</sup> DOS should prepare the SEIS only after it concludes its consultation with FWS so that any resulting changes to the project as a result of the consultation are evaluated in the SEIS and the public is given a full opportunity to comment on those changes.

#### **D. There Is New Information Regarding the Project’s Impacts on Species Affected by the Deepwater Horizon Spill**

An SEIS is necessary to analyze changed status of resources affected by the Deepwater Horizon Spill when those same resources would be affected by the Project. For example, the DEIS’s discussion of the status of Brown Pelicans references 1995 US Fish and Wildlife Service data and concludes that the proposed project would have no effect on the Brown Pelican.<sup>43</sup> The analysis has become outdated after the Deepwater Horizon spill, which significantly affected the population and habitat of this species.<sup>44</sup>

### **IV. A SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT SHOULD BE PREPARED TO ADDRESS THE INADEQUACIES OF THE DEIS IN FURTHERANCE OF THE PURPOSES OF NEPA**

Following the close of the public comment period in July 2010, the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the environmental community

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<sup>38</sup> Keystone XL Environmental Report p. 3-24 (Nov. 2008); DEIS, 3.8-35, Table 3.8.1-1.

<sup>39</sup> *Id.*

<sup>40</sup> Keystone XL Project Applicant – Prepared Biological Assessment, pp. 1-6, 3-24, Table 1.3-1.

<sup>41</sup> Keystone XL Project Applicant – Prepared Biological Assessment, pp. 1-3.

<sup>42</sup> 40 C.F.R. § 1508.27(b) (1978); *Natural Res. Def. Council v. Lujan*, 768 F. Supp. 870, 886 (D.D.C. 1991). Impacts to endangered species are one of the indicators of “significance” defined in these regulations. Accordingly, several courts have held that where new information comes to light regarding endangered or sensitive species, an SEIS must be prepared. *Portland Audubon Society v. Babbitt*, 998 F.2d 705 (9th Cir. 1993) (SEIS was required where there was a substantial change in the scientific literature regarding survival of the northern spotted owl); *Sierra Club v. Bosworth*, 465 F. Supp. 2d 931, 936 (N.D. Cal. 2006) (finding that Forest Service has failed to conduct a proper “hard look” at the significant new information regarding the impacts of the timber projects on the Pacific fisher); *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 558 (9th Cir. 2000) (Forest Service violated NEPA requirements because it failed timely to prepare an SEIS in light of seven new sensitive species designations).

<sup>43</sup> DEIS, p. 3.8-8.

<sup>44</sup> U.S. Fish and Wildlife Service Deepwater Horizon Spill Response, <http://www.fws.gov/home/dhoilspill/collectionreports.html> (last visited Dec. 15, 2010).

identified significant deficiencies in the DEIS. Correcting these deficiencies will require significant new analysis and the incorporation of high quality and accurate information regarding the Project's impacts. It would further the purposes of NEPA to allow public scrutiny of these substantial changes – outlined in this document – in an SEIS. Public scrutiny of environmental decision making, informed by high quality and accurate information, is essential to the purposes of NEPA.<sup>45</sup>

DOE and EPA noted significant defects in the needs assessment for the Project.<sup>46</sup> An SEIS is necessary to conduct a further analysis of the purported need for this pipeline in consultation with the DOE, which is a coordinating agency in the NEPA process. In July of 2010, DOE strongly criticized the DEIS. Its comments described major flaws in the demand assessment for the Pipeline, such as: (a) the DEIS based its assessment of worldwide oil demand on a misinterpretation of EIA reports; (b) provided inaccurate and conflicting estimates of current pipeline capacity available to transport Western Canadian Sedimentary Basin (WCSB) crude into the United States; (c) lacked an assessment of the Pipeline's projected impact on crude supply between PADDs; and (d) provided an incomplete analysis of the Pipeline's projected effect on price stability in the U.S. crude oil market.

DOS should work closely with DOE in the preparation of the SEIS. In addition to being a cooperating agency in the NEPA process, DOE is an agency with vast experience in matters of domestic energy policy and is uniquely suited to evaluate the Project's expected role in the energy market. DOE can assist DOS in evaluating whether the Pipeline would open up an international market for tar sands oil and compete with other pipelines for supply. The DOE analysis should be incorporated by reference or provided in an appendix to the SEIS analysis.

EPA and the environmental community submitted comments noting numerous defects in the DEIS.<sup>47</sup> Based on the analysis outlined in their comment letters, an SEIS should correct the following deficiencies:

- **The DEIS does not consider the unique risks associated with DilBit pipelines.**<sup>48</sup> The DEIS uses measures that substantially underestimate the risk of spills from the project, the volume of potential DilBit spills, the potential impacts of DilBit to the environment and water quality, and the unique challenges posed in cleaning up these spills. DilBit may be distinguished from conventional crude by its greater corrosivity, acidity,

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<sup>45</sup> 40 CFR § 1500.1(b)

<sup>46</sup> Department of Energy, Comments to the Keystone XL DEIS, July 2, 2010, <http://www.sierraclub.org/environmentallaw/tarsands/pipeline-keystone-xl/state-dept-permit-process/DOE%20Comments%20on%20DEIS%2010-7-2.pdf> (last visited Dec. 15, 2010); Environmental Protection Agency, Comments to the Keystone XL DEIS, July 16, 2010, <http://www.sierraclub.org/environmentallaw/tarsands/pipeline-keystone-xl/state-dept-permit-process/EPA%20Comments%20on%20DEIS%2010-7-16.pdf> (last visited Dec. 15, 2010).

<sup>47</sup> EPA, Comments to the Keystone XL DEIS; Sierra Club, et. al., Public Comments on the TransCanada Keystone XL Pipeline Draft Environmental Impact Statement, July 2, 2010, <http://www.sierraclub.org/environmentallaw/tarsands/pipeline-keystone-xl/state-dept-permit-process/KXL%20DEIS%20Comments%207-2-10.pdf> (last visited Dec. 15, 2010).

<sup>48</sup> Keystone XL DEIS, <http://keystonepipeline-xl.state.gov> (last visited Dec. 15, 2010).

viscosity, volatility, instability and toxicity. These factors present the risk of substantial environmental impacts that are not considered in the DEIS.

The DEIS does not assess the environmental impacts of a DilBit crude oil spill. While the DEIS notes the importance of specific gravity, viscosity, pour point, volatility, toxicity, solubility and persistence in the environment in determining the impacts of crude oil spills,<sup>49</sup> it avoids analyzing these attributes for DilBit by considering it similar enough to be treated as a conventional crude oil.<sup>50</sup> DilBit differs significantly from conventional crude in these attributes. It is significantly more corrosive and twenty to thirty times more viscous than conventional crude. Its condensate components are more volatile than conventional crude while its bitumen component, with an API gravity of 7-9, is denser. Because the Project is a dedicated DilBit pipeline, the attributes of DilBit must be specifically considered to fully assess the Project's environmental impact.

The DEIS assumes that the water quality effects of most spills on larger lakes would be eliminated once the oil slick is removed.<sup>51</sup> Its impact analysis is based on numerous studies of conventional crude oil spills and therefore do not address DilBit's distinguishing properties.<sup>52</sup> The bitumen component of DilBit would be expected to sink into the water column and accumulate on the underwater lake bed, where cleanup would be difficult. The Project's countermeasures to contain and remove DilBit released in a water resource call for sorbent booms, socks, and/or pads.<sup>53</sup> These measures are typically used for spills of conventional crudes that are less dense than water. They do not address heavy bitumen that would sink below the water's surface.<sup>54</sup>

The DEIS underestimates the effect of a DilBit spill on freshwater fish, macro-invertebrates, and other aquatic organisms.<sup>55</sup> By equating DilBit to conventional crude, the DEIS assumes that even a large spill would result in low concentrations of oil in the water column. This is true with conventional crude, as it is less dense than water and floats. In DilBit, the bitumen component is denser than water and would be expected to sink<sup>56</sup> in the water column. This could have significant impacts on fish and plankton<sup>57</sup> in the water column as well as all organisms associated with river and creek beds.<sup>58</sup>

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<sup>49</sup> DEIS, 3.13-19.

<sup>50</sup> DEIS, 3.13-19.

<sup>51</sup> DEIS, 3.13-41.

<sup>52</sup> DEIS, 3.13-46.

<sup>53</sup> DEIS, Appendix C, Section 4. Spill Control and Countermeasures.

<sup>54</sup> Athabasca bitumen has an API gravity of 7.7-9, which makes it heavier than fresh water, with an API gravity of 10. *See also* Cekirge et al., 1997, Orimulsion spill modeling in marine environments, [http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6V0V-3SNVJ0R-18&\\_user=10&\\_coverDate=06%2F30%2F1997&\\_rdoc=1&\\_fmt=high&\\_orig=search&\\_origin=search&\\_sort=d&\\_docanchor=&\\_view=c&\\_searchStrId=1579287273&\\_rerunOrigin=google&\\_acct=C000050221&\\_version=1&\\_urlVersion=0&\\_userid=10&md5=b1864e2341951676438a20bf31ea29fa&searchtype=a](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V0V-3SNVJ0R-18&_user=10&_coverDate=06%2F30%2F1997&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&_view=c&_searchStrId=1579287273&_rerunOrigin=google&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=b1864e2341951676438a20bf31ea29fa&searchtype=a) (last visited Dec. 15, 2010) (modeling a blend of bitumen and emulsified water in a marine environment. In fresh water, the bitumen sinks, though energy in the water can remix bitumen particles into the water column).

<sup>55</sup> DEIS, 3.13-46.

<sup>56</sup> *Id.*

These legitimate safety concerns associated with DilBit pipelines carry a heightened risk of environmental impacts that were not considered in the DEIS. An SEIS would further the purposes of NEPA by fully informing decision makers and the public about the risks of DilBit and allowing the opportunity to implement mitigation measures.

- **The DEIS does not adequately address the Project’s climate change impacts.** The few pages that the DEIS devotes to the impacts of greenhouse gas emissions (GHG) fail to comprehensively describe or quantify the indirect emissions of GHGs and does not analyze the local, regional, or global environmental impacts of greenhouse gas emissions from the Project and related facilities. The DEIS is also flawed because it fails to consider the economic effects of the impacts of greenhouse gas emissions from the project. DOS is required to analyze both the effects of emissions and consider potential alternatives to reduce those emissions.<sup>59</sup>
- **The DEIS does not adequately address the impacts of the Project on wetlands and water resources.** The overall lack of information on impacts, avoidance, mitigation measures and justification for adopted alternatives in the DEIS violates both the Clean Water Act (CWA) and NEPA. The DEIS does not take into account the impacts of climate change on water resources; the potential effects of the Project on mercury levels in waters and acid rain; provides inadequate mitigation measures; fails to assess impacts to wetlands and water resources from pump stations, mainline valves, roads and other associated developments; and fails to adequately analyze the impacts of refineries. It also provides inadequate analysis of releases of drilling fluid and drilling fluid additives, and of impacts to groundwater and surface water from an oil spill or leak. The DEIS also does not properly account for the fact that many impacted wetlands and water bodies are

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<sup>57</sup> Jerry Neff, *An Oil Spill in an Illinois Lake: Ecological and Human Health Assessment*, 1991, pg. 7, <http://www.iosc.org/papers/01477.pdf> (last visited Dec. 15, 2010) (noting the relationship between oil concentration in the water column and toxicity to marine plants and animals).

<sup>58</sup> *Id.*

<sup>59</sup> In *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508 (9th Cir. 2007), the original EIS for a CAFE standards rulemaking did provide quantification of GHG emissions. NHTSA argued that more was not required because the standard would slightly reduce the rate of emissions. The Ninth Circuit of Appeals asserted that the agency had a duty to analyze the effects of the emissions and analyze alternative proposed by EDF that would have reduced emissions more significantly rather than simply stating emission projections. *Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520 (8th Cir. 2003) involved a Surface Transportation Board decision about whether to approve the construction and upgrade of a railroad track, the sole purpose of which was to transport low sulfur coal to the Midwest. The court held that the agency had to analyze the effects, rather than just the quantity, of emissions of the transport, increased availability and utilization of Power River Basin coal. And in *Border Power Plant Working Group v. Department of Energy*, the Department of Energy’s environmental assessment supporting a decision regarding a Presidential Permit was invalidated for failure to analyze the effects of GHG emissions that would come from two export turbines in one power complex and another power plant being built in Mexico for the purpose of transmitting power to the United States.

not being regulated under CWA by the Corps and therefore may not receive mitigation for impacts.

- **The DEIS fails to adequately address environmental justice impacts on communities (air and water).** The DEIS makes no effort to assess the environmental justice implications of the substantial increases in pollution likely to occur in communities around refineries. The DEIS fails to analyze the refinery related impacts on the minority and low-income populations in Harris County, TX and Jefferson County, TX. It also fails to evaluate the impacts of the Project on affected minority and low-income communities living outside the pipeline corridor.
- **The DEIS fails to adequately address impacts on migratory birds.** The DEIS does not support its claim that the Project “may affect” but is “not likely to adversely affect” the Whooping Crane and the Piping Plover with analysis by independent scientists or expert agencies. The DEIS also fails to analyze how the Project’s impacts on water supply, compounded by climate change, will affect migratory birds.
- **The DEIS fails to adequately analyze refinery emissions.** The analysis set forth in the DEIS concerning cumulative impacts associated with petroleum refining is insufficient in four major respects. First, it impermissibly relies on the Clean Air Act (CAA) and CWA permitting process at individual refineries to address environmental issues associated with the processing of product delivered via the Project rather than presenting independent analysis, which is both required by law and central to the purpose of NEPA environmental review. Second, the DEIS fails to adequately analyze a variety of possible supply and demand scenarios of clean energy and different grades of crude oil. Third, the analysis assumes without basis a wide distribution of the product delivered by the Project to refineries throughout PADD II and PADD III, and based on this assumption declines to provide any analysis of region-specific impacts on air quality.
- **The DEIS fails to assess the Project’s transboundary impacts.** The DEIS states that DOS has no obligation to assess the transboundary impacts of the Project.<sup>60</sup> The transboundary impacts of the Pipeline include transboundary greenhouse gas emissions and impacts to migratory birds.

The DEIS contains a very cursory analysis of impacts in Canada associated with the XL Pipeline, without any analysis of transboundary greenhouse gas or bird impacts.<sup>61</sup> Several recent developments in the law indicate that the EIS should analyze transboundary impacts. DOS should remedy this error in an SEIS.

In a February 2010 memo to the heads of federal departments and agencies, CEQ Chair Nancy Sutley affirmed that the requirements of NEPA are applicable to greenhouse gas

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<sup>60</sup> DEIS, 3.14-42.

<sup>61</sup> DEIS, 3.14-42 et seq.

emissions and climate change impacts.<sup>62</sup> A draft of this guidance was released by CEQ, 75 Fed. Reg. 8046 (Feb. 23, 2010)). The final CEQ GHG Guidance is expected soon.

The pending CEQ GHG Guidance must be considered in conjunction with an earlier CEQ guidance on the obligation of federal agencies to consider transboundary impacts generally.<sup>63</sup> The Transboundary Guidance directs agencies to include “an analysis of the reasonably foreseeable transboundary effects of proposed actions in the United States.”<sup>64</sup>

- **The DEIS fails to adequately identify and analyze mitigation measures.** The DEIS fails to consider practicable system alternatives which would have less impact on water resources, including the use of existing pipeline capacity. In *Robertson v. Methow Valley Citizens*,<sup>65</sup> the court noted that NEPA and its implementing regulations require that an EIS contain a detailed discussion of possible mitigation measures, as omitting a reasonably competent discussion of possible mitigation measures would undermine the “action forcing” function of NEPA.

The environmental community submitted comments noting additional deficiencies in the DEIS.<sup>66</sup> An SEIS is necessary to address the following defects:

- **The DEIS fails to address the environmental consequences of abandonment and mitigation thereof.** The DEIS contains no discussion of impacts, alternatives, or mitigation of pipeline abandonment. The DEIS only states that Applicant will submit abandonment plans at the time of abandonment, and that such plans would be approved at that time by regulating entities, if any. The DOS should supplement the DEIS so that citizens may

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<sup>62</sup> CEQ, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, Feb. 18, 2010, [http://ceq.hss.doe.gov/nepa/regs/Consideration\\_of\\_Effects\\_of\\_GHG\\_Draft\\_NEPA\\_Guidance\\_FINAL\\_02182010.pdf](http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf) (last visited Dec. 15, 2010).

<sup>63</sup> See CEQ, Memorandum to Heads of Agencies on the Application of the National Environmental Policy Act to Proposed Federal Actions in the United States with Transboundary Effects (July 1, 1997) (CEQ Transboundary Guidance).

<sup>64</sup> *Id.* In *Government of the Province of Manitoba v. Salazar*, 691 F.Supp.2d 37, 51 (D.D.C. 2010), the court asserted that the Bureau of Reclamation was required to assess transboundary impacts of a large water project. The court noted that the Guidance was persuasive despite the Reclamation agency’s argument that it was non-binding. *Id.* n. 13. The Council on Environmental Quality “has determined that agencies must include analysis of reasonably foreseeable transboundary effects of proposed actions in their analysis of proposed actions in the United States.” Council on Environmental Quality Guidance on NEPA Analyses for Transboundary Impacts (July 1, 1997), available at <http://ceq.hss.doe.gov/nepa/regs/transguide.html> (last visited Dec. 15, 2010). This tracks the long standing direction of the Supreme Court that CEQ’s interpretation of NEPA deserves “substantial deference” from the lower courts. *Department of Transportation v. Public Citizen*, 541 U.S. 754 (2004); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989); *Andrus v. Sierra Club*, 442 U.S. 347 (1979).

<sup>65</sup> *Robertson v. Methow Valley Citizens Council*, 490 US 332, 1989 U.S. LEXIS 2160.

<sup>66</sup> Sierra Club, *et. al.*, Public Comments on the TransCanada Keystone XL Pipeline Draft Environmental Impact Statement, July 2, 2010, <http://www.sierraclub.org/environmentallaw/tarsands/pipeline-keystone-xl/state-dept-permit-process/KXL%20DEIS%20Comments%207-2-10.pdf> (last visited Dec. 15, 2010).

have an opportunity to comment on these impacts. A failure to provide an opportunity for comment would violate both NEPA and the Administrative Procedure Act.

- **The DEIS does not analyze alternatives that would avoid important aquifers.** The DEIS does not analyze alternatives that would avoid impacts to the Northern Great Plains Aquifer System, the Ogallala Aquifer, the Trinity Aquifer, the Texas Coastal Uplands Aquifer, and the Texas Coastal Lowlands Aquifer. The DEIS does not analyze the how geology, vegetation, soil composition and land use will affect spill impacts for aquifers. The DEIS also does not investigate the placement of shut-off valves or other possible mechanisms that could be used to protect aquifers from the effects of spills and leaks. This analysis is particularly important given new information suggesting higher risks of spill incidence for the project than was forecast by the DEIS.

## **V. THE ISSUANCE OF A FINAL EIS WITH A COMMENT PERIOD IS INCONSISTENT WITH THE REQUIREMENTS AND PURPOSE OF NEPA**

Issuance of a Final EIS (FEIS) with a comment period in lieu of an SEIS would not satisfy the requirements and purpose of NEPA. NEPA was enacted to “insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.”<sup>67</sup> It is essential that that environmental information is high quality and based upon “accurate scientific analysis, expert agency comments and public scrutiny.”<sup>68</sup>

Expert agency comments and public scrutiny is essential to implementing NEPA. Part of the NEPA process includes the public’s opportunity to understand the agency’s response to these comments. Even with a comment period, an FEIS will not allow informed public scrutiny of and input into the decision making process before a “decision is made and before actions are taken.”<sup>69</sup> Preparation of an SEIS is mandatory because all factors requiring this have been triggered. The Department should also take the opportunity when directing preparation of the mandatory SEIS to correct the significant deficiencies in the DEIS that have been identified above.

## **VI. CONCLUSION**

For the reasons outlined above, an SEIS is required to address new information and circumstances which substantially alter the Project’s impact and have arisen subsequent to the close of the DEIS comment period in July 2010. In such circumstances, NEPA regulations require the issuance of an SEIS.<sup>70</sup>

Furthermore, we believe that correcting the substantial deficiencies noted in the DEIS, outlined above and identified in comments during the public notice period, will substantially alter the EIS. DOS should issue an SEIS to further the intent and purposes of NEPA, which is to

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<sup>67</sup> 40 CFR § 1500.1(b)

<sup>68</sup> *Id.*

<sup>69</sup> *Id.*

<sup>70</sup> 40 CFR § 1502.9 (1978).

ensure that high quality, accurate environmental information is available to public officials and citizens before actions are taken.<sup>71</sup>


Thank you for taking these concerns into consideration. If you have any questions about these comments, please contact us.

Respectfully submitted,



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<sup>71</sup> 40 CFR § 1500.1(b)

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