

Appendix A

Scoping Summary Report



**United States Department of State
Scoping Summary
for the
Keystone XL Project
Environmental Impact Statement**

May 2009

1.0 INTRODUCTION

TransCanada Keystone Pipeline, L.P. has applied to the United States Department of State (DOS) for a Presidential Permit at the border of the United States for the proposed construction, connection, operation, and maintenance, of facilities for the importation of crude oil from Canada. DOS determined that the issuance of the Presidential Permit would constitute a major federal action that may have a significant impact upon the environment within the context of the National Environmental Policy Act of 1969 (NEPA), and on January 28, 2009 issued a Notice of Intent (NOI) to prepare an environmental impact statement (EIS) to address reasonably foreseeable impacts from the proposed action and alternatives.

The NOI informed the public about the proposed action, announced plans for scoping meetings, invited public participation in the scoping process, and solicited public comments for consideration in establishing the scope and content of the EIS. The NOI was published in the Federal Register and distributed to:

- Landowners along the proposed route,
- Federal, state, and local agencies,
- Municipalities and counties,
- Native American Tribes,
- Elected officials,
- Non-governmental organizations,
- Media, and
- Interested individuals.

The scoping period was originally planned to extend from January 28 to March 16, 2009. However, an amended NOI published on March 23, 2009 extended the scoping period until April 15, 2009.

2.0 SCOPING MEETINGS

DOS held 20 separate scoping meetings in the vicinity of the proposed route to give the public the opportunity to provide comments regarding the scope of the EIS. The dates and locations of the meetings are listed below, along with the attendance at each meeting (in parentheses).

February 9 – Beaumont, TX (10)
February 10 – Liberty, TX (15)
February 11 – Livingston, TX (15)

February 12 – Tyler, TX (60)
February 17 – Durant, OK (34)
February 18 – Ponca City, OK (12)

February 19 – El Dorado, KS (10)
February 19 – Clay Center, KS (20)
February 23 – York, NE (62)
February 23 – Baker, MT (39)
February 24 – Atkinson, NE (65)
February 24 – Terry, MT (30)
February 25 – Murdo, SD (46)

February 25 – Circle, MT (100)
February 25 – Plentywood, MT (7)
February 25 Glendive, MT (45)
February 26 – Glasgow, MT (53)
February 26 – Malta, MT (32)
April 8 – Faith, SD (12)*
April 8 – Buffalo, SD (31)*

*Originally scheduled for February 26, 2009, but rescheduled due to hazardous weather conditions.
Amended NOI published on March 23, 2009.

3.0 SCOPING COMMENTS

3.1 Public, Agency, and Stakeholder Comments

The verbal comments recorded during the 20 meetings and comments from comment forms, letters, and emails received during the scoping period were received, entered into the administrative record, reviewed and assigned an issue code. In total, 122 people provided oral testimony at the meetings, incorporating over 340 individual scoping comments. In addition to the oral testimony, 194 letters, cards, emails, e-comments, or telephone conversation records (henceforth referred to as “letters”) incorporating 1350 individual comments were received from the public, agencies, and other interested groups and stakeholders. Additionally, over 13,000 NGO-sponsored duplicate form letters were received electronically. Issues addressed in comments from all of these sources are summarized in this document.

In addition, at scoping meetings held in Montana, the Montana Department of Environmental Quality accepted verbal comments on route maps for the state using their Geographic Information System (GIS) computer. These comments were recorded by tagging the digital data (shapefiles) to specific geographic locations on the maps. All verbal comments were transcribed and all comments, both written and verbal were recorded, categorized by the specific issue addressed in the comment, and entered into a spreadsheet for ease of review. The following sections summarize the comments by EIS section or issue. Comments have been summarized as appropriate, particularly for concerns that were raised by several commentors.

Purpose and Need

1. TransCanada must provide updated Canadian tar sands oil production forecasts together with a description of how such forecasts may be served by other pipelines that are either under construction or in more advanced stages of permitting. TransCanada should also explain how other planned pipelines will not meet the need for supply diversification.
2. The purpose and economics of this project needs to be fully explained so that we can easily understand why money and resources are being spent to transport and refine oil in the southern US when it could possibly be used to build an oil refinery in Canada.
3. Evaluate the project in the context of overall US oil production, transportation, storage, and refining. How does this pipeline relate to other needed oil and refined product infrastructure in the US?
4. What are the latest forecasts for crude oil demand in 1) the U.S. as a whole and 2) in the Midwest and Gulf Coast regions? What are the short and long-term (10 years) trends in U.S. crude oil demand?

5. How much Alberta oil sands crude can be exported considering Canadian domestic demand? Is the amount of crude available for export out of Alberta greater than the current export pipeline capacity out of Alberta?
6. Assuming that there is an increasing need for oil in the US from friendly sources, how much additional supply is needed? How much comes from which nations? How much comes from sources that are unstable? What is the DOS policy on where the U.S. should get its crude oil in the future?
7. TransCanada bases the need for this project on unsupported allegations of commercial commitments to the Project, but provides neither a quantification of such commitments nor a description of the commercial terms of such commitments. TransCanada must provide current commercial status of and commercial terms for commitments to the Project.
8. Would the Canadian crude coming into PADD III be competitive with other foreign and domestic sources coming into PADD III?
9. Indicate how long the oil supply for the pipeline is projected to last at the throughput volumes planned for the project.

Project Description

1. Construction should be timed in a manner to minimize damage to area soils, crops and/or rangelands.
2. Why does this pipeline need to have so wide of a permanent easement? The minimum easement possible should be investigated.
3. How long will the pipeline be in use and maintained? What is the life expectancy of the pipe?
4. Describe the methods that would be used to abandon and remove the pipeline.
5. Describe the methods that would be used to cross under or over other pipelines and other utility lines.
6. Indicate whether or not pipe to be used for the project would be purchased from U.S. firms.
7. Welders need to be certified and well trained.
8. It is important that the quality of pipe be addressed. It should have sufficient coating as to eliminate potential rusting. The ditch should be a minimum of 7-8' in depth.
9. What happens when the pipeline needs replacing or needs normal repairing?
10. Describe the regulatory restrictions regarding proximity to residences and other buildings, including historical buildings and sites.
11. Include a site specific analysis and discussion of alternative stream crossing techniques that could be used on individual streams. This analysis should be based on site specific inspections, hydrologic conditions at each stream crossing, and biological conditions near each crossing. We recommend use of directional drilling for the pipeline routing under all water crossings and their associated floodplains and wetlands to the maximum extent practicable to avoid and minimize aquatic impacts.

12. The irrigation ditches and the drain ditches should be considered the same as creek crossings and should be bored under if possible.
13. The EIS should indicate the locations where the proposed pipeline would and would not run parallel to existing utility corridors.
14. How will the pipeline be marked so that years later, when grass has regrown over the trench, people don't accidentally dig it up and disturb the pipe?
15. Indicate what will be done with trees that are removed from the right-of-way.
16. Indicate what the temperature of the oil will be in the pipeline.
17. Provide information on the burial depth of the pipeline along all portions of the alignment.
18. How would trenching and pipeline construction and operation alter the grade of fields, dikes, and the effectiveness of irrigation systems? What measures would be taken to prevent potential effects?
19. If the pipeline is shut down for a period of time with crude oil in the line, describe the procedures that would be implemented to return the line to service.
20. Describe what would happen to farm fences during construction.
21. Concern that the pipeline trench should not be open very long (2 weeks or less) across county roads so that farmers can carry on their farming operations.
22. Discuss the potential to change the product shipped through the pipeline at a later date.
23. How will electricity be supplied to the pump stations?
24. Describe what maintenance and inspection activities are required by regulations and what specific activities Keystone will conduct as a part of maintenance and inspection; including the schedule for those activities.
25. Describe how maintenance activities would continue should the pipeline be sold.
26. We also recommend that the EIS identify and discuss proposed environmental inspection and monitoring during pipeline construction to ensure that appropriate techniques to minimize environmental impacts are implemented.
27. Who will inspect the pipe to guarantee that it meets US DOT specifications?

Soils & Geology

1. Methods to prevent erosion near the pipeline should be investigated and reported. Describe the methods to be used to stabilize stream banks and address the associated potential for erosion.
2. Substantial precipitation or snowmelt events may create erosion channels, and the NEPA analysis should develop mitigation and monitoring provisions to repair construction areas in a timely manner when erosion channels occur and to implement further sediment controls if necessary.
3. Address the potential for soils settling along the route after abandonment of the project based on the anticipated abandonment procedures that would be used.

4. The lower portion of the Niobrara River is underlain by Pierre shale. Clays in the shale, particularly those derived from volcanic ash, make it a very weak rock prone to fracturing and slumping.
5. Describe the methods to be used to separate topsoil from subsoil during excavation of the trench and the sequence of events to be followed during burial of the installed pipeline. Demonstrate how the identity of the topsoil will be preserved and how it will be returned to the correct place.
6. Address the issue of restoring the right-of-way land to its previous state. Define restoration in the context of this project.
7. Address the potential effects of the temperature of the pipeline on the surrounding soils, including effects on soil freezing and drying.
8. Does frost or moisture action bring rocks to the soil surface after the pipeline is constructed? If so, what can be done to mitigate this effect?
9. Consider the level of seismicity in the vicinity of the Brockton-Froid fault zone and potential effects on the integrity of the pipeline.
10. Assess erosional impacts of pipeline construction on the sand dunes of the Sand Hills region of South Dakota.

Groundwater

1. The EIS should generally identify the location of public water supply surface water intakes or ground water supply aquifers along potential pipeline corridors.
2. Evaluate the impacts of construction, normal operation, and spills or leaks on springs and on public and private wells used for drinking water. What underground sources of water would be at risk of the pipeline leaked? There is concern about possible damage to shallow wells near proposed pipeline route.
3. Describe what procedures would be put in place to provide drinking water if groundwater is polluted due to a spill, including long-term procedures in the event that cleanup after a spill does not return groundwater to drinking water quality.

Surface Water

1. Address the potential for erosion in creek beds during and after pipeline construction. Indicate what regulations would require stream bank stabilization during and immediately after construction, as well as what regulations would require that Keystone repair stream bank stabilization structures that become damaged.
2. Include a list of streams where pipeline construction would potentially introduce sediment or disturb the bed or banks of a stream.
3. Evaluate the effects of spills on surface impoundments and reservoirs used for domestic water, and also the effects of runoff during construction.
4. Is there adequate water available from the source streams to support diversion for hydrostatic testing without adversely affecting water rights or biological resources of the source streams? Water quality and availability needs to be taken into account when filing for a water right to perform hydrostatic testing.

5. The EIS should clearly describe water bodies and aquatic resources, including wetlands, and surface and ground water resources within the analysis area which may be impacted by project activities. The description of physical characteristics should include stream and surface water quality standards designations.

Wetlands and Vegetation

1. Wetlands that may be affected by proposed pipeline construction and operation should be identified and potential impacts on wetland functions assessed. We recommend that a draft Wetland Mitigation Plan be prepared and included in the DEIS to assure that adequate replacement of lost wetland functions and values occurs.
2. Any loss or impact to wetlands from pipeline construction should be fully mitigated by replacement or restoration of an equal or greater acreage in the immediate locale of the impact. Construction of a trench through wetlands creates opportunities for the trench to act as a drainage channel. Wetland drainage as a result of trenching should be avoided, but drainage impacts should be estimated and included in the acres of wetland impact.
3. Evaluate the impact on native prairie and other areas of native vegetation that the route might cross.
4. Discuss revegetation of the pastures and farm grounds. Reclamation standards should include revegetation of native shrubs and grasses. Include discussion of how the revegetated areas would be monitored to ensure that the vegetation becomes properly established.
5. Concerned with the tree shelter belts on our land.
6. It is unclear if the proposed pipeline route would impact remnants of native prairie located in Lamar County, Texas.
7. The threat of wildland fire, including the financial burden to landowners, should be assessed and analyzed in the EIS.
8. Evaluate the impacts of the project on wetlands and describe the mitigation procedures that would be implemented to offset impacts.
9. Evaluate the impacts of the project on woodland areas.
10. Identify any rare plant communities which may exist in the areas you cross and any rare plants and discuss any impacts to such.
11. The EIS should evaluate the potential for impacts to the riparian corridor, such as tree and shrub loss, as a result of pipeline construction at stream crossing.
12. How will the temperature of the pipeline impact vegetation and crops in the right-of-way?
13. Evaluate whether or not the burial depth of the pipeline is sufficient to avoid problems with the roots of crops such as alfalfa and corn.
14. There is concern regarding the spread of invasive weeds and non native species along the pipeline corridor. Discuss potential for invasive and noxious weeds infestations and potential for outbreaks in future years.
15. Discuss the impacts of trenching on regrowth, particularly during drought periods.

Fish, Wildlife and Threatened and Endangered Species

1. The Niobrara, the South Fork of the North Fork of the Elkhorn River, Cedar River, Loup River, and the West Fork of the Big Blue River, at the point of crossing, are ranked as highest-valued or high priority fishery resources.
2. What will be done to minimize effects on threatened and endangered species?
3. Depending upon the time of construction, the impact could be devastating to endangered or threatened species if spawns are prevented or interrupted.
4. Disruption of surface water flows due to fracture events could impede movements of fish or could significantly impact habitats of local flora and fauna, causing losses of threatened or endangered species, or promoting the introduction of exotic species.
5. Discuss how the pipeline construction and maintenance will alter and fragment existing habitat the pipeline passes through. Post-development surveys should also be addressed.
6. On-site or off-site mitigation may be necessary to compensate for unavoidable impacts to fisheries and wildlife habitat and recreational opportunities.
7. Conservation of large, intact tracts of sagebrush and riparian habitats are important to the biological needs of a diversity of native species including neo-tropical migrant birds, sage grouse, antelope, white-tailed deer and mule deer.
8. Impacts and mitigation to prairie dog colonies and populations should be addressed. We request an estimate of the number of prairie dog habitat acres that will be lost to the pipeline (we estimate 13 colonies).
9. Would the power lines leading to pump stations pose a risk of avian collision? If so, what can be done to reduce or eliminate the collision hazard? Are any of the lines located near water features that may attract waterfowl and other birds?
10. The EIS should also evaluate potential impacts to migratory birds, including the bald eagle.
11. Construction would pass through or near the Deep Fork Wildlife Management Area (DFWM) which has protected habitats for mammals and waterfowl including bald eagles and river otters.
12. Texas Parks and Wildlife Department requests that TransCanada provide a GIS shapefiles of the preliminary pipeline alignment to further assist in the search of the Texas Natural Diversity Database (TXNDD).
13. The right-of-ways should be visually inspected for leks and other critical or sensitive bird or wildlife habitats.

Land Use

1. Evaluate the impact of restrictions on land-use over and near the pipeline, such as restrictions on constructing new buildings or impeding other future property development.
2. The cost of reclaiming agricultural land should be analyzed.
3. What protections are in place for landowners' rights to graze their cattle, run equipment, and be free of invasive weeds?

4. Evaluate the impact of soil compaction on farmland due to the use of heavy construction equipment.
5. Evaluate the impacts of construction normal operation, and spills and leaks on agricultural uses, including impacts on surface and subsurface drainage, farm ponds, waterlines, and drainage ditches.
6. Address the potential for farmers to have difficult access to farmland during construction.
7. What compensation would Keystone provide for impacts to crop production along the construction right-of-way? Damages should be paid to the landowners that would lose the crops because they cannot water, spray for weeds, cultivate, harvest or care for their crops. The damages should be paid for the three crop years and for years after if the property isn't restored sufficiently.
8. How will cattle be protected during construction?
9. The EIS needs to identify how many residences would be located within 500 feet of each alternative.
10. Land ownership(s) that would be crossed by each alternative needs to be broken out for comparison purposes.

Recreation

1. Under current consideration is a state park located at the confluence of the Missouri and Milk Rivers. If this site is acquired, potential impacts to recreational users should be mitigated or avoided to minimize interruption of recreation.
2. Describe the construction and operation effects resulting from pipeline location through land being considered for a Montana State Park near the confluence of the Milk and Missouri rivers.
3. The proposed TransCanada Keystone XL pipeline route crosses the Lewis and Clark National Historic Trail (LCNHT) at two locations in Montana.
4. The proposed site is within two miles of the eastern-most terminus of the Niobrara National Scenic River (NNSR), but outside the designated boundary.
5. Spills of fuel or other hazardous materials could restrict boating, tubing, and other on-water activities due to health or other safety concerns.
6. Construction and long-term operation and maintenance activities, including noise, lights, and movement, could degrade recreation opportunities.
7. Assess the impacts to recreational use of the El Camino Real de los Tejas trail in Nacogdoches County, Texas, and other National Historic Trails.

Visual Resources

1. What would be the visual impacts of the above ground facilities?
2. For permanent facilities associated with pipeline operation, such as pump stations, will one of the 'Standard Environmental Colors' recognized by the BLM be selected and used on exterior surfaces? Will DOS require this mitigation?

3. Drilling mud seepage into the Niobrara could produce an unsightly plume visible through the western-most portion of the MNRR.
4. Fuel spills and/or their impacts (coatings on rocks, plants, etc.) might be visible both up and down river.
5. Assess potential visual impacts at crossings of any designated National Wild and Scenic Rivers.
6. Assess impacts on historic landscapes.

Cultural Resources

1. Address the impact of the project on archaeological sites, specifically in the Mission Concepcion and Presidio Delores archaeological zone.
2. Paleontological resources that lie within the proposed pipeline corridor should be protected. The proposed pipeline route would cross directly over three known T-Rex sites.
3. The ROW should be visually inspected for historic properties including: stone circles, Indian campsites, early settlements, artifacts dinosaur bones, and historic buildings and structures.
4. The route must avoid any significant cultural resources on public lands. The pipeline route should avoid hunting and subsistence areas. It should not create new access to these areas and it should not facilitate multiple rights-of-way.
5. The historic sites of the early Native American population must be preserved. Please also discuss concerns Native Americans have about treaty violations and any contested land ownership.
6. The proposed route crosses several National Historic Trails. A thorough analysis of satellite imagery, coupled with comprehensive surveys, should be conducted where the proposed pipeline crosses each trail to survey for cultural resources.
7. When adverse impacts to cultural resources cannot be avoided, they must be properly mitigated at the applicant's expense.
8. The proposed pipeline has the potential for major adverse impacts to the cultural resources associated with El Camino Real de los Tejas in Nacogdoches County, Texas.
9. The EIS should evaluate and disclose the potential environmental impacts on tribal trust resources as well as any health impacts to tribal communities.
10. Assess impacts on historic landscapes.

Socioeconomics

1. Address the issue of the potential decrease in property value and impacts on planned development.
2. Will our taxes and land value be increased or decreased by this pipeline?
3. Indicate what the project-related tax revenues would be to the municipalities and counties along the pipeline route associated with construction and during operation for the life of

the project. A tax assessment should be conducted to determine how property taxes for landowners crossed by the pipeline will be affected.

4. Indicate whether or not the project-related tax revenues would offset costs to the principalities and counties along the route (such as the cost of road repairs due to damage caused by construction traffic).
5. Introduction of WCSB or tar sands production can have impacts on production of oil and natural gas within the US, particularly in more isolated markets such as North Dakota and Montana.
6. The number and types of jobs, the length of employment, and the likelihood of local employment should be assessed and detailed.
7. With the large number of construction workers moving into an area there is bound to be an increase in drinking and drunk driving, drug use and crime.
8. Indicate how local union hire will be supported. There are projects bringing in foreign labor (e.g., welders from Mexico) and this is undesirable for U.S. workers during the recession.
9. Will electricity costs rise due to the need for additional power at the pump stations? How much power will it take to move the oil through this pipeline? Where will this power come from? Will there be new power plants built to provide the power? Will the pipeline pay the full costs of that new power, or will local residents rates go up to finance their construction?
10. Land owners should be allowed to claim a portion of the proceeds from the crude oil piped over their property.
11. What is the predicted effect of potential carbon taxes and potential U.S. carbon legislation on the Keystone pipeline?
12. Would the oil products created at the end point be used in the USA or shipped to other countries?
13. The EIS should identify the characteristics of the communities that are impacted, particularly the socio-economic characteristics (e.g., race, income). The EIS should pay close attention to communities that may be considered environmental justice (EJ) communities and should address the short-term and long-term impacts on these communities.
14. Consider the impacts of building and operating this pipeline on the farmers, ranchers, and rural communities along the route.

Transportation and Traffic

1. Address the impacts associated with use of county and private roadways during construction, including how Keystone would restore or provide compensation for, or repair of the roadways.
2. Describe the impacts to transportation facilities, including increased traffic on roadways, construction material transportation, and construction crew transportation. Also explain what method(s) the pipeline would use for crossings of state and federal highways, county and local roads, and railroad crossings.

3. Are existing bridges and cattle guards adequate to handle projected loads from construction traffic?
4. Describe the methods that would be used to cross roadways and driveways, including the extent and duration of road closures associated with construction across roadways, and the impacts associated with each construction method.
5. Please disclose any areas that are greater than 5,000 acres without a road, that you will be crossing and adding roads to.

Air Quality, Noise and Vibration

1. Address the impacts of air emissions and air pollution abatement from pumping stations.
2. Address the air quality impacts of refining tar sands; greenhouse gas emissions due to the project and increased carbon emissions. We suggest that the EIS include a separate section on Climate Change impacts and cover the full slate of greenhouse gas emissions that are foreseeable from the extraction, refining, and end-use of the tar sands as fuel.
3. Address potential impacts of noise from pump stations to both human receptors and cattle.
4. Address the impacts due to construction noise.
5. Address potential for oil moving through the pipeline to cause vibration and generate magnetic fields that might then impact nearby houses and cattle.

Reliability and Safety and Emergency Response

1. Is there a copy of an Emergency or Disaster plan available? Is a plan being prepared, and if so will local counties receive a copy of this plan? What input has been, or will be, sought from local counties?
2. We recommend that the industry state-of-the-art pipeline leak monitoring and detection equipment, and pipeline operation and valving systems be included in pipeline alternatives.
3. Pressure should be monitored and a sufficient number of shut-off valves should be required in order to prevent explosions along the pipeline, attend to any leaks or spills and other safety concerns.
4. In the case of a pipeline failure, what is the spacing between the shut-off valves? Is the system set up to automatically “Shut-Down” when a leak has been discovered?
5. Once discovered, what would be a reasonable time expectation for the flow of oil to be stopped? How frequently do valves fail to close in an emergency situation?
6. Will leak detection software be able to detect small leaks as well as changes in pressure and flow? Describe how a release from the pipeline would be detected, especially when there is snow cover throughout the area of the release.
7. The EIS should analyze the costs and risks of thinner pipe as TransCanada has proposed; how much more oil will leak or spill from ruptures?
8. Adequately assess the corrosive nature of Canadian tars sands oil.

9. Does TransCanada have any experience with operating high pressure crude oil pipelines or own any?
10. How far out (from the easement area) will the pipe company go to clean up spill? Where will soil or water contaminated by oil leaks be treated or stored as waste?
11. Describe how spills that reach rivers will be contained or cleaned up, especially if there is ice on the water.
12. Indicate what entity would be responsible for cleanup after a spill.
13. Where will pipeline repair crews or clean-up crews be stationed? Will these crews be on-call? What provisions are or will be in place for travel to remote pipeline sites. What type of equipment is anticipated being needed to ensure responding to needs at these remote locations?
14. Is there any fire risk associated with leaks?
15. Could pipeline potentially become a terrorist target?
16. Is there any training being proposed for Local Responders and 911 Dispatch centers?
17. Describe all pipeline safety requirements that Keystone would be required to comply with and any additional safety features that would be included in the project.
18. In the case of third party damage to the pipeline, who is responsible for cleanup costs: the owner(s), operator(s), or the party causing the damage?
19. If the farmer crosses this line and it ruptures, who is responsible? Is the farmer liable for the spill/explosion since he broke the line, or is TransCanada liable for saying he could cross it?
20. As part of the application process, has the State developed adequate bonding requirements to cover pipeline contamination and clean-up?
21. The EIS needs to document how the proposed pipeline and associated facilities would conform to applicable state and local laws and regulations.
22. TransCanada's risk assessment document does not provide the Department or citizens of Montana with an adequate understanding of the risk of spills from this pipeline.
23. TransCanada has not disclosed maximum spill volumes.

Impacts from Oil Spills and Leaks

1. In the event the pipeline leaks or ruptures and spills, soil will be contaminated, drinking water and other groundwater or surface water may be threatened, and local governments may face expensive clean-ups.
2. What harmful chemicals can be leaked out during a spill, and what effect will these chemicals have on animals and humans?
3. An oil spill would have a devastating impact on a large number of game fish and other aquatic animals as well as the large number of water fowl who live year-round on or near Lake Eufaul.
4. If the pipeline cracks and starts to leak or explodes what are all potential threats to landowners, wildlife, water, vegetation, and surface resources?

5. Assess potential impacts of spills and leaks from the pipeline or during construction on water wells.
6. Who determines if the spill is cleaned up properly?
7. How well will the landowners and the landowners' neighbors be compensated for any damages?
8. Who will handle the cleanup or any oil fires that might be associated with a spill?
9. In the Hill Creek formation, which is a good portion of Harding County, there are massive channel sands and some of them are hundreds of feet thick. If you put a pipeline in there and it leaks into the ground, you can't contain that oil. It drains immediately into the sand.

Alternatives

1. The EIS should analyze alternative routes that avoid risks to homes, farming operations, and wells and springs used by rural residents, livestock, and wildlife.
2. Place the pipeline in existing right-of-ways to minimize disturbance and damage.
3. Describe how the preferred alternative was selected.
4. The proposed pipeline does not fully utilize state-owned lands in Montana for routing. One or more alternatives need to be developed that maximize the use of state-owned lands, while minimizing adverse environmental impacts and costs.
5. The EIS should analyze the impacts of the alternative route through North Dakota.
6. List other proposed new U.S. and Canadian pipelines. Would any of these meet the need that Keystone proposes to fill? For pipelines with additional capacity available, which markets do these pipelines serve?
7. Why can't the new Keystone XL follow the same route to Steele City, NE, already established by the Keystone project?
8. Other methods of transportation should be reviewed and examined. Other routes which might transport the crude oil using existing facilities which would not require the extensive construction of a new line should also be reviewed and examined.
9. Evaluate the alternative of expanding refining capacity in Canada, refining the oil from the source planned for shipment in the Keystone pipeline, and shipping petroleum products to the US instead of crude oil.
10. In addition to alternative routes, the EIS must fully evaluate the no-action alternative.
11. Evaluate the use of renewable energy sources to meet the market demands that the energy derived from the Keystone XL project would meet.
12. Consider alternative routes that are adjacent to or within existing interstate highway right-of-ways.

Cumulative Impacts

1. Concerns were expressed regarding building another pipeline through properties that may have up to four other pipelines already crossing the land.

2. The EIS should analyze all of the impacts of mining, making, refining and using tar sands oil.
3. Analyze the cumulative effects of the construction ROW, construction activities, and associated infrastructure.
4. All analyses of management actions and impacts of the pipeline project should consider cumulative impacts from activities outside the project area such as new roads, gas or oil wells, power lines, wind farms, coal mining, farming, new homes, airstrips, industry, etc.
5. Evaluate the existing storage and transportation capacity in Wood River and Patoka, IL and Cushing, OK and the impact of introducing additional volumes of crude oil.

3.2 Agency Comment Letters

The DOS has received 13 letters or emails from state and/or federal agencies. These letters are briefly summarized below; more detailed comments within the letters have been included in the summary presented above in Section 3.1.

- United States Department of the Interior, Bureau of Reclamation, Great Plains Region. March 3, 2009. It appears that the proposed pipeline may cross Reclamation's irrigation canals in Montana and Nebraska. If it does, construction activities will need to be coordinated with Reclamation and the local Irrigation Districts that operate and maintain the canals. If the proposed construction will alter, modify, or disturb in any manner any of Reclamation's facilities or cross its lands, a Special Use Permit containing provisions necessary to protect the interests of the United States may be granted.
- Montana Department of Natural Resources and Conservation. March 6, 2009. The proposed pipeline will cross two navigable rivers administered by the DNRC Eastern Land Office. Any crossing of grades/slopes greater than 10% on DNRC administered lands will require site specific erosion control methods. All disturbed areas on DNRC administered lands will be required to be reseeded to a native grass mixture recommended by the Eastern Land Office field staff. Any noxious weeds within the project area on DNRC administered lands should be controlled by TransCanada. Archeological, paleontological, and historical sites will be managed under the "Guidelines for Conducting Cultural/Paleontologic Resources Inventory Work on Montana State Lands." DNRC will review TransCanada easement applications, conduct site specific EAs, and subsequently recommend any further mitigation measures prior to issuing Land Use Licenses for the construction phase.
- South Dakota Department of Game, Fish and Parks. March 10, 2009. We have concerns with the pipeline crossing South Dakota Game, Fish and Parks lands (Game Production Areas) which are managed specifically for wildlife populations, associated habitats, and recreational purposes. Any level of disturbance or destruction could be detrimental to the management and vitality of these areas, including direct negative impacts to wildlife production. We request these impacts be taken under consideration when establishing the final path of the pipeline.
- Montana Fish, Wildlife and Parks. March 12, 2009. Montana Fish, Wildlife and Parks believes that the priorities for protecting fish, wildlife and recreational resources in Montana should be 1) avoidance (through appropriate field surveys and siting), 2) on-site mitigation (using best mitigation techniques and effective reclamation), and 3) off-site

mitigation (to compensate for irreparable harm to fish, wildlife, their habitat, and recreational resources).

- South Dakota Department of Environment and Natural Resources. March 12, 2009. The Draft EIS needs to evaluate the potential impacts of the project on groundwater quality and quantity, and on public and private drinking water sources near the proposed pipeline. Specifically, the evaluation needs to address this issue where the project crosses surficial aquifers such as the Hell Creek, Fox Hills, and Ogallala aquifers. Also the Draft EIS, as part of its evaluation of the potential impacts to existing land uses, needs to evaluate the potential impacts to South Dakota's existing crude oil and natural gas pipeline infrastructure.
- Nebraska Game and Parks Commission. March 13, 2009. In general, we have concerns for impacts to wetland and stream resources, as they provide valuable habitat to many fish and wildlife species. Because the proposed pipeline is a lengthy, linear project we acknowledge that it would be impossible to completely avoid impacting stream and wetland resources. However, we encourage that impacts to these resources be avoided and minimized to the extent possible and that mitigation be considered for unavoidable impacts, as necessary.
- Montana Department of Environmental Quality. March 16, 2009. The EIS must comply with the Montana Environmental Policy Act as well as National Environmental Policy Act, and must provide the information and analysis required for DEQ to make its findings under MFSA. Because of this, most of our comments reflect our needs in making those findings.
- Montana Department of Natural Resources and Conservation/NELO. March 17, 2009. TransCanada will need to secure a lease for Pump Station number 9. The DNRC will complete an EA Checklist that addresses site specific impacts for the lease.
- U.S. Army Corps of Engineers, Omaha District. March 20, 2009. If the proposed pipeline construction crosses the flood plains of small drainage ways and streams, flood related problems should not occur if the lines are buried far enough below the beds of drainage ways and streams to prevent exposure due to streambed erosion during periods of high flood flows. If the construction activities involve any work in waters of the United States, a Section 404 permit may be required.
- National Park Service, Environmental Quality Division. March 27, 2009. The proposed pipeline may cross through, or very near, two units of the National Park System including Niobrara National Scenic River in Nebraska and Big Thicket National Preserve in Texas. The installation of a pipeline directly adjacent to NPS lands or waters should be done in a manner that avoids or minimizes cross-boundary adverse impacts. The proposed route crosses several National Historic Trails. Be aware of these trails and their significance as well as any other NPS special status areas such as National Historic Sites, National Natural Landmarks, National Heritage Areas, etc., that may be located in or near the proposed pipeline route.
- Texas Parks & Wildlife Department, April 14, 2009. TPWD will participate in the DOS process for preparation of an EIS. Based on the information provided to date TPWD offers preliminary comments and recommendations concerning: habitats associated with water resources, stream crossings, significant stream segments (Red River Basin, Cypress Creek Basin, Neches River Basin, Trinity River Basin), wetlands, vegetation including native prairie, rare, threatened, and endangered resources, the Water Oak – Willow Oak series community, TPWD County Lists, and Mitigation Plans.

- U.S. Environmental Protection Agency, Region 8 Montana Office. April 15, 2009. Primary issues for the project involve: (1) potential impacts to rivers, streams, lakes, and wetlands, and surface and ground water quality, including aquatic habitat impacts, sedimentation of waters during pipeline crossings of rivers and streams, and water quality impacts due to possible pipeline spills, leaks, and/or other unintended product or chemical releases to the environment during construction or operations; (2) potential impacts to air quality; (3) potential fish and wildlife impacts, including impacts to threatened and endangered species and other special status species, and impacts to sensitive terrestrial and aquatic habitats, particularly wetland and riparian habitats; (4) minimization of disturbances to vegetation, effectiveness of revegetation, potential for spread of noxious weeds; (5) human health and socio-economic impacts, including communities, tribal, environmental justice; (6) greenhouse gas emissions and climate change; (7) cumulative impacts; and (8) other issues such as historic and cultural resources and pollution prevention.
- U.S. Fish and Wildlife Service, Realty Specialist, Lewistown, Montana. May 18, 2009. The routes are the same for the majority of the way through Phillips County. The pipeline route crosses a Waterfowl Management Rights (wetland) easement managed by the Bowdoin NWR. We are not sure whether or not the Pump Station Transmission Line impacts any FWS interest. **Alternative A1A:** From our understanding, the pipeline would cross over Medicine Lake NWR owned property (the canal). It appears the Pump Station Transmission Line closely follows the pipeline and would, therefore, cross FWS owned property. **Alternative A:** This Alternative varies slightly from the other two in Phillips and Valley Counties. However, we don't believe the pipeline crosses any FWS owned or partial interest (easement) lands outside the portion in Phillips County. We do not believe the Pump Station Transmission Lines for this Alternative impact FWS owned or partial interest lands. **Alternative B:** The pipeline does not cross any FWS owned or partial interest (easement) lands outside the portion in Phillips County. The Pump Station Transmission Line does cross a small portion of primary jurisdiction property on CMR.