

**HP07-001 APPLICATION BY TRANSCANADA KEYSTONE PIPELINE, LP
FOR A PERMIT UNDER THE SOUTH DAKOTA ENERGY
CONVERSION AND TRANSMISSION FACILITY ACT TO
CONSTRUCT THE KEYSTONE PIPELINE PROJECT**

Permit Conditions

Compliance with Laws, Regulations, Permits, Standards and Commitments

1. Keystone shall comply with all applicable laws and regulations in its construction and operation of the Project. These laws and regulations include, but are not necessarily limited to: the federal Hazardous Liquid Pipeline Safety Act of 1979 and Pipeline Safety Improvement Act of 2002, as amended by the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006, and the various other pipeline safety statutes currently codified at 49 U.S.C. § 60101 et seq. (collectively, the "PSA"); the regulations of the United States Department of Transportation implementing the PSA, particularly 49 C.F.R Parts 194 and 195; temporary permits for use of public water for construction, testing or drilling purposes, SDCL 46-5-40.1 and ARSD 74:02:01:32 through 74:02:01:34.02 and temporary discharges to waters of the state, SDCL 34A-2-36 and ARSD Chapters 74:52:01 through 74:52:11, specifically, ARSD § 74:52:02:46 and the General Permit issued thereunder covering temporary discharges of water from construction dewatering and hydrostatic testing.
2. Keystone shall obtain and shall thereafter comply with all applicable federal, state and local permits, including but not limited to: Presidential Permit from the United States Department of State, Executive Order 11423 of August 16, 1968 (33 Fed. Reg. 11741) and Executive Order 13337 of April 30, 2004 (69 Fed. Reg. 25229), for the construction, connection, operation, or maintenance, at the border of the United States, of facilities for the exportation or importation of petroleum, petroleum products, coal, or other fuels to or from a foreign country; Clean Water Act § 404 and Rivers and Harbors Act Section 10 Permits; Special Permit issued by the Pipeline and Hazardous Materials Safety Administration; Temporary Water Use Permit, General Permit for Temporary Discharges and federal, state and local highway and road encroachment permits. Any of such permits not previously filed with the Commission shall be filed with the Commission upon their issuance.
3. Keystone shall comply with and implement the Recommendations set forth in the Final Environmental Impact Statement issued by the United States Department of State on January 11, 2008.
4. The permit granted by this Order shall not be transferable without the approval of the Commission pursuant to SDCL 49-41B-29.
5. Keystone shall undertake and complete all of the actions that it and its affiliated entities committed to undertake and complete in its Application and in its testimony before the Commission at the hearing.

Reporting and Relationships

6. The most recent and accurate depiction of the Project route and facility locations is found in hearing Exhibits A and C, 2 Sept 06, to the Application, Ex TC 1A and 1C, as modified by the valve and pump station relocations described in Ex TC 1C, 5 March 07, Risk Assessment, “6 Overview Valve and Pump Station Relocation (Overview of the Valve and Pump Station Relocation Rationale March 2007)” and “7 Facility Relocation 070328 (Valve and Pump Station Relocation Rationale Keystone Pipeline Project March 22, 2007)” and the route variation maps introduced into evidence at the hearing. Ex TC 9 and TC 10. The testimony of Keystone’s witness, Buster Gray, indicated that the land acquisition and precise route finalization process was on-going at the time of the hearing. Keystone shall notify the Commission and all affected landowners, utilities and local governmental units as soon as practicable if material deviations are proposed to the route. At such time as Keystone has finalized the pre-construction route, Keystone shall file maps with the Commission depicting the final pre-construction route. If material deviations from this route must be made during construction, Keystone shall advise the Commission and all affected landowners, utilities and local governmental units prior to making such changes and afford the Commission the opportunity to review and approve such modifications. At the conclusion of construction, Keystone shall file detail maps with the Commission depicting the final as-built location of the Project facilities.

7. Keystone shall provide a public liaison officer, approved by the Commission, to facilitate the exchange of information between Keystone, including its contractors, and landowners, local communities and residents and to promptly resolve complaints and problems that may develop for landowners, local communities and residents as a result of the Project. Keystone shall file with the Commission its proposed public liaison officer’s credentials for approval by the Commission prior to the commencement of construction. The public liaison officer shall be afforded immediate access to Keystone’s on-site project manager, its executive project manager and to contractors’ on-site managers and shall be available at all times to the Commission’s Staff via mobile phone to respond to complaints and concerns communicated to the Staff by concerned landowners and others. Keystone shall also implement and keep an up-dated web site covering the planning and implementation of construction and commencement of operations in this state as an informational medium for the public. As soon as the Keystone’s public liaison officer has been appointed and approved, Keystone shall provide contact information for him/her to all landowners crossed by the Project and to law enforcement agencies and local governments in the vicinity of the Project. The public liaison officer’s contact information shall be provided to landowners in each subsequent written communication with them.

8. Until construction of the Project is completed, Keystone shall submit quarterly progress reports to the Commission that summarize the status of land acquisition and route finalization, the status of construction, the status of environmental control activities, including permitting status and Emergency Response Plan and Integrity Management

Plan development, the implementation of the other measures required by these conditions, and the overall percent of physical completion of the project and design changes of a substantive nature. Each report shall include a summary of consultations with the South Dakota Department of Environment and Natural Resources and other agencies concerning the issuance of permits. The reports shall list dates, names, and the results of each contact and the company's progress implementing prescribed construction, land restoration, environmental protection, emergency response and integrity management regulations, plans and standards. The first report shall be due for the period ending June 30, 2008. The reports shall be filed within 31 days after the end of each quarterly period and shall continue until the project is fully operational.

9. Until construction of the Project is completed, Keystone's public liaison officer shall report quarterly to the Commission on the status of the Project from his/her independent vantage point. The report shall detail problems encountered and complaints received. For the period of three years following completion of construction, Keystone's public liaison officer shall report to the Commission annually regarding post-construction landowner and other complaints, the status of road repair and reconstruction and land and crop restoration and any problems or issues occurring during the course of the year.

10. As soon as practicable following the issuance of the permit, Keystone shall commence a program of contacts with state, county and municipal emergency response, law enforcement and highway, road and other infrastructure management agencies serving the Project area in order to educate such agencies concerning the planned construction schedule and the measures that such agencies should begin taking to prepare for construction impacts and the commencement of project operations.

11. Keystone shall conduct a preconstruction conference prior to the commencement of construction to ensure that Keystone fully understands the conditions set forth in this order. At a minimum, the conference shall include a Keystone representative, Keystone's construction supervisor and Commission staff.

12. Once known, Keystone shall inform the Commission of the date construction will commence, report to the Commission on the date construction is started and keep the Commission updated on construction activities as provided in Condition 7.

Construction

13. Except as otherwise provided in the conditions of this Order and Permit, Keystone shall comply with all mitigation measures set forth in the Construction Mitigation and Reclamation Plan (CMR) as set forth in Ex TC 1A as modified in the Final EIS Record of Decision.

14. Keystone shall incorporate environmental inspectors into its Construction Mitigation and Reclamation Plan and obtain follow-up information reports from such inspections upon the completion of each construction spread to help ensure compliance with this Order and Permit and all other applicable laws and rules.

15. During the course of the hearing, Keystone submitted TC 28, a Construction Agreement it executes with all affected landowners. The Construction Agreement includes a landowner option regarding trenching and topsoil removal methods. Keystone shall provide landowners with an explanation regarding these options and shall follow the landowner's selected preference as documented on the Construction Agreement. At a minimum, however, Keystone shall separate topsoil from subsoil in agricultural areas, including shelter belts in agricultural areas and grasslands, as provided in Keystone's Construction Mitigation and Reclamation Plan. Keystone shall utilize slope breakers to prevent erosion at a 2 to 4 percent gradient rather than Keystone's proposed 2 to 8 percent gradient. Keystone's cleanup and reclamation efforts shall commence immediately following backfill operations. Except where practicably infeasible, final grading and topsoil replacement and installation of permanent erosion control structures shall be completed in non-residential areas within 20 days after backfilling the trench and within 10 days in residential areas. In the event seasonal or other weather conditions prevent compliance with the time frames, temporary erosion controls shall be maintained until conditions allow completion of cleanup and reclamation.

16. Keystone shall cover open-bodied dump trucks carrying sand or soil while on paved roads and cover open-bodied dump trucks carrying gravel or other materials having the potential to be expelled onto other vehicles or persons while on all public roads.

17. Herbicides or pesticides shall not be used in or within 100 feet of a water body except as allowed by the landowner and appropriate land management or state agency.

18. Rock excavation from the trench may be used to backfill the trench only to the top of the existing bedrock profile. All other rock shall be considered construction debris.

19. Mulch shall be applied on all slopes concurrent with or immediately after seeding where necessary to stabilize the soil surface and to reduce wind and water erosion. Keystone shall implement Staff's recommendations regarding liquid mulch binders and specifications for mulch use set forth in Staff Exhibit 7.

20. Erosion control matting fabric shall be installed on water body banks at the time of final bank re-contouring, unless riprap or other bank stabilization methods are employed in accordance with federal, state and local permits and approvals.

21. If trees are to be removed that have commercial or other value to affected landowners, Keystone shall compensate the landowner for the fair market value of the trees to be cleared and/or allow the landowner the right to retain ownership of the felled trees. The environmental inspection in Condition 14 shall include forested lands.

22. Unless a wetland is actively cultivated or rotated cropland or unless non-cohesive soil conditions require utilization of greater width, the width of the construction right-of-way shall be limited to 75 feet or less in standard wetlands.

23. Unless a wetland is actively cultivated or rotated cropland, extra work areas shall be located at least 50 feet away from wetland boundaries except where site-specific conditions render a 50-foot setback infeasible.

24. Vegetation clearing shall be limited between extra work areas and the edge of the wetland to the construction right-of way.

25. Wetland boundaries and buffers shall be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

26. Extra work areas near water bodies shall be located at least 50 feet from the water's edge, except where the adjacent upland consists of actively cultivated or rotated cropland or other disturbed land or where site-specific conditions render a 50-foot setback infeasible. Clearing of vegetation between extra work space areas and the water's edge shall be limited to the construction right-of-way.

27. In water body areas, work area boundaries and buffers shall be clearly marked in the field with signs and or highly visible flagging until construction-related ground disturbing activities are complete.

28. Spoil from minor and intermediate water body crossings and upland spoil from major waterway crossings shall be placed in the construction right of way at least 10 feet from the water's edge or in additional extra work areas, except that in-stream spoil from streams greater than 30 feet in width may be temporarily stored in-stream when stream flow conditions warrant such treatment.

29. Vegetation maintenance adjacent to water bodies shall be conducted in such manner to allow a riparian strip at least 25 feet wide as measured from the water body's mean high water mark to permanently re-vegetate with native plant species across the entire construction right-of way.

30. The width of the clear cuts through any windbreaks and shelterbelts shall be limited to 50 feet or less. The width of clear cuts through extended lengths of wooded areas shall be limited to 85 feet or less.

31. Keystone shall follow all of Staff's recommendations regarding road protection and bonding. Such recommendations include:

a) Keystone shall coordinate road closures with state and local governments and emergency responders.

b) Keystone shall implement a regular program of road maintenance and repair through the active construction period to keep paved and gravel roads in an acceptable condition for residents and the general public.

- c) After construction, Keystone shall repair and restore any deterioration caused by construction traffic such that the roads are returned to at least their preconstruction condition.
- d) Keystone shall use appropriate preventative measures as needed to prevent damage to paved roads and to remove excess soil or mud from such roadways.
- e) Pursuant to SDCL 49-41B-38, Keystone shall obtain and file with the Commission a bond in the amount of \$3 million in 2008 and \$12 million in 2009 to ensure that any damage beyond normal wear to public roads, highways, bridges or other related facilities will be adequately compensated. Such bonds shall name the Commission as obligee in favor of, and for the benefit of, such townships, counties, or other governmental entities whose property is crossed by the Project. Each bond shall remain in effect until released by the Commission, which release shall not be unreasonably denied following completion of the construction and repair period. Either at the contact meetings required by Condition 10 or by mail, Keystone shall give notice of the existence and amount of these bonds to all counties, townships and other governmental entities whose property is crossed by the Project.

32. Due to the nature of residential property, Keystone shall implement the following protections in addition to those set forth in its Construction Mitigation and Reclamation Plan in areas where the Project passes within 500 feet of a residence:

- a) To the extent feasible, Keystone shall coordinate construction work schedules with affected residential landowners prior to the start of construction in the area of the residences.
- b) Keystone shall maintain access to all residences at all times, except for periods when it is infeasible to do so or except as otherwise agreed between Keystone and the occupant. Such periods shall be restricted to the minimum duration possible and shall be coordinated with affected residential landowners and occupants, to the extent possible.
- c) Keystone shall install temporary safety fencing, when reasonably requested by the landowner or occupant, to control access and minimize hazards associated with an open trench and heavy equipment in a residential area.
- d) Keystone shall notify affected residents in advance of any scheduled disruption of utilities and limit the duration of such disruption.
- e) Keystone shall repair any damage to property that results from construction activities.
- f) Keystone shall restore all areas disturbed by construction to at least their preconstruction condition.

33. Keystone shall coordinate project activities with the South Dakota State Fair Administration to make best use of fair resources for traditional users as well as construction workers.

34. Construction must be suspended when weather conditions are such that construction activities will cause irreparable damage, unless adequate protection measures approved by the Commission are taken.

35. Reclamation and clean-up along the right-of-way must be continuous and coordinated with ongoing construction.

36. All pre-existing roads and lanes used during construction must be restored to a condition that will accommodate their previous use, and areas used as temporary roads during construction must be restored to their original condition, except as otherwise requested or agreed to by the landowner or any governmental authority having jurisdiction over such roadway.

37. Keystone shall, prior to any construction, file with the Commission a list identifying private and new access roads that will be used or required during construction and file a description of methods used by Keystone to reclaim those access roads.

38. In the event the winter season delays successful completion of de-compaction, topsoil replacement or seeding until the following spring, Keystone shall prepare and obtain a winterization plan. The Commission and affected landowners and/or governmental units shall be notified.

39. Keystone shall construct and operate the pipeline in the manner described in the application and at the hearing, including in Keystone's exhibits, and in accordance with the conditions of this permit, the PHMSA Special Permit and the conditions of this Order and the construction permit granted herein.

40. Keystone shall require compliance by its shippers with its crude oil specifications in order to minimize the potential for internal corrosion.

41. Keystone's obligation for reclamation and maintenance of the right-of-way shall continue throughout the life of the pipeline.

Pipeline Operations, Detection and Emergency Response

42. In accordance with 49 C.F.R. 195, Keystone shall continue to evaluate and perform assessment activities regarding high consequence areas. Prior to Keystone commencing operation, all unusually sensitive areas as defined by 49 CFR 195.6 that may exist, whether currently marked on DOT's HCA maps or not, should be identified and added to the Emergency Response Plan and Integrity Management Plan. In its continuing assessment and evaluation of environmentally sensitive and high consequence areas,

Keystone shall seek out and consider local knowledge, including the knowledge of the South Dakota Geological Survey, the Department of Game Fish and Parks and local landowners and governmental officials.

43. The evidence in the record demonstrates that in some reaches of the Project in northern Marshall County, the Middle James Aquifer is present at or very near ground surface and is not overlain by sufficient impermeable material to isolate it from surficial infiltration of contaminants. The evidence also demonstrates that this aquifer serves as the water source for at least one significant public water supply system and several domestic farm wells. Keystone shall identify the Middle James Aquifer area in Marshall County as a hydrologically sensitive area in its Integrity Management and Emergency Management Plans, except in areas where Keystone can demonstrate that the aquifer is overlain by sufficient unoxidized glacial till or other impermeable material to isolate it from infiltration of contaminants in the event of a release from the Project. Keystone shall similarly treat any other surficial aquifers of which it becomes aware during construction and continuing route evaluation.

44. Prior to putting the Keystone Pipeline into operation, Keystone shall prepare, file with PHMSA and implement an emergency response plan as required under 49 CFR 194 and a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies as required under 49 CFR 195.402. Keystone shall also prepare and implement a written integrity management program in the manner and at such time as required under 49 CFR 195.452. At such time as Keystone files its Emergency Response Plan and Integrity Management Plan with PHMSA or any other state or federal agency, it shall also file such documents with the Commission. The Commission's confidential filing rules found at ARSD 20:10:01:41 may be invoked by Keystone with respect to such filings to the same extent as with all other filings at the Commission. If information is filed as "confidential," any person desiring access to such materials or the Commission Staff or the Commission may invoke the procedures of ARSD 20:10:01:41 through 20:10:01:43 to determine whether such information is entitled to confidential treatment and what protective provisions are appropriate for limited release of information found to be entitled to confidential treatment.

45. To facilitate periodic pipeline leak surveys during operation of the facilities in wetland areas, a corridor centered on the pipeline and up to 15 feet wide shall be maintained in an herbaceous state. Trees within 15 feet of the pipeline greater than 15 feet in height may be selectively cut and removed from the permanent right-of-way.

46. To facilitate periodic pipeline leak surveys in riparian areas, a corridor centered on the pipeline and up to 10 feet wide shall be maintained in an herbaceous state.

47. At the hearing, Keystone's expert witness, Brian Thomas, testified that there do not currently exist any viable and cost effective remote sensing or monitoring systems that could either be installed along the pipeline, particularly at sensitive locations, or employed in aerial and/or ground surveillance activities to detect volatile organic

compounds or other indicators of potential leaks. The Commission believes that such technologies, when available, could increase the effectiveness of visual surveillance and augment the SCADA system and mass balance and other leak detection methods that Keystone will employ. The Commission accordingly directs Keystone to keep abreast of the latest developments in such technologies and report to the Commission on the status of innovation in such pipeline leak detection equipment and methods on or before April 1, 2010 and at such additional times thereafter until 2019 as the Commission shall specifically request, but in no case more frequently than once every three years.

Environmental

48. Except to the extent waived by the owner or lessee in writing or to the extent the noise levels already exceed such standard, the noise levels associated with Keystone's pump station and other noise-producing facilities will not exceed the L10=55dbA standard at the nearest occupied, existing residence, office, hotel/motel or non-industrial business not owned by Keystone. The point of measurement will be within 100 feet of the residence or business in the direction of the pump station facility. Post-construction operational noise assessments will be completed by an independent third-party noise consultant, approved by the Commission, to show compliance with the noise level at each pump station or other noise-producing facility. The noise assessments will be performed in accordance with applicable American National Standards Institute standards. The results of the assessments will be filed with the Commission. In the event the noise level exceeds the limits set forth in this condition at any pump station or other noise producing facility, Keystone shall promptly implement noise mitigation measures to bring the facility into compliance with the limits set forth in this condition and shall report to the Commission concerning the measures taken and the results of post-mitigation assessments demonstrating that the noise limits have been met.

49. At the request of any landowner or public water supply system that offers to provide the necessary access to Keystone over his/her property or easement(s) to perform the necessary work, Keystone shall replace at no cost to such landowner or public water supply system, any polyethylene water piping located within 500 feet of the Project. Keystone shall not be required to replace that portion of any piping that passes through or under a basement wall or other wall of a home or other structure. At least forty-five (45) days prior to commencing construction, Keystone shall publish a notice in at least one newspaper of general circulation in each county through which the Project will be constructed advising landowners and public water supply systems of this condition.

50. If during construction, Keystone or its agents discover what may be an archaeological resource, cultural resource, paleontological resource, historical resource or gravesite, Keystone or its agents shall immediately cease work at that portion of the site and notify the Commission and the State Historical Preservation Office. If the SHPO determines a protectable resource is present, Keystone shall develop a plan that is acceptable to the SHPO to salvage, avoid or protect the archaeological resource. If such a plan will require a different route than that approved by the Commission, Keystone shall obtain Commission approval for the new route before proceeding with any further construction.

51. Keystone shall promptly report to the Commission the presence in the permit area of any critical habitat of threatened or endangered species that Keystone becomes aware of and that were not previously reported to the Commission.

52. Keystone shall keep a record of drain tile system information throughout construction. Location information shall be collected using a sub-meter accuracy global positioning system where available or, where not available by accurately documenting the pipeline station numbers of each exposed drain tile. Keystone shall maintain the drain tile location information and tile specifications and incorporate it into its Emergency Response and Integrity Management Plans where drains might be expected to serve as contaminant conduits in the event of a release.

Liability for Damage

53. Keystone shall repair or replace all property removed or damaged during all phases of construction and operation of the proposed transmission facility, including but not limited to, all fences, gates and irrigation or drainage systems. Keystone shall compensate the owners for damages or losses that cannot be fully remedied by repair or replacement, such as lost productivity and crop and livestock losses.

54. In the event that a person's well is contaminated as a result of the pipeline operation, Keystone shall pay all costs associated with finding and providing a permanent water supply that is at least of similar quality and quantity; and any other related damages including but not limited to any consequences, medical or otherwise, related to water contamination.

55. Any damage that occurs as a result of soil disturbance on a persons' property shall be paid for by Keystone.

56. No person will be held responsible for a pipeline leak that occurs as a result of his/her normal farming practices over the top of or near the pipeline.

57. Keystone shall pay commercially reasonable costs and indemnify and hold the landowner harmless for any loss, damage, claim or action resulting from Keystone's use of the easement, except to the extent such loss, damage claim or action results from the gross negligence or willful misconduct of the landowner or its agents.